



**Partnership for a  
Healthy Community**

healthyhoi.org

# 2023-2025

# COMMUNITY HEALTH IMPROVEMENT PLAN

*Peoria County  
Tazewell County  
Woodford County*

# 2023-2025 Community Health Improvement Plan

PEORIA, TAZEWELL, AND WOODFORD COUNTIES

## TABLE OF CONTENTS

Introduction: The Partnership for a Health Community .....	3
Partnership for a Healthy Community Board.....	4
CHIP 2020-2022 Highlights .....	4
Healthy Eating/Active Living .....	5
Breast, Lung and Colorectal Cancers .....	5
Substance Use and Mental Health.....	6
Executive Summary .....	6
Statement of Purpose .....	6
Development Process for the 2023-2025 CHIP .....	6
Goals for Each Health Priority .....	8
2023-2025 CHIP Priority: Healthy Living and Active Living (HEAL) .....	9
2023-2025 CHIP Priority: Obesity.....	11
2023-2025 CHIP Priority: Mental Health.....	13
Evaluation and Monitoring.....	15
Acknowledgements.....	15
Appendices.....	17
Community Health Needs Assessment Priority Data.....	17
Evidence-Based Interventions .....	36
Gap Analysis.....	82
Forces of Change.....	133

## I. INTRODUCTION

Partnership for a Healthy Community (hereafter referred to as PFHC) is a multi-sector community partnership working to improve population health in the Tri-County Region. Created in 2016, the PFHC uses a collaborative approach to improve health in development and oversight of the Community Health Needs Assessment (CHNA) and Community Health Improvement Plan (CHIP). The collaborative includes the regional health systems, health departments, and community agencies. PFHC is a community-driven partnership of public and private stakeholders working to address priority health issues in Peoria, Tazewell, and Woodford counties. Partnership for a Healthy Community is recognized as leaders in community health improvement.

Since 2016, Partnership for a Healthy Community has increased development and structure to assist in creating a sustainable collaborative initiative. PFHC currently has a reporting structure, adoption of bylaws, and elections and appointments of officers. The organization structure includes an ad-hoc CHNA collaborative team, ad-hoc data team, and health priority action teams to identify and implement health priority goals and strategies.

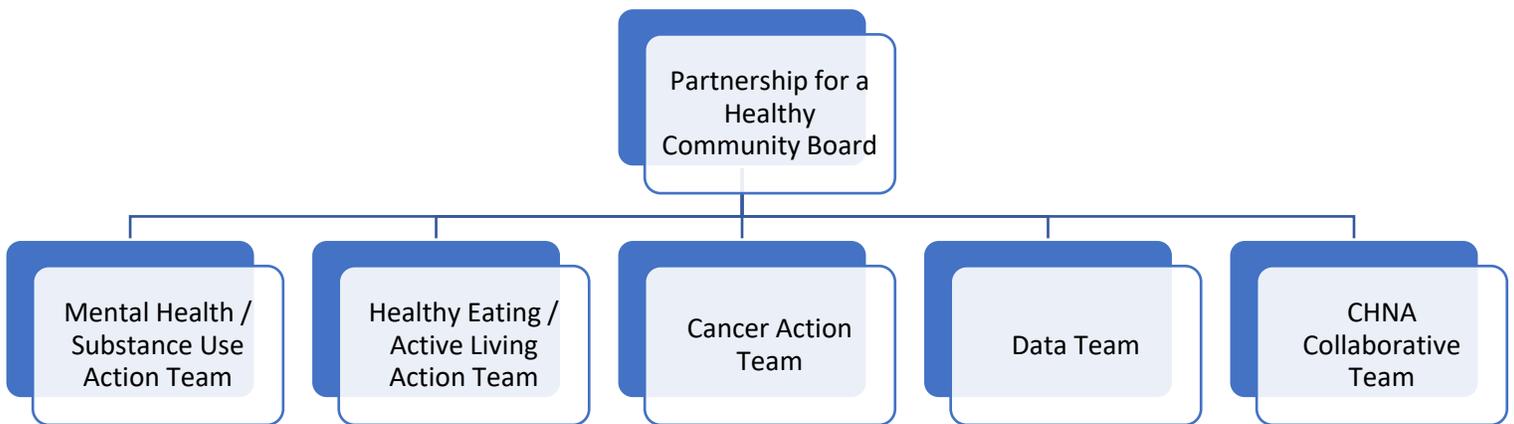


Figure 1: PFHC Action Team Committees 2020-2022

PFHC provides backbone support from multiple sectors to plan, coordinate, and support community health initiatives. Priority health action committee teams report their work to PFHC Board to promote a coordinated health improvement strategy.

The overall vision of PFHC is for the Tri-County Region to be a thriving community that is inclusive, diverse, and sustainable to ensure health equity and opportunity for all. The 2023-2025 CHIP is the third plan developed using this collaborative approach. As PFHC continues to align community efforts in addressing health outcomes, this cycle maximized efforts to increase data collection and gap analysis to drive interventions.

## **2022 PARTNERSHIP FOR A HEALTHY COMMUNITY BOARD MEMBERS**

Lisa Fuller, Co-Chair	<b>OSF Healthcare Saint Francis Medical Center</b>
Amy Fox, Co-Chair	<b>Tazewell County Health Department</b>
Hillary Aggertt	<b>Woodford County Health Department</b>
Amelia Boyd	<b>UnityPoint Health – Central Illinois</b>
Holly Bill	<b>Hult Center for Healthy Living</b>
Ann Campen	<b>UnityPlace</b>
Beth Crider	<b>Peoria Regional Office of Education</b>
Sally Gambacorta	<b>Carle Eureka Hospital</b>
Kate Green	<b>Home for All – Continuum of Care</b>
Monica Hendrickson	<b>Peoria City/County Health Department</b>
Tricia Larson	<b>Tazewell County Board of Health</b>
Craig Maynard	<b>Eureka College</b>
Nicole Robertson	<b>American Cancer Society</b>
Chris Setti	<b>Greater Peoria Economic Development Council</b>
Adam Sturdavant	<b>OSF Medical Group - Pediatrics</b>
Larry Weinzimmer	<b>Bradley University</b>
Jennifer Zammuto	<b>Heart of Illinois United Way</b>

## **II. CHIP 2020-2022 HIGHLIGHTS**

Since 2016, PFHC has worked collectively to establish and coordinate evidence-based intervention strategies for the Tri-County Region. The first cycle of the CHIP plan included the gathering of multiple organizations, sectors, and the public to participate in population health planning. Experts and community members worked together to identify and prioritize local health concerns and quality of life issues, map, and leverage community resources, and form effective partnerships to implement health improvement strategies in Peoria, Tazewell, and Woodford Counties.

In 2019, the Partnership for a Healthy Community began their second cycle in needs assessment and improvement planning, building from the previous cycles' lessons learned and increased community commitment. The focus of 2020-2022 CHNA/CHIP was to leverage additional community partners in leadership and expand the interventions through focused social determinants of health (SDOH)

impacts. However, beginning in February 2020, the COVID-19 pandemic would greatly impact this cycle's capacity to implement and engage various interventions.

Throughout the 2020-2022 CHNA/CHIP cycle, PFHC was able to pivot interventions and programming to address novel challenges and to highlight programming that met increased demand. The Partnership for a Healthy Community Action Teams pivoted in response to the COVID-19 pandemic and worked creatively to address barriers. Examples of this flexibility included increased food distribution, opioid overdose response, and launch telehealth to increase access to mental health providers.

### **Healthy Eating/Active Living (HEAL)**

HEAL was prioritized by Peoria, Tazewell & Woodford Counties to focus on youth and adult nutrition and physical activity, food insecurity, and built environment. HEAL formed workgroups to develop objectives and strategies to reduce the proportions of adults considered obese, youth who self-reported as overweight and obese, and reduce food insecurity within the Tri-Counties. HEAL continues to receive the Community Foundation of Central Illinois' *Ending Hunger Together* Grant to increase healthy food access, advance community education, and create economic and agricultural development opportunities. Additionally, the Illinois State Physical Activity and Nutrition (ISPAN) grant continues to focus on Food Service Guidelines, Breastfeeding, Active Living, and Early Childhood Education programming. *HEAL Team News* was created and distributed to promote HEAL activities among community partners. HEAL has offered support to the development of many campaigns: Move It Mondays, Hunger Action Month & Tri-County Hunger Walk, WIC Farmers Market, and 12 Days of Giving.

### **Breast, Lung, and Colorectal Cancers**

The Cancer Community Action Team worked to reduce the illness, disability, and death caused by breast, lung, and colorectal cancer. The objective was to reduce age-adjusted death rate by 1% for all three cancers. The team focused on increasing the number of breast, lung, and colon cancer screenings performed in the tri-county area. Additionally, there were a number of projects aimed at increasing smoking cessation participation, creating tobacco free policies in the tri-county area, and increasing the proportion of homes with an operating Radon mitigation system.

The past three years had some unique challenges for this team due to the COVID pandemic and the subsequent disengagement from elective healthcare that accompanied efforts to slow the spread of the virus. With this in mind a large percentage of our efforts were devoted to educating our community members on the need to continue screening for cancer during this unique time. The team utilized print, radio, television, and social media to educate the public that cancer does not stop during a pandemic. The Cancer Action Team designed a press release from the Partnership for a Healthy Community to educate the community on the need to get back to screening. All partners shared ideas and held screening events to prioritize a return to screening. The data demonstrated screenings return to pre-COVID levels by the end of this three-year cycle. Lung screenings in particular far exceeded previous levels. Edwards Settlement Grant dollars were obtained and used to increase lung screening awareness along with increasing applications for home Radon mitigation systems. These efforts contributed to a

significant increase throughout the area in lung screenings and Radon mitigation. Efforts were made to educate the community on the various methods for colon screenings. Colon cancer screening kits were made available at community outreach events by both UnityPoint and OSF Healthcare. Illinois Tobacco-Free Communities Grant was successful throughout the pandemic in increasing tobacco-free policies. Genetic screening activities were also emphasized by local healthcare provider partners to identify high risk individuals and adjust screening regimens accordingly. Barriers to care was also a focus as the American Cancer Society provided grants to both UnityPoint and OSF Healthcare to assist patients living with cancer with transportation and lodging.

## **Substance Use and Mental Health**

Substance Use, defined as abuse of illegal and legal drugs, alcohol, and tobacco/vaping use, and Mental Health, defined as anxiety, depression, and suicide, were identified as a priority concerns for the Tri-County in the 2019 Community Health Needs Assessment. These two priority concerns were addressed under one working group during the 2020-2022 CHIP cycle, as many of the key agencies involved in the selected interventions worked together to address these concerns. The group selected goals, objectives, and strategies to address mental health and substance use issues across all three counties.

Substance Use efforts were largely focused on reducing overdoses and drug-induced deaths through increased Narcan distribution efforts, expanding access to stable housing for frequent utilizers, and providing education and awareness through social media and technology-enhanced classroom instruction. Mental Health efforts led to an increased number of community members certified in the evidence-based training, Mental Health First Aid, additional suicide prevention efforts throughout schools and communities, and an increased number of behavioral health providers throughout primary care settings.

## **III. EXECUTIVE SUMMARY**

### **a. Statement of Purpose**

In 2022, PFHC embarked on the planning of the 2023-2025 CHIP. It was important to Partnership for a Healthy Community that the board and action committees continue to take a collaborative approach to accomplishing the goals identified in the CHIP. To facilitate this process, the CHIP Transition Team, an ad-hoc committee, was formed to review the process and intentionally plan community feedback. The committee consisted of members from the three local health departments (Peoria, Tazewell, and Woodford) and three hospital systems (Carle Eureka, OSF Saint Francis Medical Center and UnityPoint Health). To assist in the transition between the two cycles, the committee focused on reviewing the CHNA, identifying gaps, supporting evidence-based interventions, and creating a structure to gain feedback and voice to the process.

### **b. Development Process for the 2023-2025 CHIP**

#### **Community Health Needs Assessment and Prioritization**

The 2022 Community Health Needs Assessment (CHNA) provides and assists with data determination for strategic planning. As with the previous CHNA, the 2022 CHNA included community engagement and statistical analysis both county and regionally. A quality

improvement project the PFHC Board discussed was to conduct regional analyses, specifically identifying thirteen (13) geographic sub-areas within the tri-county. The data was used to make health priority determinations. The completed 2022 CHNA can be found at [www.healthyhoi.org](http://www.healthyhoi.org).

A variety of data sources were used as part of the assessment which included demographic composition of the Tri-County Region, the predictors for and prevalence of diseases, the leading causes of mortality, the accessibility to health services and healthy behaviors. Primary data is a key component of the CHNA, specifically to engage the community in determining trends and perceptions. To perform these analyses, information was collected from publicly available sources as well as private sources of data. Additionally, surveys were completed by 1,649 respondents in the community. The residents were assessed with a special focus on the at-risk or economically disadvantaged population.

On May 24, 2022, Partnership for a Healthy Community hosted a prioritization meeting with over 50 community members representing a variety of sectors. During this event the data was shared (Appendix A) to review the key health priorities and voting was conducted to determine the top three areas of concern.

The 2023-2025 Health Priorities are:

- **Healthy Eating / Active Living (HEAL)** includes a healthy eating plan, physical activity throughout the day, access to foods, and food security
- **Obesity** includes individuals who are overweight or obese
- **Mental Health** includes depression, anxiety, and suicide

## **Gap Analysis**

Upon completion of the CHNA Prioritization, the ad-Hoc Transition Team began to focus on the selection of goals, objectives, and interventions. Discussion regarding areas of opportunity from the previous cycle included focused gap analysis regarding sub-populations that are disproportionately impacted in regards to the three health priorities. Utilizing staff from the University of Illinois College of Medicine Peoria, a gap analysis was completed to assist in development of the interventions (Appendix B). The report included analysis of the community survey, along with local and national data to further examine the gaps and barriers as they pertain to HEAL, obesity, and mental health.

## **Intervention Assessment**

PFHC's work is rooted in using evidence-based practices to improve health outcomes. Using validated resources, the ad-Hoc committee established an extensive list of interventions that specifically impacted the three health priorities. The committee then conducted a crosswalk to establish if the interventions aligned with the gap analysis and/or are currently being conducted within the 2020-2022 CHNA/CHIP. (Appendix C).

## **CHIP Development Feedback**

The Partnership for a Healthy Community hosted three CHIP Development meetings in October 2022, each focused on one key health priority. Prior to the meetings, attendees were provided the gap analysis, intervention crosswalk, and a training video explaining the importance of choosing evidence-based practices.

The development days included multisector partners and individuals with lived experience to review the interventions in determining the next cycle's scope of work. The day included a walk-through of evidence-based practices, discussion of intervention assessment, and lastly a dot-voting process to determine rankings of activities. No more than three interventions were selected in an effort to allow action teams to focus on specific gaps and have meaningful outcomes through a highly coordinated approach.

#### **IV. 2023-2025 Health Priority Goals, Objectives, and Interventions**

For the 2023-2025 Community Health Improvement Plan, community stakeholders and partners assembled within Action Teams to begin development of the goals, objectives, and interventions. Embedded in the process was a review of the data used in priority selection along with the interventions selected during the CHIP Development meetings. Facilitated discussion began with walking through the Forces of Change which examines trends that would impact the ability to conduct work (i.e. legislation, economic shifts). The Forces of Change Assessment can be found in Appendix D. The Action Team members provided feedback on tactics and evaluation of milestones to demonstrate success for the evidence-based interventions. All of the information has been consolidated into the three following dashboards:

1. Healthy Eating / Active Living
2. Obesity
3. Mental Health

## HEALTHY EATING/ACTIVE LIVING

<b>Goal:</b>	<b>Improve overall healthy eating and physical activity in the Tri-County Region.</b>
<b>Objective HEAL1</b>	By December 31, 2025, increase accessibility of healthy food in the Tri-County Region through the support of community gardens by 10%.
<b>Objective HEAL 2</b>	By December 31, 2025, increase adults reporting exercising 1-5 days a week among the Tri-County Region by 1%.  <i>Baseline: 28% of adults reported no exercise at all (Source:2022 CHNA)</i>

### Intervention Strategies

#### **Gardening: Increase Vegetable Consumption among Children (HE)**

	<b>Tasks/Tactics</b>	<b>Evaluation Plan</b>
	HE 1: Gather baseline data around community gardens and school-aged programming.	<ul style="list-style-type: none"> <li>• Complete a comprehensive list establishing locations of community gardens and school aged gardening programs.</li> <li>• # of children/families accessing the community gardens</li> </ul>
	HE 2: Implement garden-based learning sessions focused on gardening and healthy eating.	<ul style="list-style-type: none"> <li>• # of children/families attending information sessions about gardening and healthy foods.</li> <li>• Increase healthy eating knowledge through pre/post test evaluation per session by 75%.</li> </ul>
	HE 3: Promote campaigns focused on healthy eating and access to healthy foods.	<ul style="list-style-type: none"> <li>• # of healthy eating and community gardening campaigns in the Tri-County Region.</li> </ul>

#### **Physical Activity- Increase physical activity through social supports to improve fitness of adults in the tri-county area. (PA)**

	<b>Tasks/Tactics</b>	<b>Evaluation Plan</b>
	PA 1: Increase data collection focusing on adult physical activity in the Tri-County Region.	<ul style="list-style-type: none"> <li>• # of establishments collecting adult physical activity data in the Tri-County Region.</li> </ul>
	PA 2: Recruit additional Tri-County partner participation in the HEAL action team.	<ul style="list-style-type: none"> <li>• Increase # of partners recruited by 6.</li> </ul>

	PA 3: Create promotional campaigns to promote physical activity in the Tri-County Region.	<ul style="list-style-type: none"> <li>• Increase the number of physical activity campaigns in the Tri-County Region.</li> </ul>
	PA4: Create social support events focused on increasing physical activity in the Tri-County Region.	<ul style="list-style-type: none"> <li>• Increase the number of adults attending each event by 50%.</li> </ul>

## OBESITY

<b>Goal:</b>	<b>Reduce the proportion of residents with obesity in the Tri-County Region.</b>
<b>Objective OB1</b>	By December 31, 2025, reduce the proportion of adolescents with obesity in the Tri-County Region by 1%.
<b>Objective OB2</b>	By December 31, 2025, reduce the proportion of adults (women) with obesity in the Tri-County Region by 2%.

### Intervention Strategies

#### Digital Health Interventions for Adolescents with Obesity (DHIAO)

	<b>Tasks/Tactics</b>	<b>Evaluation Plan</b>
	DHIAO 1: Identify baseline data, definitions and programming for digital health interventions in the tri-county area.	<ul style="list-style-type: none"> <li>• # of data points collected.</li> <li>• Define “Digital Health Interventions”</li> <li>• Identify programming currently being offered.</li> </ul>
	DHIAO 2: Promote through education and awareness utilizing social media communication.	# of promotional campaigns performed through the Tri-County Region.
	DHIAO 3: Collaborate with healthcare providers for enrollment.	<ul style="list-style-type: none"> <li>• % of individuals completing digital health program report improved weight related measures.</li> <li>• 10-15% improvement in BMI</li> <li>• % retention of registered individuals for one month of the program.</li> </ul>
	DHIAO 4: Promote behavioral change through use of technology devices.	<ul style="list-style-type: none"> <li>• Pre / Post changes in behavior</li> </ul>
	DHIAO 5: Personalize program with Text Messaging, Health coaching calls, or Tele Visits	<ul style="list-style-type: none"> <li>• Pre/ Post changes in Biometrics</li> </ul>

#### Strong People Healthy Weight (SPHW)

	<b>Tasks/Tactics</b>	<b>Evaluation Plan</b>
	SPHW 1: Collect Baseline data	<ul style="list-style-type: none"> <li>• # of data points collected.</li> </ul>
	SPHW 2: Develop recruitment campaign in the tri-county area.	<ul style="list-style-type: none"> <li>• Increase # of individuals registering for programs.</li> <li>• # of promotional campaigns performed in the tri-county area.</li> </ul>
	SPHW 3: Provide a Leadership workshop to educate and inform about program.	<ul style="list-style-type: none"> <li>• # of participants in the workshop</li> </ul>

	<p>SPHW4: Partner with community resources to establish class locations.</p>	<ul style="list-style-type: none"> <li>• % of retention of registered individuals through completion of program.</li> <li>• # of individuals completing SPHW program report having improved weight related measures.</li> <li>• Enrollment of 25 participants quarterly within the tri-county area.</li> </ul>
	<p>SPHW5: Share success stories of the program within the tri-county program</p>	<p># of pre/post test changes in biometrics and behavior.</p>

## MENTAL HEALTH

<b>Goal:</b>	<b>Improve the mental health, specifically suicide, depression, and anxiety, within the Tri-County Region.</b>
<b>Objective MH1</b>	By December 31, 2025, decrease the number of suicides in the tri-county area by 10%. <i>Baseline: Suicide deaths per 100,000–PC 16.2; TC 14.7; WC 17.7; IL 11.1 (Source: Tri-County 2015-2018 HCI Conduent)</i>
<b>Objective MH2</b>	By December 31, 2025, increase the proportion of children and adults with mental health problems in the tri-county areas who get treatment by 10%. <i>Baseline: Age-adjusted ER rate due to pediatric mental health per 10,000; PC 312.5; TC 275.5; WC 139.9; IL 192.3 and Age-adjusted hospitalization rate due to adult mental health per 10,000; PC 286.8; TC 173.1; WC 113.4; IL 158.9 (Source: HCI Conduent); and % of respondents that indicated they spoke to someone about their mental health in the last 30 days (Source: 41% in 2022 CHNA)</i>

### Intervention Strategies

#### Culturally-Adapted Health Care (CAHC)

	Tasks/Tactics	Evaluation Plan
	CAHC 1: Promote awareness and education trainings quarterly that are focused on improving cultural competence related to mental health care.	<ul style="list-style-type: none"> <li>• 60% of individuals who register for the event(s) will complete the training</li> <li>• More than 50% of the individuals who attended the sessions will self-report improvement in behaviors after cultural competence training(s)</li> <li>• More than 70% of the individuals who attended the session will self-report improvement in attitudes after cultural competence training(s)</li> </ul>
	CAHC 2: Provide tailored educational trainings bi-annually to healthcare professional in the tri-county region.	<ul style="list-style-type: none"> <li>• Establish baseline, increase # providers completing cultural competence trainings by 10%</li> </ul>
	CAHC 3: Create policies to support matching patient race/ethnicity/cultural/sexual orientation backgrounds to provider	<ul style="list-style-type: none"> <li>• Increase # providers/systems that have policies to support cultural competence by 10%</li> </ul>
	CAHC 4: Make culturally- and linguistically adapted materials and marketing available	<ul style="list-style-type: none"> <li>• Improve patient experience ratings (likelihood to recommend) by 1%</li> </ul>

#### Telemedicine (TELMED)

	<b>Tasks/Tactics</b>	<b>Evaluation Plan</b>
	TELMED 1: Establish baseline, inventory available telemedicine among tri-county	<ul style="list-style-type: none"> <li>• Complete inventory list of all telemedicine access.</li> </ul>
	TELMED 2: Disseminate information through 10 promotional campaigns on how to access (mental health) telemedicine	<ul style="list-style-type: none"> <li>• Increase # patients engaged in mental health telemedicine by 10%</li> </ul>
	TELMED 3: Support the development of structured partnerships for community healthcare organizations to provide telemedicine	<ul style="list-style-type: none"> <li>• Increase # new patients enrolled in telemedicine by 10%</li> </ul>
	TELMED 4: Expand number of locations for community members to access telemedicine mental health care (community settings, OSF Strive, libraries, Wraparound Center, etc.)	<ul style="list-style-type: none"> <li>• Increase # telemedicine community access points by 10%</li> </ul>
	TELMED 5: Provide more than 100 residents access to mental health telemedicine appointments who are either medically underserved or live in rural areas	<ul style="list-style-type: none"> <li>• Reduce # hospital readmissions among individuals who engage in telemedicine by 30%</li> </ul>

## **V. Evaluation and Monitoring**

Within Partnership for a Healthy Community's Improvement Plan, there is an "Evaluation Plan" that contains both process indicators and outcome indicators. These indicators will be tracked throughout the three-year cycle, with a specific focus on capturing gap analysis data measures. PFHC Board will be responsible for assuring that data is monitored and reported to the community.

Partnership for a Healthy Community Board reserves the right to amend this 2023-2025 Community Health Improvement Plan as needed to reflect changes with organizational capacity as well as changes in community focus. In addition, throughout the cycle, the acuity of health needs may become more significant and require amendments to the strategies developed to address the health need. Finally, in compliance with Internal Revenue Code Section 501(r), requirements for hospitals may refocus the limited resources the organization committed to the Plan to best serve the community.

## **VI. Acknowledgements**

The work required to support development of the Community Health Improvement Plan cannot be done in a silo. There were over 50 community agencies and stakeholders involved in bringing the improvement plan forward. In addition, PFHC Board would like to specifically identify the following individuals:

**Sarah Donohue, PhD**, Director of Research Services, University of Illinois College of Medicine Peoria

**Sarah Warfield Kelly, PhD, MPH**, Research Epidemiologist / Assistant Professor, University of Illinois College of Medicine Peoria

**Amy Roberts**, Administrative Assistant, Peoria City/County Health Department

### **CHIP Transition Team:**

**Hillary Aggertt, MS**, Public Health Administrator, Woodford County Health Department

**Phillip Bauer, MBA, RRT, RACHE**, Director of Community Outreach, OSF HealthCare Saint Francis Medical Center

**Holly Bill, MPH, CHES, CNP**, Assistant Manager, Hult Center for Healthy Living, UnityPoint Health

**Amy Fox**, Public Health Administrator, Tazewell County Health Department

**Lisa Fuller, MS, MA**, Vice President Outpatient and Ancillary Services, OSF HealthCare Saint Francis Medical Center

**Sally Gambacorta, MA, MS**, Community Health Director, Carle BroMenn Medical Center | Eureka Hospital

**Monica Hendrickson, MPH**, Public Health Administrator, Peoria City/County Health Department

**Nicole Robertson, MPH**, Senior Manager, American Cancer Society

**Amanda Sutphen, MS**, Ambulatory HOD Coordinator, OSF HealthCare Saint Francis Medical Center

### **Spalding Pastoral Center – Catholic Diocese of Peoria Staff**

This page intentionally left blank.

