



COMMUNITY HEALTH ASSESSMENT & IMPROVEMENT PLAN

In partnership with



June 2021

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CREDITS AND ACKNOWLEDGEMENTS

Madison County Community Health Assessment and Improvement Plan

June 2021

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Thanks to all who participated in the surveys and focus groups. Thanks to the community partners who promoted our surveys and participated in community health improvement planning meetings.

PART 1: The Community Health Assessment and Community Health Improvement Planning Process

The Madison County Health Department Community Health Assessment (CHA) and Community Health Improvement Plan (CHIP) was a joint project conducted by the Madison County Health Department and public health program students and faculty from Eastern Kentucky University. This is an excellent and ongoing partnership that allows us to identify and share information on our community's most pressing public health issues.

The purpose of the community health assessment was to learn about the health status of the population, to identify assets, resources, and areas for improvement, and to determine factors that contribute to health issues. Figure 1 is a timeline of the major milestones of the community health assessment and community health improvement planning process. This assessment used a variety of sources of data to describe the health of our community. Part 2 of this document includes findings from three major sources of data for the CHA:

- The Madison County Health and Safety Survey
- Existing sources of population-level data on social determinants of health, health behaviors, and health status of Madison County vs. Kentucky and the United States
- Community Focus Groups

Vitality important to the community health assessment is input from community stakeholders—those who live, work, play, go to school, and worship in Madison County. The results from the community health assessment were presented to the community through a [video](#) linked on the Madison County Health Department website. Part 2 of this document is a more thorough version of the results presented in the video. After viewing the video, stakeholders were asked to give opinions through an online survey ([Madison County Community Health Priority Setting Survey](#)) about what they think the priorities of the community health improvement plan should be. The questions on this survey were designed using a changeability matrix. Community stakeholders were asked to identify the issues that were perceived as less changeable, more changeable, less important, and more important. There were 53 total respondents for the prioritization survey. The results of this priority setting survey revealed three priority areas that were considered to be highly important, with varying degrees of perceived changeability:

- Substance misuse related issues
- Mental health-related issues
- Obesity-related issues

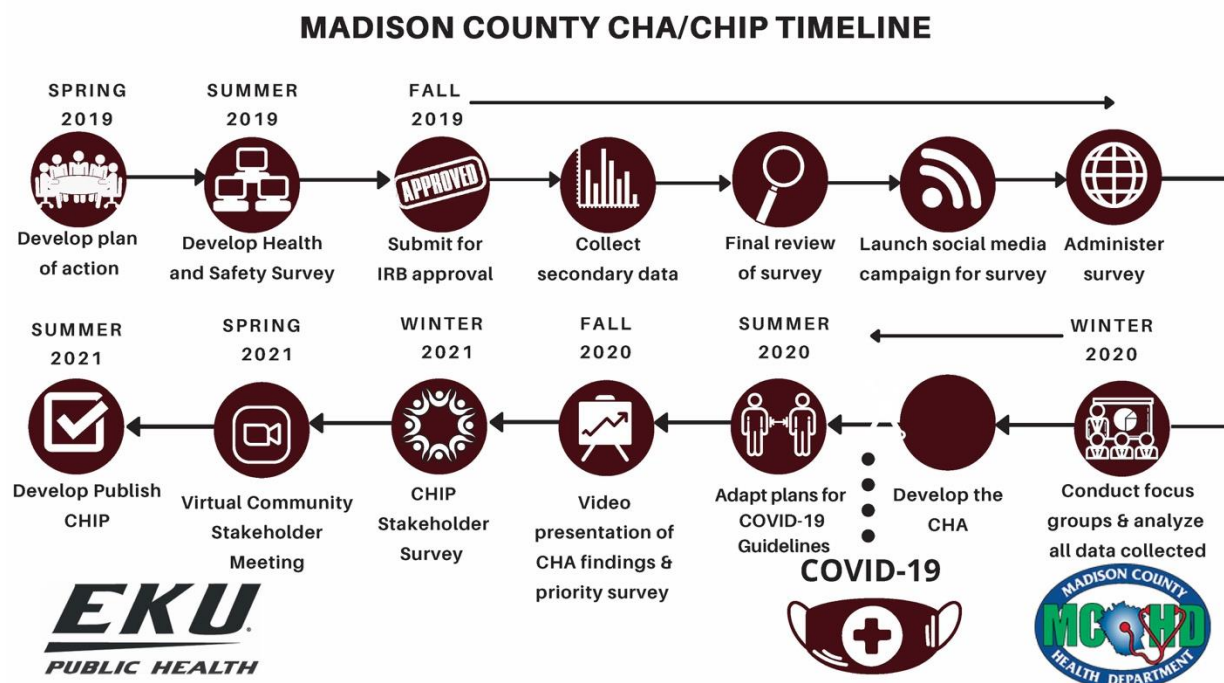
In the winter/early spring of 2021, the [Madison County Community Health Improvement Plan Stakeholder Survey](#) was implemented. This survey was created to explore existing work in the community and to inform a planned virtual community meeting. The survey focused on the top 3 priority areas as well as work related to the social determinants of health (housing, education,

food insecurity, social supports, etc.) and root causes of the priority areas. The CHIP stakeholder survey had 34 respondents. The [results of the CHIP stakeholder survey](#) were utilized by the team to formulate an agenda for a virtual community meeting and to provide background information for stakeholders who will be participating in the development of the CHIP.

In April of 2021, a virtual community meeting was held with 37 stakeholders in attendance. The purpose of the virtual community meeting was to identify what is currently being done in the community, what gaps exist, and to establish community goals for each of the three priority areas identified in the most recent community health assessment—substance misuse related issues, mental health-related issues, and obesity-related issues. Utilizing virtual break-out rooms, each of the three groups discussed the most up-to-date information on existing efforts centered upon the three priority areas. Additionally, each group discussed the priority area within the social determinants of health. We also asked questions about health equity within each priority area and higher-level changes such as policy or systems changes that were ongoing. Each priority group discussed goal(s) for the community. The CHIP process is ongoing, and these stakeholders will continue involvement in this process.

Contact with community stakeholders for CHA and CHIP information has been through the Madison County Health and Wellness (MCHWN). This network consists of over 120 community members from diverse agencies and individuals in Madison County.

Figure 1. Madison County Community Health Assessment/Health Improvement Plan Timeline



PART 2: The Community Health Assessment Findings

The Madison County Health and Safety Survey

During fall 2019, the Madison County Health and Safety Survey was conducted. The survey had a total of 38 questions about major health issues, community beliefs about health, safety, and connectedness, satisfaction with action on issues, and basic demographics. The survey was available in online and paper versions in both English and Spanish languages. A total of 1,335 people responded using the online version, 617 completed the paper version, and 41 of the surveys were completed using the Spanish version of the survey. The goal was to reach as many people as possible to represent the overall population of Madison County. Table 1 shows select demographic characteristics of the survey respondents as compared to the actual population data from Madison County. Overall, the survey sample is relatively similar to the existing population demographics of Madison County. The full results from each question on the survey can be found on the following several pages of this document.

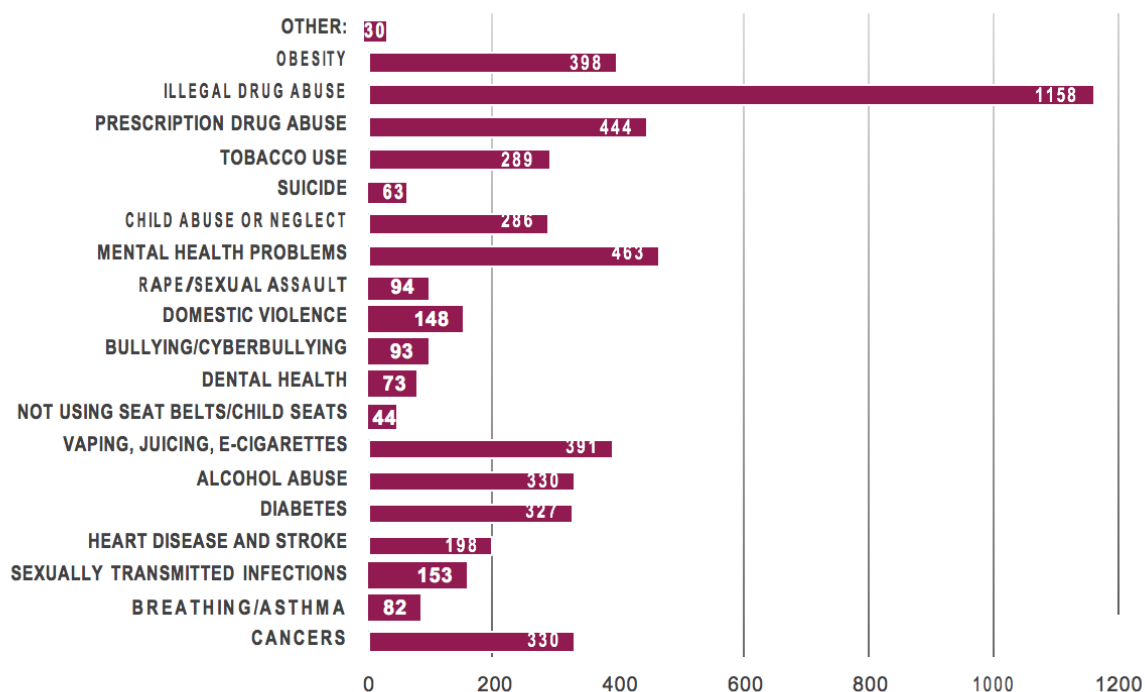
Table 1. Comparison of survey and Madison County demographic characteristics

Characteristics	Survey	Madison County*
Age		
18-19	6%	--
20-29	26%	20%
30-39	22%	12%
40-49	22%	13%
50-59	14%	12%
60 -69	8%	10%
70 -79	2%	6%
80+	0.3%	3%
Sex		
Male	20%	48%
Female	78%	52%
Other	2%	--
Race/Ethnicity		
American Indian/Alaskan Native	0.3%	0.3%
Asian	1.6%	1.1%
Pacific Islander/Native Hawaiian	0.1%	0.1%
Black or African American	8.5%	4.6%
White	87.5%	91.7%
Two or more races	2.0%	2.2%
Prefer not to answer	3.0%	--
Hispanic or Latino	**	2.7%
Education		
High school graduate or higher	93%	87%
Bachelor's degree or higher	60%	31%

*United States Census Bureau, 2019

** 4% of respondents identified as Hispanic/Latino/Latina (Figure 9)

Figure 2. Three greatest health problems in Madison County



•Number of responses for the survey question: "What are the three greatest health problems in Madison County?"