# Appendix A

# HEALTHY EATING & ACTIVE LIVING

## National Target Data

### Healthy People 2030 Nutrition and Healthy Eating

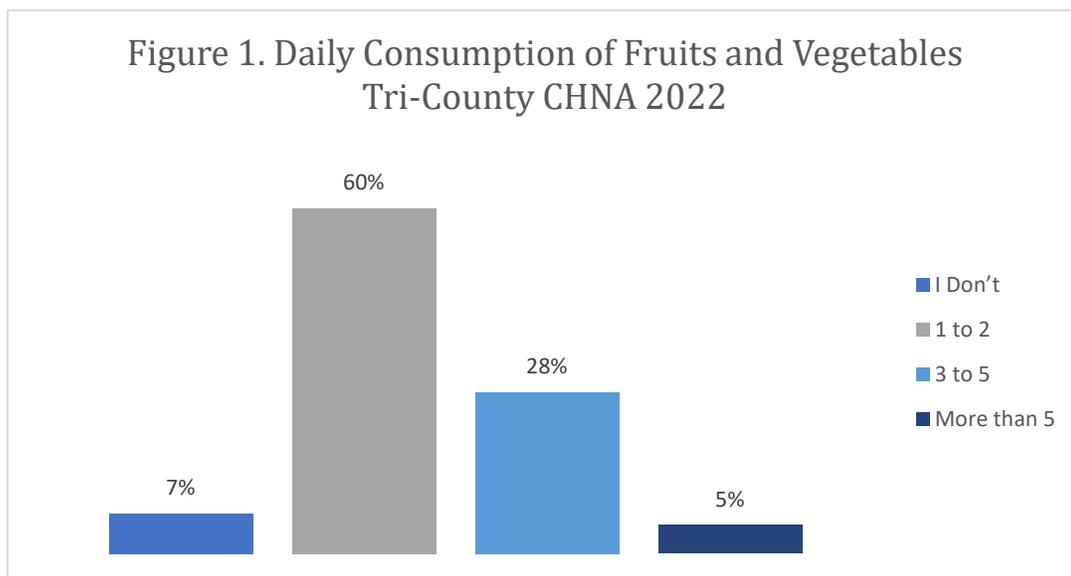
- Reduce household food insecurity and hunger from 11.1% (2018) to 6.0%
- Eliminate very low food security in children from .59% in 2018 to 0.0%

### Healthy People 2030 Physical Activity

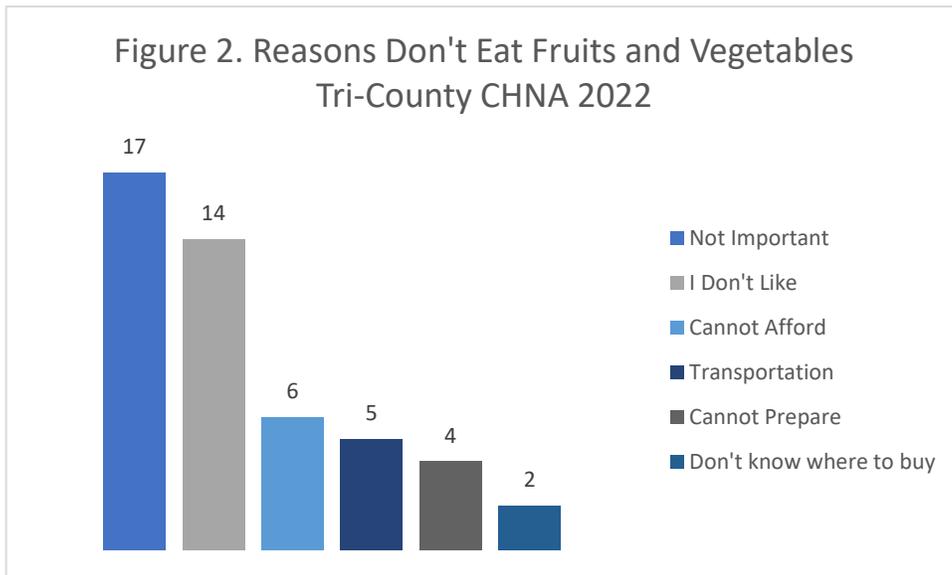
- Reduce the proportion of adults who do no physical activity in their free time from 25.4 % (2018) to 21.2% (NHIS)
- Increase the proportion of adults who do enough physical activity substantial health benefits from 54.2 % in 2018 to 59.2% (NHIS)

## Community Status Assessment Data

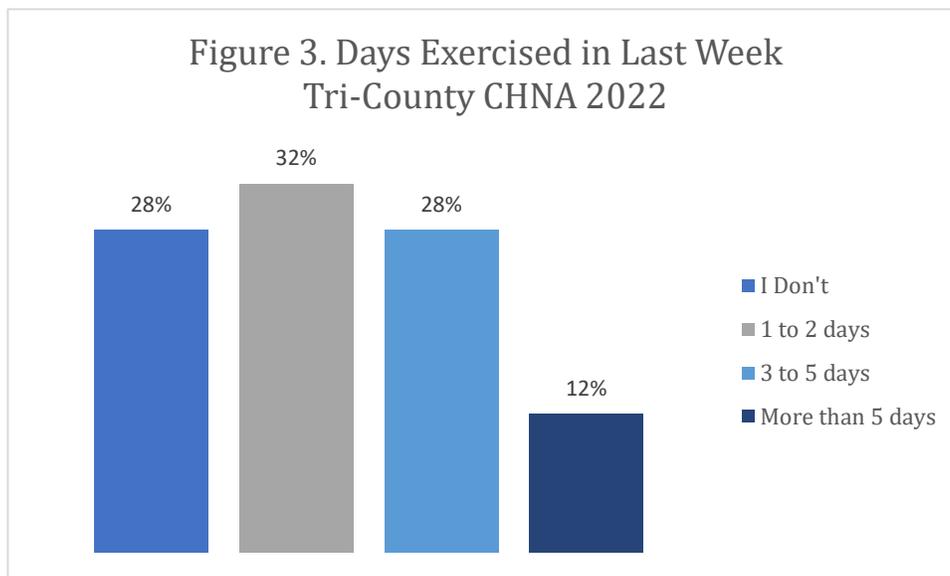
The CHNA survey asked respondents to report how many servings of fruits and vegetables they consumed each day. Over two-thirds (67%) of residents reported that they consumed little or no fruits and vegetables each day as shown in Figure 1.



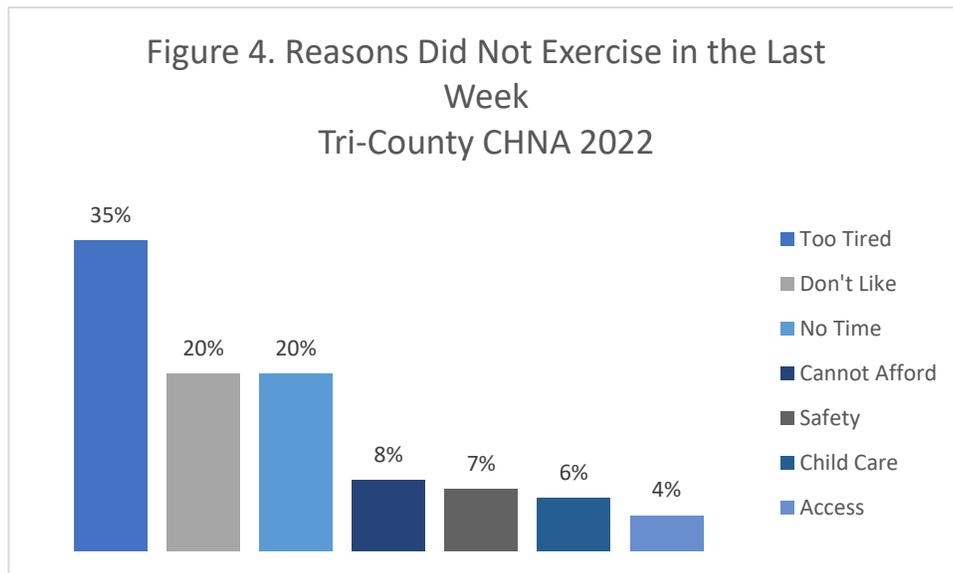
Individuals that indicated that they do not eat fruits or vegetables were asked to follow-up with their reasons for not eating them which are displayed in Figure 2. The most cited reasons for not eating fruits and vegetables were “not important” and “I don’t like”. Note that this only represents a small sample of the survey population and is displayed in frequencies rather than percentages.



A healthy lifestyle, comprised of regular physical activity, has been shown to increase physical, mental, and emotional well-being. Specifically, 28% of respondents indicated that they do not exercise at all, while the majority (60%) of resident's exercise 1-5 times per week (Figure 3).



To find out why some residents do not exercise at all, a follow up question was asked. The most common reasons for not exercising are too tired (35%), dislike of exercise (20%) and not having enough time (20%) (Figure 4).



### Supplemental Conduent’s Healthy Communities Institute (HCI) Data

**Peoria County** has a higher average amount spent on fast food than most counties in Illinois, but it is lower than the average for Illinois and the U.S. Peoria County has a lower average amount spent on fruits and vegetables than most counties in Illinois, but it is higher than the average for Illinois.

**Region 1** scored **below** the tri-county area for healthy eating

**Tazewell County** has a higher average amount spent on fast food than most counties in Illinois, but it is lower than the average for Illinois and the U.S. Tazewell County has a lower average amount spent on fruits and vegetables than most counties in Illinois, but it is higher than the average for Illinois. No regional disparities identified through CHNA Survey Data

**Woodford County** has a higher average amount spent on fast food than most counties in Illinois, but it is lower than the average for Illinois and the U.S. Woodford County has a lower average amount spent on fruits and vegetables than most counties in Illinois, but it is higher than the average for Illinois.

**East Region** scored **below** the tri-county area for exercise

### Focus Group Data

Challenges to staying health across all counties included:

- Unhealthy eating/lack of health literacy around eating/lack of access to healthy food
- Lack of providers for preventative care
- Other challenges included: Lack of healthcare for women with a particular emphasis on having more female providers (Woodford), lack of dental providers (Tazewell), lack of exercise (Peoria) or safe spaces to ride bikes (Tazewell).

Challenges to accessing healthcare included:

- Lack of transportation

- Lack of insurance/fear of cost
- Long wait times to see PCP and longer wait times for specialist care
- Other challenges included a lack of diverse providers and providers who listen (Peoria), a lack of interpreters and who speak the same dialect (Peoria and Tazewell), and prejudice in the healthcare systems (Peoria and Tazewell).

## Social Determinants of Health Data

### Education Access and Quality

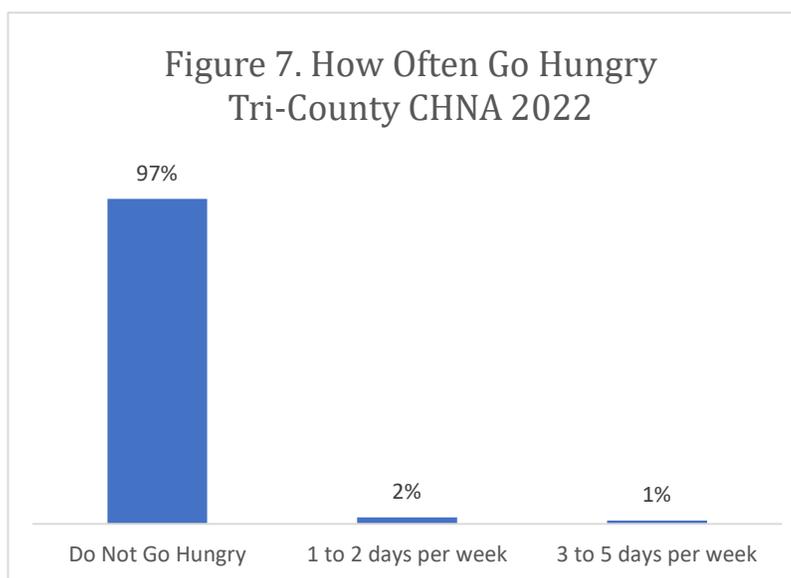
Students who entered 9th grade in 2021 in Peoria County school districts, except Peoria HS, Manual Academy, Limestone Community HS, Il Valley Central HS, Illini Bluffs HS and Farmington HS reported high school graduation rates that were comparable to the State average of 86%.

Students who entered 9th grade in 2021 in Tazewell County school districts, except East Peoria and Delavan HS reported high school graduation rates that were comparable to the State average of 86%.

Students who entered 9th grade in 2021 in Woodford County school districts, except Eureka HS, Low Point-Washburn JR SR HS and Roanoke-Benson HS reported high school graduation rates that were comparable to the State average of 86%.

### Economic Stability

Assessing food insecurity is an essential measure to ensure that everyone has access to food and drink necessary for living healthy lives. Food insecurity exists when people don't have physical and economic access to sufficient, safe, and nutritious food that meets their dietary needs for a healthy life.



Respondents were asked, “How many days a week do you or your family members go hungry?” Most respondents indicated they do not go hungry (97%); however, 3% indicate they go hungry between 1 and 5 days per week.

## **Neighborhood and Built Environment**

Food landscape is a measure of the conditions that affect the ability of residents to access health, affordable nutrition. Key risk influencers include accessibility, affordability, and literacy. For the TriCounty region, 22% of the population is at elevated risk for food landscape. This is lower than the State of Illinois average of 25%. (SocialScape® powered by SociallyDetermined®, 2022)

## **Tri-County Regions of Concern**

### **Frequency of exercise**

- Tends to be rated higher for men, those with higher education, those with higher income and people from an unstable (e.g., homeless) housing environment.
- Rated lower for residents who live in the Eastern Woodford County region.

### **Consumption of fruits and vegetables**

- Tends to be more likely for older people, those with a higher level of education and those with higher income.
- Consumption of fruits and vegetables tends to be less likely for Black people, and lower for residents who live in the Peoria/West Peoria region.

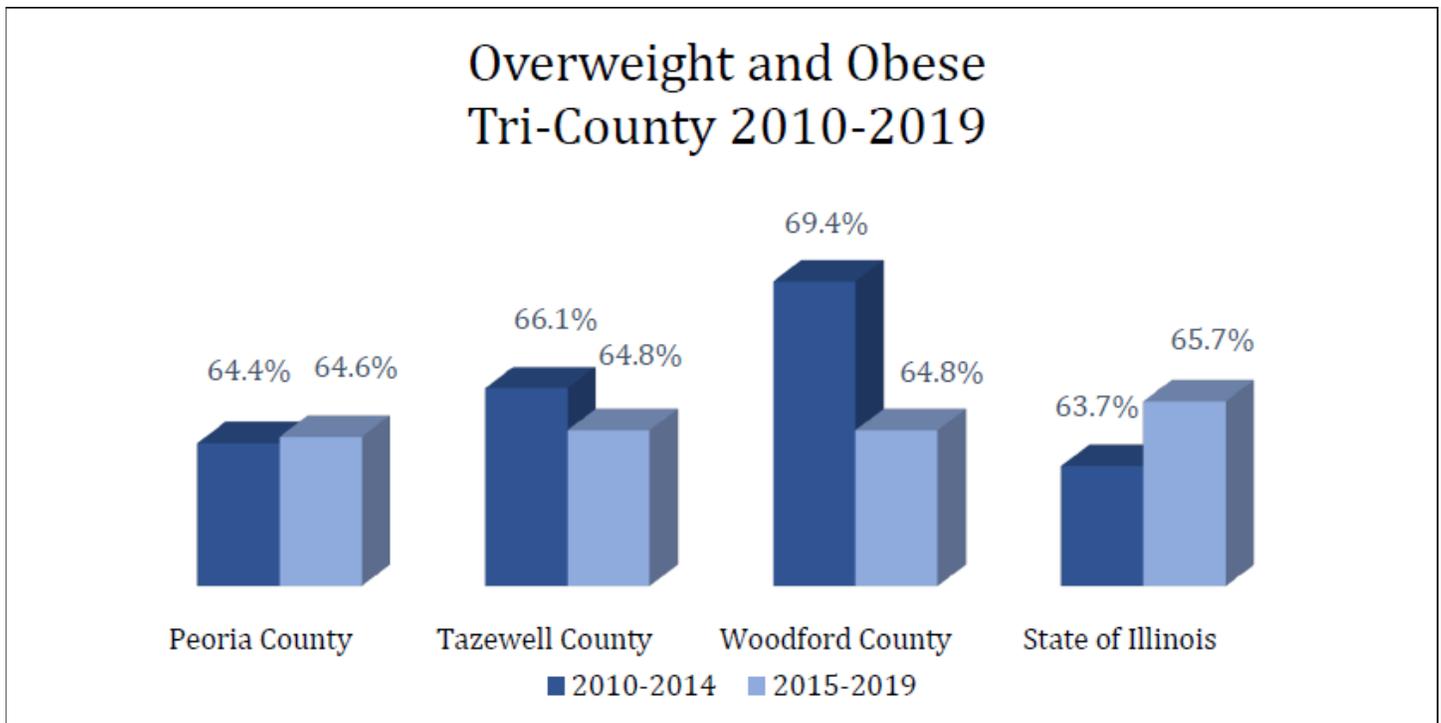
# OBESITY

## National Target Data

- **Healthy People 2030 (HP 2030)** Reduce the proportion of children and adolescents with obesity to 15.5%.
- **HP 2030** Reduce the proportion of adults with obesity to 36.0%.
- **HP 2030** Increase the proportion of health care visits by adults with obesity that include counseling on weight loss, nutrition, or physical activity to 32.6%.
- **HP 2030** Increase the proportion of women who had a healthy weight before pregnancy to 47.1%

## Community Status Assessment Data

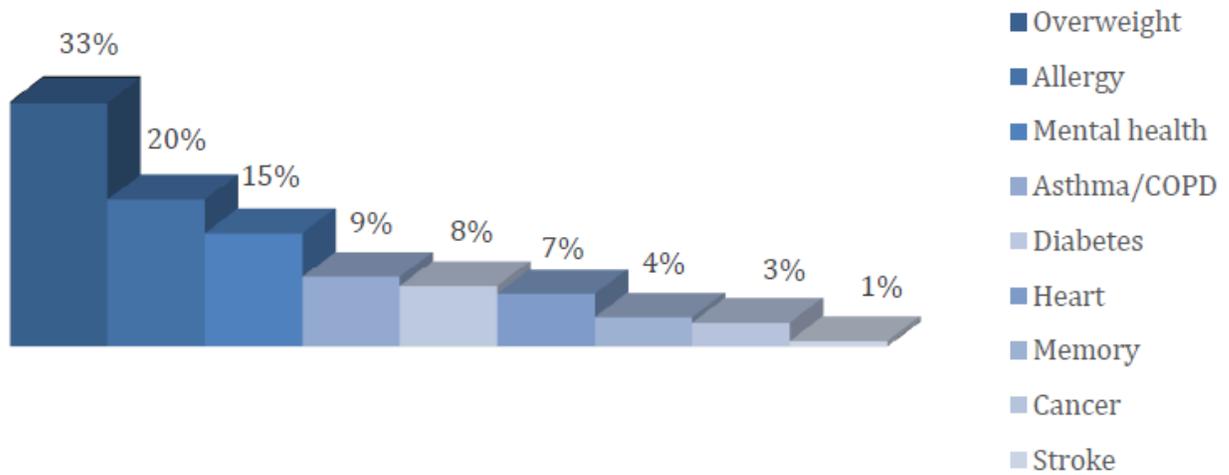
Peoria County has seen an increase in the number of people diagnosed as overweight or obese from 2010-2014 to 2015-2019 from 64.4% to 64.6%. Tazewell County has seen a decrease in the number of people diagnosed with being overweight and obese from 2010-2014 to 2015-2019 from 66.1% to 64.8%. Woodford County has also seen a decrease from 2010-2014 to 2015-2019 from 69.4% to 64.8%. For the State of Illinois, the percentage of obese and overweight people has increased from 63.7% to 65.7% with all three counties being slightly below the State of Illinois.



*Source: Illinois Behavioral Risk Factor Surveillance System*

In the 2022 CHNA Survey, respondents indicated that being overweight was their most prevalently diagnosed health condition.

## Health Conditions Tri-County



*Source: CHNA Survey*

### Supplemental Conduent's Healthy Communities Institute (HCI) Data

**Peoria County:** scored below other counties in Illinois for adults 20+ who are obese.

Region 2, 3, 4 & 5 scored below the county for adults who are obese.

Region 6 scored above the county for adults who are obese.

**Tazewell County:** has an obese population of 29.9%.

Region East, North, South & West scored above the county for adults who are obese

**Woodford County:** scored below other counties in Illinois for adults 20+ who are obese.

Region Central, East, & West scored above the county for adults who are obese.

### Social Determinants of Health (SDoH) Data

**Health Care Access and Quality** according to a 2016 paper, various studies indicate that weight bias and discrimination in the healthcare setting can lead to negative outcomes for patients. This paper found that around 79% of people who are overweight or obese report eating more to cope with weight discrimination and around 52% of women report their weight as a barrier to receiving healthcare. Weight bias can lead to disordered eating, avoiding preventative care, gaining weight and having negative healthcare experiences.

**Education Access and Quality** According to Centers for Disease Control and Prevention (CDC) for children aged 2-19 years the prevalence of obesity decreased as household education level increased.

Adults with college degrees have a lower prevalence of obesity, but this can differ by sex and race/ethnicity (CDC).

**Social and Community Context** involves relationships, specifically positive ones. Positive relationships at home, work, and in the community can help reduce negative health impacts on individuals.

**Economic Stability** According to Harvard T.H. Chan School of Public Health there are direct and indirect costs associated with the treatment of obesity and obesity-related conditions. Direct costs involve outpatient and inpatient health services, lab and radiological tests and drug therapy. Indirect costs are harder to measure, but include the categories of value of lost work, insurance, and wages.

The CDC estimates the annual cost of obesity in the United States (U.S.) was \$147 billion in 2008. Medical costs were \$1,429 higher for obese individuals compared to those with a healthy weight.

The prevalence of obesity decreases in adolescents aged 2-19 years as income level increases (CDC).

**Neighborhood and Built Environment** National data provides evidence that greater walkability in residential neighborhoods may lead to lower child BMI and obesity. According to a study by Kaiser Permanente, barriers to walkability include lack of sidewalks, vehicles not obeying speed limits, distracted drivers, crime and lack of places to walk to.

# MENTAL HEALTH

## National Target Data

Healthy People 2030 aims to increase the proportion of adults with serious mental illness get the treatment they need from 64.1% to 68.8% (2018).

Healthy People 2030 aims to increase the proportion of children with mental health problems who get treatment from 73.3% to 82.4% (2018).

Healthy People 2030 aims to reduce the suicide rate from 13.9 to 12.8 suicide per 100,000 population (2019).

## Community Status Assessment Data

The CHNA survey asked respondents to self-assess their overall mental health status which is displayed in Figure 1. “Good” mental health status fell over 73% between 2016 and 2022 from 72% down to 19%. In 2019, only 8% of respondents answered “Poor”, and in 2022 that number doubled to 16%.

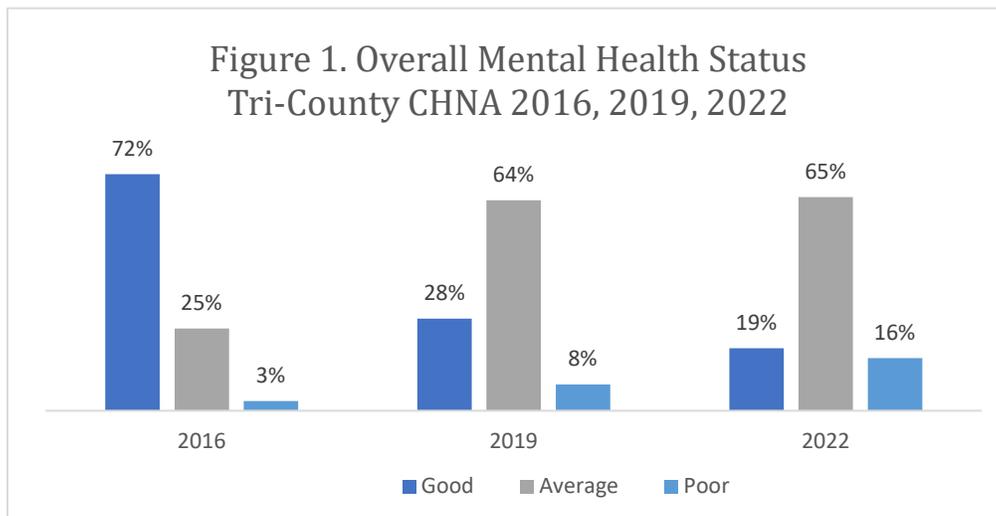


Figure 2 examines how often respondents have felt depressed in the past 30 days. 58% stated that they felt depressed at least 1 to 2 days in the past 30 days, and 11% of respondents feeling depressed more than 5 days in the past 30 days.

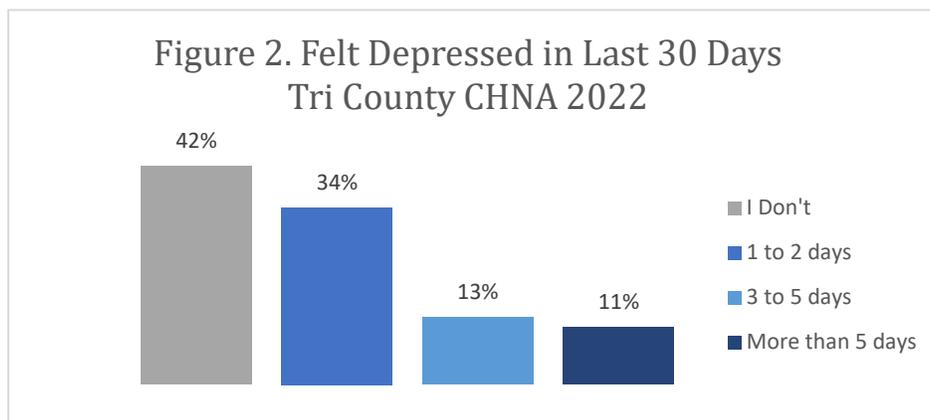
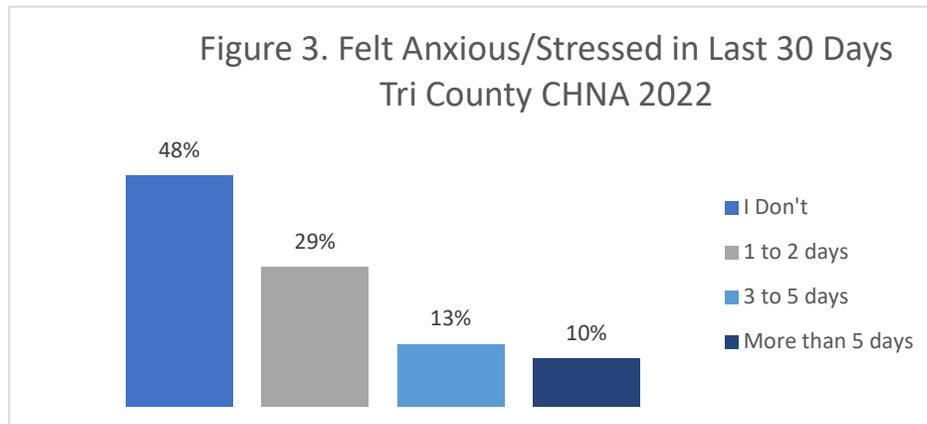


Figure 3 examines the prevalence of anxiety and stress among respondents in the previous 30 days. 52% stated that they felt anxious or stressed at least 1 to 2 days in the past 30 days. 10% of individuals experienced anxiety or stress more than 5 days in the past 30 days.



Results of the 2022 CHNA show a 12% increase in the number of people experiencing depression, compared to 2019. Similarly, results of the 2022 CHNA show a 12% increase in the number of people experiencing stress / anxiety, compared to 2019.

### Supplemental Conduent's Healthy Communities Institute (HCI) Data

#### Peoria County:

Region 1 scored **below** the tri-county area for adults with depression

Region 2 scored **below** the tri-county area for adults with anxiety

Region 3 scored **below** the tri-county area adults with lower overall mental health

#### Tazewell County:

North, South and East regions scored **below** the tri-county area for adults having depression

#### Woodford County:

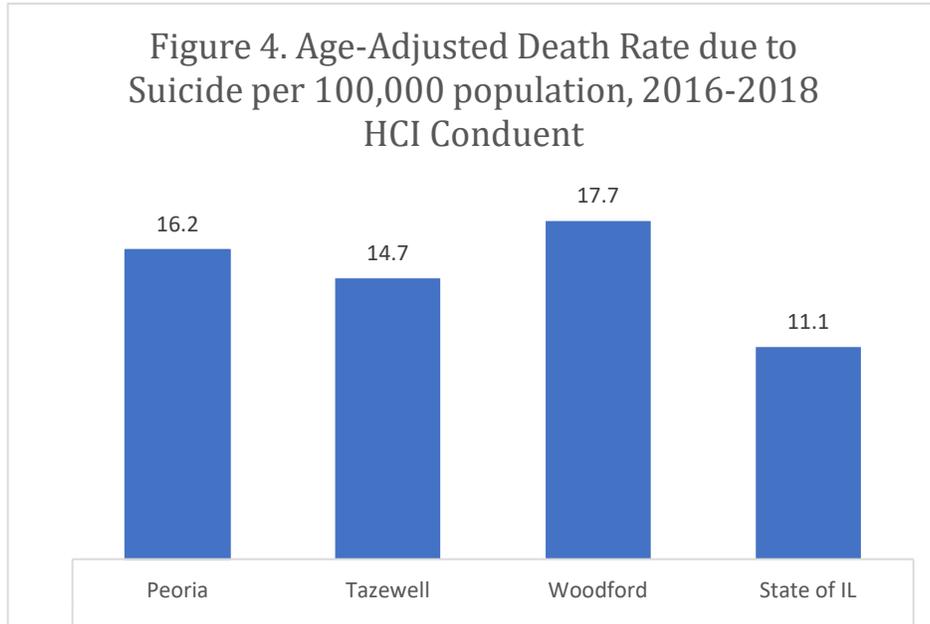
No regional disparities identified through CHNA Survey Data

#### Suicide:

Peoria County has a lower age-adjusted suicide rate than most counties in Illinois, but it is higher than the Illinois rate and is trending upward.

Tazewell County has a lower age-adjusted suicide rate than most counties in Illinois, but it is higher than the Illinois rate and is trending upward.

Woodford County is in the middle of Illinois counties when comparing age-adjusted suicide rates and is trending downward, but it is higher than the Illinois rate.

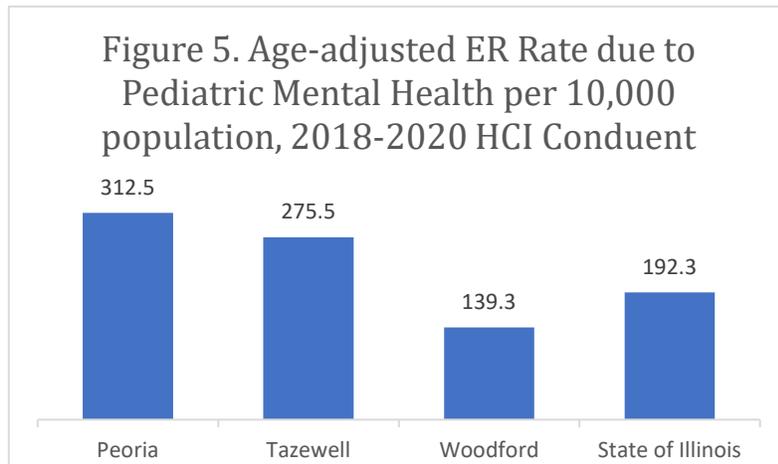


**Pediatric Hospitalization:**

Peoria County has a higher age-adjusted ER rate due to pediatric mental health than most counties in Illinois and is higher than the Illinois rate.

Tazewell County has a higher age-adjusted ER rate due to pediatric mental health than most counties in Illinois and is higher than the Illinois rate.

Woodford County has a lower age-adjusted ER rate due to pediatric mental health than most counties in Illinois and is lower than the Illinois rate.



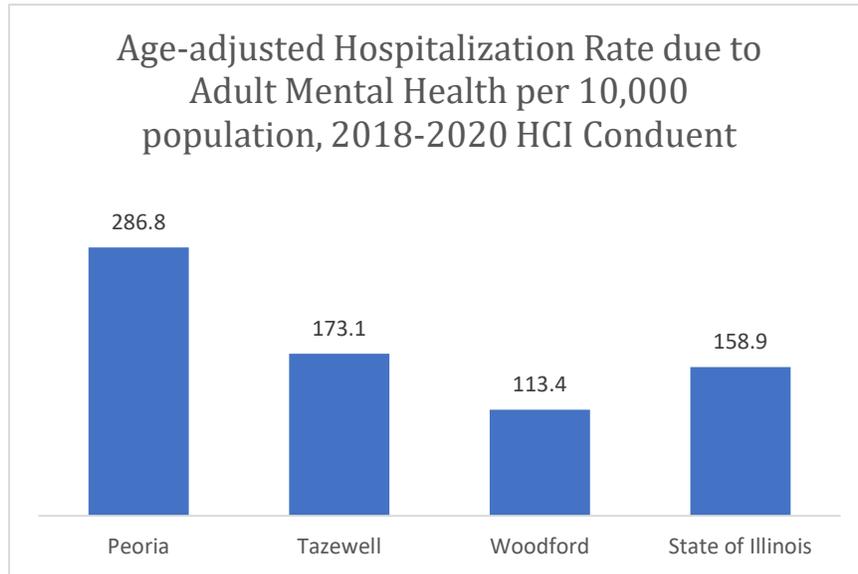
Adult

Hospitalization:

Peoria County has a higher age-adjusted hospitalization rate due to adult mental health than most counties in Illinois and is higher than the Illinois rate.

Tazewell County has a higher age-adjusted hospitalization rate due to adult mental health than most counties in Illinois and is higher than the Illinois rate.

Woodford County has a higher age-adjusted hospitalization rate due to adult mental health than most counties in Illinois but is lower than the Illinois rate.



## Focus Group Data

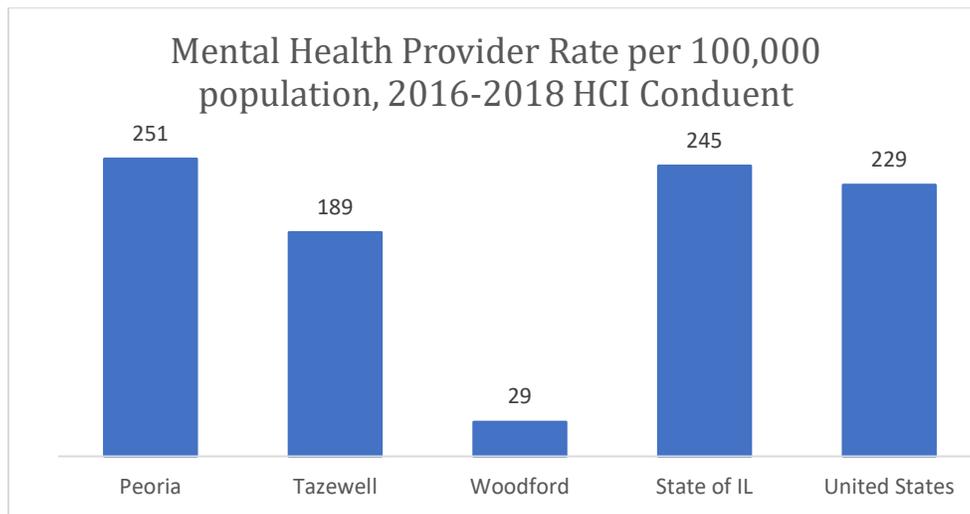
Challenges to staying mentally healthy among the tri-county area included: stigma, unstable home environment, and lack of teacher training to recognize symptoms.

Challenges associated with accessing mental health services among the tri-county area included: lack of knowledge or resources, lack of providers and diverse providers (people of color, multiple languages, LGBTQ+ friendly), lack of inpatient beds, lack of money, lack of insurance, and lack of transportation.

## Social Determinants of Health Data

### **Health Care Assess and Quality** (CHNA Survey Data)

Peoria County has a higher rate of mental health providers per 100,000 population than the State of Illinois. Tazewell and Woodford both have lower rates than the state and national level.



### Education Access and Quality

Students who entered 9th grade in 2021 in Peoria County school districts, except Peoria HS, Manual Academy, Limestone Community HS, Il Valley Central HS, Illini Bluffs HS and Farmington HS reported high school graduation rates that were comparable to the State average of 86%.

Students who entered 9th grade in 2021 in Tazewell County school districts, except East Peoria HS and Delavan HS reported high school graduation rates that were comparable to the State average of 86%.

Students who entered 9th grade in 2021 in Woodford County school districts, except Eureka HS, Low Point-Washburn JR SR HS and Roanoke-Benson HS reported high school graduation rates that were comparable to the State average of 86%.

Healthy People 2030 has a goal to increase the proportion of public schools with a counselor or social worker which is still in the research phase

### Health Literacy

Health literacy is a measure of factors in the community that impact healthcare access, navigation and adherence. Key risk influencers include culture, demographics and education. For the Tri-County region, 16% of the population is at elevated risk for health literacy. This is lower than the State of Illinois average of 34% (SocialScape® powered by SociallyDetermined®, 2022)

### Social and Community Context

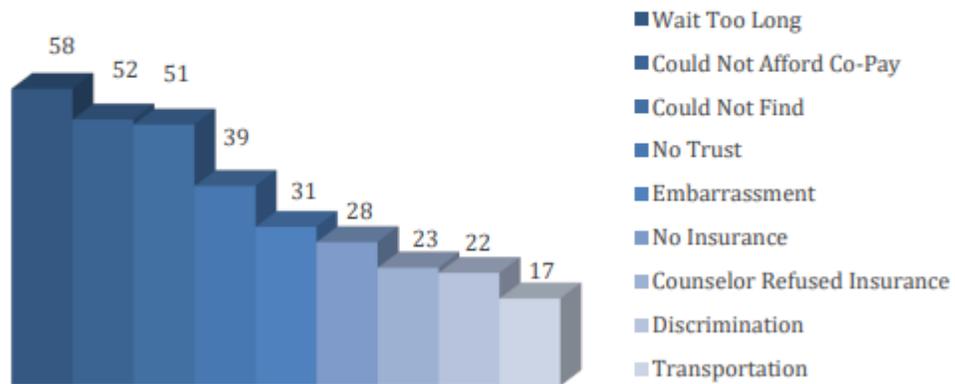
59% of the Tri-county population identified that they have been able to talk with someone about their mental health, while 41% did not.

Of those that spoke to someone about their mental health, 43% spoke to a counselor, 34% spoke to family or friends, and 23% spoke to a doctor or nurse.

### Economic Stability

Survey respondents who reported they were not able to get counseling when needed were asked a follow-up question. The leading causes of the inability to gain access to counseling were the wait was too long (58), inability for afford co-pay (52) and could not find counselor (51)

## Causes of Inability to Access Counseling Tri-County 2022



### Neighborhood and Built Environment

Another factor in accessing mental health care is transportation. Transportation network is a measure of the adequacy of the transportation network to facilitate access to care. Key risk influencers include access and proximity to resources. While survey data indicate transportation was not a leading cause of inaccessibility, for the Tri-County region, 14% of the population is at elevated risk for transportation network. This is higher to the State of Illinois average of 6% (SocialScape® powered by SociallyDetermined®, 2022)

### Tri-County Regions of Concern

- **Depression** tends to be rated higher for residents who live in the Peoria/West Peoria region and Northern, Southern and Eastern Tazewell County.
- **Anxiety** tends to be rated higher for residents who live in the Northern Peoria/Peoria Heights region.
- **Perceptions of mental health** tends to be rated lower for residents who live in the Bartonville/Limestone region.
- **Access to counseling** tends to be rated lower for residents who live in South Tazewell County region

## Priority Data Sources

### National Target Data

Healthy People 2030 (HP2030) is a national framework setting the goals and objectives towards attaining healthy and thriving communities. Created by the Office of US Surgeon General, the initiative is to create targets and support data-driven processes in improving the health of individuals.

### Community Status Assessment Data

The Community Status Assessment (CSA) includes data regarding the demographic composition of the Tri-County region, the predictors for and prevalence of diseases, leading causes of mortality, accessibility to health services and healthy behaviors. Included is a detailed analysis of secondary data to assess information regarding the health status of the community. The secondary data sources include publicly available sources as well as private sources of data.

Additionally, primary data were collected for the general population and the at-risk or economically disadvantaged population. Areas of investigation included perceptions of the community health issues, unhealthy behaviors, issues with quality of life, healthy behaviors and access to medical care, dental care, prescription medications and mental-health counseling.

### Supplemental Conduent's Healthy Communities Institute (HCI) Data

Conduent Healthy Communities Institute platform (HCI) is the technology foundation for a customizable, publicly accessible website. It is a powerful data management tool that provides hundreds of indicators related to community health with comparisons to local, state and national benchmarks. The platform includes data on social determinants of health and valuable analyses on preventable hospitalization and ER admissions.

### Focus Group Data

Between June 2021 and April 2022, nine focus groups on mental health were conducted in Peoria (four, including one in Spanish), Tazewell (three) and Woodford (two) counties. The work was in partnership between the University of Illinois College of Medicine Peoria and the Partnership for a Healthy Community. The population in these groups consisted of adults, and they were asked questions related to the challenges they have experienced or witnessed in their community when it comes to healthcare and specific health priorities.

## Social Determinants of Health Data (HP2030)



### Health Care Assess and Quality

Many people in the United States don't get the health care services they need. Healthy People 2030 focuses on improving health by helping people get timely, high-quality health care services.

About 1 in 10 people in the United States don't have health insurance.<sup>1</sup> People without insurance are less likely to have a primary care provider, and they may not be able to afford the health care services and medications they need. Strategies to increase insurance coverage rates are critical for making sure more people get important health care services, like preventive care and treatment for chronic illnesses.

Sometimes people don't get recommended health care services, like cancer screenings, because they don't have a primary care provider. Other times, it's because they live too far away from health care providers who offer them. Interventions to increase access to health care professionals and improve communication — in person or remotely — can help more people get the care they need.

### Education Access and Quality

People with higher levels of education are more likely to be healthier and live longer. Healthy People 2030 focuses on providing high-quality educational opportunities for children and adolescents — and on helping them do well in school.

Children from low-income families, children with disabilities, and children who routinely experience forms of social discrimination — like bullying — are more likely to struggle with math and reading. They're also less likely to graduate from high school or go to college. This means they're less likely to get safe, high-paying jobs and more likely to have health problems like heart disease, diabetes, and depression.

In addition, some children live in places with poorly performing schools, and many families can't afford to send their children to college. The stress of living in poverty can also affect children's brain development, making it harder for them to do well in school. Interventions to help children and adolescents do well in school and help families pay for college can have long-term health benefits.

## **Social and Community Context**

People's relationships and interactions with family, friends, co-workers, and community members can have a major impact on their health and well-being. Healthy People 2030 focuses on helping people get the social support they need in the places where they live, work, learn, and play.

Many people face challenges and dangers they can't control — like unsafe neighborhoods, discrimination, or trouble affording the things they need. This can have a negative impact on health and safety throughout life.

Positive relationships at home, at work, and in the community can help reduce these negative impacts. But some people — like children whose parents are in jail and adolescents who are bullied — often don't get support from loved ones or others. Interventions to help people get the social and community support they need are critical for improving health and well-being.

## **Economic Stability**

In the United States, 1 in 10 people live in poverty,<sup>1</sup> and many people can't afford things like healthy foods, health care, and housing. Healthy People 2030 focuses on helping more people achieve economic stability.

People with steady employment are less likely to live in poverty and more likely to be healthy, but many people have trouble finding and keeping a job. People with disabilities, injuries, or conditions like arthritis may be especially limited in their ability to work. In addition, many people with steady work still don't earn enough to afford the things they need to stay healthy.

Employment programs, career counseling, and high-quality child care opportunities can help more people find and keep jobs. In addition, policies to help people pay for food, housing, health care, and education can reduce poverty and improve health and well-being.

## **Neighborhood and Built Environment (CHNA Survey Data)**

The neighborhoods people live in have a major impact on their health and well-being.<sup>1</sup> Healthy People 2030 focuses on improving health and safety in the places where people live, work, learn, and play.

Many people in the United States live in neighborhoods with high rates of violence, unsafe air or water, and other health and safety risks. Racial/ethnic minorities and people with low incomes are more likely to live in places with these risks. In addition, some people are exposed to things at work that can harm their health, like secondhand smoke or loud noises.

Interventions and policy changes at the local, state, and federal level can help reduce these health and safety risks and promote health. For example, providing opportunities for people to walk and bike in their communities — like by adding sidewalks and bike lanes — can increase safety and help improve health and quality of life.

### Tri-County Regions of Concern

Given the size and diversity of the Tri-County area, thirteen (13) regions were identified to provide more detailed analyses. Based on zip codes, there were six (6) regions identified in Peoria County, four (4) regions identified in Tazewell County and three (3) regions identified in Woodford County. Specific regional descriptions and complete results of regional analyses were completed to address geographic inequity.

<b>Peoria</b>
Region 1: Peoria/West Peoria (61602, 61603, 61604, 61605, 61606, 61625)
Region 2: North Peoria/Peoria Heights (61612, 61614, 61615, 61616)
Region 3: Bartonville/Limestone (61607, 61547)
Region 4: South West Peoria County (61569,61533, 61536)
Region 5: North West Peoria County (61529, 61517, 61559)
Region 6: North East Peoria County (61528, 61525, 61626, 61523, 61552)
<b>Tazewell</b>
North (61611, 61571, 61610)
South (61534, 61734, 61747, 61759, 61721)
East (61550, 61755, 61568)
West (61564, 61554)
<b>Woodford</b>
East (61738, 61760, 61771, 61561, 61516)
Central (61570, 61545, 61530, 61729, 61742)
West (61548, 61611)

# Appendix B

**APPENDIX B:**

**HEALTHY EATING & ACTIVE LIVING INTERVENTIONS**

Intervention	Description	Target Audience	Setting	Impact	Aligns with Gap Analysis	On '20-'22 CHIP	Level of intervention
<u>Active recess</u>	Active, semi-structured, or structured recess is a break from the school day typically before lunch that involves a variety of planned, inclusive, and actively supervised games or activities. Active recess engages all students in these playground activities and games. Active recess efforts are often multi-component interventions that include investments in playground and activity equipment, painted markings on playgrounds, and training for teachers or specialists to lead activities.	School children	Schools	Increased physical activity			Primary
<u>Activity programs for older adults</u>	Programs for older adults offer educational, social, creative, musical, or physical activities in group settings that encourage personal interactions, regular attendance, and community involvement. Activity programs are a potential means to reduce social isolation; isolation among older adults is associated with poorer health outcomes	Older adults	Community	Improved health outcomes, mental health, and quality of life, Reduced isolation	✓		Primary
<u>Community fitness programs</u>	Fitness programs can be offered in a variety of public settings including community, senior, fitness, and community wellness centers and outdoor settings such as parks. Program offerings vary by location, but often include exercise classes such as aerobic dance classes, Zumba, Pilates, yoga, Tai Chi, and spinning/indoor cycling.	Adults	Community	Increased physical activity, Improved physical fitness	✓		Primary
<u>Breastfeeding promotion programs</u>	Breastfeeding promotion programs provide education and information about breastfeeding to women throughout pre- and post-natal care, and offer counseling from health care providers or trained volunteers, and support groups for nursing mothers.	Pre and post-natal women, Healthcare providers, Volunteers	Community, Healthcare	Increased breastfeeding rates		✓	Primary

	Programs often establish breastfeeding policies and supports in clinical settings such as hospitals and birth centers, as well as community settings such as workplaces and child care centers. Breastfeeding promotion programs can also provide information and education to healthcare providers.						
<u>Community-based social support for physical activity</u>	Community-based social support interventions for physical activity combine physical activity opportunities and social support to build, strengthen, and maintain social networks that encourage positive behavior changes. Interventions can also include education, group or individual counseling, or plans tailored to individual needs. Examples of community-based social support interventions include walking groups, setting up an exercise buddy system, and making contracts, goals, or physical activity plans with others	Adults	Community	Increased physical activity, Improved physical fitness, health outcomes and mental health	✓	✓	Primary
<u>Complete Streets &amp; streetscape design initiatives</u>	Streetscape design improvements enable pedestrians, bicyclists, transit riders, and motorists to share and use the street, accommodating the needs of all users. Improvements to streetscape design can include increased street lighting, enhanced street landscaping and street furniture, increased sidewalk coverage and connectivity of pedestrian walkways, bicycling infrastructure, street crossing safety features, and traffic calming measures. Streetscape design improvement projects can be implemented incrementally or comprehensively, and are often part of community-level Complete Streets policies.	General	Urban, Community	Increased physical activity, Increased pedestrian and cyclist safety			Primary
<u>Competitive pricing for healthy foods</u>	Competitive pricing assigns higher costs to non-nutritious foods than nutritious foods. Competitive pricing can include incentives, subsidies, or price discounts for healthy foods and beverages as well as disincentives or price increases for unhealthy foods and beverages. Competitive pricing can be implemented in various settings	General	Community, Schools, Workplace	Increased sales of healthy foods	✓		Primary

<u>Exercise prescriptions</u>	Prescriptions for physical activity and exercise are one way for health care providers to give patients physical activity advice and information. Prescriptions for physical activity outline an exercise plan that can safely meet a patient's needs based on their current physical condition and the recommended daily Physical Activity Guidelines for Americans. Such prescriptions set achievable goals, and may also include counseling, activity logs, and exercise testing. Providers check progress at each office visit and may also follow-up via phone, internet, or mail. Individuals at high risk of injury with complex health conditions are referred to certified exercise professionals to receive individually tailored plans.	Adults	Healthcare	Increased physical activity and mobility, Improved physical fitness	✓		Primary
<u>Fruit &amp; vegetable incentive programs</u>	Fruit and vegetable incentive programs, often called bonus dollars, market bucks, produce coupons, or nutrition incentives, offer participants with low incomes matching funds to purchase healthy foods, especially fresh fruits and vegetables. Programs are typically funded and managed by non-profit organizations, private foundations, or local governments. Many programs match funds to Supplemental Nutrition Assistance Program (SNAP) benefit spending amounts.	Adults	Community	Increased access to healthy food, healthy food purchases and fruit and vegetable consumption	✓		Primary
<u>Individually-adapted physical activity programs</u>	Individually-adapted physical activity programs teach behavioral skills that can help participants incorporate physical activity into their daily routines. Behavioral skills often include goal-setting, self-monitoring, positive self-talk, and self-reward systems. Individually-adapted programs are developed to align with personal interests, preferences, and abilities. Programs also include efforts to develop social support systems and proactive plans to prevent relapse into sedentary behavior.	Adults	Community, Healthcare	Increased physical activity, Improved physical fitness	✓		Primary
<u>Mixed-use development</u>	Mixed-use development supports a combination of land uses within a project rather than developing an area for a single purpose. Mixed-use development projects can be site-specific, neighborhood-based, or regional, and	General	Community	Increased physical activity	✓		Primary

	can be incorporated into new development, redevelopment, brownfield, and Smart Growth initiatives in urban and rural areas. Mixed-use development areas have high densities and incorporate places to work, shop, or play within residential areas.						
<u>Nutrition and physical activity interventions in preschool &amp; child care</u>	Nutrition and physical activity interventions in preschool and child care offer young children opportunities to eat healthy foods and engage in physical activity throughout the day. Nutrition interventions provide fruits, vegetables, and other healthy foods as part of snacks, meals, taste-testing, and food preparation, frequently with basic nutrition education. Physical activity interventions provide opportunities for children to increase their physical activity, typically by training teachers to incorporate physical activity into daily routines, changing the physical environment, or offering more time for physical activity.	Young children	Childcare, Schools	Improved nutrition, fruit and vegetable consumption, weight status, and physical fitness and Increased physical activity			Primary
<u>Physically active classrooms</u>	Physically active classrooms incorporate classroom energizers or moving activities into academic lessons. Physical activity breaks and active transitions may be part of classroom-based physical activity programming which complements physical education and recess. Physically active classroom efforts can be implemented within an existing curriculum.	Children	Schools	Increased physical activity and academic achievement, Improved on-task behavior			Primary
<u>Places for physical activity</u>	Enhancing access to places for physical activity involves changes to local environments that create new opportunities for physical activity or reduce the cost of existing opportunities. Increased access is typically achieved in a community through a multi-component strategy. Such efforts are often implemented in neighborhoods that have been structurally disadvantaged and under-resourced.	General, Disadvantaged, Under-sourced	Neighborhoods, Community	Increased physical activity, Improved physical fitness	✓		Primary
<u>Point-of-decision prompts for physical activity</u>	Point-of-decision prompts are motivational signs placed on or near stairwells, elevators, and escalators to encourage individuals to use stairs. Point-of-decision prompts can be implemented in workplaces or in public	General	Workplace, Community	Increased physical activity			Primary

	venues. Point-of-decision prompts can be implemented alone or in combination with stairwell enhancements.						
<u>Safe Routes to Schools</u>	Safe Routes to Schools (SRTS) is a federally supported program that promotes walking and biking to school through education and incentives. The program also supports city planning and legislative efforts to make walking and biking safer and provides resources and activities to help communities build sidewalks, bicycle paths, and other pedestrian-friendly infrastructure	Children	Schools	Increased active transportation			Primary
<u>School breakfast programs</u>	School breakfast programs (SBP) offer students a nutritious breakfast, often incorporating a variety of healthy and culturally relevant choices. Breakfast can be served in the cafeteria before school starts, from grab and go carts in hallways, or in classrooms as the school day begins. Some schools offer breakfast during a morning break, called second chance breakfast or school brunch.	Children	Schools	Increased academic achievement, Increased healthy food consumption			Primary
<u>School fruit &amp; vegetable gardens</u>	School gardens encourage students to garden during school or non-school hours with school staff guidance, generally on school grounds. School gardens are typically accompanied by nutrition education, food preparation lessons, and fruit and vegetable tasting opportunities. School gardens can also provide students with hands-on learning opportunities in subjects such as science, math, health, and environmental studies.	Children	Schools	Increased consumption and willingness to try fruits & vegetables			Primary
<u>Screen time interventions for children</u>	Screen time interventions encourage children to spend time away from TV and other stationary screen media such interventions typically do not address use of mobile screens. Screen time interventions teach self-management skills to initiate or maintain behavior change using tracking and monitoring, classroom-based education, counseling sessions, and/or family-based or peer social support. Screen time interventions can also include physical activity and/or healthy diet components.	Children	Community, Households	Reduced sedentary screen time, Increased physical activity, Improved dietary habits and weight status		✓	Primary