Figure 3: Rating of community's overall health

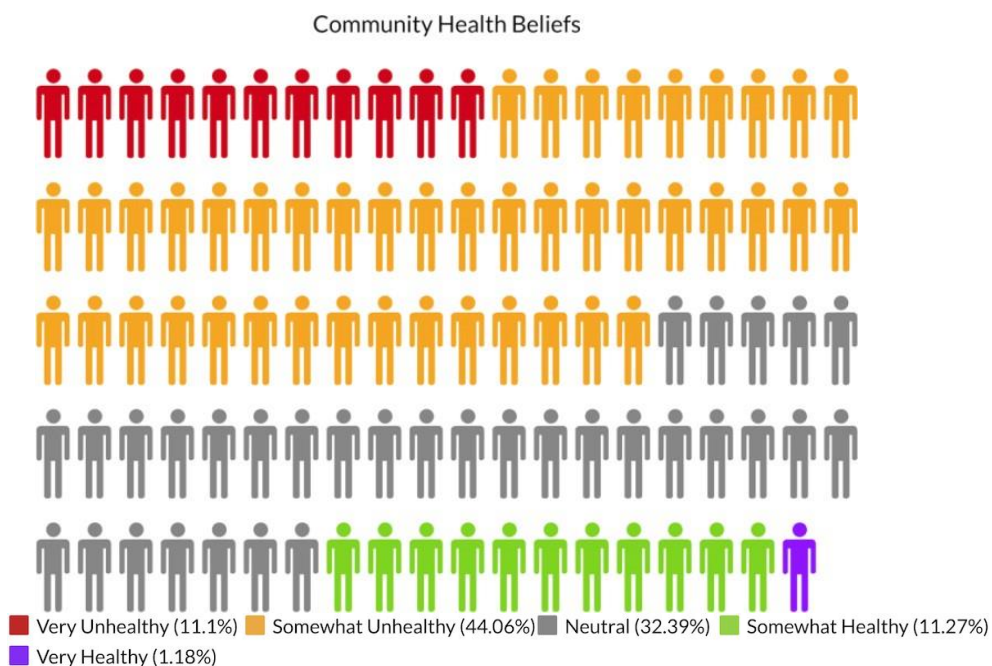
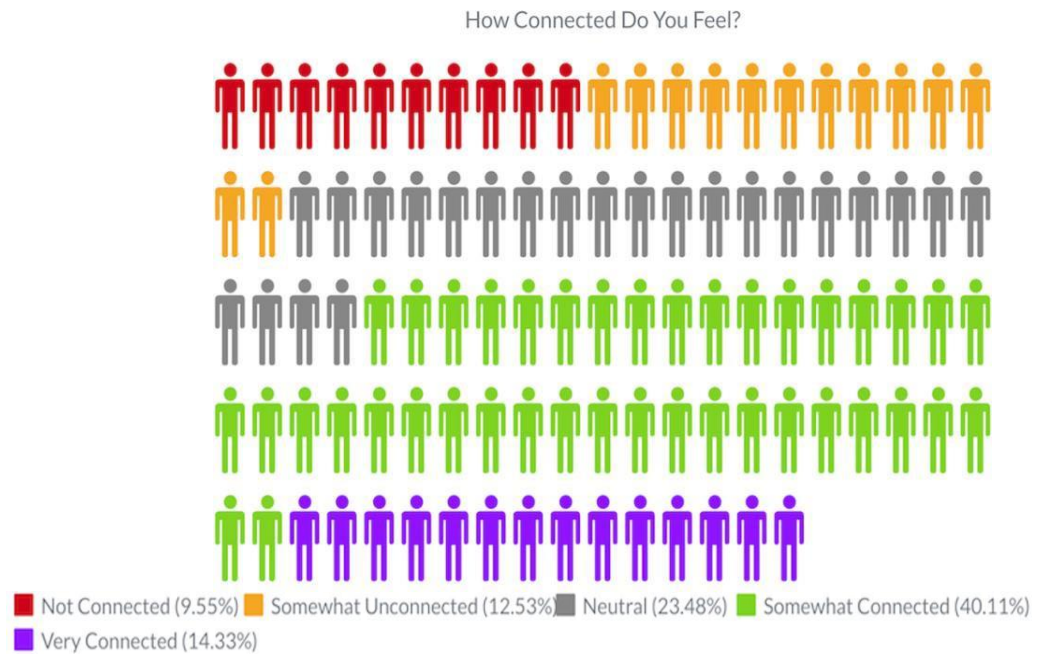


Figure 4: Rating of connection* to community



***Connection means having healthy relationships with other people in your community.**

Figure 5: Rating of community's safety



Table 2. Community beliefs about overall health, connectedness, and safety

Question 2: Community's Overall Health	Very Unhealthy # (%)	Somewhat Unhealthy # (%)	Neutral # (%)	Somewhat Healthy # (%)	Very Healthy # (%)	Total # of responses
How would you rate your community's overall health?	197(11.1%)	782(44.1%)	575(32.4%)	200(11.3%)	21(1.2%)	1775
Question 3: Connection to Community	Not Connected	Somewhat Unconnected	Neutral	Somewhat Connected	Very Connected	Total # of responses
How connected do you feel to your community?	170(9.6%)	223(12.5%)	418(23.5%)	714(40.1%)	255(14.3%)	1780
Question 4: Community's Safety	Very Unsafe	Somewhat Unsafe	Neutral	Somewhat Safe	Very Safe	Total # of responses
How would you rate the safety of your community?	41(2.3%)	285(16%)	352(19.8%)	913(51.3%)	189(10.6%)	1780

Table 3: Satisfaction with what is being done about these issues*

Issue	Very unsatisfied # (%)	Somewhat Unsatisfied # (%)	Neutral # (%)	Somewhat satisfied # (%)	Very satisfied# (%)	Average score
Availability of healthcare	97(6%)	247(15.2%)	349(21.4%)	613(37.6%)	323(19.8%)	3.5
Youth have access to basic medical services	64(3.9%)	199(12.3%)	354(21.8%)	652(40.2%)	352(21.7%)	3.63
Availability of mental health services	288(17.8%)	414(25.6%)	435(26.9%)	351(21.7%)	127(7.9%)	2.76
Availability of jobs.	125(7.7%)	339(20.9%)	460(28.3%)	541(9.7%)	158(9.7%)	3.17
Ability to afford basic but decent standard of living	192(11.9%)	406(25.1%)	412(25.4%)	460(28.4%)	149(9.2%)	2.98
Access to public transportation	341(21%)	399(24.6%)	470(29%)	284(17.5%)	129(7.9%)	2.67
Quality of public schools	91(5.6%)	195(12%)	443(27.4%)	567(35%)	323(20%)	3.52
Availability of quality childcare	132(8.2%)	247(15.3%)	715(44.2%)	382(23.6%)	141(8.7%)	3.09
Safety at schools	62(3.8%)	185(11.4%)	423(26.1%)	633(39%)	319(19.7%)	3.59
Acceptance of diverse groups of people	135(8.3%)	289(17.9%)	442(27.3%)	561(34.7%)	191(11.8%)	3.24
Safe neighborhoods.	51(3.2%)	221(13.7%)	420(25.9%)	750(46.3%)	177(10.9%)	3.48
Homelessness.	310(19.2%)	569(35.2%)	516(31.9%)	184(11.4%)	37(2.3%)	2.42
Availability of affordable housing	212(13.1%)	377(23.3%)	523(32.3%)	400(24.7%)	105(6.5%)	2.88
Availability of places for outdoor activities	135(8.3%)	318(19.7%)	335(20.7%)	574(35.5%)	256(15.8%)	3.31
Availability of parks and recreation facilities	87(5.4%)	258(15.9%)	329(20.3%)	652(40.2%)	296(18.2%)	3.5
The amount of litter and trash seen	283(17.5%)	449(27.7%)	375(23.1%)	387(23.9%)	126(7.8%)	2.77
Availability of safe, connected sidewalks	215(13.3%)	387(23.9%)	427(26.4%)	451(27.9%)	139(8.6%)	2.95
Availability of safe, connected bike paths	305(18.9%)	351(21.8%)	556(34.5%)	276(17.1%)	125(7.7%)	2.73
Availability of places for physical activity	115(7.1%)	307(19%)	462(29.6%)	524(32.5%)	206(12.8%)	3.25
Health issues related to climate change	144(8.9%)	259(16.1%)	906(56.2)	166(10.3%)	138(8.6%)	2.93
Suicide Prevention	149(9.2%)	384(23.8%)	743(46%)	265(16.4%)	73(4.5%)	2.83
Enough to eat	75(4.6%)	260(16.1)	412(25.4%)	541(33.4%)	331(20.4%)	3.49
Access to fresh foods	99(6.1%)	275(17%)	380(23.5%)	578(35.7%)	285(17.6%)	3.42
Location of farmer's markets	78(4.8%)	213(13.1%)	453(27.9%)	580(35.7%)	299(18.4%)	3.5
Screen time for youth	265(16.4%)	382(23.7%)	727(45.1%)	158(9.8%)	80(5%)	2.63
Response to the opioid epidemic	443(27.4%)	506(31.3%)	403(24.9%)	199(12.3%)	66(4.1%)	2.34

*Survey question: How satisfied are you about what is being done about these issues?

Table 4: Ranking of average satisfaction with what is being done about these issues from highest satisfaction to lowest satisfaction*

Issue	Average score
Child/Youth Access Basic Medical Services	3.63
Safety at Schools	3.59
Quality of Public Schools	3.52
Availability of Healthcare	3.5
Availability of park and recreation facilities	3.5
Location of farmers markets	3.5
Enough to eat	3.49
Safe neighborhoods	3.48
Access to fresh foods	3.42
Availability of places for outdoor activities	3.31
Availability of places for physical activity	3.25
Acceptance of Diverse groups of people	3.24
Availability of Jobs	3.17
Availability of Quality Childcare	3.09
Afford basic but decent standard of Living	2.98
Availability of safe, connected sidewalks	2.95
Health Issues related to climate change	2.93
Availability of Affordable Housing	2.88
Suicide Prevention	2.83
Amount of litter and trash seen in comm.	2.77
Availability of Mental Health Services	2.76
Availability of safe, connected bike paths	2.73
Access to Public Transportation	2.67
Screen time for youth	2.63
Homelessness	2.42
Response to Opioid Epidemic	2.34

* Ranking of means for survey question: How satisfied are you about what is being done about these issues?