<u>Walking school buses</u>	Walking school buses (WSBs) are an organized mode of active transportation for students walking to school. WSBs have a fixed route, with designated stops and pick up times when children can join adult chaperones to walk to school. Walking school bus programs can be implemented in neighborhoods of various socio-economic status, and frequently are in urban and suburban areas where many children live close enough to walk to school. Children who live farther than walking distance from school may join WSBs at pre-appointed spots along the route, especially in rural areas	Children	Schools, Community	Increased active transportation and physical activity			Primary
<u>Nutrition and Physical Activity: Digital Health and Telephone Interventions to Increase Healthy Eating and Physical Activity among Students at Institutions of Higher Education</u>	Use of digital health and telephone interventions to improve healthy eating and physical activity among students. These interventions are for students at institutions of higher learning who are interested in improving these behaviors. These interventions are designed to increase healthy eating and physical activity using websites, mobile apps, text messages, emails, or one-on-one telephone calls. They include educational information plus one or more of the following: Coaching or counseling from trained professionals Self-monitoring to record healthy eating, physical activity or weight, Goal setting and Computer-generated feedback that provides tailored information	College students	Digital, College or University	Increased healthy eating and physical activity			Primary
<u>Nutrition and Physical Activity: Worksite Digital Health and Telephone Interventions to Increase Healthy Eating and Physical Activity</u>	Use of worksite digital health and telephone interventions to increase healthy eating and physical activity among working adults. These interventions are for working adults interested in improving these behaviors. They're designed to increase healthy eating and physical activity by using websites, mobile apps, text messages, emails, or one-on-one telephone calls. They include educational information plus one or more of the following: Coaching or counseling from trained professionals, Self-monitoring to record healthy eating, physical activity or weight, Goal setting and Computer-generated feedback that provides tailored information	Working adults	Digital, Workplace	Increased healthy eating and physical activity			Primary

<u>Nutrition: Gardening Interventions to Increase Vegetable Consumption Among Children</u>	Use of school-based gardening interventions in combination with nutrition education to increase children’s vegetable consumption. Gardening interventions provide children with hands-on experience planting, growing, and harvesting fruits and vegetables in an effort to increase their willingness to consume them. Interventions must include at least one of the following: Outside gardens, Microfarms, Container gardens or Other alternative gardening methods	Children	Schools	Increased vegetable consumption	✓		Primary
<u>Nutrition: Home-delivered and Congregate Meal Services for Older Adults</u>	Use of home-delivered and congregate meal services for older adults. Home-delivered meal services also increase energy intake and improve health-related quality of life and well-being.	Adults 60 years and older who live independently	Households	Reduced malnutrition, Increased energy intake, Improved quality of life and well-being			Primary
<u>Meal or Fruit and Vegetable Snack Interventions to Increase Healthier Foods and Beverages Provided by Schools</u>	Use of meal interventions and fruit and vegetable snack interventions to provide healthier foods and drinks in schools. These interventions include either policies that ensure school meals meet certain nutrition requirements or programs that provide fresh fruits and vegetables during lunches or snacks — or both of these components. When these interventions are used, students eat more fruits and vegetables.	Children	School	Increased fruit and vegetable consumption	✓		Primary
<u>Physical Activity: Classroom-based Physical Activity Break Interventions</u>	Classroom-based physical activity breaks are structured breaks between academic lessons when a teacher directs a bout of physical activity. The recommended break interventions involve moderate-to-vigorous physical activity and range from 4 to 10 minutes in length. Teachers should be trained and May include additional resources to engage students in physical activity	Children	School	Increased physical activity			Primary
<u>Physical Activity: Digital Health Interventions for Adults 55 Years and Older</u>	Use of digital health interventions for adults age 55 years and older to increase physical activity. These interventions use 1 or more of the following to deliver physical activity guidance and support that’s tailored to a person’s activity level, age, and health status: Web-based interactive content, Telephone sessions with	Adults 55 years and older	Digital	Increased physical activity			Primary

	intervention providers or automated phone messages and reminders, Text messages and reminders or Apps with goal-setting, activity tracking, and reminder functions						
<u>Physical Activity: Family-Based Interventions</u>	Use of family-based interventions to increase physical activity in children. These interventions combine activities to build family support with health education. The interventions include 1 or more of the following: Goal-setting tools and tracking progress, Reinforcement of positive health behaviors or Organized physical activity sessions. Interventions also may provide information about other behaviors, like choosing healthier foods or getting less screen time.	Families	Community	Increased physical activity	✓		Primary
<u>Physical Activity: Community-Wide Campaigns</u>	Use of community-wide campaigns to increase physical activity and improve physical fitness. These campaigns involve many community sectors, are highly visible, and use a combination of strategies, like social support and health education. Sometimes they address other cardiovascular disease risk factors, like diet and smoking.	General	Community, Digital	Increased physical activity and improved fitness			Primary
<u>Physical Activity: Social Support Interventions in Community Settings</u>	Use of social support interventions in community settings to increase physical activity and improve physical fitness in adults. These interventions focus on increasing physical activity by building, strengthening, and maintaining social networks that support behavior change. This can include things like setting up a buddy system, making “contracts” with others to complete specified levels of physical activity, or setting up walking groups or other groups.	Adults	Community, Households, Digital	Increased physical activity and improved fitness	✓		Primary
5 A Day Peer Education Program	This workplace intervention uses trained peer educators to deliver nutrition education to co-workers through the modeling of dietary change, communication, and the distribution of gifts and a monthly nutrition booklet.	Adults	Workplace	Increased fruit and vegetable consumption			Primary
5-a-Day Power Plus	This school-based intervention has four components: behavioral curricula, parental involvement/education,	School Children, Parents	School (K-College)	Increased fruit and vegetable consumption	✓		Primary

	school food service changes, and industry involvement and support.						
Alberta Project Promoting active Living and healthy Eating (APPLE Schools)	This intervention helps schools implement a customized, comprehensive action plan addressing each of four pillars of school health: teaching and learning, physical and social environments, healthy school policy, and partnerships and services.	School Children	School (K-College)	Increased physical activity and reduced caloric intake	✓		Primary
ALIVE!	This personalized computer-based intervention consists of a health risk assessment with immediate feedback, health behavior modules, and weekly tailored emails.	Employees	Home, Workplace, Suburban, Urban/Inner City	Increased physical activity and fruit and vegetable consumption, Decreased consumption of saturated and trans fats			Primary
Bienestar	Designed to improve dietary habits and increase physical activity among Mexican American elementary school students, this culturally tailored school-based diabetes prevention intervention consists of health and physical education classes, an after-school health club, family activities, and a food service component.	School Children, Mexican American	Home, School (K-College), Urban/Inner City	Increased consumption of dietary fiber, Decrease fasting capillary glucose levels, Increased physical fitness.			Primary
Body & Soul	Designed to increase fruit and vegetable consumption among African Americans, this church-based intervention consists of nutrition-related events and other activities, the development of policies such as food guidelines for church functions, self-help materials, and motivational counseling calls conducted by lay church volunteers.	Faith-based Groups, Adults, African American	Religious establishments, Suburban, Urban/Inner City	Increased fruit and vegetable consumption	✓		Primary
CARDIAC Kinder	Designed to promote healthy dietary habits and increase physical activity. This school-based intervention consists of an obesity screening, a health report, educational materials, and use of pedometers by children and their parents.	School Children	School (K-College), Rural	Decreased consumption of sweets, Increased physical activity	✓		Primary
Coordinated Approach to Child Health (CATCH)	Designed to promote healthy eating habits and increase physical activity among children and adolescents. This intervention consists of school components (such as a curriculum, physical education, and school food service modifications) and family components (such as a home curriculum and family fun nights) that work together to	School Children	School (K-College)	Decreased fat intake from school lunches, Increased energy expenditure			Primary

	address nutrition, physical activity, and cigarette smoking.						
DINE Healthy: Diet Improvement Software	Designed to promote healthy dietary habits. This computer-based intervention provides a method for users to record their present health habits and receive recommendations for healthy eating and exercise so they can lose or maintain weight, improve health, and achieve energy balance.	Overweight/Obese Individuals	Home, Other Settings, Workplace, Suburban	Decreased saturated fat, total fat intake and calorie intake, Increased dietary fiber intake, Decreased body weight			Secondary
Eat for Life	Community-based program designed to promote healthy dietary habits. This church-based intervention includes a cookbook, videotape, and tailored telephone calls to motivate behavior change.	Faith-based Groups, African American Adults	Religious establishments, Rural, Suburban, Urban/Inner City	Increase fruit and vegetable consumption	✓		Primary
Eat Well and Keep Moving	School-based program designed to increase physical activity and promote healthy dietary habits among 4th and 5th grade students. This interdisciplinary school-based intervention is integrated into a school's regular curricula and is complemented by a school food service component and physical education activities.	School Children	School (K-College), Urban/Inner City	Decreased calories from fat and saturated fat, Increased fruit and vegetable consumption			Primary
Eating for a Healthy Life (EHL) Project	Designed to promote healthy dietary habits among religious community members. This manualized intervention for religious organizations includes creation of an advisory committee, social activities, sessions about healthy eating, self-help booklets, motivational messages, and tip sheets.	Faith-based Groups, Adults	Other Settings, Religious establishments, Urban/Inner City	Decreased fat intake, Increased fiber intake			Primary
Gimme 5	School-based program designed to increase fruit and vegetable consumption. This school-based intervention led by teachers and guided by a curriculum encourages students to set goals and keep a diet record, rewards students, and teaches problem skills through fun activities.	School Children	School (K-College)	Increased vegetable consumption			Primary
Healthier Troops in a SNAP (Scouting Nutrition & Activity Program)	Designed to increase physical activity and promote healthy dietary habits to reduce obesity. This intervention for Junior Girl Scouts includes an interactive educational curriculum delivered by troop leaders, troop meeting policies implemented by troop leaders, and badge assignments completed at home.	School Children	Home, Other Settings	Increased physical activity	✓		Primary

Healthy Body Healthy Spirit	Community-based program designed to promote healthy dietary habits and increase physical activity. This community- and religious-based intervention provides users with Bible-themed materials, including an exercise videotape and guidebook, a nutrition videotape, a cookbook of recipes from church members, an audio cassette of gospel music to use during a workout, and motivational interviewing telephone calls.	Faith-based Groups, African American Adults	Religious establishments, Rural, Suburban, Urban/Inner City	Increased fruit and vegetable consumption and physical activity.	✓		Primary
High 5 Flyers Program	Designed to increase fruit and vegetable consumption among elementary school students. This school-based intervention conducted in the cafeteria includes daily activities that increase the availability, accessibility, and appeal of fruits and vegetables and special activities that increase the motivation to eat fruits and vegetables through peer and adult support.	School Children	School (K-College)	Increased servings of fruits consumed per day	✓		Primary
High 5 Fruit and Vegetable Intervention for 4th Graders	School-based program designed to increase fruit and vegetable consumption. This school-based intervention promotes the consumption of five fruits and vegetables a day through a classroom component with 14 lessons and homework assignments; a parent component with a kick-off party and parent-child homework assignments; and a food service component with staff training.	School Children, Parents	School (K-College)	Increased of fruit and vegetable consumption	✓		Primary
Middle School Physical Activity and Nutrition (MSPAN)	Designed to increase physical activity and promote healthy dietary habits among Grade 6-8 level students. This school-based intervention consists of new physical education (PE) curricula, efficient use of PE equipment and space, training for PE staff to improve instructional skills and create action plans that promote physical activity, and training for nutrition services staff to create plans that reduce the fat content in school foods.	School Children	School (K-College)	Increased physical activity and a decreased BMI	✓		Primary
North Carolina Black Churches United for Better Health Project	Designed to increase fruit and vegetable consumption. This community-based intervention includes activities to increase awareness (e.g., receiving printed materials), fruit and vegetable access (e.g., gardening, recipe tasting, serving more fruits and vegetables at church functions), and social and environmental support (e.g.,	Faith-based Groups, Adults	Religious establishments	Increased fruit and vegetable consumption	✓		Primary

	provision of lay health advisors, grocer and vendor involvement, church-initiated activities).						
Nutrition Pathfinders	The program is designed to promote healthy dietary habits and increase physical activity among fourth-grade children. This school-based intervention consists of seven lessons in which students learn about nutrition and exercise and a workbook students use to record their progress and complete family homework assignments.	School Children, Families	School (K-College)	Decreased consumption of low-nutrient, high-density foods and sugar-sweetened beverages			Primary
Nutrition to Grow On	Designed to promote healthy dietary habits among elementary school students. This school-based intervention consists of nine nutrition lessons (including lesson plans, activities, handouts, and family newsletters) complemented with a gardening activity: planting seeds in a mini-greenhouse and studying the growing process.	School Children	School (K-College)	Greater preference for various vegetables.	✓		Primary
Out of School Nutrition and Physical Activity (OSNAP) Project	The program is designed to increase physical activity and promote healthy dietary habits among children aged 5 to 12 years. This out-of-school intervention consists of learning collaborative sessions during which staff learn about OSNAP's physical activity and nutrition goals, assess their own policies and practices, develop action plans, and share implementation successes and challenges.	School Children	Other Settings, School (K-College), Urban/Inner City	Increased physical activity	✓		Primary
Parents As Teachers (PAT) High 5 Low Fat Program	Designed to increase fruit and vegetable consumption and improve dietary habits among African Americans, this intervention consists of five home visits to teach parents nutrition-related skills and promote parental modeling of healthy dietary behaviors; group meetings to demonstrate appropriate food selection, preparation, and taste tasting; newsletters; and monthly calendars.	Medically Underserved, African American, Parents, Children	Home	Increased fruit and vegetable consumption	✓		Primary
Physical Activity and Nutrition for Health	Designed to increase physical activity and improve dietary habits among elementary school students, this 20-week school-based intervention consists of physical education instruction, nutrition education, and packets	School Children	Home, School (K-College), Rural	Decreased daily total fat intake	✓		Primary

	and guided home activities children can do with their parents to practice using skills to modify their behaviors.						
Promoting Healthy Living: Assessing More Effects (PHLAME)	Designed to increase physical activity and promote healthy dietary habits to reduce obesity. This intervention consists of a team-centered curriculum delivered by a designated shift leader in 11 scripted lessons with activities.	Employees	Workplace	Increased fruit and vegetable intake, healthy dietary behaviors, physical activity and fitness, and general well-being, less weight gain.			Primary
Reach Up & Out: Toward a Healthy Lifestyle	Designed to improve nutrition and increase physical activity among rural African American women, this community-based intervention includes four scripted 2-hour group sessions and one individual session delivered by a lay health educator and handouts and homework assignments to establish goals and monitor food intake.	Women, African American	Other Settings, Rural	Increased fruit and vegetable consumption, Decreased fried food consumption, Increased in physical activity	✓		Primary
Seattle 5-a-Day Program	Designed to increase fruit and vegetable consumption, this worksite intervention developed around the stages of change consists of individualized activities and a self-help manual as well as changes to the work environment (e.g., posters, flyers, food demonstrations)..	Employees	Workplace	Increased fruit and vegetable consumption			Primary
SIPsmartER	Designed to decrease the consumption of sugar-sweetened beverages among adults to reduce obesity, this intervention addresses health literacy and changes in attitudes, subjective norms, perceived behavioral control, and behavioral intentions through three small-group classes, a teach-back call, and 11 Interactive Voice Response calls.	Adults	Home, Other Settings, Rural	Decreased consumption of sugar-sweetened beverages	✓		Primary
Students for Nutrition and eXercise (SNaX)	Designed to improve dietary habits to reduce obesity among seventh-grade children, this school-based intervention implemented by a wellness coordinator includes the following: (1) school-wide messaging; (2) cafeteria food changes and promotion to increase the number of students served lunch in the cafeteria and to increase fruit, vegetable, and water consumption and decrease school snack sales; (3) classroom lessons and activities; (4) parent-student activities; and (5) students	School Children	School (K-College), Urban/Inner City	Increased fruit servings, Decreased snack sales			Primary

	<p>serving as peer leaders to encourage and model healthy behaviors and engage other students.</p>						
<p>Teens Eating for Energy and Nutrition at School (TEENS)</p>	<p>Designed to increase the consumption of fruits, vegetables, and lower-fat foods among seventh and eighth graders, this school-based intervention consists of a 10-lesson classroom component teaching self-monitoring, goal setting, snack preparation, and skills for choosing healthy foods; a school-wide component to increase the offering and promotion of healthy foods; and a family component providing newsletters with tips for healthy eating and shopping.</p>	<p>School Children</p>	<p>Home, School (K-College)</p>	<p>Increased intentions to select lower-fat foods and in the proportion of healthy foods</p>			<p>Primary</p>
<p>The Faith, Activity and Nutrition (FAN) Program</p>	<p>Designed to increase physical activity and fruit and vegetable consumption among African American adults, this church-wide intervention is led by a committee that creates appropriate and fun activities for physical activity and healthy eating, sets organizational guidelines and practices, and gets the message out through church channels (e.g., bulletin board, health messages from the pulpit).</p>	<p>African American, Adults</p>	<p>Religious establishments</p>	<p>Increased physical activity and fruit and vegetable consumption</p>	<p>✓</p>		<p>Primary</p>
<p>The Stanford Nutrition Action Program (SNAP)</p>	<p>Designed to improve dietary habits among women and their families, this community-based intervention consists of a classroom component with lessons, small- and large-group activities, discussions, and tasks to build skills in choosing and preparing low-fat foods followed by a 12-week maintenance intervention involving calls or mailings to provide support and encouragement.</p>	<p>Low-Literate, Women, Families</p>	<p>Urban/Inner City</p>	<p>Increased education on calories from total fats and saturated fats</p>	<p>✓</p>		<p>Primary</p>
<p>Tiny Tastes</p>	<p>Designed to increase vegetable consumption among young children by influencing their exposure to and liking of vegetables, this home-based intervention consists of parents introducing the child to a target vegetable for 14 days by presenting the whole uncooked vegetable to the child, talking about how it grows, preparing it in front of the child, offering it to the child, and giving the child a sticker or other reward for trying it.</p>	<p>School Children</p>	<p>Home</p>	<p>Increased liking and consumption of target vegetable</p>			<p>Primary</p>

Aerobic Exercise Versus Spinal Flexibility + Aerobic Exercise for Sedentary & Functionally Limited Adults	Designed to enhance spinal flexibility and improve physical functioning, this intervention teaches older adults how to engage in increasing levels of aerobic activity and how to practice various postures and positions and incorporate them into daily life. The study showed improved physical functioning.	Sedentary Individuals	Other Settings	Improved physical functioning			Primary
Children's Health, Activity and Nutrition: Get Educated! (CHANGE!)	Designed to improve dietary habits and increase physical activity among children to reduce obesity, this school-based intervention includes lessons on nutrition and exercise, worksheets, and homework assignments.	School Children	School (K-College)	Decreased BMI, Increased physical activity	✓		Primary
Community Healthy Activities Model Program for Seniors (CHAMPS)	Designed to increase physical activity among older sedentary individuals, this intervention encourages the creation of a physical activity regimen and includes support such as an informational meeting, individual planning session, telephone calls from a counselor, monthly group workshops, and newsletters.	Sedentary Individuals	Other Settings	Increased physical activity	✓		Primary
COPE (Creating Opportunities for Personal Empowerment) Healthy Lifestyles TEEN (Thinking, Emotions, Exercise, and Nutrition) Program	Designed to improve dietary habits and increase physical activity to reduce obesity, this school-based intervention includes 15 manualized sessions for teens about nutrition, healthy eating, physical activity, and mindfulness; pedometer use; and parent newsletters..	School Children	School (K-College)	Increased steps per day, lowered BMI, Decreased weight, Decreased depression			Primary
Evaluation and Modification of Exercise Patterns in the Natural Environment	Designed to increase physical activity among sedentary individuals, this intervention places signs with a healthy heart message near the stairs/escalator to encourage those nearby to use to the stairs.	Sedentary Individuals	Other Settings	Increased stair use			Primary
Exercise and Physical Functional Performance in Independent Older Adults	Designed to enhance body endurance and body strength among older adults, this intervention consists of supervised exercise sessions with a warm-up, cool-down, and strength and endurance training using machines and free weights.	Sedentary Individuals, Older adults	Other Settings	Increased strength and aerobic capacity			Primary
Faith in Action (Fe en Acción)	Designed to increase physical activity among Latina adults, this church-based intervention is delivered by promotoras who lead physical activity classes, conduct motivational interviewing calls, mail monthly educational handouts, and coordinate environmental improvement projects.	Latina adults	Religious establishments, Suburban, Urban/Inner City	Increased physical activity			Primary

Fit & Strong!	Designed to increase physical activity among older adults with osteoarthritis, this intervention delivers group training exercise sessions that incorporate flexibility/balance, aerobics, strength training, and an educational component that helps the adults develop individualized exercise plans so they can maintain exercise outside of the sessions.	Adults with osteoarthritis	Clinical, Other Settings, Rural, Suburban, Urban/Inner City	Increased exercise, Decreased pain and stiffness			Primary
Increasing Park-Based Physical Activity Through Community Engagement	Designed to increase the level of physical activity and number of people using parks, this community-based intervention works with parks that have advisory boards to identify and implement new park programming and outreach interventions.	Non-park users, Park users	Other Settings, Urban/Inner City	Increased use of park and energy expenditure			Primary
Patient-centered Assessment and Counseling for Exercise (PACE)	Designed to increase physical activity among sedentary individuals, this intervention delivered by primary care providers assesses a patient's stage of change for increasing physical activity and provides the patient with a stage-matched protocol and brief counseling as well as a booster call 2 weeks later.	Sedentary Individuals	Clinical	Increased activity and minutes walked	✓		Secondary
Physically Active for Life (PAL)	Designed to increase physical activity among adults aged 50 years and older, this intervention is delivered by physicians who provide patient counseling tailored to each patient's stage of readiness for being physically active, provide an exercise prescription and patient manual, schedule a follow-up appointment, and send physical activity newsletters.	Sedentary Individuals	Clinical, Urban/Inner City	Increased motivational readiness for physical activity	✓		Secondary
Sports, Play and Active Recreation for Kids (SPARK)	Designed to increase physical activity among 4th- and 5th-grade students during physical education (PE) classes and outside of school, this intervention consists of two components: (1) a PE component that includes 10 health-fitness activity units (e.g., aerobic games) and 9 skill-fitness activity units (e.g., soccer) and (2) a classroom-based self-management component that promotes behavior change skills (e.g., self-monitoring, goal setting, problem solving).	School Children	School (K-College)	Increased physical activity, strength, participation in PE classed			Primary

Supporting Health and Activity in Preschool Environments (SHAPES)	Designed to increase physical activity to reduce obesity among preschool children, this school-based intervention changes instructional practices and the school environment through four daily components: (1) 10 minutes of indoor physical activity, (2) two 20-minute sessions of recess, (3) two 5-minute sessions incorporating physical activity into classroom lessons, and (4) enhanced social support (e.g., verbal encouragement) and physical environment (e.g., equipment, space).	School Children	Day care / Preschool	Increased physical activity			Primary
The Faith, Activity and Nutrition (FAN) Program	Designed to increase physical activity and fruit and vegetable consumption among African American adults, this church-wide intervention is led by a committee that creates appropriate and fun activities for physical activity and healthy eating, sets organizational guidelines and practices, and gets the message out through church channels (e.g., bulletin board, health messages from the pulpit).	African American Adults	Religious establishments	Increased physical activity and fruit and vegetable consumption	✓		Primary
Walk Your Heart to Health (WYHH)	Designed to increase physical activity among urban non-Hispanic Black and Hispanic adults, this community-based intervention involves community health promoters who lead members in walking group sessions three times per week; facilitate warm-up, cool-down, and stretching exercises; and help build peer support and group cohesion by encouraging participants to engage in discussion, set team goals, select a name for their group, and celebrate accomplishments.	Black and Hispanic adults	Other Settings, Religious establishments, Urban/Inner City	Increased in steps per day			Primary
Walking for Wellbeing in the West (WWW)	Designed to increase physical activity among adults (increasing their daily steps by 3,000), this intervention includes the following: (1) a baseline measurement of steps by using a pedometer, (2) a physical activity consultation that focuses on enhancing motivation to increase walking behavior and developing a tailored walking plan for the next 12 weeks with instructions to gradually increase daily steps, and (3) a second physical	Adults	Other Settings	Increased weekly steps, minutes walked and positive effect			Primary

	activity consultation 12 weeks later focused on relapse prevention and maintenance of walking activity.						
Web-Based Physical Activity Intervention for College-Aged Women	Designed to promote physical activity among college-aged women, this intervention involves the following: (1) participants meeting with a program administrator to receive a pedometer, learn how to set weekly step goals, and complete a goal statement form; (2) participants regularly accessing web content designed to enhance behavioral capability, self-regulation, and self-efficacy; and (3) participants receiving weekly emails providing personalized feedback on their progress.	College Women	School (K-College)	Increased steps per day			Primary
Wheeling Walks	Designed to increase physical activity among sedentary older adults, this media-based community campaign intervention encourages walking through paid newspaper, TV, and radio advertising; weekly press conferences and news coverage; worksite programs; website exposure; and public health education programs implemented by physicians, health professionals, and ministers.	Sedentary Individuals, Older Adults	Community	Increased proportion of participants classified as active walkers			Secondary
Youth Fit 4 Life	Designed to increase physical activity among students aged 5-12 years, this after-school intervention provides children with four weekly counselor-led sessions, each with physical activity, nutrition education about making healthy food choices, and behavioral skills training (e.g., how to manage stress), and provides parents with a letter summarizing the lessons and ways to reinforce physical activity and healthy eating at home.	School Children	School (K-College)	Increased physical activity	✓		Primary
Youth Fit For Life	Designed to increase physical activity among students aged 5-12 years, this after-school intervention provides children with three weekly counselor-led sessions that include physical resistance training and cardiovascular exercise, nutrition and health education, and training around interactive, behavioral life skills (e.g., goal-setting, recruiting social support, using positive self-talk), and each participant receives a workbook that includes additional activities.	School Children	Other Settings, School (K-College), Suburban, Urban/Inner City	Increased days of voluntary physical activity	✓		Primary

<u>A Matter of Balance</u>	A Matter of Balance is an evidence-based health promotion group program for older adults that uses cognitive-behavioral techniques to reduce the fear of falling. The program is a comprehensive approach to maximizing activity engagement and function and reducing fall risks, and is designed for small groups of older adults living independently in community settings or senior housing.	Older Adults	Community, Senior housing	Increased exercise level, Reduced falls			Primary
Active Choices	Active Choices is a telephone-based lifestyle behavior change program targeting adults aged ≥50 years designed to increase physical activity, grounded in social cognitive theory and the transtheoretical model. This promising practice is delivered through one face-to-face meeting and up to eight one-on-one telephone counseling calls.	Adults aged ≥50 years	Digital, Community	Increased physical activity, increased satisfaction with body appearance and function, Decreased BMI			Primary
BetterU	The BetterU program, formerly Choose to Move, is a campaign to increase the proportion of women who meet national recommendations for physical activity and nutrition. The campaign educates participants about proper physical activity and nutrition behaviors, and encourages women to develop a strong support system. Women, aged 25 years and older, are recruited by direct mail, the media, health care providers, and other means. The messages target women at high risk for heart disease and stroke, and invite women to log on to the American Heart Association's Website to access other intervention components, including a downloadable BetterMe Coaching Tool, journaling capabilities, structured goal setting, and 365 daily tips from experts on nutrition, stress, and physical activity. After registering, participants receive a welcome kit with program materials. The program consists of a 12-week behavior modification tailored to women to help them take steps toward improving health behaviors. The courses include tips for goal setting, healthy cooking,	Women aged 25 years and older	Community, Digital	Increased knowledge, physical activity and Improved nutrition	✓		Primary

	diabetes prevention, weight loss, increasing physical activity, and smoking cessation						
Color Me Healthy	Color Me Healthy is a physical activity and nutrition program developed to reach limited-resource children ages four and five. The program teaches children that healthy food and physical activity are fun by using color, music, and exploration of the senses. Development of the Color Me Healthy curriculum was based on the social cognitive theory and the socioecological model. The Color Me Healthy curriculum is fun, engaging, and interactive, and incorporates and stimulates all of the senses: touch, smell, sight, sound, and taste. The curriculum components include picture cards, original songs, and posters.	Children, Parents, Individuals with limited resources	Schools, Childcare	Increased physical activity, Increased fruit and vegetable consumption			Primary
EnhanceFitness	EnhanceFitness is a multi-component group exercise program designed for community-based organizations and retirement communities.. The EnhanceFitness program consists of one-hour classes, three times a week. The classes are conducted by a certified fitness instructor and emphasize moderate intensity aerobic conditioning, strength training, flexibility, and balance exercises.	Older Adults	Community, Senior housing	Improved social and physical functioning			Primary
Food on the Run	Food on the Run (FOR) is a multi-component, high-school based intervention program to promote healthful eating and physical activity among adolescents. FOR's primary target audience is multiethnic, underserved high school students. The program focuses on strengthening individual skills and knowledge while also working to influence high school policies and environments to increase access to healthy foods and physical activity options. Food on the Run works with teens, parents, community members and local policy makers to educate them on the importance of healthy eating and physical activity, and engage them in developing supportive policy solutions. FOR trains student advocates to conduct research, set goals, and formulate policy	School children, Multi-ethnic, Underserved, Parents, Community members	Schools	Improved attitude, knowledge and healthy eating	✓		Primary

	solutions to improve their schools' food and physical activity environments. The goals of FOR are to encourage high school students to advocate for additional health food and physical activity options at school; advance policy and environmental changes that promote healthful eating and physical activity, both at school and in the community; and to motivate students to eat more healthfully and engage in more physical activity.						
Maryland WIC 5-A-Day	The Maryland WIC 5-A-Day program consisted of three components. The first was a series of nutrition sessions about increasing consumption of fruits and vegetables conducted by a peer educator. The three small group discussions took place immediately before the WIC voucher distribution days, and child care was provided by another peer educator during the sessions. The first session focused on self assessment and setting personal goals for eating more fruits and vegetables, the second on identifying and overcoming barriers, and the third on maintenance strategies. Sessions also included food demonstrations, explaining how to cook healthy food and allowing participants to try new foods. The second component of the program included a set of printed and visual materials, a photonovella in which participants wrote down their goals and ideas. The third and final component of the program was intervention through direct mail. Because peer educators had limited opportunities for direct contact with all WIC participants, participants were sent four letters accompanied by tip sheets and other tools over a period of six months.	Women served by WIC, Low income	WIC	Sustained dietary changes	✓		Primary
More Than a Meal	Participants were randomized to one of three groups: daily, traditional meal delivery (Meals on Wheels Program); once-weekly frozen meal delivery; or waiting list for meals (control). The intervention period was 15 weeks. Daily, traditional meal delivery of frozen meals	Older Adults	Community	Improved health			Primary

	included socialization and safety check at time of delivery.						
NutriActive	NutriActive is a 4-week intervention delivered to kindergartners and first graders on a daily basis. It consists of a 15-minute morning walk and a 90-minute after school session which includes classroom learning and physical activities. In classroom sessions, students learn about body awareness, play safety and injury prevention, and nutrition. In physical activity sessions, students participate in fitness enhancing activities that help develop their motor skills.	School children	Schools	Improved motor skills and fitness			Primary
Nutrition and Physical Activity Self-Assessment for Child-Care (NAP SACC)	The Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC) program is an evidence-based childcare facility intervention. NAP SACC aims to advance childcare by improving the nutritional value of food served, the amount and quality of exercise, staff-child interactions, and policies and practices related to environmental characteristics.	Children, Families	Childcare	Improved nutrition, Increased exercise	✓		Primary
Nutrition Detectives	The Nutrition Detectives Program (ND) is created for elementary school children meant to educate the students about nutrition and make a positive impact on their health with minimal burden to the normal school curriculum. The education program teaches students how to understand food labels based on “5 clues”, detect marketing deception, and select the healthier food option.	School children, Parents	Schools	Increased ability to choose healthy foods	✓		Primary
PACE+: Counseling Adolescents for Exercise and Nutrition	Many adolescents do not meet national guidelines for participation in regular moderate or vigorous physical activity; limitations on sedentary behaviors; or dietary intake of fruits and vegetables, fiber, or total dietary fat. PACE+ for adolescents targets these behaviors through a primary care and home-based intervention. Adolescents meet with a health care provider, set goals and are followed by computer-assisted diet and physical activity assessment. Participants also receive 12 months of monthly mail and telephone counseling. Phone	Adolescents	Healthcare, Home, Digital	Increased fruit and vegetable consumption, Increased physical activity, Decreased dietary fat, Decreased sedentary habits	✓		Primary

	counseling and print materials guide adolescents to use cognitive and behavioral skills to make changes in behavior						
Trying Alternative Cafeteria Options in Schools (TACOS)	The goal of the TACOS program was to increase the availability of lower-fat foods in secondary school a la carte areas. This intervention spanned two years and included 20 secondary schools that were randomly assigned to either the control or intervention group. TACOS aimed to change the school environment by increasing the availability of lower fat foods in a la carte areas of cafeterias and by implementing student-based promotions of those lower-fat foods throughout the entire school. For the peer promotion component, TACOS staff worked with student groups and their faculty advisors to conduct specific promotional activities that highlighted one or more of the lower fat foods available in the a la carte areas.	School children	Schools	Increased availability and sales of lower fat foods			Primary
Be Active Kids®	Be Active Kids (BAK) is an innovative, interactive physical activity, nutrition, and food safety program for preschoolers ages four and five. The program curriculum was designed by professionals in the areas of physical activity, nutrition, and food safety. The curriculum uses colorful characters, interactive hands-on lessons, and bright visuals to teach children about physical activity and healthy eating. The basis of the program is to use fun and interactive methods to teach children about healthy living, and to show them that physical activity and healthy eating can be fun.	Preschoolers	Childcare, Schools	Improved nutrition and physical activity	✓		Primary

## OBESITY INTERVENTIONS

Intervention	Description	Target Audience	Setting	Impact	Aligns with Gap Analysis	On '20-'22 CHIP	Level of intervention
<u>Technology-Supported Multicomponent Coaching or Counseling Interventions to Reduce Weight</u>	Technology-supported multicomponent coaching or counseling interventions use technology to facilitate or mediate interactions between a coach or counselor and an individual or group, with a goal of influencing weight-related behaviors or weight-related outcomes.	Adults, Individual or group	Virtual	Weight loss, behavior change	✓		Primary
<u>Maine Youth Overweight Collaborative (MYOC)</u>	MYOC aims to improve clinical practice, care, and outcomes regarding children's weight. The program trains participating physicians to routinely address children's weight as part of clinical practice and equips physicians with the "5-2-1-0" slogan to teach key messages.	Children, Providers	Healthcare	Reduced BMI, Increased knowledge	✓		Primary & Secondary
<u>National Diabetes Prevention Program (DPP)</u>	Lifestyle change program for preventing type 2 diabetes among individuals who are pre-diabetic. Through a 16-course curriculum, lifestyle coaches help participants identify emotions and situations that can sabotage their success.	Adults with pre-diabetes	Community	Weight loss, Reduced risk for diabetes		✓	Secondary
<u>Text4Diet™</u>	A mobile phone-based intervention tool that addresses dietary, physical activity and sedentary behaviors with the goal of promoting and sustaining weight loss.	Adults	Virtual	Weight loss, behavior change	✓		Primary
<u>Diabetes Self-Management Program (DSMP)</u>	The weekly two and a half hour workshop is held for six weeks in community locations such as churches, senior centers, and libraries. DSMP participants are active in group discussions and the support of the group is critical to the success of the workshop.	Adults with diabetes	Community	Improved self-management			Secondary
<u>Pounds Off With Empowerment (POWER)</u>	Participants meet in individual and group sessions with a nutritionist weekly for the first 4 months, every other week for the next 2 months, and once a month for the following 6 months. The program consists of regionally and culturally appropriate suggestions for physical	Adults with diabetes	Individual or group, Healthcare, Rural	Weight loss, Improved glycemic control and reduce blood pressure	✓		Secondary & Tertiary

	activity and dietary changes, as well as individually tailored goals.						
<u>Intervention Mapping and the Development of a Peer Supported Diabetes Self-Management Program in Rural Alabama</u>	Intervention mapping process to determine areas of implementation for a peer-supported diabetes self-management program. Peer advisers were selected on prior experience with diabetes and provide social support and connecting individuals to community and health care resources.	Adults with diabetes, poor health literacy, physically isolated, low socio-economic	Community	Improved self-care, glycemic control, blood pressure and lipid levels			Secondary
<u>Advancing Diabetes Self-Management</u>	During the initial session, Certified Diabetes Educators collected baseline information and clinical data, performed an assessment of diabetes knowledge, psychosocial, cultural and social factors, and administered a depression screening questionnaire. Participants who had coexisting depression were referred to a therapist. After the first session, participants were given the choice to take part in any of the following activities: individual education sessions, group sessions, physical activity sessions, and cooking clubs. Participants were encouraged to think about behaviors, goals, and actions that they could take to improve their health outcomes. After goals were set, staff members worked to repeatedly emphasize and encourage goal attainment and maintenance over time.	Hispanic adults with diabetes, underserved, patient of FQHC	Healthcare	Improved glycemic control, blood pressure, and LDL cholesterol.			Secondary & Tertiary
<u>CDC COMMUNITY GUIDE: Diabetes Prevention and Control: Case Management Interventions to Improve Glycemic Control</u>	Case management is a process which involves planning, coordinating, and providing healthcare to individuals affected by a disease. It is intended for patients who have limited resources and who likely use too much of their income to pay for related healthcare services, who are not receiving the services that give them the best chance to stay healthy, or who are receiving services that are not well coordinated with one another.	Adults with diabetes, underserved	Healthcare	Improved glycemic control			Tertiary
<u>Northern Michigan Diabetes Initiative: Provider Education Program</u>	Provider Education Program of the Northern Michigan Diabetes Initiative (NMDI) consists of two main components: the Educational Outreach Visit program and	Healthcare providers	Healthcare	Improved glycemic control and lipid levels.			Primary

	the web-based iDose application. The Educational Outreach Visit program educates providers on diabetes management through a curriculum based on ADA guidelines						
<u>Cardiovascular Risk Management by Community Pharmacists</u>	A cardiovascular case-management program that utilizes pharmacists to provide education about heart disease and healthy lifestyle choices during individual appointments at manufacturing workplaces in rural Iowa.	Adults, Employees, Rural	Workplace	Improved blood pressure and cholesterol			Tertiary
<u>The HEALTHY Study</u>	HEALTHY Study was a randomized controlled trial administered across 42 middle schools across the US. The intervention integrated several themes across nutrition, physical activity, behavior, and communications and social marketing.	Children	Schools	Reduce risk in developing diabetes			Primary
Community-Based Multiple Risk Factor Intervention for Cardiovascular Risk	This program is a community-based multiple risk factor intervention on cardiovascular risk in African American families with a history of premature coronary disease. This program targets the siblings of an individual diagnosed with coronary heart disease under age 60. Participants in the program have a physical examination and medical history taken by a cardiologist. During community-based care visits at an easily accessible nonclinical site, a nurse practitioner performs physical assessments, evaluates patients for pharmacotherapy, and monitors compliance. A community health worker provides dietary counseling, smoking cessation support, and exercise counseling, with follow-up telephone interventions available.	Adults, African American families, Risk of heart disease	Community	Reduce risk of heart disease			Secondary
Complete Health Improvement Program (CHIP) (formerly the Coronary Health Improvement Project)	CHIP is a lifestyle intervention to reduce coronary risk factor levels. The program has been implemented in community-based, worksite-based, and medical settings. Community-based programming consists of 18 45-minute video lectures and a 45-minute class discussion. Worksite-based programming consists of 18 25-minute video lectures and 25-minute class discussions. The medical program is customized for specific disease groups	Adults with risk of coronary risk factors	Community, Healthcare, Workplace	Improved blood pressure, cholesterol, blood glucose and weight loss			Primary & Secondary

Head to Toe Weight Management Program	St. Louis Children's Hospital Head to Toe family-based weight management program helps children, teens, and their parents learn to make healthier lifestyle choices to address risk factors for high blood pressure and diabetes. The program is implemented in twelve 60-minute sessions and monthly follow-up calls with trained experts. Each lesson is led by a team of trained professionals consisting of a registered dietitian, exercise specialist, and a licensed social worker. Participants are taught how to manage their weight and are encouraged to have a positive self-image as their bodies grow. Participants set goals to increase regular exercise, practice healthy eating, and increase the child's self-esteem.	Children and families	Healthcare	Weight loss		✓	Secondary & Tertiary
Nurse-Led Secondary Prevention in Coronary Heart Disease	Patients with a working diagnosis of coronary heart disease are qualified for the program. Through the program nurse-run clinics in general practices promote medical and lifestyle aspects of secondary prevention and offer regular follow-up. Participants visit the clinics every two to six months where they receive one-on-one counseling, receive personalized feedback, set goals, and an develop an action plan.	Adults with a history coronary heart disease.	Healthcare	Improve secondary prevention of coronary heart disease			Secondary
CDC COMMUNITY GUIDE: Obesity Prevention and Control: Worksite Programs	These programs can include one or more approaches to support behavioral change including informational and educational, behavioral and social, and policy and environmental strategies.	Adults	Workplace	Reduced BMI, weight and body fat percentage			Primary & Secondary
HomeMeds	HomeMeds is a medication use improvement program developed specifically for agencies providing in-home services and health care to older adults. The program address unnecessary therapeutic duplication, cardiovascular medication problems, use of psychotropic drugs by patients with adverse psychomotor or adrenergic effects and use of nonsteroidal anti-inflammatory drugs in patient at high risk of peptic ulcer complications.	Older adults	Healthcare	Improved blood pressure			Tertiary

Project Dulce	A nurse-led team including a Certified Diabetes Educator, medical assistant, and dietitian provide clinical care in collaboration with primary care providers. The program also trains peer educators to provide diabetes self-management education and support, as well as an electronic diabetes registry to track patient care, and clinical standards to guide treatment. Project Dulce provides culturally appropriate curriculum, patient handouts in eight different languages, and training for health care providers.	Adults with diabetes, underserved, low-income, ethnically diverse	Community, Healthcare	Improved glycemic control, blood pressure and cholesterol			Tertiary
Internet-Based Case Management for Secondary Prevention of Heart Disease	An internet-based program to provide risk factor management training and services to individuals with cardiovascular disease. Only 11-38% of eligible patients with cardiovascular disease participate in cardiac rehabilitation programs, despite demonstrated benefits. Nurse case managers provide risk factor management training, education, and monitoring services to patients in their homes. Participants complete online education modules that include interactive, multiple choice, self-tests. Participants enter data (i.e., number of minutes of exercise, blood pressure measurements) into progress graphs which provide immediate graphic feedback showing progress over time. Participants log onto the site once a week for 30 minutes to communicate with a case manager. A registered dietitian provides feedback regarding dietary issues based upon a patient-maintained food diary.	Adults with coronary heart disease or congestive heart failure	Healthcare, Virtual	Reduced cardiovascular events			Tertiary
Strong Women - Healthy Hearts (also called StrongPeople Healthy Weight)	Strong Women – Healthy Hearts is a targeted education and behavioral prevention program created by Tufts University and run by the Cooperative State Research, Education, and Extension Service of the US Department of Agriculture. The intervention consists of classes twice a week for 12 weeks with a physical activity and dietary components. In the physical activity component women work their way up to 30 minutes of moderate-to-vigorous aerobic activity and are encouraged to increase lower-	Rural, Woman, 40+, BMI >24	Community	Reduced weight, BMI and waist circumference	✓		Secondary & Tertiary

	intensity lifestyle physical activity outside of the class. During the dietary portion of the class women learn healthy eating patterns, self-monitoring of food-intake, skills building for meal preparation, supermarket shopping, restaurant eating, and hands-on recipe preparation in small groups.						
<u>Behavioral Counseling to Promote a Healthy Lifestyle in Adults Without Cardiovascular Risk Factors</u>	The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians offer or refer adults age 18 or older without cardiovascular disease (CVD) risk factors to behavioral counseling interventions based on their own clinical judgement. These interventions can include dietary or physical activity counseling and can be performed by a wide range of specially trained professionals. USPSTF found that the adoption of healthy behavior advice may be increased by tailoring behavioral counseling interventions to the goals and motivations of individual patient	Adults 18 years or older without known cardiovascular disease risk factors, Clinicians	Healthcare	Reduced risk factors for cardiovascular disease	✓		Secondary
<u>Heart Disease and Stroke Prevention: Reducing Out-of-Pocket Costs for Cardiovascular Disease Preventive Services for Patients with High Blood Pressure and High Cholesterol</u>	The Community Preventive Services Task Force (CPSTF) recommends interventions that combine reduced patient out-of-pocket costs (ROPC) for medications to control high blood pressure and high cholesterol with additional components aimed at improving patient-provider interactions and patient knowledge. These additional components could include, for example, team-based care with medication counseling and patient education.	Adults, Healthcare providers	Healthcare	Improved medication adherence, blood pressure and cholesterol			Primary
<u>Heart Disease and Stroke Prevention: Team-Based Care to Improve Blood Pressure Control</u>	The Community Preventive Services Task Force (CPSTF) recommends team-based care to improve patients' blood pressure. Team-based care is a health systems-level, organizational intervention that incorporates a multidisciplinary team to improve the quality of hypertension care for patients.	Healthcare providers, Adults		Improved blood pressure			Tertiary
<u>Heart Disease and Stroke Prevention: Self-Measured Blood Pressure Monitoring Interventions for Improved Blood Pressure Control</u>	Self-measured blood pressure monitoring interventions support and promote the use of personal blood pressure measurement devices in the management and treatment of high blood pressure. Patients are trained to use validated, and usually automated, blood pressure	Adults with high blood pressure	Virtual, Healthcare	Improved blood pressure			Tertiary

	measurement devices on a regular basis in familiar settings, typically their homes. Patients share blood pressure readings with their healthcare providers during clinic visits, by telephone, or electronically. These measurements are monitored and used in treatment decisions to improve blood pressure control.						
<u>Diabetes Management: Team-Based Care for Patients with Type 2 Diabetes</u>	The Community Preventive Services Task Force (CPSTF) recommends team-based care to control type 2 diabetes. Team-based care is a health systems-level, organizational intervention that assigns a multidisciplinary team — including the patient, a primary care provider, and at least 1 other health professional — to help patients: Get appropriate medical tests and exams, Use medicines to control and manage risk factors, Self-manage their health care and adhere to treatment and Make healthy behavior and lifestyle choices	Adults with diabetes, Healthcare providers	Healthcare	Improves glycemic control, blood pressure and lipid levels			Tertiary
<u>Diabetes Management: Mobile Phone Applications Used Within Healthcare Systems for Type 2 Diabetes Self-Management</u>	The Community Preventive Services Task Force recommends diabetes self-management mobile phone apps, implemented in health care systems, to improve blood sugar among patients with type 2 diabetes. These interventions aim to facilitate communication between patients and health care providers and to improve diabetes care. Patients enter data into the apps or use medical equipment that transmits data directly. The apps then provide patients with feedback from health care professionals or automated systems.	Adults with diabetes, Healthcare providers	Virtual, Healthcare	Improved glycemic control			Tertiary
<u>Abnormal Blood Glucose and Type 2 Diabetes Mellitus: Screening</u>	The U.S. Preventive Services Task Force (USPSTF) recommends screening for abnormal blood glucose and type 2 diabetes for adults ages 40 to 70 who are overweight or obese. Specifically, USPSTF recommends that clinicians include blood glucose screenings during cardiovascular risk assessments. USPSTF also recommends that clinicians provide people with abnormal blood glucose behavioral counseling that promotes healthy eating and physical activity.	Adults 40-70 who are overweight or obese	Healthcare	Improved glycemic control			Tertiary

<u>Diabetes Management: Intensive Lifestyle Interventions for Patients with Type 2 Diabetes</u>	The Community Preventive Services Task Force recommends intensive lifestyle interventions for people with type 2 diabetes. Over at least 6 months, these interventions offer counseling, coaching, or individualized guidance to improve people’s diet, physical activity level, or both.	Adults with diabetes	Healthcare	Improved glycemic control and reduced cardiovascular disease risk factors			Tertiary
<u>Screening for Prediabetes and Type 2 Diabetes</u>	The U.S. Preventive Services Task Force (USPSTF) recommends screening for prediabetes and type 2 diabetes. USPSTF notes that clinicians should offer or refer people with prediabetes to effective preventive interventions. USPSTF found convincing evidence that preventive interventions for people with prediabetes have a moderate benefit in reducing progression to type 2 diabetes. They also found adequate evidence that interventions for people with newly diagnosed diabetes have a moderate benefit in reducing the risk of death.	Asymptomatic adults aged 35 to 70 years who are overweight or obesity	Healthcare	Improved glycemic control			Secondary
<u>Heart Disease and Stroke Prevention: Interactive Digital Interventions for Blood Pressure Self-Management</u>	The U.S. Preventive Services Task Force (USPSTF) recommends interactive digital interventions to improve blood pressure control in people with high blood pressure. In these interventions, people get personalized, automated guidance on blood pressure self-management through digital devices — like mobile phones or telephones.	Adults with high blood pressure	Virtual, Healthcare	Improved blood pressure			Tertiary
<u>Obesity Prevention and Control: Digital Health Interventions for Adolescents with Overweight or Obesity</u>	The Community Preventive Services Task Force (CPSTF) recommends digital health interventions. In the interventions, trained moderators, supervised by health care providers, help adolescents learn about healthy behaviors and teach them how to use the program’s website, mobile app, or wearable devices. Adolescents record their weight and their dietary or physical activity behaviors, and they track progress toward goals.	Adolescent who are overweight or obese	Virtual, Healthcare	Weight loss	✓		Tertiary
<u>5As counseling framework</u>	Obesity treatment guidelines include a treatment algorithm based on the 5As framework (Assess, Advise, Agree, Assist, and Arrange). This is an effective behavior-change counseling model. This model 1) assists with intensive counseling; 2) addresses psychosocial issues	Healthcare providers, patients	Healthcare	Increased motivation to lose weight, change diet and exercise			Tertiary

	and medical or psychiatric comorbidities associated with obesity treatment failure; and 3) connects patients with available community resources.						
<u>Behavioral Counseling Interventions to Promote a Healthy Diet and Physical Activity for Cardiovascular Disease Prevention in Adults Without Cardiovascular Disease Risk Factors</u>	Clinicians individualize the decision to offer or refer adults without cardiovascular disease risk factors to behavioral counseling interventions to promote a healthy diet and physical activity.	Adults 18 years or older without known cardiovascular disease risk factors	Healthcare	Reduced cardiovascular risk factors			Secondary
<u>Obesity in Children and Adolescents: Screening</u>	Clinicians screen for obesity in children and adolescents 6 years and older and offer or refer them to comprehensive, intensive behavioral interventions to promote improvements in weight status.	Children and adolescents 6 years and older	Healthcare	Improved weight status	✓		Secondary
<u>Weight Loss to Prevent Obesity-Related Morbidity and Mortality in Adults: Behavioral Interventions</u>	The USPSTF recommends that clinicians offer or refer to intensive, multicomponent behavioral interventions.	Adults with a BMI $\geq 30$	Healthcare	Improved weight status	✓		Tertiary
<u>Hypertension in Adults: Screening</u>	The USPSTF recommends screening for hypertension in adults 18 years or older with office blood pressure measurement (OBPM). The USPSTF recommends obtaining blood pressure measurements outside of the clinical setting for diagnostic confirmation before starting treatment.	Adults 18 years or older without known hypertension	Community, Healthcare	Improved monitoring for hypertension			Secondary
Improving Body Mass Index (BMI) Assessment in Suffolk County Health Centers	The Improving Body Mass Index (BMI) Assessment in Suffolk County Health Centers targets) receiving primary care services in Suffolk County health centers and addresses the issue of obesity and overweight. The goal of this practice was to improve screening rates for obesity/overweight through use of BMI.	Adult and pediatric patients (age 3 years and older)	Healthcare	Increased rates of BMI assessment	✓		Secondary
Worcester Area Trial for Counseling in Hyperlipidemia (WATCH)	The WATCH intervention is a dietitian-based nutrition counseling and education program for adult patients with hyperlipidemia. Group sessions lasted for two hours and each participant attended two sessions. Individual sessions were 45-minutes in length and each participant attends one individual session at the beginning of the	Adults with hyperlipidemia	Community, Healthcare	Improved care of patients with hyperlipidemia			Tertiary

	program and one individual session after the two group sessions. Individual sessions were focused on practical skills for reducing total and saturated fat intake, reducing cholesterol intake, and creating dietary behavior change goals.						
SHAPEDOWN	Designed to improve dietary habits and increase physical activity among obese adolescents, this family-based intervention includes a comprehensive assessment of each adolescent to identify psychosocial and biological contributors to the weight problem, 10 weekly group meetings for adolescents to exercise and complete weigh-ins, and two parent sessions that help parents support their adolescent's weight-loss efforts	Overweight/Obese Individuals	Clinical, Urban/Inner City	Greater weight loss	✓		Tertiary
Keep ME Healthy	Designed for pediatric primary care practices to promote healthy dietary habits and increase physical activity to reduce obesity. this intervention trains pediatric practices to implement improvements in clinical decision support that optimize the management of obesity; provide counseling to children and parents about behavioral goals related to nutrition, physical activity, and screen time; and develop overall practice and provider improvements for obesity management.	Overweight/Obese Individuals	Clinical, Rural, Urban/Inner City	Increased discussion of obesity risk behaviors by health providers	✓		Secondary
StrongPeople-Healthy Weight	Designed to improve dietary habits and increase physical activity to reduce obesity among sedentary women, this community-based intervention consists of classes with physical activity, didactic education about a healthy diet, and skills training to teach behavioral strategies such as self-monitoring and goal setting.	Overweight/Obese Individuals	Clinical, Religious establishments, Rural	Decreased body weight, body mass index (BMI), and waist circumference	✓		Secondary
The Physical Activity and Teenage Health (PATH) Program	Designed to increase physical activity and improve dietary habits among minority adolescents, this school-based intervention delivered by physical education teachers consists of manual-guided sessions that integrate vigorous exercise with health and nutrition education as well as homework assignments to enhance classroom learning.	School Children	School (K-College), Urban/Inner City	Decreased body fat, systolic blood pressure, and diastolic blood pressure	✓		Primary