Figure 6: Number and % of Respondents by Gender

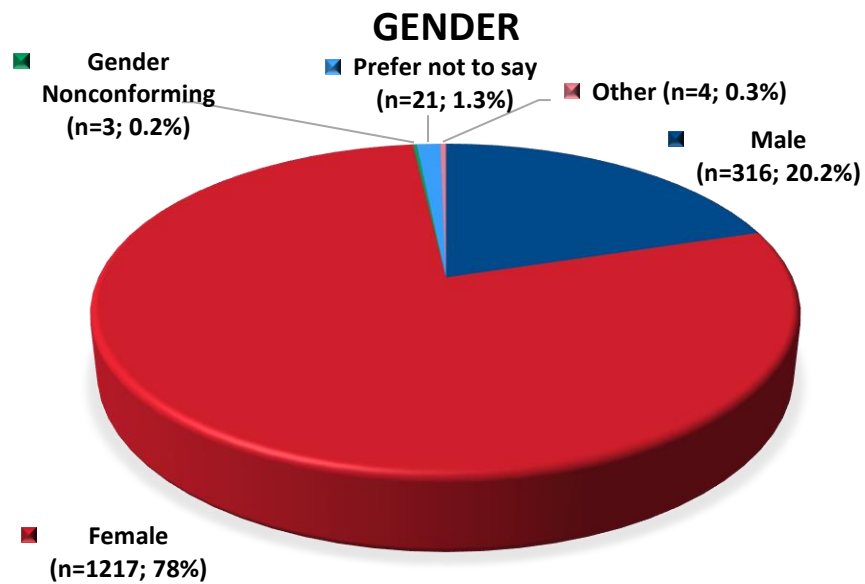


Figure 7: Number and % of Respondents by Age Group

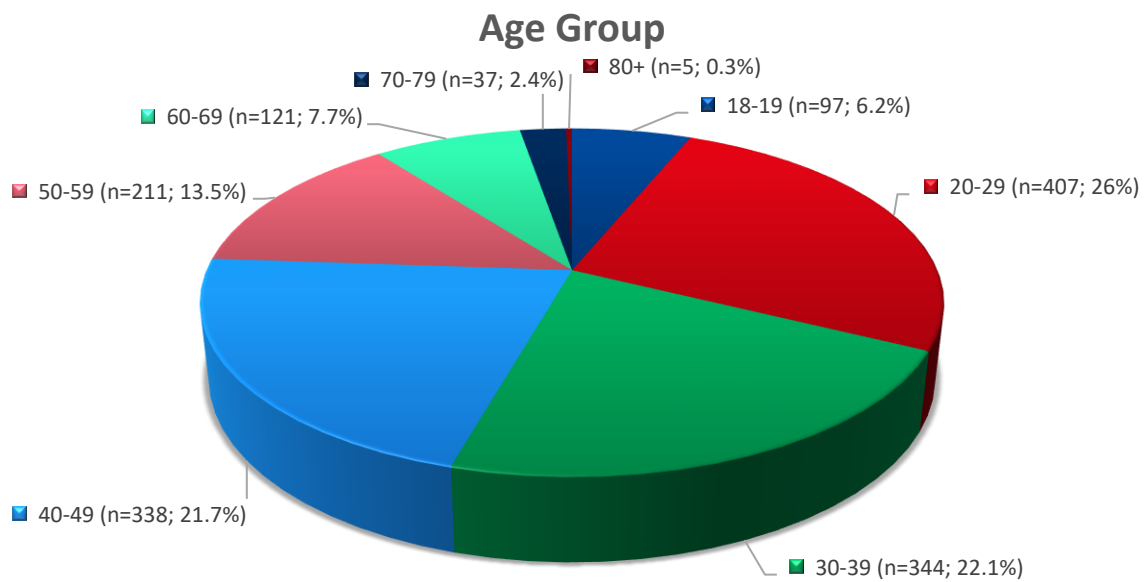


Figure 8: Number and % of Respondents by Race

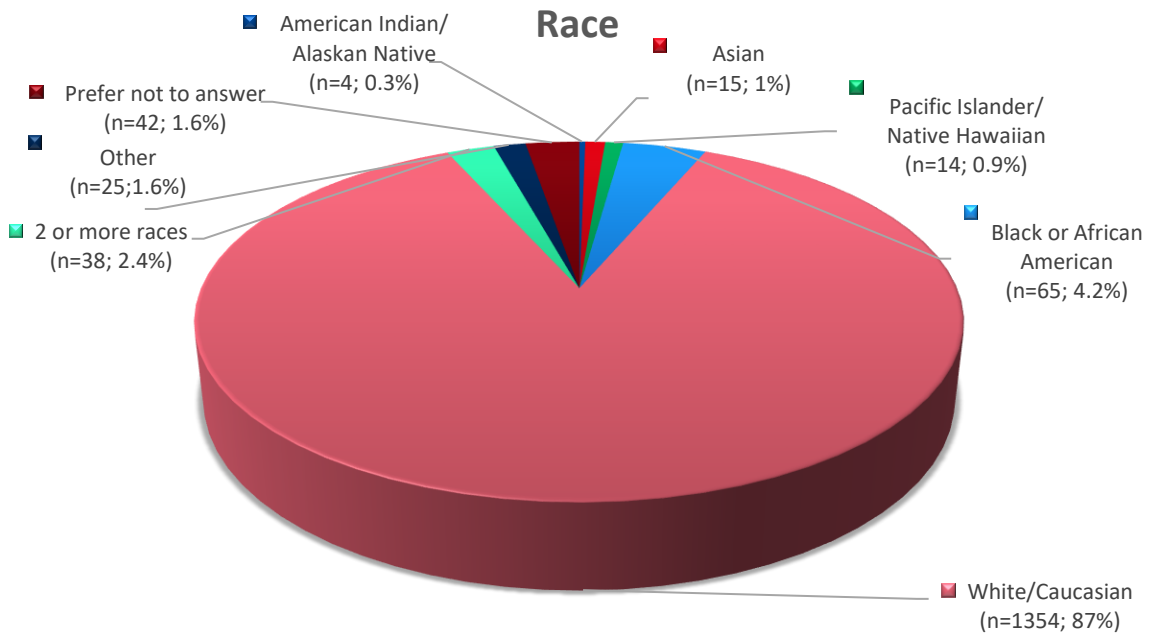


Figure 9: Number and % of Respondents by Hispanic/Latino

Are you Hispanic/Latino/Latina?

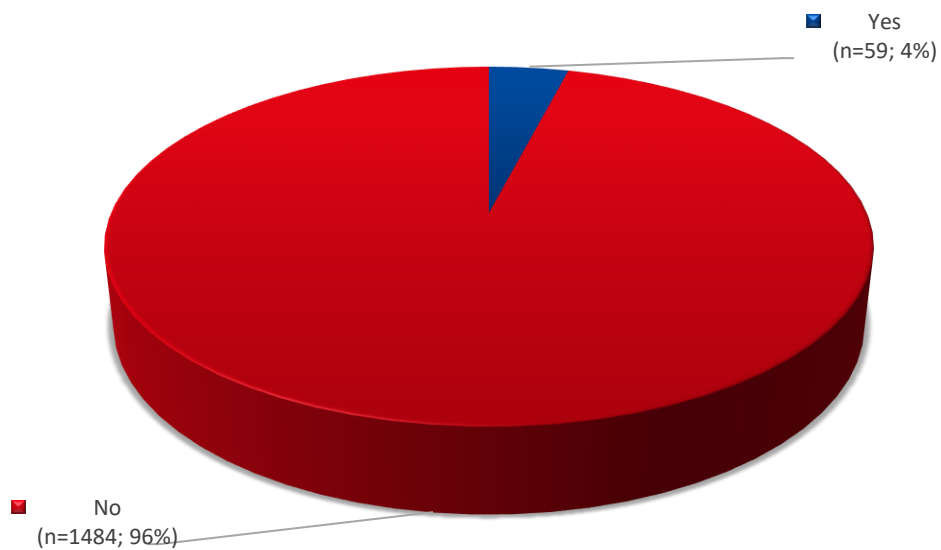


Figure 10: Number and % of Respondents by Health Care Usage

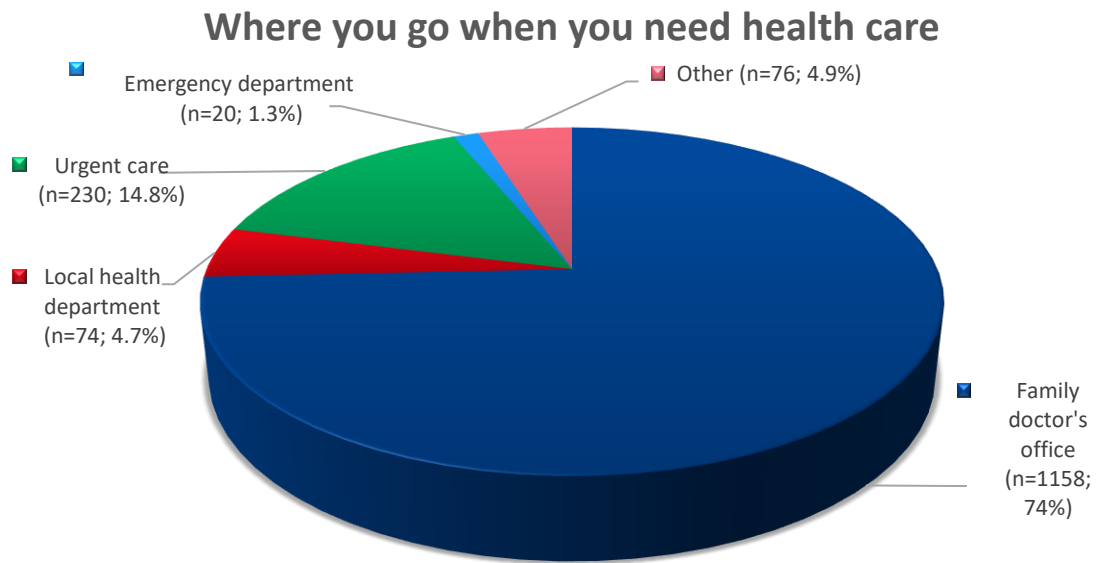


Figure 11: Number and % of Respondents by Education

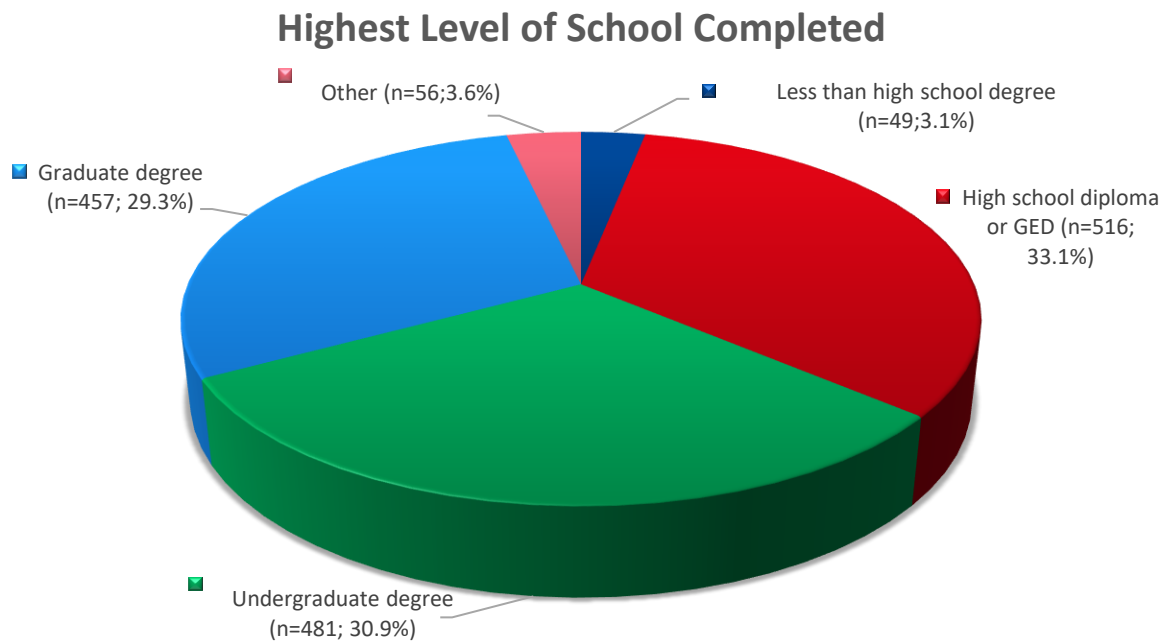


Figure 12: Number and % of Respondents by Reason in Madison County

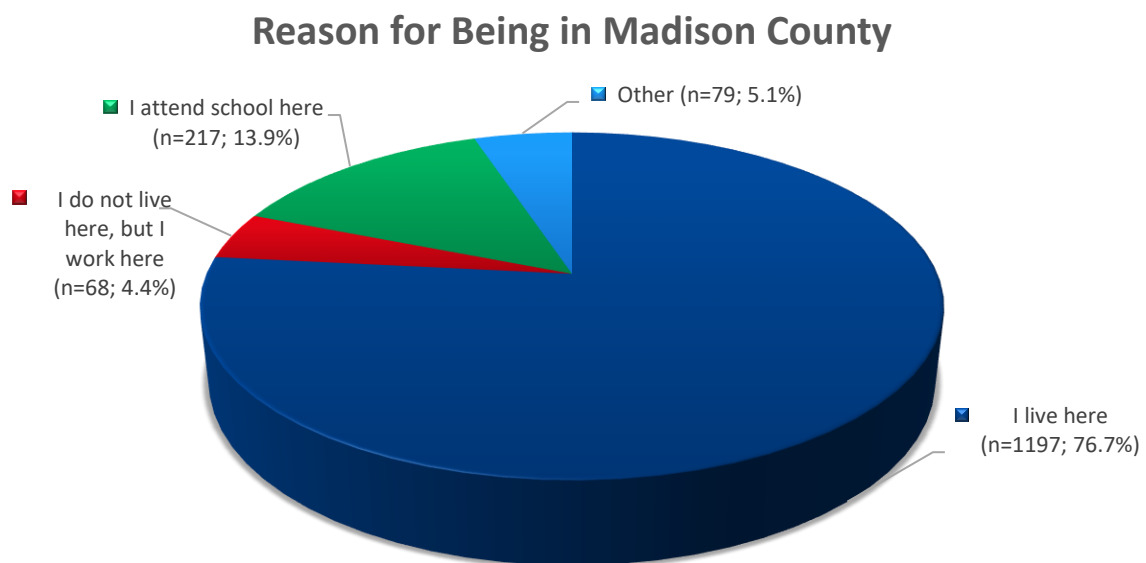
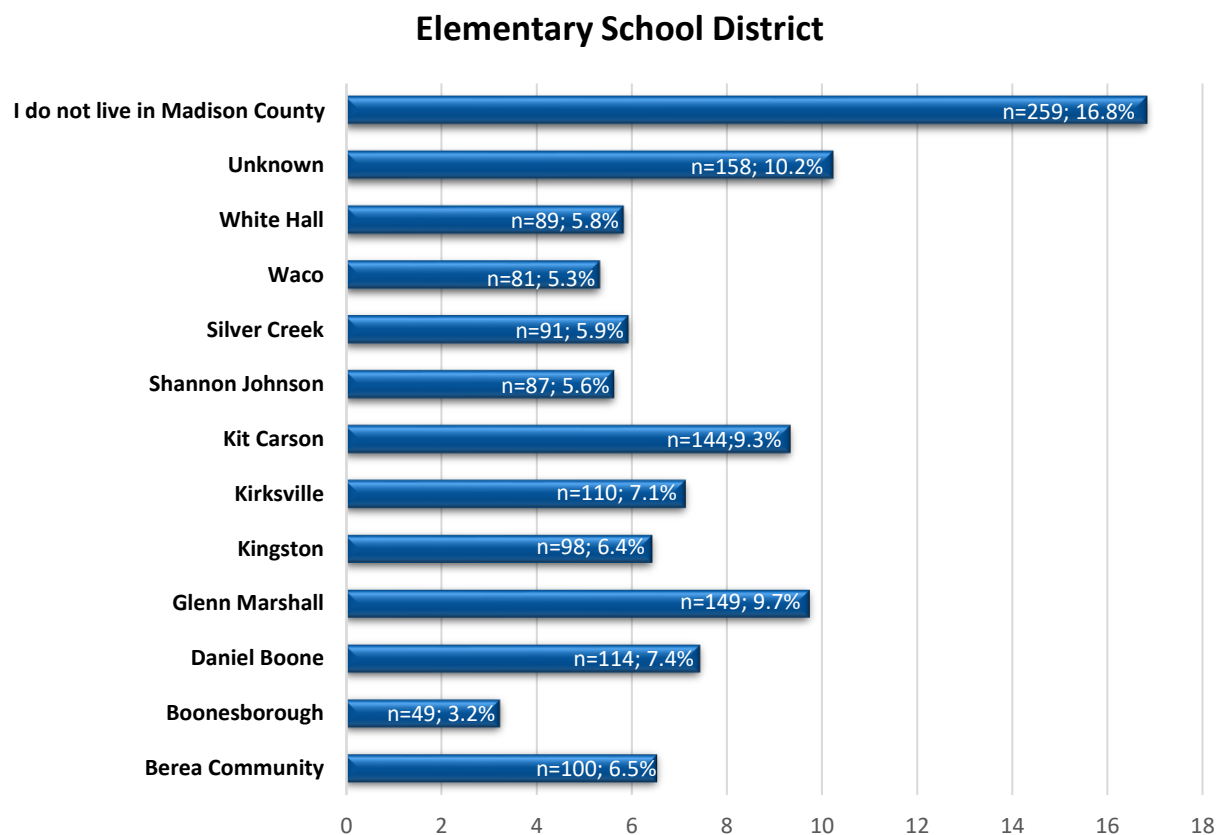