Complete Health Improvement Program (CHIP)	Designed to promote healthy dietary habits to markedly reduce major risk factors for chronic disease. This intervention includes an educational lecture series with health risk assessments, textbooks and workbooks, and an alumni support organization that helps adults maintain dietary and exercise goals.	Adults, Older Adults	Clinical, Other Settings, Religious establishments, Workplace	Decreased BMI, weight, and percentage body fat.	✓		Primary & Secondary
--	---	----------------------	---	---	---	--	---------------------

## MENTAL HEALTH INTERVENTIONS

Intervention	Description	Target Audience	Setting	Impact	Aligns with Gap Analysis	On '20-'22 CHIP	Level of intervention
<u>Al's Pals</u>	Al's Pals uses 46 interactive lessons that teach children how to practice positive ways to express feelings, relate to others, communicate, brainstorm ideas, solve problems, and differentiate between safe and unsafe substances and situations. Lessons are delivered twice a week over 23 weeks. Each lesson lasts 15 to 20 minutes and typically consists of two or three activities.	Children Ages 3-8, Parents, All racial backgrounds	Schools, Urban/Suburban, Rural	Increased prosocial and coping behaviors			Primary
<u>Cool Kids</u>	The Cool Kids program applies cognitive behavior therapy to teach methods of managing their anxiety to children who have been diagnosed with an anxiety disorder. During the 10-week program, children learn a variety of skills, including linking thoughts and feelings, problem solving, self-rewarding, dealing with teasing, and being assertive. Parents also participate in the program to learn about different ways to interact with their children, and are given worksheets, summaries, and guides for helping their children practice behavioral techniques at home.	children ages 7-17 who have been diagnosed with an anxiety disorder & parents	Clinic-Based	Reduced symptoms and amount of life interference caused by anxiety, Reduced avoidance, Reduced family distress, Increased confidence, Improved peer relationships, Increased engagement in extra-curricular activities.	✓		Tertiary
<u>Coping Cat</u>	The Coping Cat program is a cognitive-behavioral therapy intervention that helps children recognize and analyze anxious feelings and develop strategies to cope with anxiety-provoking situations. The program focuses on four related components: (1) recognizing anxious feelings and physical reactions to anxiety; (2) clarifying feelings in anxiety-provoking situations; (3) developing a coping plan (for example, modifying anxious self-talk into coping self-talk, or determining what coping actions might	Children aged 8 to 13 years, C.A.T. Project workbook is used for children aged 14 to 17 years.	Clinic-Based	Reduced anxiety and fear, Improved ability to cope with dreaded situations, Reduced frequency of			Secondary

	be effective); and (4) evaluating performance and administering self-reinforcement.			negative thoughts during the week.			
<u>Critical Time Intervention</u>	Aims to enhance continuity of care during the transition from institutional to community living. The intervention, which lasts roughly 9 months following institutional discharge, involves two components: (1) strengthening the individual's long-term ties to services, family, and friends; and (2) providing emotional and practical support during the transition.	Institutionalized adults and adolescents	Various settings, Hospitals	Reduction in likelihood of being homeless, Reduction in homeless nights			Tertiary
<u>Early HeartSmarts Program</u>	Designed to train teachers how to give young children (3–6 years old) the skills and knowledge necessary to develop age-appropriate socio-emotional competencies. The goal of the program was to teach children how to facilitate their emotional, social, and cognitive development. Some of the program components include learning about the heart and how it's connected to emotions, how to recognize the five basic emotions, how to generate positive emotions, and how to relate to peers.	Preschool children (3-6 years old), Educators, Lower socio-economic status, Ethnic minorities	Classroom	Improved SEL, physical, cognitive, and language development			Primary
<u>Fast Track</u>	Comprehensive, long-term prevention program that includes primary prevention for ALL students in elementary and middle (PATHS Curriculum) and a component for children considered high risk; also includes a parent component, tutoring, and home visiting. The main goals of this program are to increase communication and bonds between and among the three domains of school, home, and the individual; to enhance children's social, cognitive, and problem-solving skills; to improve peer relationships; and ultimately to decrease disruptive behavior at home and in school.	Children identified in kindergarten for disruptive behavior and poor peer relations and extending through 10th grade, Parents	School-Based Prevention Education for all (Primary) and at-risk (Secondary)	Reduction in serious conduct problems			Secondary
<u>First Step to Success</u>	Empowers schools and social service agencies to address violence and destructive behavior, at the point of school entry and beyond, in order to ensure safety and to facilitate the academic achievement and healthy social development of children and youth. The primary goal of this program is to divert antisocial kindergartners from an antisocial behavior pattern during their subsequent school careers and to develop in them the competencies needed to build effective teacher- and peer-related, social-behavioral adjustments.	Kindergarteners	School-Based, Community organizations	Addresses and diverts violent and antisocial behaviors early			Primary

<u>FRIENDS Programs</u>	The goal of the FRIENDS Programs is to teach cognitive-behavioral skills to reduce anxiety in elementary school students who are or were exposed to violence.	Elementary Age Students	Clinic-Based	Increased standardized mathematics achievement scores, Decreased life stressors, and reduced victimization by community violence in children			Secondary
<u>Healthy IDEAS</u>	The Healthy IDEAS (Identifying Depression, Empowering Activities for Seniors) (1) screening for symptoms of depression & assessment of severity of symptoms; (2) educating older adults and primary caregivers; (3) referral, linkage and follow-up to primary care and mental health service providers; and (4) behavioral activation intervention	Older Adults	Integrated into existing case management	Improved access to help for depression, Reduced pain, Increased activity			Secondary
<u>I Can Problem Solve (ICPS)</u>	The goal of this program is to teach children effective problem-solving skills. This school-based intervention trains children in generating a variety of solutions to interpersonal problems, considering the consequences of potential solutions, and recognizing thoughts, feelings, and motives that lead to problem situations. Throughout the intervention, instructors use pictures, role-playing, puppets, and group interaction to help develop students' thinking skills. Children's own lives and problems are used as examples when teachers demonstrate problem-solving techniques.	K through 6th grades, Poor, Urban, High-risk	School-Based	Decreased impulsiveness, inhibition, and total behavior problems, Fewer high-risk behaviors, Improved positive, prosocial behaviors, Decreased antisocial behaviors, Improved standardized achievement tests.			Secondary

<a href="#"><u>Parenting Management Training - The Oregon Model (PMTO)</u></a>	The goal of this program is to teach effective parenting practices in order to promote healthy child adjustment.	Parents	Community-Based	Improved positive parenting practices and reduced family coercion, Reduced child behavioral problems and parent depression			Primary
<a href="#"><u>Promoting Alternative Thinking Strategies (PATHS)</u></a>	The goal of this program is to promote social and emotional learning (SEL) and character development, to prevent bullying, and to build the problem-solving abilities and other life skills required for positive relationships throughout students' lives.	Elementary Age Students	School-Based	Improved sociometric tests for aggression and hyperactivity-disruptive behavior			Primary
<a href="#"><u>QPR Institute   Practical and Proven Suicide Prevention Training QPR Institute (en-US)</u></a>	Community suicide prevention training; 2-hour virtual or in person for high school age and adults	High School and Older	Community/School	Increased knowledge; self-efficacy; ability to diffuse training information; Increased gatekeeper skills for suicide prevention			Primary
<a href="#"><u>Sources of Strength Suicide Prevention Program</u></a>	Community suicide prevention training; 2-hour virtual or in person for high school age and adults	High School and Older	Community/School	Increased knowledge; self-efficacy; ability to diffuse training information; Increased gatekeeper skills for suicide prevention			Primary
<a href="#"><u>The Connect Project</u></a>	Intervenes at multiple community levels to reduce risk and enhance protective factors for youth suicide. The program divides its intervention in three components: gatekeeper training for all participants; discipline-specific training for professionals in 13 different disciplines and clear,	High Schools and Adults	Schools and Community-Based	Increased knowledge and skills for youth and adults			Primary

	evidence-supported protocols that provide an integrated approach to guide the response of individuals who recognize a youth as being at risk for suicide.						
Wellness Recovery Action Plan (WRAP)	The goal of WRAP is to teach participants recovery and self-management skills and strategies. WRAP is a group intervention for adults with mental illness. WRAP aims to teach participants how to implement the key concepts of recovery in their daily lives, identify and understand their wellness resources, create advance directives to guide family members or supporters when their involvement is required, and develop individualized post-crisis plans.	Adults living with mental illness	Community/Clinic	Enhanced self-determination and promotion of recovery for people with psychiatric disabilities			Tertiary
Zero Suicide Initiative (Michigan)	The Zero Suicide Initiative is a comprehensive model of suicide prevention that challenges health and behavioral health care systems to strive for zero suicides among those in their care.	Various	Various settings	Reduced suicides	✓		Primary-Tertiary
<u>Behavioral health primary care integration   County Health Rankings &amp; Roadmaps</u>	Based on the idea that bringing behavioral health into primary care also brings mental health and substance abuse/treatments into primary care-chronic medical conditions and mental health concerns/ substance abuse often occur together; includes collaboration between providers, case managers, behavioral health consultants and mental health specialists	Various	Primary care settings	Improved mental health and quality of life, Increased adherence to treatment, patient engagement, and patient satisfaction	✓	✓	Secondary
<u>Clinic-Based Depression Care Management</u>	Depression care management in primary care clinics for older adults with major depression or chronic low levels of depression. Clinic-based depression care management involves: Active screening for depression, Measurement-based outcomes, Trained depression care managers providing case management, and Primary care provider and patient education, antidepressant treatment and/or psychotherapy, and a supervising psychiatrist	Adults 60 years and older	Healthcare	Improved depression outcomes	✓		Secondary & Tertiary
<u>Culturally adapted health care   County Health Rankings &amp; Roadmaps</u>	Tailors care to patients' norms, beliefs, values, language, literacy; such as matching specialists by race/ethnicity; adapting materials for patients' culture, language or literacy skills; offering education via community-based health advocates; incorporating norms about faith, food, family, or self-image; implementing patient involvement strategies	Culturally and linguistically diverse patients	Various settings	Improved mental health, health outcomes, health related knowledge	✓		Primary
<u>Federally qualified health centers (FQHCs)   County</u>	FQHCs deliver comprehensive care to uninsured, underinsured, and vulnerable patients regardless of ability to pay. FQHCs can also include migrant health centers, health care for the homeless centers, public	High need patients	Community-Based, Healthcare	Increased access to care; improved health outcomes			Secondary & Tertiary

<u>Health Rankings &amp; Roadmaps</u>	housing primary care centers, and outpatient health programs or facilities operated by a tribe or tribal organization.						
<u>Health insurance enrollment outreach &amp; support   County Health Rankings &amp; Roadmaps</u>	Health insurance enrollment outreach and support programs assist individuals whose employers do not offer affordable coverage, who are self-employed, or unemployed with health insurance needs; individuals may be uninsured or need assistance in renewing coverage.	Uninsured individuals	Community-Based	Increased health insurance coverage; Increased awareness of health insurance availability			Secondary
<u>Home-Based Depression Care Management</u>	Home-based depression care management involves: Active screening for depression, Measurement-based outcomes, Trained depression care managers, Case management Patient education, and a Supervising psychiatrist	Older Adults 60+	Home-Based	Reduce depression	✓		Secondary & Tertiary
<u>Medical homes   County Health Rankings &amp; Roadmaps</u>	Medical homes provide continuous, comprehensive, whole person primary care. In this model of care, primary care providers and their teams coordinate care across the health care system, working with patients to address all their preventive, acute, and chronic health care needs, and arranging care with other qualified health professionals as needed. Medical homes offer enhanced access, including expanded hours and easy communication options for patients. They also practice evidence-based medicine, measure performance, and strive to improve care quality.	All ages	Healthcare	Improved quality of health care and access to care and increase the use of preventive services, reduced preventable emergency room visits hospitalizations	✓		Tertiary
<u>Mental Health Benefits Legislation</u>	Practice (not one specific program) for changing regulations for mental health insurance coverage to improve financial protection and to increase access to, and use of, mental health services including substance abuse services	General audience	N/A	Increased diagnosis of mental health conditions, reduced prevalence of poor mental health, and reduced suicide rates	✓		Primary
<u>Mental Health: Collaborative Care for the</u>	Collaborative care for the management of depressive disorders is a multicomponent, healthcare system-level intervention that uses case	Adults with depressive disorders	Clinic-based	Improved depression symptoms,	✓		Tertiary

<u>Management of Depressive Disorders</u>	managers to link primary care providers, patients, and mental health specialists.			treatment adherence and response, and remission and recovery from depression.			
<u>Mental Health: Interventions to Reduce Depression Among Older Adults – Home-Based Depression Care Management</u>	Home-based depression care management involves: Active screening for depression, Measurement-based outcomes , Trained depression care managers providing case management, Patient education, and a supervising psychiatrist	Older adults with depression	Home-based	Improved short-term depression outcomes			Secondary & Tertiary
<u>Mental Health: Interventions to Reduce Depression Among Older Adults- Clinic-Based Depression Care Management</u>	Clinic-based depression care management involves: Active screening for depression, Measurement-based outcomes, Trained depression care managers providing case management , Primary care provider and patient education, Antidepressant treatment and psychotherapy and a supervising psychiatrist	Older adults with depression	Clinic-based	Improved short-term depression outcomes.			Secondary & Tertiary
<u>School-based social and emotional instruction   County Health Rankings &amp; Roadmaps</u>	School-based social and emotional instruction focuses on five core competency areas: self-awareness, self-management, social awareness, relationship skills, and responsible decision making <sup>1</sup> . Such instruction typically includes efforts to develop skills such as recognizing and managing emotions, setting and reaching goals, appreciating others’ perspectives, establishing and maintaining relationships, and handling interpersonal situations constructively.	All students in school- elementary, middle, high	School-Based	Increased social and emotion skills and prosocial behavior		✓	Primary
<u>Telemedicine   County Health Rankings &amp; Roadmaps</u>	Telemedicine, sometimes called telehealth, uses telecommunications technology to deliver consultative, diagnostic, and health care treatment services. Services can encompass primary and specialty care, referrals, and remote monitoring of vital signs, and may be provided via videoconference, email, smartphones, wireless tools, or other modalitie <sup>1</sup> . Telemedicine can supplement health care services for patients who would benefit from frequent monitoring or provide services to individuals in areas with limited access to care.	All ages	Home-based/Clinic-Based	Increased access to care; Improved mental health, mortality, and medication adherence	✓		Secondary & Tertiary
<u>Text message-based health interventions  </u>	Text message-based health interventions provide patients with reminders, education, or self-management assistance for a broad	Adolescents through Adutls	Home-based/Clinic-Based	Improved health outcomes	✓		Secondary & Tertiary

<u>County Health Rankings &amp; Roadmaps</u>	spectrum of health conditions. Interventions are most frequently used as a part of broader health promotion efforts or to help individuals manage chronic diseases. Text messages may be standardized or tailored to specific patients and sent at varied frequencies based on the intervention. Text messaging can be combined with other approaches or delivered as part of a stepped care or progressive intervention that is tailored to patients' needs, beginning with the least intensive treatment and moving to more intensive, and often expensive, treatments as needed <sup>1</sup> . Text message software and smartphone apps can be integrated into electronic health records (EHRs) to send alerts and reminders to patients.						
<u>Early childhood home visiting programs   County Health Rankings &amp; Roadmaps</u>	In early childhood home visiting programs trained personnel regularly visit at-risk expectant parents and families with young children and provide them with information, support, and/or training regarding child health, development, and care based on families' needs. Home visitors can be nurses, social workers, parent educators, paraprofessionals, lay workers from within the community, or others. Home visiting often begins prenatally and continues during the child's first two years of life, but may also begin after birth, last only a few months, or extend until kindergarten	Expectant parents, families, young children	Home	Reduced child maltreatment, reduced child injury; Improved cognitive skills; Improved SEL; Improved parenting; Improved birth outcomes; Improved maternal health; Improved economic stability			Secondary
<u>Early Head Start (EHS)   County Health Rankings &amp; Roadmaps</u>	Early Head Start (EHS) is a federally funded program for pregnant women and parents with low incomes and children aged 0 to 3. The program's comprehensive approach includes child care, parent education, health and mental health services, and family support. EHS programs can be home-based, center-based, or offer a mix of home and center services	Pre-K Students, Parents	Schools, Childcare, Home	Improved cognitive skills; Improved SEL			Secondary & Tertiary
<u>Families and Schools Together   County Health Rankings &amp; Roadmaps</u>	A group-based family intervention program for at-risk children with 2.5 hour weekly meetings for 8 weeks	At-risk children	Home-based, Clinic-Based	Improve youth behavior; Improved social emotional skills			Tertiary

<a href="#">Group-based parenting programs   County Health Rankings &amp; Roadmaps</a>	Practice (not one specific program): Group-based parenting programs use standardized curriculums to teach parenting skills in a group setting. Programs are usually based on behavioral or cognitive-behavioral approaches and often target parents whose children display or are at risk for aggressive and disruptive behaviors, possess low self-esteem or poor social skills. In some programs, participants' children are at risk of, or diagnosed with, Conduct Disorder or Oppositional Defiant Disorder <sup>1</sup> . Programs can be for parents of children of all ages, but are most often designed for those with children under 12 years old.	Parents with children under 12	Community-Based	Improved child behavior; Improved mental health; Improved parenting			Secondary & Tertiary
<a href="#">Health Equity: School-Based Health Centers</a>	Implementation of school-based health centers in low-income communities to improve educational and health outcomes	Low-income students	Healthcare Setting	Reduced gaps in education and improve health equity			Secondary
<a href="#">The Surgeon General's Call to Action to Implement the National Strategy for Suicide Prevention</a>	This Call to Action recognizes suicide as a complex issue that needs far-reaching solutions. Suicide prevention efforts must combine strategies, like: Promoting resilience and wellness, Identifying and supporting at-risk individuals and groups, Responding helpfully to crisis situations, Caring for those at risk of suicide, Supporting people affected by suicide	All age, Military service members, Veterans Indigenous, communities Ethnic, racial, sexual, and gender minorities	Various settings	Lowered suicide rates and improved mental health			Primary, Secondary, & Tertiary
<a href="#">Cognitive Behavioral Intervention for Trauma in Schools (CBITS)</a>	Cognitive Behavioral Intervention for Trauma in Schools (CBITS) was designed for use in schools for children ages 10–15 who have had substantial exposure to violence or other traumatic events and who have symptoms of posttraumatic stress disorder (PTSD) in the clinical range. The CBITS program has three main goals: 1) to reduce symptoms related to trauma, 2) to build resilience, and 3) to increase peer and parent support. The program was developed to reduce symptoms of distress and build skills to improve children's abilities to handle stress and trauma in the future.	Children ages 10–15 who have had substantial exposure to violence or other traumatic events and who have PTSD	School-Based delivered by licensed clinician	Significantly reduced PTSD and depression caused by exposure to violence			Tertiary
<a href="#">Screening for Anxiety in Adults</a>	The USPSTF recommends screening for anxiety in adults, including pregnant and postpartum persons.	Adults age 64 years or younger, including	Healthcare	Increased screening and identification on anxiety disorders	✓		Secondary

		pregnant and postpartum persons					
<u>Screening for Depression and Suicide Risk in Adults</u>	The U.S. Preventive Services Task Force (USPSTF) recommends screening all adults age 18 years and older for depression — including older adults and people who are pregnant or postpartum. USPSTF found insufficient evidence to recommend for or against screening for suicide risk in all adults. This recommendation only applies to people without recognized signs or symptoms of depression or suicide risk.	Adults, pregnant and postpartum persons, and older adults	Healthcare	Increased screening and identification of depression	✓		Secondary
<u>Suicide and Violence Prevention</u>	Males in the United States are more likely to take their own life at nearly four times the rate of females and represent 79% of all U.S. suicides. Suicide is the seventh leading cause of death for males in the United States. Gay, bisexual, and other men who have sex with men are at even greater risk for suicide attempts, especially before the age of 25. A study of youth in grades 7-12 found that lesbian, gay, and bisexual youth were more than twice as likely to have attempted suicide as their heterosexual peers. Some risk factors are linked to being gay or bisexual in a hostile environment and the effects that this has on mental health. This website provides information specific to gay, bisexual, and other men who have sex with men to prevent: Suicide, Intimate partner violence, Sexual violence, It provides an overview, LGBT-specific resources, and general resources for each topic area.	LGBT men	Community	Decreased suicide	✓		Secondary
<u>Mental Health: Targeted School-Based Cognitive Behavioral Therapy Programs to Reduce Depression and Anxiety Symptoms</u>	The Community Preventive Services Task Force recommends targeted school-based cognitive behavioral therapy programs to reduce depression and anxiety in school-aged children and adolescents at increased risk for these conditions. Trained school staff or outside mental health professionals deliver these interventions in individual or group settings. The programs help students build strategies to: Solve problems, Regulate emotions and Establish helpful thought and behavior patterns	Children	Schools	Reduced depression and anxiety	✓		Secondary & Tertiary
<u>Mental Health: Universal School-Based Cognitive Behavioral Therapy Programs to Reduce Depression and Anxiety Symptoms</u>	The Community Preventive Services Task Force recommends universal school-based cognitive behavioral therapy (CBT) programs to prevent or reduce depression and anxiety symptoms in school-aged children and adolescents. All students, whether or not they have mental health conditions, participate in these programs. The programs help students build strategies to: Solve problems, Regulate emotions, Establish helpful	Children	Schools	Prevention and reduction of depression and anxiety	✓		Primary & Secondary

	thought and behavior patterns, Trained school staff or outside mental health professionals deliver the programs.						
<u>Perinatal Depression: Preventive Interventions</u>	The U.S. Preventive Services Task Force (USPSTF) recommends counseling interventions for perinatal depression for women who are at higher risk. Specifically, USPSTF recommends interventions for women during pregnancy or after birth if they have 1 or more of the following: History of depression, Symptoms of depression, Risk factors related to social-economic status, Recent history of intimate partner violence and Other risk factors related to mental health	Perinatal women at high risk	Healthcare	Reduced depression			Secondary
<u>Prompts to Encourage Appointment Attendance for People with Serious Mental Illness</u>	In this Cochrane systematic review, the Cochrane Collaborative found that giving people with suspected serious mental illness a prompt just before their first appointment at a mental health clinic may encourage them to attend. Researchers found that prompting people with an orientation letter may be more effective than giving them a telephone prompt.	Patients	Healthcare	Improved participation in mental health treatment	✓		Tertiary
<u>Depression in Adults: Screening</u>	The U.S. Preventive Services Task Force (USPSTF) recommends screening adults, including pregnant and postpartum people, for depression. USPSTF notes that systems for screening should ensure accurate diagnosis, effective treatment, and appropriate follow-up.	Adults, pregnant and postpartum	Healthcare	Increased screenings and identification of depression	✓		Secondary
<u>Depression in Children and Adolescents: Screening</u>	The U.S. Preventive Services Task Force (USPSTF) recommends screening adolescents ages 12 to 18 years for major depressive disorder (MDD). USPSTF notes that systems for screening should ensure accurate diagnosis, effective treatment, and correct follow-up. USPSTF found insufficient evidence to assess whether the benefits of screening for MDD in children age 11 years or younger outweigh the harms.	Children 12-18	Healthcare	Increased screenings and identification of depression	✓		Secondary

# Appendix C

# Gap Analysis

SEPTEMBER 2022

# TABLE OF CONTENTS

<b>Health Priorities</b> .....	3
Purpose and process .....	3
Overall health .....	3
Mortality .....	4
<b>Healthy Eating, Active Living</b> .....	5-10
Summary .....	5
Community perspectives.....	5-6
Healthy eating.....	5-6
Active Living .....	5-6
Related Health metrics .....	6-8
Healthy People 2030 Goals.....	8
Gaps and Barriers.....	9
Metrics to assess healthy eating, active living .....	10
<b>Obesity</b> .....	11-15
Summary .....	11
Community perspectives.....	11
Related Health metrics .....	12-13
Healthy People 2030 Goals.....	13
Gaps and Barriers.....	13-14
Metrics to assess obesity .....	14-15
<b>Mental Health</b> .....	16-21
Summary .....	16
Community perspectives.....	16-17
Related Health metrics .....	17-18
Healthy People 2030 Goals.....	18
Gaps and Barriers.....	19-20
Metrics to assess mental health.....	20-21
<b>References</b> .....	22-26
<b>Appendices</b> .....	27-49
Regional distribution among survey respondents .....	28
Leading causes of death among Tri-County region, 2020 .....	29-30
Sociodemographic characteristics of survey respondents.....	31

Self-reported health status among survey respondents .....32-33

Physical activity among survey respondents.....34-35

Healthy eating among survey respondents.....36-37

Weight status among survey respondents .....38-39

Mental health condition among survey respondents.....40-41

Self-reported mental health status among survey respondents .....42-43

Self-reported health status by region..... 44

Physical activity by region ..... 45

Healthy eating by region..... 46

Weight status by region..... 47

Mental health condition by region ..... 48

Self-reported mental health status by region..... 49

# Health Priorities

## *Purpose*

This report provides a summary of findings along gaps, barriers, and recommendations related to the three health priorities in Peoria, Tazewell and Woodford Counties: 1) Healthy Eating/ Active Living (HEAL), 2) obesity, and 3) mental health. These findings were identified using 2021 data from the Community Health Needs Assessment (CHNA).

## *Process*

The 2021 CHNA was conducted among residents of Peoria, Tazewell, and Woodford counties. Surveys assessed health related concerns for themselves and for their community. Survey data for all three counties were compiled and analyzed for this report using SAS software, Version 9.4 (SAS Institute, Cary, NC). Descriptive analyses for CHNA survey respondents were completed using cross tabulations for all outcomes and alpha was set to 0.05 for tests unless otherwise specified. Bivariate analyses were conducted using chi-square test of differences between groups (e.g., sociodemographic, regional, etc.) for nominal variables and Cochran-Armitage tests was conducted for ordinal variables. When cell sizes were low, exact p-values were calculated. Supplemental tables with detailed information on CHNA survey results can be found in the appendices.

In addition to survey data collected among residents of the Tri-County region, local and national data were examined to further understand gaps and barriers in these community that pertained to the three health priorities. Results were aggregated and then assessed for each county.

## *Overall health*

In regard to overall health status assessed in the CHNA, 14.5% of respondents (n=177) reported having below average physical health. This corresponds to findings from the 2019 Behavioral Risk Factor Surveillance System (BRFSS) collected by the Centers for Disease Control and Prevention (CDC), which estimated that 14-18% of the residents in the Tri-County region reported themselves to be in poor or fair health. In addition, 2019 BRFSS data suggest that approximately 3.4-3.9 days in the past month adults reported to be physically unhealthy. Those who reported below average physical health in the CHNA survey, were more often younger (p=0.04), reported lower educational attainment (p<0.01), lower household income (p<0.01), unstable housing (<0.01), or identified as LGBTQ+ (p=0.03).

**Table 1.** Additional measures of health status among Tri-County Residents <sup>1-2</sup>

Description	Peoria County	Tazewell County	Woodford County	Illinois	US
% of adults who consider themselves to be poor or fair health (age-adjusted)	18%	16%	14%	17%	17%
Number of poor physical health days in the past month	3.9	3.7	3.4	3.6	3.9
Life expectancy (years)	77.4	78.8	79.9	79.4	77.0

<sup>1</sup> Data source: 2019 Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System

<sup>2</sup> Data source for life expectancy: National Center of Health Statistics, National Vital Statistics System (NVSS). These data are submitted to the NVSS by the vital registration systems operated in the jurisdictions legally responsible for registering vital events (i.e., births, deaths, marriages, divorces, and fetal deaths).

### Mortality

The top two leading causes of death in Illinois and the Tri-County area include diseases of the heart and malignant neoplasms. In Peoria County, malignant neoplasms, diseases of the heart, and accidents were the top three leading causes of death in 2020. In Tazewell and Woodford Counties, diseases of the heart, malignant neoplasms, and COVID-19 were the top three leading causes of death in 2020. Table 2 provides the number of deaths along with the age-adjusted mortality rates for the five leading causes of death, ranking based on age-adjusted death rate.

**Table 2.** Leading Causes of Death in Tri-County region, 2020 <sup>1-2</sup>

	Illinois	Peoria County	Tazewell County	Woodford County
<b>Rank</b> <sup>3</sup>	Description (number of deaths, age-adjusted mortality rate per 100,000)			
<b>1</b>	Disease of the heart (27,460 deaths, 171.43)	Malignant neoplasms (422 deaths, 182.01)	Diseases of the heart (351 deaths, 174.14)	Diseases of the heart (107 deaths, 182.81)
<b>2</b>	Malignant neoplasms (24,105 deaths, 150.88)	Diseases of the heart (418 deaths, 175.30)	Malignant neoplasms (294 deaths, 153.31)	Malignant neoplasms (83 deaths, 152.56)
<b>3</b>	COVID-19 (15,735 deaths, 99.19)	Accidents (144 deaths, 73.58)	COVID-19 (112 deaths, 55.12)	COVID-19 (46 deaths, 78.56)
<b>4</b>	Accidents (7,170 deaths, 53.36)	COVID-19 (146 deaths, 61.75)	Chronic lower respiratory diseases (109 deaths, 54.54)	Alzheimer diseases (30 deaths, 47.60)
<b>5</b>	Cerebrovascular diseases (6,762 deaths, 42.32)	Chronic lower respiratory diseases (103 deaths, 43.55)	Accidents (73 deaths, 48.75)	Chronic lower respiratory diseases (23 deaths, 43.27)

<sup>1</sup> Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics. CDC WONDER, Underlying cause of death dataset. Query date: September 1, 2022.

<sup>2</sup> The following Underlying Cause of Death ICD-10 codes were used to pull the following mortality data. Diseases of the heart: I00-I09, I11, I13, I20-I51; malignant neoplasms: C00-C97; COVID-19: U07.1; accidents (unintentional injuries): V01-X59, Y85-Y86; cerebrovascular diseases: I60-I69; chronic lower respiratory diseases: J40-J47; and Alzheimer disease: G30.

<sup>4</sup> Ranking based on age-adjusted mortality rate. Populations used to calculate standard age-adjusted rates can be found: <http://wonder.cdc.gov/wonder/help/ucd.html#2000> Standard Population.

# Healthy Eating, Active Living

**Healthy eating, active living (HEAL):** Defined as having health eating and active living, access to food and food insecurity. A healthy lifestyle, comprised of a proper diet, has been shown to increase physical, mental, and emotional well-being. In addition HEAL has been shown to reduce morbidity and mortality. Some factors that contribute to HEAL include: access to healthy foods, lack of fitness opportunities, lack of time, work demands, and personal health problems such as chronic diseases.

The U.S. Department of Agriculture (USDA) recommend that adult eat at least 1.5 to 2 cups of fruit and 2 to 3 cups per day of vegetables as part of a healthy eating pattern. Yet only 1 in 10 adults meet these fruit or vegetable recommendations [1-2]. Based on these recommendations, data from the CHNA survey were collapsed into two categories based on the amount of fruits and vegetables they reported to eat per day. Those who reported eating at least 3 servings of fruits and vegetables and those that did not eat that many servings a day were categorized for further analyses to identify potential gaps and barriers to healthy eating.

## *Community perspectives*

**Healthy eating:** Among survey respondents, nearly 70% reported eating less than 3 servings of fruits and vegetables in a day (n=799). Males (p=0.02) and those who were younger less often ate at least 3 servings of fruits and vegetables in a day (p <0.01). Moreover, those who were Black/African American (p=0.02) or those with lower education attainment (p <0.01), or lower household income (p<0.01) more often reported eating less than 3 servings of fruits and vegetables.

- Among those who did not eat at least 3 servings of fruits and vegetables a day, the most common reasons were they did not think it was important to them (1.7%) and that they did not like fruits/vegetables (2.6%).
- Moreover, those who did not eat the recommended amount of fruits and vegetables most often accessed their foods from a grocery store (92.3%). Other sources for food were a gas station (3.0%), fast food (1.14%), or convenience store (1.23%).
- Among all survey respondents, 2.4% (n=20) reported they or their family were hungry in the past week. Hunger tends to be less likely for those who were White, higher educational attainment, and higher household income. In addition, hunger tends to be more likely for people in an unstable (e.g., homeless) housing.

According to the Physical Activity Guidelines for Americans, adults need 150 of moderate-intensity physical activity [3]. In the CHNA individuals were asked, “In the last WEEK how many times did you participate in exercise, (such as jogging, walking, weight-lifting, fitness classes) that lasted for at least 30 minutes?” Responses to this question could have been: none, 1-2 times, 3-5 times, more than 5 times. Based on the Physical Activity Guidelines for Americans, respondents were collapsed into two categories based on the amount of days they exercised for at least 30 minutes. Those who reported exercising for at least 3 days and those that exercised less than 3 days. Additional analyses were used to identify potential gaps and barriers to an active lifestyle.

**Active living:** More than half of residents in the Tri-County area do not engage in physical activity for at least 30 minutes, for at least 3 times a week (61.0%, n=745). In particular, females (p <0.01), reported lower educational attainment (p <0.01), and those with lower household incomes (p=0.03) more do not engage in the recommended amount of physical activity.

- Among those who did not engage in the recommended amount of physical activity, the most common reasons were they were too tired (26.0%), lack of time (16.7%), do not like to exercise (16.8%), and cannot afford the fees to exercise (7.3%).

Of note, no county or regional differences were found in the Tri-County area in regards to healthy eating, active living questions assessed in the CHNA.

*Related health metrics using external data sources*

In addition to the community perspective of health behaviors related to healthy eating and active living, supplementary measures to compare between counties and to the state. Table 3 provides these metrics and further information on how these metrics are collected is provided below.

**Table 3.** County-level HEAL Metrics

<b>Metric</b>	<b>Peoria</b>	<b>Tazewell</b>	<b>Woodford</b>	<b>Illinois</b>	<b>US</b>
<b>Healthy Eating</b>					
Food Environment Index	7.3	8.1	8.9	8.6	7.8
Food insecurity	11%	9%	8%	10%	12%
Limited access to healthy foods	13%	9%	5%	5%	4%
<b>Active Living</b>					
Physical inactivity	27%	24%	23%	25%	26%
Access to exercise opportunities	75%	80%	58%	87%	80%

The *Food Environment Index (FEI)* ranges from a scale of 0 (worst) to 10 (best) and equally weights two indicators of the food environment: limited access to healthy foods and 2) food insecurity. The FEI is based on 2019 data used from the USDA Food Environment Atlas.

*Physical Inactivity* is based on responses to the 2019 Behavioral Risk Factor Surveillance Survey (BRFSS) conducted by the Centers for Disease Control and Prevention (CDC). This denotes the percentage of adults ages 18 and over reporting no leisure-time physical activity in the past month (age-adjusted).

*Access to exercise opportunities* measures the percentage of individuals in a county who live reasonably close to a location for physical activity. Locations for physical activity are defined as parks or recreational facilities. Data from 2020 and 2021 were used from Business Analyst, ESRI, YMCA, & US Census Tigerline Files to calculate this metric.

*Food insecurity* is measured by the percentage of population who lack adequate access to food. Data collected in 2019 was used from Map the Meal Gap to estimate this metric.

*Limited access to healthy foods* is measured by the percentage of population who are low-income and do not live close to a grocery store. This measure is developed by using 2019 data from the USDA Food Environment Atlas.

#### *National Goals*

Table 4 provides a description of healthy eating and active living measures for Healthy People 2030 being used to the target goals.

**Table 4.** Healthy People 2030 Goals Related to Healthy Eating, Active Living

Description	Baseline	Target
<b>Healthy Eating</b> <sup>1</sup>		
<b>Household food insecurity and hunger</b>	11.1	6
<b>Low food security among children</b>	0.59	0
<b>Fruit consumption by people aged 2 years and over</b> (Defined as cup equivalents of fruit per 1,000 calories)	0.51	0.56
<b>Vegetable consumption by people aged 2 years and over</b> (Defined as cup equivalents of vegetable per 1,000 calories)	0.76	0.84
<b>Consumption of dark green leafy vegetables, red and orange vegetables, and beans and peas by people aged 2 years and over</b> (Defined as cup equivalents of dark green vegetables, red and orange vegetables, and beans and peas per 1,000 calories)	0.31	0.33
<b>Whole grain consumption by people aged 2 years and over</b> (Defined as ounce equivalents of whole grains per 1,000 calories)	0.46	0.62
<b>Consumption of added sugars by people aged 2 years and over</b> (Defined as percent of calories from added sugars)	13.5	11.5
<b>Consumption of saturated fat by people aged 2 years and over</b> (Defined as percent of calories from saturated fat)	11.4	8.4
<b>Active Living (adults)</b> <sup>2</sup>		
<b>Proportion of adults who do no physical activity in their free time</b> (Defined as the proportion of adults who engage in no leisure-time physical activity)	26.1	21.8
<b>Proportion of adults who do enough aerobic physical activity for substantial health benefits</b> (Defined as aerobic physical activity of at least moderate intensity for at least 150 minutes/week, or at least 75 minutes/week of vigorous intensity, or an equivalent combination)	47.9	52.9
<b>Proportion of adults who do enough aerobic physical activity for extensive health benefits</b> (Defined as aerobic physical activity of at least moderate intensity for more than 300 minutes/week, or more than 150 minutes/week of vigorous intensity, or an equivalent combination)	29.3	33.9
<b>Proportion of adults who do enough muscle-strengthening activities</b> (Defined as muscle-strengthening activities on 2 or more days of the week)	31.9	36.6
<b>Proportion of adults who do enough aerobic and muscle strengthening activities</b> (Defined as at least 150 minutes a week of moderate-intensity aerobic activity and muscle-strengthening activity at least 2 days a week)	25.2	29.7
<b>Proportion of older adults with physical or cognitive health problems who get physical activity</b> (Defined as engagement in light, moderate, or vigorous leisure-time physical activities in 2018)	41.3	51.0
<b>Active Living (children and adolescents)</b> <sup>3</sup>		
<b>Proportion of children who do enough aerobic physical activity</b>	25.9	30.4
<b>Proportion of children and adolescents who play sports</b>	58.4	63.3
<b>Proportion of adolescents who do enough muscle-strengthening activities</b>	51.1	56.1
<b>Proportion of adolescents who do enough aerobic physical activity</b>	26.1	30.6
<b>Proportion of adolescents who do enough aerobic and muscle strengthening activities</b>	20.0	24.1

<sup>1</sup> Household food insecurity and hunger along with low food security among children obtained from the 2020 Current Population Survey Food Security Supplement (CPS-FSS). Consumption of other foods was collected from the 2013-2016 National Health And Nutrition Examination Survey (NHANES).

<sup>2</sup> Data source: 2020 National Health Interview Survey (NHIS)

<sup>3</sup> Data source: National Survey on Children's Health (NSCH) and Youth Risk Behavior Surveillance System (YRBSS)

### *Gaps and barriers*

The following gaps and barriers have been identified in the Tri-County region around HEAL.

#### Awareness/Education

Primary prevention strategies, such as improving awareness and knowledge on healthy eating, active living could provide substantial benefits for community members. Providing education to community members, in particular those who are: Black/African American, younger, and have lower educational attainment could help improve this health priority. Conducting a social media campaign that encourages increased activity and healthy food choices is another way to improve awareness and knowledge [4-5]. Such programs that improve the understanding on the benefits of healthy eating, active living would be beneficial to the community based on CHNA data. In addition, providing cooking classes on how to make healthier meals could be helpful when encouraging community members on behavior change when it comes to increasing the number of fruits and vegetables consumed by community members.

For children and adolescents, supporting school-based programs are promising programs that provide education on nutrition and physical activity [6-7]. Additional resources could also provide a school linked health center so that all children and adolescents receive a BMI measurement [8].

#### Access

Increasing access to healthy foods would be of great importance when encouraging community members to maintain a healthy diet [9]. Based on data from the CHNA and external sources, reducing food insecurity is especially important in Peoria and Tazewell Counties. Promoting the use of school and/or community gardens can be helpful, especially in communities where access to healthy foods is limited [6-8, 10-11].

In addition, improving access to exercise opportunities would also encourage healthier behaviors among community members [12]. Programs developed that promote physical activity, especially among females and those with a lower household income should be a priority. Based on findings from national data sources, only 58% of residents in Woodford County have access to exercise opportunities compared to the other counties which range between 75-80% of residents. Developing community-based exercise opportunities such as sponsoring a 5k walk, could be beneficial. In addition, identifying ways to reduce other barriers such as cost and time could be helpful. In particular, providing off hours and weekends to host events could be helpful to engage community members in such activities.

### *Metrics to assess healthy eating, active living*

Measuring the **reach** of the programs provided and the associated **outcomes** would be valuable to understand changes occurring in the community. The following things can be used to measure the improvement of health behaviors related to nutrition and physical activity.

#### **Reach**

- Number of individuals attending meetings or trainings
- Number of individuals engaged with social media posts or other media releases
- Number of individuals screened for dietary counseling and surveillance
- Number of nutrition classes or cooking classes offered in the community
  - Number of individuals who attended the class
- Number of community gardens
  - Proportion of residents accessing community gardens
- Number of physical activity classes offered in the community
  - Number of individuals who attended fitness classes in the community

If healthcare data is available, the following CPT and ICD-10 codes can be used to assess changes in these numbers in the community.

- Screening and Nutrition (CPT) codes: 97802-97804, 99401-9904
- Nutrition/dietary counseling (ICD-10) codes: Z71.3, S9470
- Nutrition class (CPT) code: S9452
- Self-care management training (CPT) code: 97535

#### **Outcomes**

- Changes in annual survey data (public health department or national surveillance systems)
  - Number of fruits and vegetables eaten in a day
    - Increase the proportion of residents who eat the recommended amount of fruits and/or vegetables
  - Number of days/week residents engage in physical activity
    - Increase in the proportion of residents who engage in more physical activity
    - Identify the type of physical activity the residents engage in (e.g., strength training, aerobic, etc.)
- Pre- and post-evaluations for any meetings, trainings, and educational programs provided in the community

# Obesity

**Obesity:** defined as being overweight and obese.

According to the CDC, obesity is defined as a body mass index (BMI) of 30 kg/m<sup>2</sup> or higher in adults [13]. In the past decade, obesity has been recognized by the World Health Organization (WHO) and American Medical Association (AMA) as a chronic disease, similar to diabetes or heart disease [14]. Obesity is a complex disease in which abnormal or excess body fat impairs health. Effects from obesity include health conditions, lower quality of life, and a reduced lifespan. In fact, obesity is one of the leading causes of preventable death in the United States. In order to identify those who are at risk for complications related to obesity, body mass index (BMI) is often collected. Although BMI is not always an accurate tool for identifying obesity-related complications, it is can be easily collected in routine physical examinations. BMI measurements can help healthcare providers identify individuals who may benefit from additional medical management.

Some direct factors that contribute to obesity include: nutrition, physical activity, sleep, genetics, and certain medical conditions. Indirect factors that contribute to obesity include: lack of resources to obtain healthy foods, lack of education on nutrition and medical services (i.e. medication, weight management), limited access to healthcare, and lack of understanding of medical needs.

## *Community perspectives*

Approximately half of survey respondents in the Tri-County region stated that obesity/overweight status was one of the top health issues in the community (n=612). Among survey respondents, 45.8% reported they were overweight (n=561). Those who reported being overweight more often were female (p <0.01) and older in age (p<0.01). In addition, those who reported uncertainty about their housing situation more often reported being overweight whereas those who were homeless more often reported they were not overweight (p <0.01).

There were significant differences between the three counties for residents who reported to be overweight (p <0.01). In particular, Tazewell County residents more often reported being overweight compared to the other two counties. In fact, 52.7% of those who completed the CHNA survey for Tazewell County reported they were overweight whereas Peoria had the lowest proportion of individuals who reported being overweight (42.8%). No regional differences were found in the Tri-County area.

*Related health metrics using external data sources*

Data from the Behavioral Risk Factor Surveillance System (BRFSS) estimates that roughly two-thirds of adults in Illinois are overweight or obese, which has risen by 20% over the past decade [15]. Researchers have estimated that obesity is projected to increase across the nation, resulting in nearly half the population having obesity by 2030. In fact, they projected 50% of the adult population in Illinois to have obesity, and 25.5% of them will have severe obesity (BMI,  $\geq 35$ ) by 2030 [16]. The prevalence of adults in Illinois who are overweight and obese from 2011-2020 can be found in Figure 1 below.

**Figure 1.** Weight classification among adults in Illinois, 2011-2020

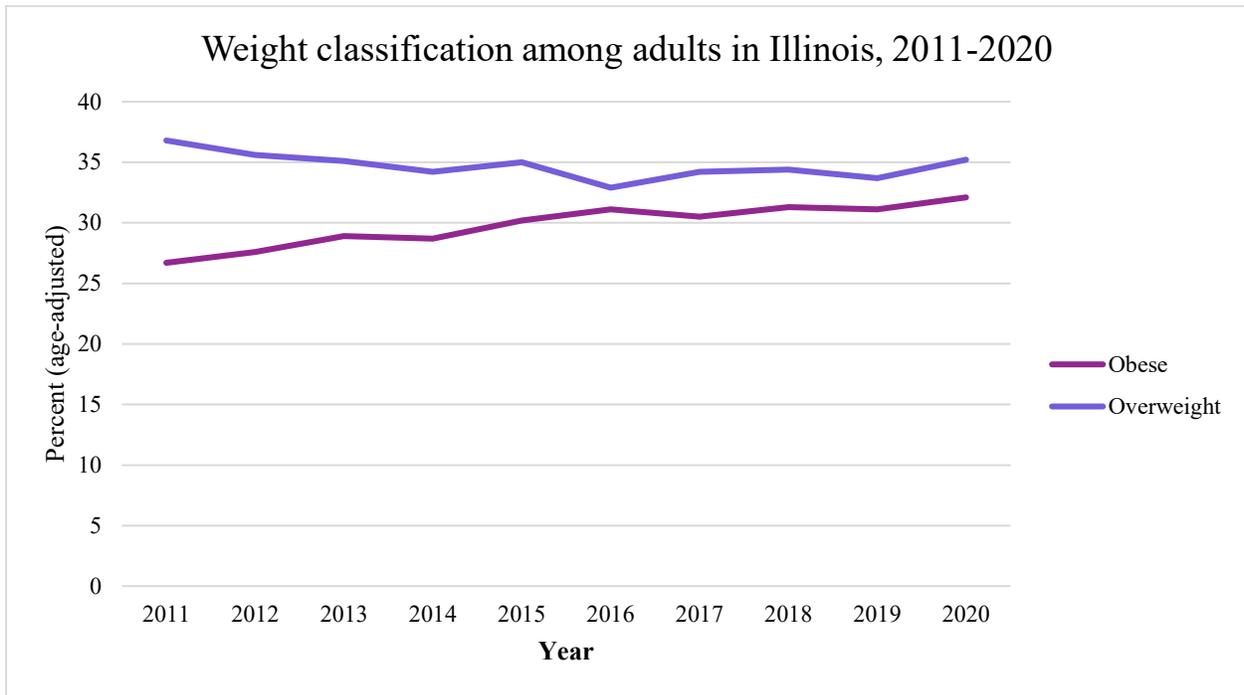


Table 5 provides county-level metrics assessing obesity among the Tri-County region. Additional information on how these are measured is provided below.

**Table 5.** County-level Obesity Metrics

Metric	Peoria	Tazewell	Woodford	Illinois	US
Adults obese	39%	33%	32%	32%	32%
High school students who had obesity	14%	13%	9%	15%	16%

*Adults obese* is measured by the percentage of the adult population (age 18 years and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m<sup>2</sup> (age-adjusted) using data from 2019 Behavioral Risk Factor Surveillance System (BRFSS).

*High school students who had obesity* is measured by the average proportion of students (8<sup>th</sup>-12<sup>th</sup> grade) who were overweight or obese based on BMI categories using data from the 2019 Youth Risk Behavior Survey (YRBS). Woodford County only had responses for 8<sup>th</sup> graders, which could impact results reported.

*National Goals*

Table 6 provides a description of obesity-related goals for Healthy People 2030.

**Table 6.** Healthy People 2030 Goals Related to Obesity

Description	Baseline	Target
<b>Obesity</b>		
Proportion of children and adolescents with obesity <sup>1</sup>	17.8	15.5
Proportion of adults with obesity <sup>1</sup>	38.6	36.0
Proportion of health care visits by adults with obesity that include counseling on weight loss, nutrition, or physical activity <sup>2</sup>	24.8	32.6
Proportion of women who had a healthy weight before pregnancy <sup>3</sup>	42.1	47.1

<sup>1</sup>Data source: 2013-2016 National Health And Nutritional Examination Survey (NHANES)

<sup>2</sup>Data source: 2016 National Ambulatory Medical Care Survey (NAMCS)

<sup>3</sup>Data source: 2018 National Vital Statistics System (NVSS-N)

*Gaps and barriers*

Awareness/Education

Improving the overall knowledge of obesity would be helpful in reducing the prevalence of obesity in the Tri-County region. In addition to providing education on factors that are related to obesity, increasing awareness to reduce stigma related to obesity would be beneficial. Ensuring that media campaigns and other materials distributed use language that is non-stigmatizing has been shown to benefit health outcomes [17-18]. Primary prevention strategies, such as developing educational campaigns on obesity including a variety of communication modes such as social media and written materials disseminated throughout the community could help the prevalence of obesity over time in the community [19].

Screening programs

In regards to improving secondary prevention measures, promoting screening programs in the community to identify those who may be at risk for obesity-related complications would be an effective way to improve weight status in the community. In fact, the U.S. Preventive Services Task Force (USPSTF) recommends that healthcare providers screen all individuals over 6 years of age for obesity.

Offering self-management programs that encourage healthy nutrition and/or physical activity would also help reduce obesity in the community [20-21]. One additional way to do this is the use of Community Resource Specialists, who can provide referrals to local resources to help individuals achieve sustainable lifestyle changes. These referrals may include programs such as support groups or appropriate medical resources in the community.

### Access to care

In order to address gaps in all prevention strategies, improving tertiary prevention such as access to care is essential in reducing morbidity and mortality related to obesity. In particular, enhancing access to appropriate medical care is essential in improving weight status among community members. For adults with obesity and other co-occurring chronic conditions often need weight management support in order to improve weight status. Therefore, increasing the number of individuals engaged in weight management services is important to address this health priority. Bariatric surgery, commonly referred to as weight loss surgery has been found to significantly reduce morbidity and mortality among individuals with high BMI [22-25]. Moreover, bariatric surgery results in greater improvement in weight loss outcomes and weight associated comorbidities compared with non-surgical interventions, regardless of the type of procedure performed [26-28].

### *Metrics to assess obesity*

Measuring the **reach** of the programs provided and the associated **outcomes** would be valuable to understand changes occurring in the community. The following things can be used to measure the improvement of weight status.

### **Reach**

- Number of individuals attending meetings or trainings related to obesity
- Number of individuals engaged with social media posts or other media releases
- Number of individuals screened for obesity/overweight
- Number of people who are obese/overweight and seen by weight management specialists
  - Proportion of individuals who are provided pharmacotherapy, psychological and behavioral interventions
  - Proportion of individuals who qualify and undergo bariatric surgery

If healthcare data is available, the following CPT and ICD-10 codes can be used to assess changes in these numbers in the community.

- Office or outpatient evaluation (E/M): 99201-99215

- Preventive medicine counseling: 99401-99404, 99411, 99412
- Obesity counseling: G0447
- Obesity (CPT) code: E66.9, E66.01 (often in conjunction with Z71.3, Z00.00)
- Bariatric surgery (CPT code): 43770-43775

### **Outcomes**

- Changes in annual survey data (public health department or national surveillance systems)
  - Number of adults in the region who are obese/overweight
  - Number of children and adolescents in the region who are obese/overweight
- Pre- and post-evaluations for any meetings, trainings, and educational programs provided in the community

# Mental Health

**Mental health:** defined as depression, anxiety, and suicide for this Tri-County report.

The CDC defines mental health as “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses in life, can work productively and fruitfully, and is able to make a contribution to his or her community.”