Figure 13: Number and % of Respondents by Elementary School District



Existing Social Determinants of Health Data for Madison County

Using existing population-level data as part of this community health assessment helps compare Madison County to Kentucky and the United States. Table 5 presents existing data based on categories of the social determinants of health—the factors in the environments of where we live, work, and play—that influence our health. All existing data in Table 5 is prior to COVID-19. Nonetheless, these data help spotlight areas of health in which Madison County is doing well and areas that may need improvement. Data definitions for the sources of data used in Table 5 are as follows:

Economic Security:

- Percent in poverty (All Ages and Under 18); data from 2018 (U.S. Census Bureau, 2019)
- Unemployment: Percentage of population ages 16 and older unemployed but seeking work; data from 2018 (County Health Rankings & Roadmaps, 2018)

Education:

- High school graduation: Percentage of ninth-grade cohort that graduates in four years; data from 2016-2017 (County Health Rankings & Roadmaps, 2018)

- Reading Scores: Average grade level performance for 3rd graders on English Language Arts standardized tests. For example, a score of 3.5 indicates that the 3rd graders are performing half a grade level better than expected for 3rd graders. The data is from 2016 for this measure. (County Health Rankings & Roadmaps, 2018)
- Kindergartners ready to learn, School Year 2018-2019 (Madison County Schools, not Berea Independent) (Kentucky Youth Advocates, 2019)

Food:

- Food insecurity refers to USDA's measure of lack of access, at times, to enough food for an active, healthy life for all household members and limited or uncertain availability of nutritionally adequate foods. Reported as 2018 data. (Feeding America, 2018)
- Food Environment Index: Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best); data from 2015 - 2017 (County Health Rankings & Roadmaps, 2018)

Environment:

- Violent Crimes: Number of reported violent crime offenses per 100,000 population. County Health Rankings; data from 2014 and 2016 (County Health Rankings & Roadmaps, 2018)
- Severe Housing Problems: Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities; data from 2012-2016 (County Health Rankings & Roadmaps, 2018)

Health:




























- Poor mental health days: Average number of mentally unhealthy days reported in past 30 days; data from 2017 (County Health Rankings & Roadmaps, 2018)
- Poor physical health days: Average number of physically unhealthy days reported in past 30 days; data from 2017 for this measure (County Health Rankings & Roadmaps, 2018)
- Poor or Fair Health days: Percentage of adults reporting fair or poor health; data from 2017 (County Health Rankings & Roadmaps, 2018)
- Ratio of population to primary care physicians; data from 2017 (County Health Rankings & Roadmaps, 2018)
- Ratio of population to mental health providers; data from 2019 (County Health Rankings & Roadmaps, 2018)
- Ratio of population to dentists; data from 2018 (County Health Rankings & Roadmaps, 2018)

Health Behaviors:

- Adult smoking: Percentage of adults who are current smokers; data from 2017 (County Health Rankings & Roadmaps, 2018)

- Physical Inactivity: Percentage of adults age 20 and over reporting no leisure-time physical activity; data from 2016 (County Health Rankings & Roadmaps, 2018)
- Excessive Drinking: Percentage of adults reporting binge or heavy drinking; data from 2017 (County Health Rankings & Roadmaps, 2018)
- Suicide Deaths: Number of deaths due to suicide per 100,000 population; data from 2014-2018 (County Health Rankings & Roadmaps, 2018)
- Frequent mental distress: Percentage of adults reporting 14 or more days of poor mental health per month; data from 2017 (County Health Rankings & Roadmaps, 2018)

Table 5: Comparison of Existing Data (Madison County, KY, and US)

Economic Security 	Poverty (All Ages)	Madison Co. 16.5%	KY 16.7%	US 13.1%	
	Poverty (Under 18)	17.6%	22.3%	18%	
	Unemployed	3.9%	4.3%	2.6%	
Education 	Kindergartners Ready to Learn	Madison Co. 48.7%	KY 51.1%	US -	
	3 rd Grade Reading Scores	3.1	3.2	3.4	
	High School Graduation	95%	90%	96%	
Environment 	Severe Housing Problems	Madison Co. 16%	KY 14%	US 9%	
	Violent Crimes Per 100,000	173	222	63	
Food 	Food Insecurity	Madison Co. 14.2%	KY 14.8%	US 11.5%	
	Food Environment Index	6.9	7	8.6	
Health 	Poor Physical Health Days	Madison Co. 4.7	KY 5.1	US 3.1	
	Poor Mental Health Days	4.7	5	3.4	
	Poor or Fair Health Days	20%	24%	12%	
	Mental Health Provider Ratio	770: 1	440: 1	290: 1	
	Primary Provider Ratio	1,820: 1	1,520: 1	1,030: 1	
	Dentist Ratio	2,150: 1	1,540: 1	1,240: 1	
Health Behaviors 	Adult Smoking	Madison Co. 19%	KY 25%	US 14%	
	Adult Physical Inactivity	23%	29%	20%	
	Adult Excessive Drinking	18%	17%	13%	
	Frequent Mental Distress	15%	16%	11%	
	Suicide Deaths Per 100,000	16	17	11	



MC is better (or same as) than state or national;



MC is similar (slightly above or below) to state or national;



MC is worse than state or national

Community Focus Groups

In the Winter and early Spring of 2020, prior to Covid-19 restrictions, two separate community focus groups were convened. Groups of 7 to 8 community members representing law enforcement, city government, local businesses, school system officials, faith-based leaders, medical care providers, social workers, and a nonprofit housing organization met for an approximately one-hour-long interview. All participants consented to be interviewed. Interviews were audio-recorded and then transcribed. A semi-structured interview guide (Table 6) was used to guide the conversation. Thematic analysis of interviews was conducted to reveal key themes:

1. Need for more drug abuse treatment,
2. Need for increased childhood intervention,
3. Need for greater social connectedness,
4. Need for increased availability of mental health counseling, and
5. Built environment improvement.

Refer to [the full report](#) for greater detail on each of the themes identified in the community focus group findings.

Table 6: Focus Group Semi-Structured Interview Guide

Semi-Structured Interview Guide

A recent community survey represents that citizens feel the top health problems in the community are:

1) Illegal Drug Abuse

2) Mental Health

3) Prescription drug abuse

4) Vaping

5) Cancer

6) Obesity

- Do you agree with this list generally? Why? Why not?
- Are there population segments that you feel are disproportionality impacted by any of these health issues? What contributes to that?
- How do you think the general environment (physical, social, political) of our county plays into these health issues?
- Are there areas that we are doing well in? What contributes to this?
- Do you have suggestions for how some of these aforementioned health issues might be addressed better?
- Are there interventions that you are familiar with within our community that addresses any of these issues?
- If you could wave a magic wand and fix one issue in our county, what would it be and why?

PART 3: The Community Health Improvement Plan

After reviewing data from the community health assessment, the community partners identified the following three priority areas: **substance misuse-related issues, mental health-related issues, and obesity-related issues**. During a virtual partners' meeting, goals for each of the three areas were established. Each priority area is defined below, and the concerns specific to Madison County are noted. Each priority area is organized into a table format in the MCCHIP. The data field sections in each table include priority areas: goal; healthy people priorities addressed; social determinants of health (SDOHs) impacted; evidence-based resources and programs; policy changes planned/desired; objectives; performance measures; and lead person/agency responsible for implementation of strategies to target the objectives.

Priority Area 1: Substance Misuse Related Issues

What are substance misuse-related issues?

The American Public Health Association defines substance misuse as the use of illegal drugs and the inappropriate use of legal substances, such as alcohol and tobacco (2020). In 2015, more than 15,000 people died from overdoses of prescription opioids in the United States (American Public Health Association, 2020). Additionally, alcohol-related injuries accounted for the deaths of 88,000 people and ranks as the third most preventable cause of death in the United States (American Public Health Association, 2020).

Why are substance misuse-related issues a concern for Madison County?

The Madison Opioid Response program noted in 2019 that Madison County ranked 3rd highest of all Kentucky counties for fentanyl-related death and methamphetamine-related overdoses (Kentucky River Foothills, 2021). County Health Rankings cites 144 drug overdose deaths per 100,000 persons in Madison County (2019). Madison County Community Health Assessment survey responses rated illegal drug abuse as the greatest health problem in the county with 1,158 responses, followed closely by prescription drug abuse with 444 responses. Alcohol abuse, vaping, juicing, and e-cigarette use was also key health concern for the county. During the same survey, 58.7% of community members expressed being unsatisfied with the current response to the opioid epidemic. Community focus groups also revealed the community's desire for more comprehensive drug abuse treatment programs in the area.

Priority Area 2: Mental Health-related issues

What are mental health-related issues?

The World Health Organization defines mental health as a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community (2018). The National Alliance on Mental Illness (NAMI) reports that 1 in 5 adults experience mental illness each year in the United States (2021). NAMI also reports that suicide is the second leading cause of death among people aged 10 to 34 in the United States (2021).

Why is mental health a concern for Madison County?

County Health Rankings reports an average of 5.1 mentally unhealthy days in the past 30 days for Madison County residents. In the Community Health Assessment, mental health problems were cited as the second greatest health problem in Madison County. Of those who responded to Community Health Assessment surveys, 43.4% reported being unsatisfied with the current availability of mental health services. During community focus groups, a need for increased availability of mental health counseling was identified as one of five key themes within the county.

Priority Area 3: Obesity-related issues**What are obesity-related issues?**

The World Health Organization defines obesity as abnormal or excessive fat accumulation that present a risk to health (n.d.). The Center for Disease Control and Prevention (CDC) reported a 42.4% prevalence of obesity for the United States in 2018 (2021). Additionally, the CDC notes preventable co-morbidities that result from obesity, such as heart disease, stroke, and type two diabetes (2021).

Why are obesity-related issues a concern for Madison County?

County Health Rankings reports 36% of adults in Madison County classify as obese (2019). In the Community Health Assessment, obesity was ranked as the third greatest health problem in Madison County. Issues with access to fresh food, availability of places for outdoor or physical activity, and walkability issues garnered moderate to low satisfaction scores in the Community Health Assessment. Themes related to social connectedness and built environment also emerged from community focus groups which could directly be linked to obesity rates within the county.

Potential Community Health Improvement Plan

In April of 2021, a virtual community meeting was held with 37 stakeholders in attendance. The purpose of the virtual community meeting was to identify what is currently being done in the community, what gaps exist, and to establish community goals for each of the three priority areas identified in the most recent community health assessment—substance misuse related issues, mental health-related issues, and obesity-related issues. Utilizing virtual break-out rooms, each of the three groups discussed the most up-to-date information on existing efforts centered upon the three priority areas. Additionally, each group discussed the priority area within the social determinants of health. We also asked questions about health equity within each priority area and higher-level changes such as policy or systems changes that were ongoing. Each priority group discussed goal(s) for the community. (p. 5)

This section represents the outcome of this meeting.

PRIORITY AREA 1: Substance misuse-related issues

Goal: Reduce the incidence and prevalence of substance misuse-related issues in Madison County.

Healthy People 2030 Goals: Increase the proportion of people with a substance use disorder who got treatment in the past year (SU-01); Increase the rate of people with an opioid use disorder getting medication for addiction treatment (SU-D03); Reduce the proportion of people who had drug use disorder in the past year (SU-15).

Social Determinants of Health Addressed: Adverse Childhood Experiences, Social Support, Unemployment, Poverty, Availability of Resources, Neighborhood Living Conditions, Housing Conditions, Parenting Style, Educational Attainment, Stigma, Poor Access to Risk Reduction Information, Discrimination

Evidence-based Resources/Programs:

Policy Changes Planned/Desired:

Madison County Objectives	Performance Measures	Lead Person or Organization
Achieve Recovery Ready Community Certification by ____.	Recovery Ready Community Certification achieved	<ul style="list-style-type: none"> ○ Madison County Health Department ○ Health & Wellness Network Partners ○ Other Community Stakeholders and Subject Matter Experts
Increase membership of the Health & Wellness Network by ____ members by ____.	# of new members added to the Health and Wellness Network	<ul style="list-style-type: none"> ○ Madison County Health Department ○ Health & Wellness Network Partners
Create a streamlined and easily accessible online resource page for residents of Madison County by ____.	Online resource page for Madison County created	<ul style="list-style-type: none"> ○ Madison County Health Department ○ ECU Public Health ○ Health & Wellness Network Partners ○ Madison County Public Library
Hold ____# of meetings per year with the Health & Wellness Network to maintain connection between community partners and foster collaboration starting ____.	# of meetings held with the Health & Wellness Network	<ul style="list-style-type: none"> ○ Madison County Health Department ○ Health & Wellness Network Partners

Create ____ media messages aimed at normalizing the use of resources within Madison County while providing connection to the online resource page by ____.	# of media messages created	<ul style="list-style-type: none"> ○ Madison County Health Department ○ ECU Public Health ○ Health & Wellness Network Partners ○ Other Community Stakeholders and Subject Matter Experts
Provide ongoing support to organizations (e.g., Ky River Foothills; HEAL, etc.) that aim to provide physical access to resources in Madison County.	# of meetings held with community organizations	<ul style="list-style-type: none"> ○ Madison County Health Department ○ Health & Wellness Network Partners ○ Extension Office ○ School System & FRYSCs ○ Other Community Stakeholders and Subject Matter Experts ○ Madison County Public Library ○ Chamber of Commerce
Conduct facilitated meetings with underrepresented community groups (African American and Hispanic) to identify barriers to resources	# of meetings held with underrepresented groups in Madison County	<ul style="list-style-type: none"> ○ Madison County Health Department ○ ECU Public Health ○ Health & Wellness Network Partners
Increase the number of people utilizing the syringe exchange program	# of people using the Madison County syringe exchange program	<ul style="list-style-type: none"> ○ Madison County Health Department ○ Health & Wellness Network Partners ○ Other Community Stakeholders and Subject Matter Experts
Maintain support for Madison County School education and risk reduction programs.	# of meetings held with Madison County School personnel/staff	<ul style="list-style-type: none"> ○ Madison County Health Department ○ Health & Wellness Network Partners ○ School System & FRYSCs ○ Other Community Stakeholders and Subject Matter Experts

Conduct facilitated meetings with underrepresented community groups (Black/African American, Hispanic, Homeless) to identify barriers.	# of meetings held with underrepresented community groups in Madison County	<ul style="list-style-type: none"> ○ Madison County Health Department ○ ECU Public Health ○ Health & Wellness Network Partners
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PRIORITY AREA 2: Mental health-related issues

Goal: Improve mental health in Madison County by reducing stigma and ensuring access to mental health resources for all residents.

Healthy People 2030 Goals: Increase the proportion of people with substance use and mental health disorders who get treatment for both (MHMD-07); Increase the proportion of primary care visits where adolescents and adults are screened for depression (MHMD-08); Increase the proportion of children and adolescents who get appropriate treatment for anxiety or depression (EMC-D04); Increase the proportion of children and adolescents who get preventative mental health care in school (EMC-D06); Reduce the suicide rate (MHMD-01); Reduce suicide attempts by adolescents (MHMD-02).

Social Determinants of Health Addressed: Access to Care, Social Support, Knowledge, Attitude, Awareness, Stigma, Low Socioeconomic Status, Neighborhood Living Conditions, Perceived Lack of Control, Parenting Style, Schools.

Evidence-based Resources/Programs:

Policy Changes Planned/Desired:

Madison County Objectives	Performance Measures	Lead Person or Organization
Work with the school system to establish a support group for kids who have parents that struggle with SUDs or other traumatic issues.	# of schools in Madison County with support groups established	<ul style="list-style-type: none"> ○ Madison County Health Department ○ Health & Wellness Network Partners ○ Extension Office ○ School System & FRYSCs ○ Other Community Stakeholders and Subject Matter Experts ○ NAMI
Create ____ media messages aimed at normalizing the use of resources within Madison County while providing connection to the online resource page by ____.	# of media messages created	<ul style="list-style-type: none"> ○ Madison County Health Department ○ ECU Public Health ○ Health & Wellness Network Partners ○ Extension Office ○ Other Community Stakeholders and Subject Matter Experts

Increase membership of the Health & Wellness Network by ____ members by ____.	# of new members added to the Health & Wellness Network	<ul style="list-style-type: none"> ○ Madison County Health Department ○ Health & Wellness Network Partners
Hold ____ # of meetings per year with the Health & Wellness Network to maintain a connection between community partners and foster collaboration starting ____.	# of meetings held per year with the Health and Wellness Network	<ul style="list-style-type: none"> ○ Madison County Health Department ○ Health & Wellness Network Partners ○ Other Community Stakeholders and Subject Matter Experts
Create a streamlined and easily accessible online resource page for residents of Madison County by ____.	Online resource page for Madison County created	<ul style="list-style-type: none"> ○ Madison County Health Department ○ ECU Public Health ○ Health & Wellness Network Partners ○ Other Community Stakeholders and Subject Matter Experts ○ Madison County Public Library
Provide ongoing support to existing organizations (e.g., School system; Kentucky River Foothills, etc.) that aim to provide physical access to resources in Madison County.	# of meetings held with community organizations	<ul style="list-style-type: none"> ○ Madison County Health Department ○ Health & Wellness Network Partners ○ Other Community Stakeholders and Subject Matter Experts ○ Madison County Public Library
Conduct facilitated meetings with underrepresented community groups (Black/African American and Hispanic/Latino) to identify barriers to resources.	# of meetings held with underrepresented community groups in Madison County	<ul style="list-style-type: none"> ○ Madison County Health Department ○ ECU Public Health ○ Health & Wellness Network Partners

PRIORITY AREA 3: Obesity-related issues

Goal: Decrease obesity-related issues among Madison County residents.

Healthy People 2030 Goals: Reduce the proportion of children and adolescents with obesity (NWS-04); Reduce the proportion of adults with obesity (NWS-03); Reduce the proportion of adults who do no physical activity in their free time (PA-01); Increase the proportion of adults who walk or bike to get places (PA-10); Increase the proportion of adolescents who do enough aerobic physical activity (PA-06); Increase the proportion of adolescents who walk or bike to get places ((PA-11); Increase the proportion of parents who follow AAP recommendations on limiting screen time for children aged 6 to 17 years (PA-R02); Reduce household food insecurity and hunger (NWS-01); Eliminate very low food security in children (NWS-02); Increase fruit consumption by people aged 2 years and over (NWS-06); Increase vegetable consumption by people aged 2 years and over (NWS-07); Increase the proportion of eligible students participating in the Summer Food Service Program (AH-R03).

Social Determinants of Health Addressed: Built environment, Social Networks and Support, Neighborhood Connectivity, Cleanliness, Transportation and active modes of travel, Food Cost and Availability, Food Deserts.

Evidence-based Resources/Programs:

Policy Changes Planned/Desired:

Madison County Objectives	Performance Measures	Lead Person or Organization
Conduct an evaluation of walkability within a 5-mile radius of downtown Richmond and Berea by _____.	Walkability evaluation completed	<ul style="list-style-type: none"> ○ Madison County Health Department ○ ECU Public Health ○ Health & Wellness Network Partners
Conduct an evaluation of nutritional availability within a 5-mile radius of downtown Richmond and Berea by _____.	Nutritional evaluation of downtown Richmond completed	<ul style="list-style-type: none"> ○ Madison County Health Department ○ ECU Public Health ○ Health & Wellness Network Partners
Increase by _____ the number of health messages (traditional and online) that promote physical activity and healthy eating on a local level by _____.	# of health messages created	<ul style="list-style-type: none"> ○ Madison County Health Department ○ ECU Public Health ○ Health & Wellness Network Partners

		<ul style="list-style-type: none"> ○ Other Community Stakeholders and Subject Matter Experts
Advocate for improved sidewalk connectivity and safety, specifically in areas of the community that report greater transportation barriers.	# of new sidewalks created	<ul style="list-style-type: none"> ○ Madison County Health Department ○ Health & Wellness Network Partners
Maintain online up-to-date activity guide for Madison County Residents	Activity guide for Madison County updated	<ul style="list-style-type: none"> ○ Madison County Health Department ○ Health & Wellness Network Partners ○ Extension Office ○ Madison County Public Library
Conduct facilitated meetings with underrepresented community groups (Black/African American and Hispanic/Latino) to identify barriers to resources.	# of meetings held with underrepresented community groups in Madison County	<ul style="list-style-type: none"> ○ Madison County Health Department ○ ECU Public Health ○ Health & Wellness Network Partners ○



PART 4: Using the Community Health Improvement Plan

The plan guides Madison County community organizations, health care systems, health department, social service agencies, and other community stakeholders in our collaborative work together. Many of the objectives in this plan are based on other community groups unaffiliated with the health department that has assumed responsibility for them. Therefore, it may be challenging to achieve a uniform format across all projects, and not all strategies may fit the strict definition of being "evidence-based."

The next step in this process will include the dissemination of the plan to the Madison County Health and Wellness Network (MCHWN). This will be followed by the health department staff conducting one-on-one meetings with community stakeholders to determine the best fit for the stakeholders' contribution to the community health improvement plan. The health department will convene quarterly meetings with the MCHWN to fine-tune the objectives, performance measures, and strategies and will widely disseminate the community health improvement plan to stakeholders.

The health department staff will attend as many project meetings as possible to track projects/performance measures and record progress and outcomes. We see the value in the number of partners that are collaborating with us on these projects. We will track our progress toward completing each of the objectives as we seek to improve health outcomes for the three priority issues. The Madison County Health and Wellness Network's planning process will be tracked and reported on as it progresses. To track progress and provide updates, the Madison County Health Department will have a designated web link to the updated version of the CHIP on its public website. Progress reports will be provided to the community each year in an annual report that will be appended to this original document, and the MCCHIP will be updated accordingly. Both the CHA and the MCCHIP will be posted on the health department's public website. Other objectives/projects may be added across the five-year planning cycle as current ones are deemed complete or community stakeholders identify new objectives/projects.

REFERENCES

- Centers for Disease Control and Prevention. (2021, February 11). *Adult Obesity Facts*. Centers for Disease Control and Prevention. <https://www.cdc.gov/obesity/data/adult.html>.
- County Health Rankings & Roadmaps (2018). Madison (MI). *County Health Rankings*. <https://www.countyhealthrankings.org/app/kentucky/2019/rankings/madison/county/outcomes/overall/snapshot>
- Feeding America (2018). Food Insecurity in Madison County. <https://map.feedingamerica.org/county/2017/overall/kentucky/county/madison>
- Kentucky Youth Advocates (2019). Kentucky Kids Count: Madison County Profile. <https://kyyouth.org/wp-content/uploads/2019/11/2019-Madison.pdf>
- Madison Opioid Response and Empowerment*. Kentucky River Foothills. (2021, March 9). <https://foothillscap.org/programs/madison-opioid-response-and-empowerment/>.
- Mental Health by the Numbers*. NAMI. (2021). <https://www.nami.org/mhstats>.
- Substance Misuse*. American Public Health Association. (2020). <https://www.apha.org/topics-and-issues/substance-misuse>.
- U.S. Census Bureau (2019). QuickFacts: United States; Kentucky; Madison County, Kentucky. <https://www.census.gov/quickfacts/fact/table/US,KY,madisoncountykentucky/PST0452>
- World Health Organization. (2018). *Mental health: strengthening our response*. World Health Organization. <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>.
- World Health Organization. (n.d.). *Obesity*. World Health Organization. https://www.who.int/health-topics/obesity#tab=tab_1.

Appendix 1

Health Disparities in the Commonwealth

A report on Race and Ethnicity and Health in Kentucky

Health Disparities in the Commonwealth, A Report on Race and Ethnicity and Health in Kentucky
https://www.healthy-ky.org/projects/article/14/health-disparities-in-the-commonwealth-a-report-on-race-and-ethnicity-and-health-in-kentucky?order_by=latest

HEALTH DISPARITIES in the Commonwealth

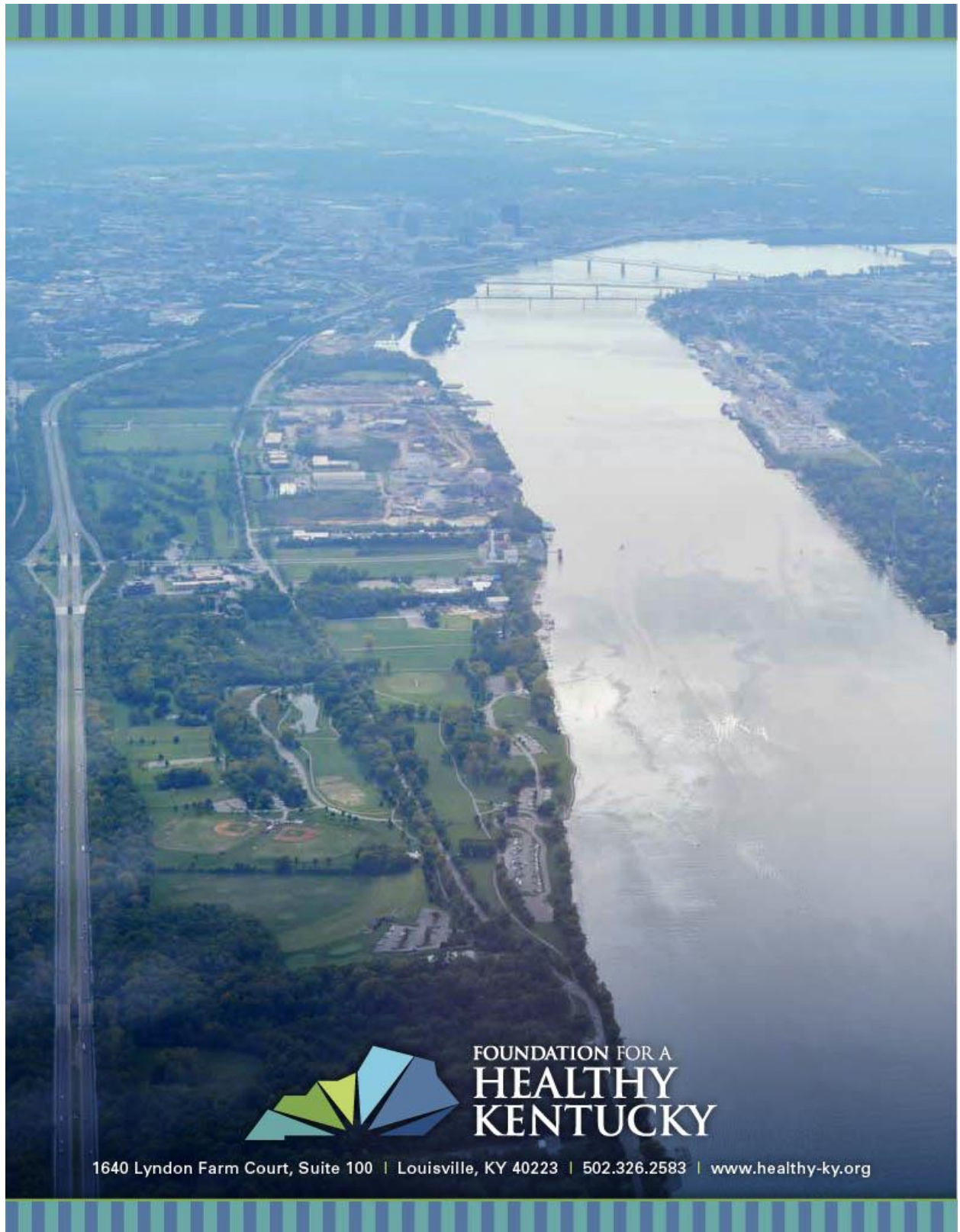
A Report on Race and Ethnicity and Health in Kentucky



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





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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/sgtr/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.

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>.

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?"

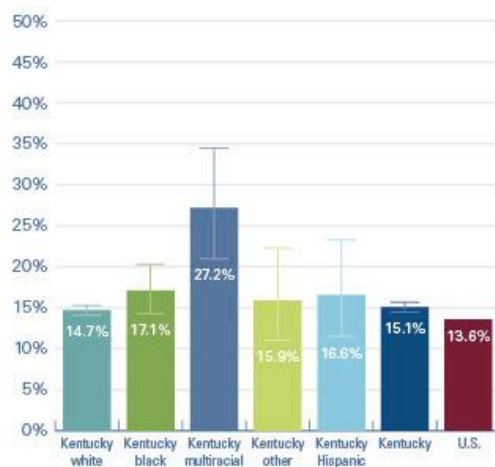
Continued on next page

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

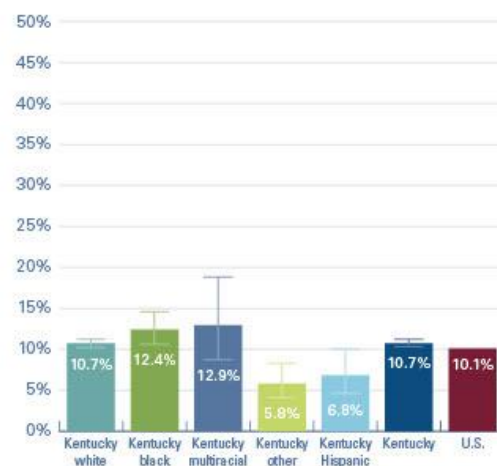


Diabetes

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

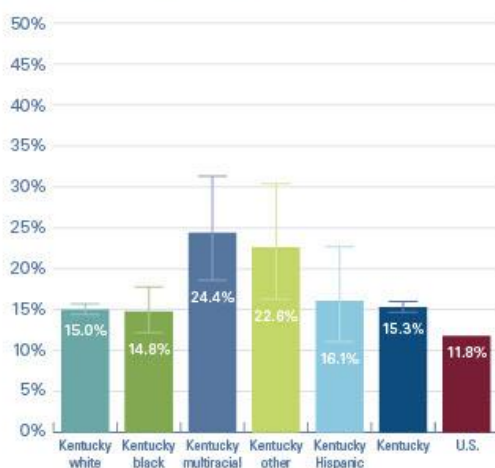


Health Disparities in the Commonwealth

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%).

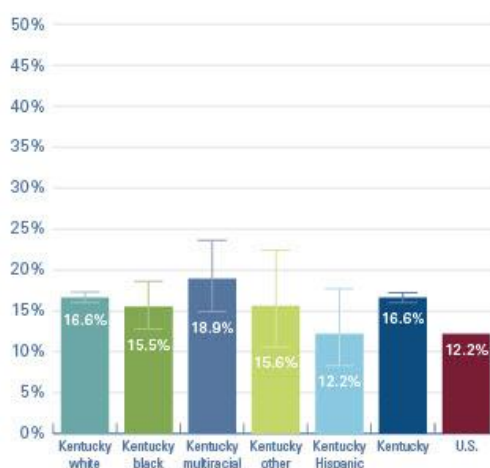
Poor Mental Health by Race and Ethnicity, 2011-2013



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

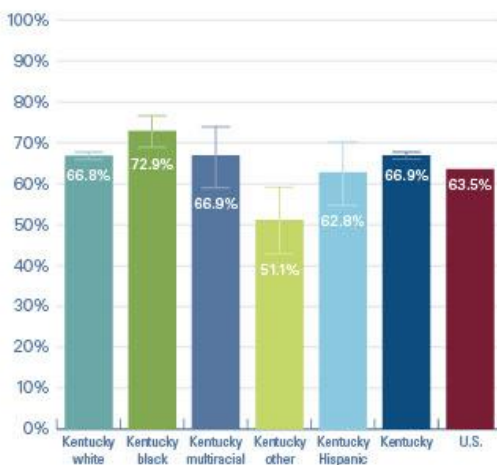




Overweight or Obese

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

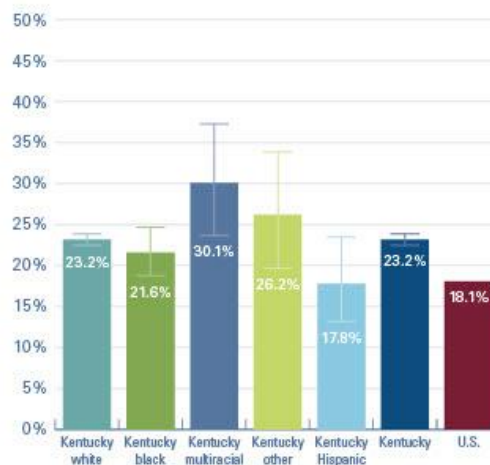


Health Outcomes

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

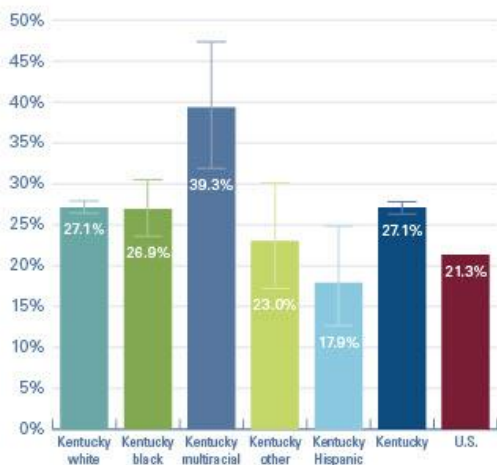




Activity Limitations

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%).

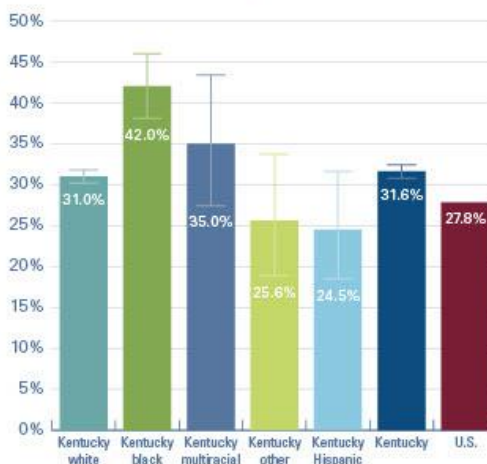
Activity Limitations by Race and Ethnicity, 2011-2013



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

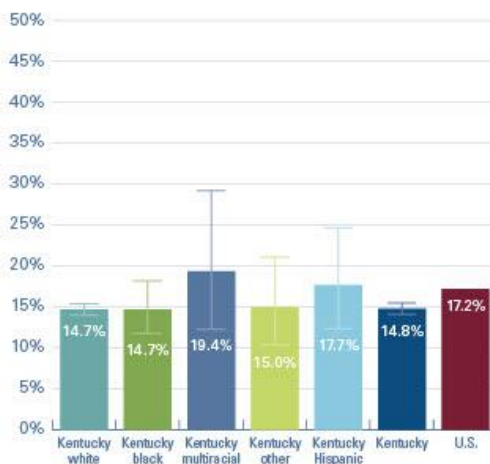




Binge Drinking

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

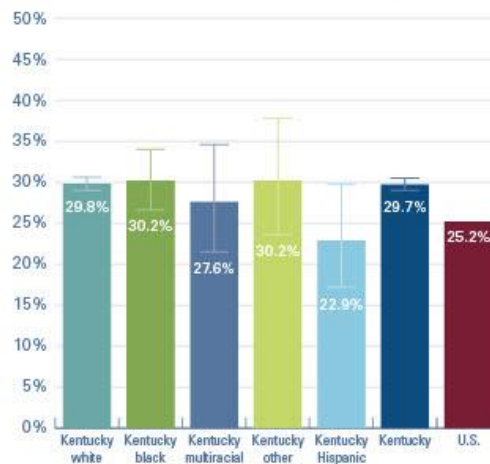


No Physical Activity

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

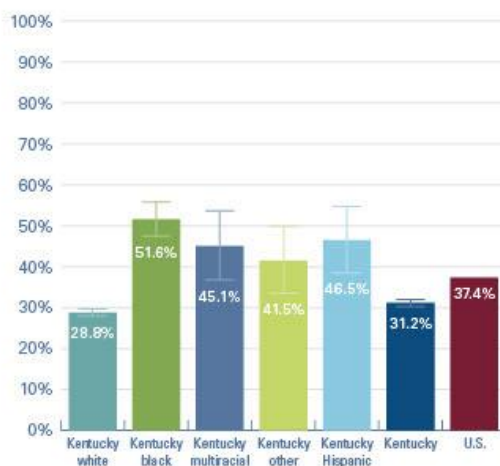


Health Disparities in the Commonwealth

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



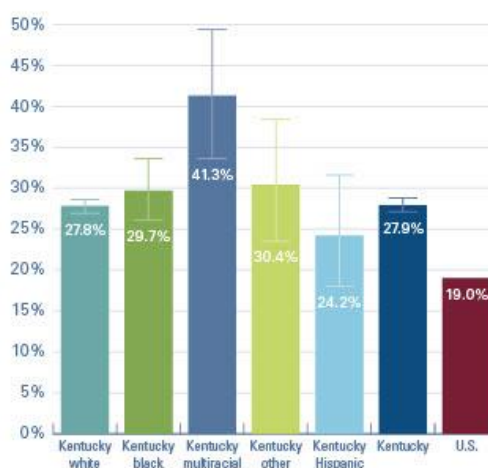
Social and Health Behaviors

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

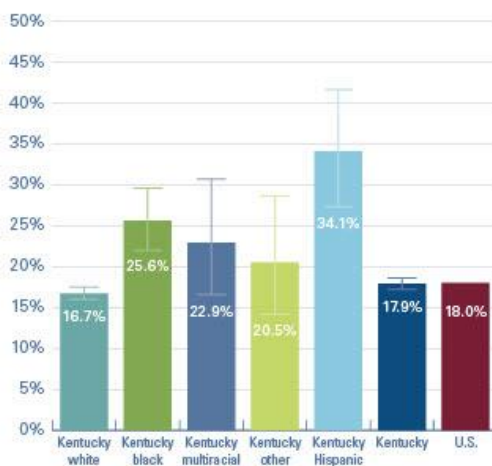


No Health Insurance Coverage

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

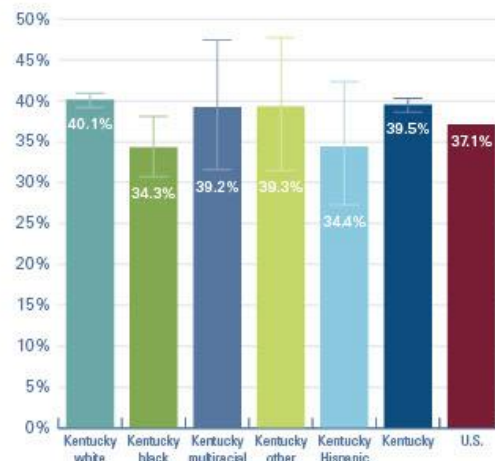


Completed Seasonal Flu Vaccination

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



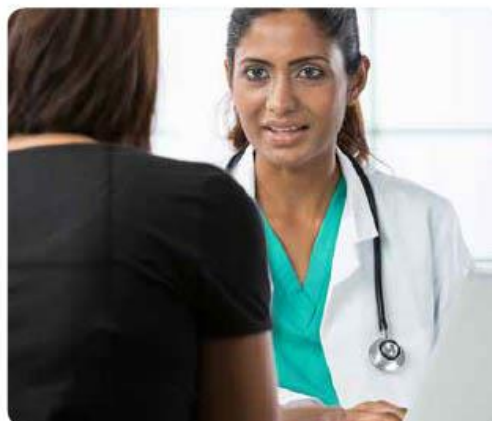
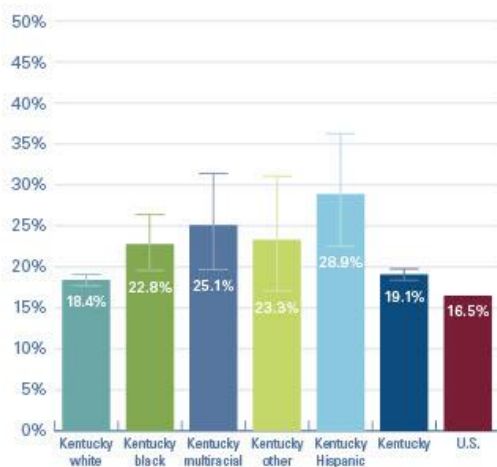
Access to Care

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

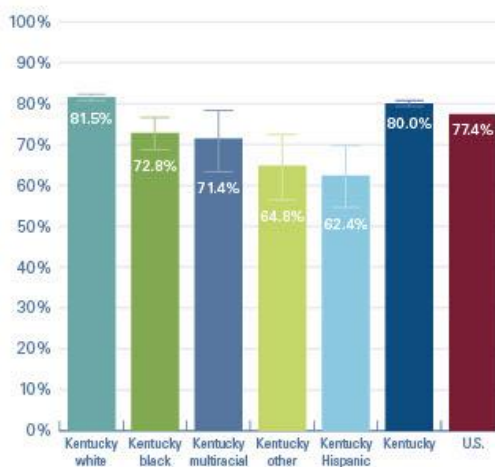


Personal Doctor

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



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.

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?"

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.

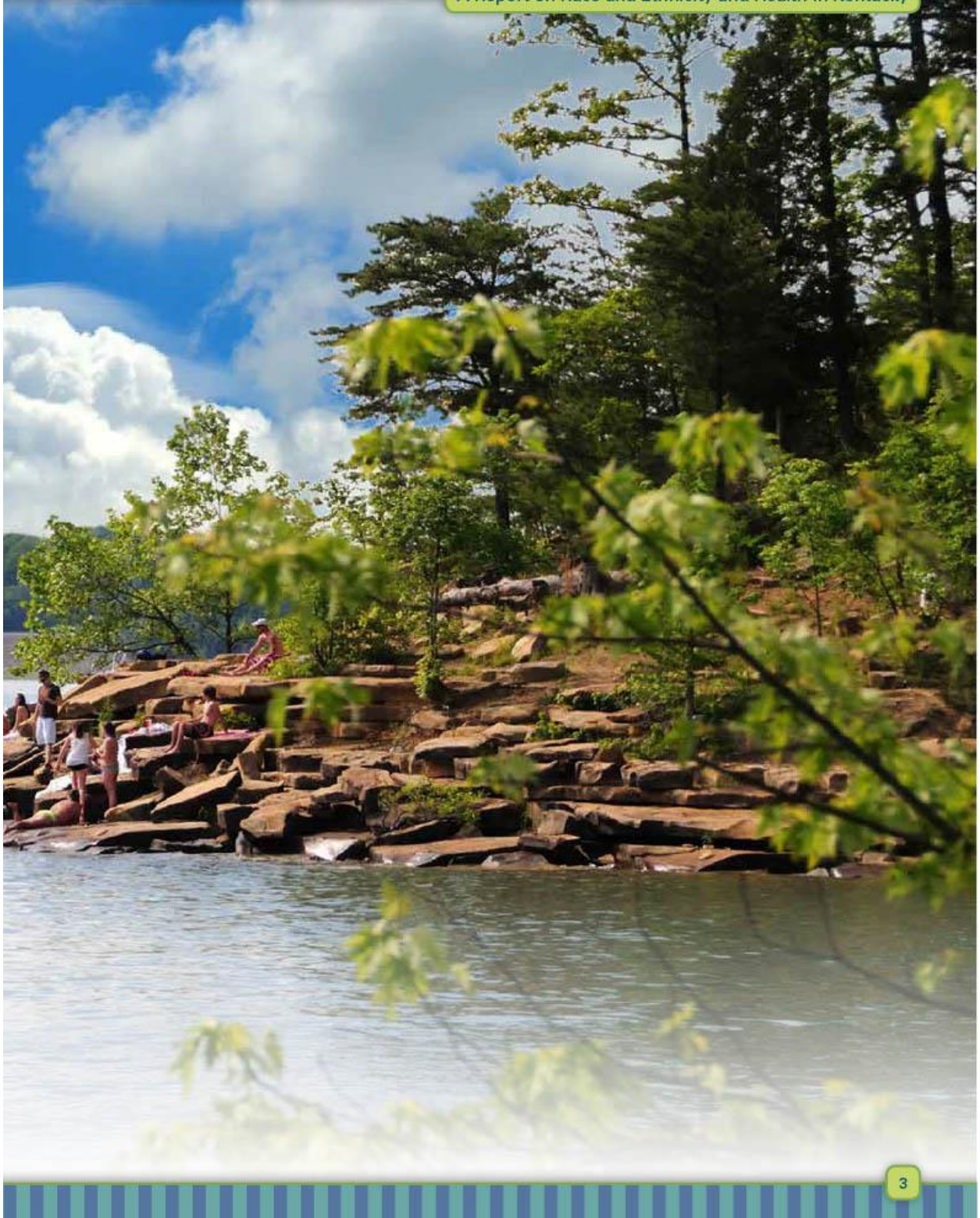
Health disparities between racial and ethnic groups in the United States are well documented and persistent.³ Researchers have demonstrated, for example, that obesity rates are much higher among black Americans than among white Americans.⁴ Similarly, Hispanic Americans are more likely to lack health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

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Health Disparities in the Commonwealth



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:

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Appendix 2

CDC Social Vulnerability Index

Madison County, Kentucky

2018

Socially vulnerable populations are especially at risk during public health emergencies because of factors like socioeconomic status, household composition, minority status, or housing type and transportation.

CDC Social Vulnerability Index (CDC SVI)

A tool to identify socially vulnerable communities

GRASP

CDC Social Vulnerability Index

What is social vulnerability?

Every community must prepare for and respond to hazardous events, whether a natural disaster like a tornado or disease outbreak, or a human-made event such as a harmful chemical spill. A number of factors, including poverty, lack of access to transportation, and crowded housing may weaken a community's ability to prevent human suffering and financial loss in a disaster. These factors are known as **social vulnerability**.

What is CDC Social Vulnerability Index?

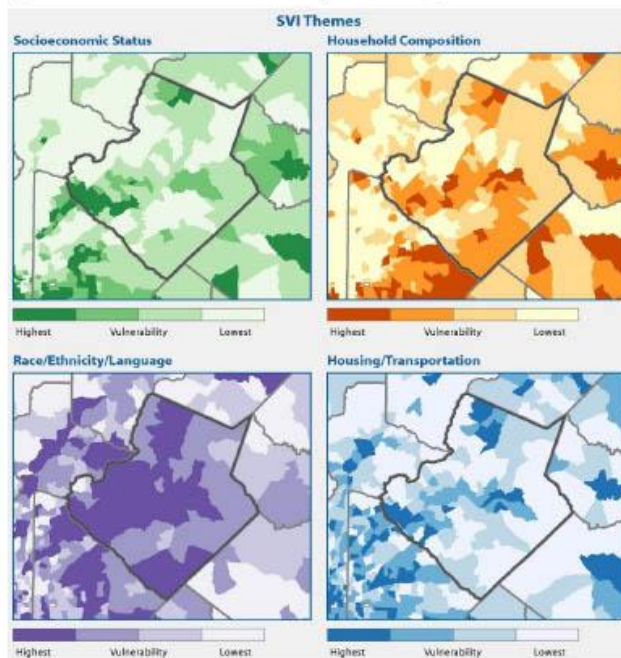
ATSDR's Geospatial Research, Analysis & Services Program (GRASP) created databases to help emergency response planners and public health officials identify and map communities that will most likely need support before, during, and after a hazardous event.



Hurricane Sandy - Breezy Point, NY

Photographer - Pauline Tran

CDC SVI uses U.S. Census data to determine the social vulnerability of every census tract. Census tracts are subdivisions of counties for which the Census collects statistical data. CDC SVI ranks each tract on 15 social factors, including poverty, lack of vehicle access, and crowded housing, and groups them into four related themes. Maps of the four themes are shown in the figure below. Each tract receives a separate ranking for each of the four themes as well as an overall ranking.



How can CDC SVI help communities be better prepared?

CDC SVI can help public health officials and local planners better prepare for and respond to emergency events like hurricanes, disease outbreaks, or exposure to dangerous chemicals.

CDC SVI databases and maps can be used to:

- Estimate the amount of needed supplies like food, water, medicine, and bedding.
- Help decide how many emergency personnel are required to assist people.
- Identify areas in need of emergency shelters.
- Plan the best way to evacuate people, accounting for those who have special needs, such as people without vehicles, the elderly, or people who do not understand English well.
- Identify communities that will need continued support to recover following an emergency or natural disaster.

Maps show the range of vulnerability in Gwinnett County, Georgia for the four themes.

For more information, please contact the CDC SVI Coordinator (svi_coordinator@cdc.gov).



Geospatial Research Analysis, and Services Program (GRASP)
Division of Toxicology and Human Health Sciences, ATSDR

GRASP

Centers for Disease Control and Prevention
Agency for Toxic Substances and Disease Registry

Madison County, Kentucky

PART 1



Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-made disasters, such as chemical spills. The CDC Social Vulnerability Index (CDC SVI 2018)³ County Map depicts the social vulnerability of communities at the census tract level within a specified county. CDC SVI 2018 groups fifteen census-derived factors into four themes that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data, as well as data regarding education, employment, housing, health care, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment.

MAP PROCEEDING 1/12/2022
GRASP
 Agency for Toxic Substances and Disease Registry
 Division of Toxicology and Human Health Sciences
FINAL - FOR EXTERNAL USE

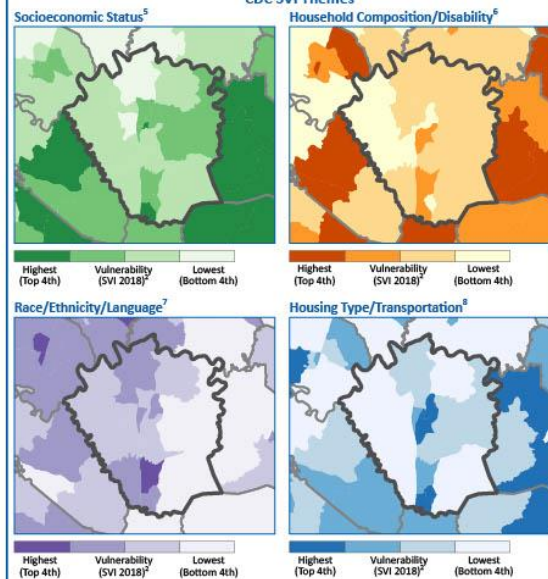


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CDC SVI 2018 – MADISON COUNTY, KENTUCKY

PART 2

CDC SVI Themes

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Appendix 3

Community Health Improvement Plan

Initial

The next step in this process will include the dissemination of the plan to the Madison County Health and Wellness Network (MCHWN). This will be followed by the health department staff conducting one-on-one meetings with community stakeholders to determine the best fit for the stakeholder's contribution to the community health improvement plan. The health department will convene quarterly meetings with the MCHWN to fine-tune the objectives, performance measures, and strategies and will widely disseminate the community health improvement plan to stakeholders. (p.31)

This initial plan follows multiple one-on-one stakeholder meetings and two virtual Madison County Health and Wellness Network meetings (August 31, 2021, & September 2, 2021). The CHIP indicates the commitment level of community partners.

Tracking Updates

The health department staff will attend as many project meetings as possible to track projects/performance measures and record progress and outcomes. We see the value in the number of partners that are collaborating with us on these projects. We will track our progress toward completing each of the objectives as we seek to improve health outcomes for the three priority issues. The Madison County Health and Wellness Network's planning process will be tracked and reported on as it progresses. To track progress and provide updates, the Madison County Health Department will have a designated web link to the updated version of the CHIP on its public website. Progress reports will be provided to the community each year in an annual report that will be appended to this original document, and the MCCHIP will be updated accordingly. Both the CHA and the MCCHIP will be posted on the health department's public website. Other objectives/projects may be added across the five-year planning cycle as current ones are deemed complete or community stakeholders identify new objectives/projects. (p. 31)

The MC-CHIP is a living document and will have Community Objectives added, changed, or deleted as needed.

Primary Data Collected

Date	Method	Priority Area	Target Population	Partner(s)
8/19/21	Key Informant Interviews & Listening Session	1, 2, 3	African American/Black Community	NAACP & Chair of Health Committee
9/13/21	Key Informant Interviews	1, 2, 3	Berea College Campus	Berea College Nursing Students
10/03/21	Listening Session	1, 2, 3	Hispanic/Spanish Speaking Catholic Community	Saint Marks Catholic Church Hispanic Outreach & ECU

PRIORITY AREA 1: Substance misuse related issues		
GOAL: Reduce the incidence and prevalence of substance misuse-related issues in Madison County.		
Objective/impact project	Performance Measures	Responsible for implementation
Increase telehealth opportunities for alcohol and drug counseling by June 2022	Increase in telehealth counseling.	*CHI Saint Joseph Health *Saint Joseph Berea
Increase community participation in the Youth Impact Team of Madison County (a Drug Free Communities youth prevention coalition) from 50 members to 80 members by 8/1/2022	The Youth Impact Team will use online/social media and in-person events, when possible, to recruit new members. Membership will be measured by sign-ins at Youth Impact Team meetings (virtual and in-person).	*Youth Impact Team Project Coordinator *Youth Impact Team Executive and Recruiting Committees
The Youth Impact Team will increase community awareness of underage substance use and community prevention efforts by offering four trainings to community members and stakeholders by 9/30/22	The Youth Impact Team will present four trainings (virtual or in-person) to community members and stakeholders (one training every three months).	*Youth Impact Team Project Coordinator *Youth Impact Team Education Committee

The Youth Impact Team will educate community members, including elected officials and community leaders, about the need for a County and City Social Host Ordinance in training presented at a community meeting by 8/1/22	The Youth Impact Team will educate community leaders about the need and possibilities for a Social Host Ordinance with training provided at a community meeting.	*Youth Impact Team Project Coordinator *Youth Impact Team Social Host Committee
Create Life Skills Pilot program at Madison Central High School 9th & 10th graders by Spring 2022	75% of participating students will expand their understanding of substance use disorder and the impact it has on families and the community.	Kentucky River Foothills Development Council MORE Collaborative Madison County School District Youth Impact Team
Increase the number of Narcan kits distributed throughout the community from 2050 in 2020 to 4100, a 100% increase by December 31, 2022	Number of Narcan kits/training distributed Number of documented Narcan reversals	Madison County Health Department Harm Reduction SPARK Ministries
Increase the number of people with substance use disorder who enter treatment through the Harm Reduction program from 26 in 2020 to 52, a 100% increase by December 31, 2022.	Number of treatment referrals made	Madison County Health Department Harm Reduction SPARK Ministries Voices of Hope

Increase the number of HIV and Hep C tests conducted in the community from 75 in 2020 to 450, a 600% increase by December 2022.	Number of tests conducted	*Madison County Health Department Harm Reduction *University of Kentucky KIRP program
Improve communication among community stakeholders regarding local substance use disorder resources by December 2022, measured by the number of participants in resource-sharing ASAP meetings.	Number of Partnerships	*Madison County ASAP Board
Creation of Charity Tracker Community Resource Guide by March 2022	GO-Directory will be live and usable by March 2022	*God's Outreach *Madison County Health Department *Madison County Health & Wellness Network
Three Listening Sessions will be conducted in Madison County with vulnerable populations by June 2022	Listening session will be completed for Hispanic Community, African-American/Black Community, and Harm Reduction Clients	Madison County Health Department
Local Data Resource Hub to be created by December 2022	Resource Hub goes live	*Madison County Health Department

Madison County Health & Wellness Network will increase membership from 113, by 10%, to 125 by December 2021	Number of MCHWN members	*Madison County Health & Wellness Network *Madison County Health Department

PRIORITY AREA 2: Mental health-related issues		
GOAL: Improve mental health in Madison County by reducing stigma and ensuring access to mental health resources for all residents.		
Objective/impact project	Performance Measures	Responsible for implementation
Provide information about virtual support and education groups for individuals living with mental health issues and their family members.	Publishing of a resource list of virtual support and education programs available in Madison County.	*National Alliance on Mental Illness (NAMI) Local Chapter
Open inpatient behavioral health service by Fall 2022	Program implementation	*Baptist Health Richmond
Open Emergency Department behavioral health treatment area by Fall 2022	Program Implementation	*Baptist Health Richmond
By June 2022, increase mental health resources, including telehealth, participation, and collaboration with community partners.	Increase in mental health resources in Madison County. Increase use of telehealth.	*CHI Saint Joseph Health *Saint Joseph Berea
Creation of Charity Tracker Community Resource Guide by March 2022	GO-Directory will be live and usable by March 2022	*God's Outreach Madison County Health Department *Madison County Health & Wellness Network

Three Listening Sessions will be conducted in Madison County with vulnerable populations by June 2022	Listening session will be completed for Hispanic Community, African-American/Black Community, and Harm Reduction Clients	*Madison County Health Department
Local Data Resource Hub to be created by December 2022	Resource Hub goes live	Madison County Health Department
Madison County Health & Wellness Network will increase membership from 113, by 10%, to 125 by December 2021	Number of MCHWN members	*Madison County Health & Wellness Network *Madison County Health Department

PRIORITY AREA 3: Obesity-related issues		
GOAL: Decrease obesity-related issues among Madison County residents.		
Objective/impact project	Performance Measures	Responsible for implementation
Diabetes education classes and individual counseling, along with medical nutrition therapy, will be available in Madison County through June 2022	Diabetes education classes and medical nutrition therapy remains available	*CHI Saint Joseph Health *Saint Joseph Berea
Creation of the online Charity Tracker Community Resource Guide by March 2022	GO-Directory will be live and usable by March 2022	*God's Outreach *Madison County Health Department *Madison County Health & Wellness Network
Physical Activity Resource Guide for Madison County will be updated and published by May 2022	Publishing the Guide and making it available online	*Madison County Health Department *Madison County Library
Madison County Bicycle & Pedestrian Plan will be updated by June 2023	Completion of plan	Madison County City of Richmond City of Berea Madison County Health Department

Three Listening Sessions will be conducted in Madison County with vulnerable populations by June 2022	Listening session will be completed for Hispanic Community, African American/Black Community, and Harm Reduction Clients	*Madison County Health Department *Saint Marks Hispanic Outreach *Local NAACP Chapter *Madison County Health Department Harm Reduction
Local Data Resource Hub to be created by December 2022	Resource Hub goes live	*Madison County Health Department
Madison County Health & Wellness Network will increase membership from 113, by 10%, to 125 by December 2021	Number of MCHWN members	Madison County Health & Wellness Network Madison County Health Department