A myriad of factors can influence mental health outcomes, including suicide. Some of the direct factors that contribute to mental health include: other chronic health conditions, culture, genetics, and lack of coping skills. Examples of some indirect factors include: lack of appropriate medical services, lack of education about recognizing mental health issues, and stigma surrounding mental health.

## *Community Perspective*

Approximately 24.1% of respondents reported feeling depressed, down, or hopeless more than 3 days in the past month. Similarly, 20.9% of respondents reported that stress and/or anxiety has stopped them from their normal daily activities more than 3 days in the past month. Moreover, among survey respondents, 19.8% reported a mental health condition (n=243). Those who reported having a mental health condition were more often younger ( $p<0.01$ ), LGBTQ+ ( $p<0.01$ ), with lower household income ( $p<0.01$ ) and had unstable or no housing ( $p<0.01$ ). In addition, 14.8% of respondents reported that their mental health was below average (n=178). Along with the factors previously mentioned for those who reported a mental health condition, those with lower educational attainment more often reported below average mental health ( $p<0.01$ ).

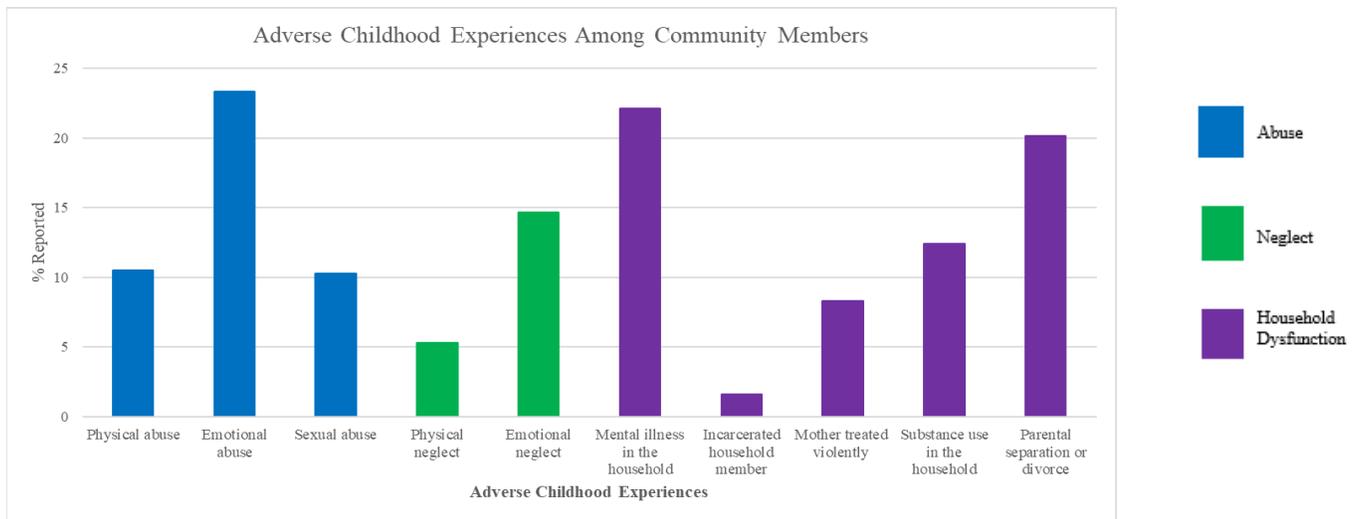
Of note, there were significant differences between the three counties among those who reported to have a mental health condition. Peoria respondents more often reported a mental health condition ( $p<0.01$ ). In fact, roughly 25% of the respondents who reported a mental health condition in Peoria whereas Woodford residents had the lowest proportion of residents (12.1%) report a mental health condition.

When examining regional differences, significant differences were identified within Peoria County. Residents in Peoria/West Peoria more often reported below average mental health compared to other areas in the county. The South West Peoria, North West Peoria, and North East Peoria less often reported below average mental health ( $p=0.02$ ).

*Additional indicators of mental health*

Adverse childhood experiences (ACE) such as abuse, neglect, or household dysfunction are associated with severe problems later in life, especially mental health outcomes. ACE scores were calculated from CHNA respondents using the sum of the ten questions. Those with 4 or more ACEs were collapsed into one category. Previous research suggest that an ACE score of 4 or more are at increased risk for several mental health outcomes including: suicide, depression, and anxiety [29-32]. ACEs were highly prevalent, nearly half of respondents reported at least one ACE. In fact, approximately 13.8% (n=169) of survey respondents reported more than 4 ACEs. The proportion of survey respondents who reported at least one of the ACEs assessed in the CHNA are shown in Figure 2, categorized by type of ACE: abuse, neglect, or household dysfunction.

**Figure 2.** Adverse Childhood Experiences (ACEs) among Community Members in the Tri-County region



*Related health metrics using external data sources*

Table 7 provides county-level metrics assessing mental health among the Tri-County region. Additional information on how these are measured is provided below.

**Table 7.** County-level Mental Health Metrics

Metric	Peoria	Tazewell	Woodford	Illinois	US
Poor mental health days	4.6	4.6	4.3	4.2	4.5
Frequent mental distress	15%	15%	14%	13%	13%
Depressive disorder	22%	27%	20%	22%	20%
Mental health providers	370:1	490:1	2,930:1	370:1	350:1
Suicide mortality rate	15.0	13.0	15.0	11.0	13.9

*Poor mental health days* measures the average number of mentally unhealthy days reported in past 30 days (age-adjusted) using data from the 2019 BRFSS.

*Frequent mental distress* is the percentage of adults (age-adjusted) who have reported 14 or more days of poor mental health per month using data from the 2019 BRFSS.

*Depressive disorder* is measured by the percentage of adults (age-adjusted) who have ever been told they had a depressive disorder (i.e., lifetime measure) using data from the 2019 BRFSS.

*Mental health providers* denote the ratio of the population to mental health providers in the county. The ratio represents the number of individuals served by one mental health provider in a county, if the population was equally distributed across providers. This data is collected from Centers for Medicare & Medicaid Services (CMS), National Provider Identification (NPI).

*Suicide mortality rate* is the number of deaths due to suicide per 100,000 population and is age-adjusted. Data from 2016-2020 CDC WONDER is used for this metric, to identify accurate measures for counties with smaller populations.

#### *National Goals*

Table 8 provides a description of mental health goals for Healthy People 2030.

**Table 8.** Healthy People 2030 Goals Related to Mental Health

<b>Description</b>	<b>Baseline</b>	<b>Target</b>
<b>Depression &amp; anxiety</b>		
Proportion of adolescents with depression who get treatment <sup>1</sup>	41.4	46.4
Proportion of adults with depression who get treatment <sup>1</sup>	64.8	69.5
Proportion of primary care visits where adolescents and adults are screened for depression <sup>2</sup>	8.5	13.5
<b>Suicide</b>		
Suicide mortality rate <sup>3</sup>	14.2	12.8
Suicide attempts among adolescents <sup>4</sup>	2.4	1.8
Suicidal thoughts among lesbian, gay, or bisexual high school students <sup>5</sup>	58.5	52.1

<sup>1</sup> Data source: 2019 National Survey on Drug Use and Health (NSDUH)

<sup>2</sup> Data source: 2016 National Ambulatory Medical Care Survey (NAMCS)

<sup>3</sup> Data source: 2010 National Vital Statistics System- Mortality (NVSS-M)

<sup>4</sup> Data source: 2019 Youth Risk Behavior Surveillance System (YRBSS)

<sup>5</sup> Data source: 2017 Youth Risk Behavior Surveillance System (YRBSS)

## *Gaps and barriers*

### Awareness/Education

Primary prevention strategies, such as increasing awareness and education around mental health, including information on community resources and where to obtain support is one preventative way to improve mental health. Examples include developing a social media campaign to spread awareness on identifying the signs of mental health conditions [33-36]. Programs such as the Mental Health First Aid (MHFA) is one evidence-based program for the community that educates individuals on identifying someone experiencing a mental health crisis [37]. These types of programs could not only increase awareness and education surrounding mental health, but it could also reduce stigma surrounding mental health.

Working collaboratively with community entities to implement health programs working collectively to improve mental health throughout the region could be an efficient way to disseminate information [38-39]. In fact, leveraging local, state, and national resources when disseminating mental health resources in the community could be an example of streamlining ongoing mental health efforts [40-44].

Given that younger individuals and those in the LGBTQ+ community more often reported worse mental health outcomes in the survey, implementing school-based programs or community-based programs that are tailored for this population is essential [45-47]. There are several evidence-based programs and some promising practices as well that could be used throughout the region to help curtail this growing problem. One example is the use of Trauma Informed Awareness in school systems using program management provided by SAMHSA [48-49].

### Screening

In regards to improving secondary prevention measures, amplifying resources for healthcare providers in the Tri-County region in order to increase number of prevention programs, screenings, and interventions conducted in the community could also improve mental health status by connecting people to appropriate care. There is a need to expand access to screening services to assess for depression, emotional, and mental health conditions using validated instruments that are low cost and low burden for healthcare professionals (e.g., PHQ-9).

### Access to care

In order to address gaps in all prevention strategies, supporting the expansion of mental health care available in the Tri-County area is essential in improving mental health for the community. While Peoria respondents more often reported poor mental health, Woodford County is well below the average number

of residents to mental health providers. Enhancing access to appropriate mental health care is essential in improving mental health outcomes such as depression, anxiety, and suicide. In particular, identifying and improving the number of individuals who seek mental health care after an incident diagnosis is one way to ensure access to care is improving in the community.

### *Metrics to assess mental health*

Measuring the **reach** of the programs provided and the associated **outcomes** would be valuable to understand changes occurring in the community. The following things can be used to measure the improvement of mental health.

### **Reach**

- Number of individuals attending meetings or trainings related to mental health
  - Number of at-risk individuals who have attended the events
- Number of individuals engaged with social media posts or other media releases

### **Outcomes**

- Changes in annual survey data (public health department or national surveillance systems)
  - Number of adults in the region who have been diagnosed with a mental health condition (incident diagnosis)
  - Number of individuals reporting poor mental health status
- Number of individuals screened for mental health conditions
- Proportion of adults who are receiving care for mental health disorders
- Proportion of children and adolescents who are receiving care for mental health disorders
- Number of individuals who are diagnosed with a mental health condition and seen by a mental health professional in a timely manner
  - Time to follow-up appointment after incident diagnosis
  - Assessing the suicide-related morbidity and mortality
    - Reduction in suicide mortality
    - Increase in the number of individuals obtaining follow-up care following a non-fatal suicide attempt or documented suicide ideation
- Pre- and post-evaluations for any meetings, trainings, and educational programs provided in the community

If healthcare data is available, the following CPT and ICD-10 codes can be used to assess changes in these numbers in the community.

- Mental health screening (ICD-10 code): Z13.3, Z00.121
- Mental health treatment (CPT code): H0002, H0004, H0017, H0018, H0019, H0023, H0024, H0025, H0030, H2012, H2037, 96127, 96160, 96161, 99214, 99215
- Depression disorders (ICD-10 code): F32, F33
- Anxiety disorders (ICD-10 code): F41
- Suicidal ideation/self-harm (ICD-10 code): R45.851, E950-E958.9, T14.91
- Other diagnostic measures related to negative health outcomes:
  - Bullying or psychological abuse (ICD-10: T74.3)
  - Target of (perceived) adverse discrimination and persecution (ICD-10: Z60.5)

## References

1. Lee SH, Moore LV, Park S, Harris DM, Blanck HM. Adults Meeting Fruit and Vegetable Intake Recommendations — United States, 2019. *MMWR Morb Mortal Wkly Rep* 2022;71:1–9. DOI: <http://dx.doi.org/10.15585/mmwr.mm7101a1>
2. Lee-Kwan SH, Moore LV, Blanck HM, Harris DM, Galuska D. Disparities in State-Specific Adult Fruit and Vegetable Consumption — United States, 2015. *MMWR Morb Mortal Wkly Rep* 2017;66:1241–1247. DOI: <http://dx.doi.org/10.15585/mmwr.mm6645a1>
3. Piercy, K. L., Troiano, R. P., Ballard, R. M., Carlson, S. A., Fulton, J. E., Galuska, D. A., ... & Olson, R. D. (2018). The physical activity guidelines for Americans. *Jama*, *320*(19), 2020-2028.
4. Hennink-Kaminski, H., Ihekweazu, C., Vaughn, A. E., & Ward, D. S. (2018). Using formative research to develop the healthy me, healthy we campaign: Partnering childcare and home to promote healthy eating and physical activity behaviors in preschool children. *Social Marketing Quarterly*, *24*(3), 194-215.
5. Nosi, C., D’Agostino, A., Pratesi, C. A., & Barbarossa, C. (2021). Evaluating a social marketing campaign on healthy nutrition and lifestyle among primary-school children: A mixed-method research design. *Evaluation and Program Planning*, *89*, 101965.
6. Nosi, C., D’Agostino, A., Pratesi, C. A., & Barbarossa, C. (2021). Evaluating a social marketing campaign on healthy nutrition and lifestyle among primary-school children: A mixed-method research design. *Evaluation and Program Planning*, *89*, 101965.
7. Llargues, E., Franco, R., Recasens, A., Nadal, A., Vila, M., Pérez, M. J., ... & Castells, C. (2011). Assessment of a school-based intervention in eating habits and physical activity in school children: the AVall study. *J Epidemiol Community Health*, *65*(10), 896-901.
8. Sharma, M. (2006). School-based interventions for childhood and adolescent obesity. *Obesity reviews*, *7*(3), 261-269.
9. Ziso, D., Chun, O. K., & Puglisi, M. J. (2022). Increasing Access to Healthy Foods through Improving Food Environment: A Review of Mixed Methods Intervention Studies with Residents of Low-Income Communities. *Nutrients*, *14*(11), 2278.
10. Alaimo, K., Beavers, A. W., Crawford, C., Snyder, E. H., & Litt, J. S. (2016). Amplifying health through community gardens: A framework for advancing multicomponent, behaviorally based neighborhood interventions. *Current environmental health reports*, *3*(3), 302-312.
11. Zoellner, J., Zanko, A., Price, B., Bonner, J., & Hill, J. L. (2012). Exploring community gardens in a health disparate population: findings from a mixed methods pilot study. *Progress in community health partnerships: research, education, and action*, *6*(2), 153-165.

12. Katz, D. L., O'Connell, M., Yeh, M. C., Nawaz, H., Njike, V., Anderson, L. M., ... & Dietz, W. (2005). Public health strategies for preventing and controlling overweight and obesity in school and worksite settings: a report on recommendations of the Task Force on Community Preventive Services. *Morbidity and Mortality Weekly Report: Recommendations and Reports*, 54(10), 1-12.
13. Lundeen, E. A., Park, S., Pan, L., O'Toole, T., Matthews, K., & Blanck, H. M. (2018). Obesity prevalence among adults living in metropolitan and nonmetropolitan counties—United States, 2016. *Morbidity and Mortality Weekly Report*, 67(23), 653.
14. De Lorenzo, A., Romano, L., Di Renzo, L., Di Lorenzo, N., Cennamo, G., & Gualtieri, P. (2020). Obesity: a preventable, treatable, but relapsing disease. *Nutrition*, 71, 110615.
15. Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Questionnaire. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2011-2020.
16. Ward, Z. J., Bleich, S. N., Cradock, A. L., Barrett, J. L., Giles, C. M., Flax, C., ... & Gortmaker, S. L. (2019). Projected US state-level prevalence of adult obesity and severe obesity. *New England Journal of Medicine*, 381(25), 2440-2450.
17. Turner, M. M., Ford, L., Somerville, V., Javellana, D., Day, K. R., & Lapinski, M. K. (2020). The use of stigmatizing messaging in anti-obesity communications campaigns: Quantification of obesity stigmatization. *Communication Reports*, 33(3), 107-120.
18. Hill, B., Bergmeier, H., Incollingo Rodriguez, A. C., Barlow, F. K., Chung, A., Ramachandran, D., ... & Skouteris, H. (2021). Weight stigma and obesity-related policies: A systematic review of the state of the literature. *Obesity Reviews*, 22(11), e13333.
19. Arora, M., Barquera, S., Lambert, N. J. F., Hassell, T., Heymsfield, S. B., Oldfield, B., ... & Vicari, M. (2019). Stigma and obesity: the crux of the matter. *The Lancet Public Health*, 4(11), e549-e550.
20. Pettman, T. L., Misan, G. M., Owen, K., Warren, K., Coates, A. M., Buckley, J. D., & Howe, P. R. (2008). Self-management for obesity and cardio-metabolic fitness: Description and evaluation of the lifestyle modification program of a randomised controlled trial. *International Journal of Behavioral Nutrition and Physical Activity*, 5(1), 1-15
21. Tongvichean, T., Aunguroch, Y., & Preechawong, S. (2019). The Effect of Self-Management Exercise Program on Physical Fitness among People with Prehypertension and Obesity: A Quasi Experiment Study. *Pacific Rim International Journal of Nursing Research*, 23(1), 6-17.
22. Cefalu, W. T., Rubino, F., & Cummings, D. E. (2016). Metabolic surgery for type 2 diabetes: changing the landscape of diabetes care. *Diabetes Care*, 39(6), 857-860.

23. Schauer, D. P., Arterburn, D. E., Livingston, E. H., Coleman, K. J., Sidney, S., Fisher, D., ... & Eckman, M. H. (2015). Impact of bariatric surgery on life expectancy in severely obese patients with diabetes: a decision analysis. *Annals of surgery*, 261(5), 914-919.
24. Sjöström, L., Narbro, K., Sjöström, C. D., Karason, K., Larsson, B., Wedel, H., ... & Carlsson, L. M. (2007). Effects of bariatric surgery on mortality in Swedish obese subjects. *New England journal of medicine*, 357(8), 741-752.
25. Arterburn, D. E., Olsen, M. K., Smith, V. A., Livingston, E. H., Van Scoyoc, L., Yancy, W. S., ... & Maciejewski, M. L. (2015). Association between bariatric surgery and long-term survival. *Jama*, 313(1), 62-70.
26. Sharples, A. J., & Mahawar, K. (2020). Systematic review and meta-analysis of randomised controlled trials comparing long-term outcomes of Roux-en-Y gastric bypass and sleeve gastrectomy. *Obesity surgery*, 30(2), 664-672.
27. Colquitt JL, Pickett K, Loveman E, Frampton GK. Surgery for weight loss in adults. *Cochrane Database Syst Rev*. 2014 Aug 8;2014(8):CD003641. doi: 10.1002/14651858.CD003641.pub4. PMID: 25105982; PMCID: PMC9028049.
28. El Ansari, W., & Elhag, W. (2021). Weight regain and insufficient weight loss after bariatric surgery: definitions, prevalence, mechanisms, predictors, prevention and management strategies, and knowledge gaps—a scoping review. *Obesity Surgery*, 31(4), 1755-1766.
29. Chapman, D. P., Dube, S. R., & Anda, R. F. (2007). Adverse childhood events as risk factors for negative mental health outcomes. *Psychiatric Annals*, 37(5), 359.
30. Mersky, J. P., Topitzes, J., & Reynolds, A. J. (2013). Impacts of adverse childhood experiences on health, mental health, and substance use in early adulthood: A cohort study of an urban, minority sample in the US. *Child abuse & neglect*, 37(11), 917-925.
31. Schilling, E. A., Aseltine, R. H., & Gore, S. (2007). Adverse childhood experiences and mental health in young adults: a longitudinal survey. *BMC public health*, 7(1), 1-10.
32. Chang, X., Jiang, X., Mkandarwire, T., & Shen, M. (2019). Associations between adverse childhood experiences and health outcomes in adults aged 18–59 years. *PloS one*, 14(2), e0211850.
33. Collins, R. L., Wong, E. C., Breslau, J., Burnam, M. A., Cefalu, M., & Roth, E. (2019). Social marketing of mental health treatment: California’s mental illness stigma reduction campaign. *American journal of public health*, 109(S3), S228-S235.
34. Saha, K., Torous, J., Ernala, S. K., Rizuto, C., Stafford, A., & De Choudhury, M. (2019). A computational study of mental health awareness campaigns on social media. *Translational behavioral medicine*, 9(6), 1197-1207.

35. Robinson, P., Turk, D., Jilka, S., & Cella, M. (2019). Measuring attitudes towards mental health using social media: investigating stigma and trivialisation. *Social psychiatry and psychiatric epidemiology*, 54(1), 51-58.
36. Karras, E., Stokes, C. M., Warfield, S. C., & Bossarte, R. M. (2022). Designing mental health promotion campaigns: segmenting US Veteran audiences to address public stigma. *Journal of Mental Health*, 1-7.
37. Gorman, C. D. (2022). Mental Health First Aid: Assessing the Evidence for a Public Health Approach to Mental Illness.
38. Castillo, E. G., Ijadi-Maghsoodi, R., Shadravan, S., Moore, E., Mensah, M. O., Docherty, M., ... & Wells, K. B. (2019). Community interventions to promote mental health and social equity. *Current psychiatry reports*, 21(5), 1-14.
39. Kohrt, B. A., Asher, L., Bhardwaj, A., Fazel, M., Jordans, M. J., Mutamba, B. B., ... & Patel, V. (2018). The role of communities in mental health care in low-and middle-income countries: a meta-review of components and competencies. *International journal of environmental research and public health*, 15(6), 1279.
40. Bower P, Gilbody S, Fletcher J, Sutton A. Collaborative care for depression in primary care: making sense of a complex intervention: systematic review and meta-regression. *The British Journal of Psychiatry* 2006;189(6):484-93.
41. Gilbody S, Bower P, Whitty P. Costs and consequences of enhanced primary care for depression: systematic review of randomised economic evaluations. *The British Journal of Psychiatry* 2006; 189(4):297-308.
42. Katon W, Von Korff M, Lin E, Simon G. Rethinking practitioner roles in chronic illness: the specialist, primary care physician, and the practice nurse. *General Hospital Psychiatry* 2001;23(3):138-44.
43. U.S. Preventive Services Task Force. Screening for depression in adults: U.S. Preventive Services Task Force Recommendation Statement. *Annals of Internal Medicine* 2009;151(11):784-92.
44. U.S. Preventive Services Task Force. Screening and treatment for major depressive disorder in children and adolescents: U.S. Preventive Services Task Force Recommendation Statement. *Pediatrics* 2009(b);123(4):1223-8.
45. King, C. A., Czyz, E., & Gillespie, B. W. (2019). Youth-Nominated Support Team Intervention For Suicidal Adolescents And Mortality Outcomes—Reply. *JAMA psychiatry*, 76(7), 765-766.
46. King, C. A., Arango, A., Kramer, A., Busby, D., Czyz, E., Foster, C. E., ... & YST Study Team. (2019). Association of the youth-nominated support team intervention for suicidal adolescents with

11-to 14-year mortality outcomes: secondary analysis of a randomized clinical trial. *JAMA psychiatry*, 76(5), 492-498.

47. Burk, J., Park, M., & Saewyc, E. M. (2018). A media-based school intervention to reduce sexual orientation prejudice and its relationship to discrimination, bullying, and the mental health of lesbian, gay, and bisexual adolescents in Western Canada: A population-based evaluation. *International journal of environmental research and public health*, 15(11), 2447.
48. Avery, J. C., Morris, H., Galvin, E., Misso, M., Savaglio, M., & Skouteris, H. (2021). Systematic review of school-wide trauma-informed approaches. *Journal of Child & Adolescent Trauma*, 14(3), 381-397.
49. Kataoka, S. H., Vona, P., Acuna, A., Jaycox, L., Escudero, P., Rojas, C., ... & Stein, B. D. (2018). Applying a trauma informed school systems approach: Examples from school community-academic partnerships. *Ethnicity & disease*, 28(Suppl 2), 417.

# APPENDICES

**APPENDIX A**

**REGIONAL DISTRIBUTION AMONG SURVEY RESPONDENTS**

<b>REGION (Zip Codes)</b>	<b>NAME</b>	<b>Frequency</b>
<b>PEORIA COUNTY</b>		465
Region 1 (61602, 61603, 61604, 61605, 61606, 61625)	Peoria/West Peoria	150
Region 2 (61612, 61614, 61615, 61616)	North Peoria/Peoria Heights	148
Region 3 (61607, 61547)	Bartonville/Limestone	42
Region 4 (61569,61533, 61536)	South West Peoria County	28
Region 5 (61529, 61517, 61559)	North West Peoria County	35
Region 6 (61528, 61525, 61626, 61523, 61552)	North East Peoria County	42
<b>TAZEWELL COUNTY</b>		389
Region 1 (61611, 61571, 61610)	North Tazewell County	159
Region 2 (61534, 61734, 61747, 61759, 61721)	South Tazewell County	43
Region 3 (61550, 61755, 61568)	East Tazewell County	62
Region 4 (61564, 61554)	West Tazewell County	109
<b>WOODFORD COUNTY</b>		372
Region 1 (61738, 61760, 61771, 61561, 61516)	East Woodford County	165
Region 2 (61570, 61545, 61530, 61729, 61742)	Central Woodford County	43
Region 3 (61548, 61611)	West Woodford County	62

Total may not add up due to missingness related to zip code.

**APPENDIX B**

**LEADING CAUSES OF DEATH AMONG TRI-COUNTY REGION, 2020**

**Mortality rate for leading causes of death, 2020<sup>1-2</sup>**

Leading Causes of Death	Illinois			Peoria			Tazewell			Woodford		
	Number of deaths	Age-adjusted mortality rate	95% CI	Number of deaths	Age-adjusted mortality rate	95% CI	Number of deaths	Age-adjusted mortality rate	95% CI	Number of deaths	Age-adjusted mortality rate	95% CI
Diseases of heart	27,460	171.43	(169.37-173.49)	418	175.3	(158.11-192.50)	351	174.14	(155.62-192.67)	107	182.81	(147.24-218.38)
Malignant neoplasms	24,015	150.88	(148.94-152.82)	422	182.01	(164.22-199.79)	294	153.31	(135.35-171.26)	83	152.56	(120.59-190.40)
COVID-19	15,735	99.19	(97.62-100.76)	146	61.75	(51.53-71.97)	112	55.12	(44.81-65.43)	46	78.56	(57.08-105.47)
Accidents (unintentional injuries)	7,170	53.36	(52.09-54.62)	144	73.58	(61.14-86.01)	73	48.75	(37.78-61.91)			
Cerebrovascular diseases	6,762	42.32	(41.30-43.34)	96	39.97	(32.22-49.02)	74	37.41	(29.22-47.19)	20	33.63	(20.25-52.51)
Chronic lower respiratory diseases	5,430	34.04	(33.13-34.96)	103	43.55	(35.04-52.06)	109	54.54	(44.22-64.86)	23	43.27	(26.79-66.14)
Alzheimer disease	4,636	28.69	(27.86-29.52)	85	33.56	(26.77-41.55)	77	37.01	(29.16-46.32)	30	47.6	(31.88-68.37)
Diabetes mellitus	3,485	22.17	(21.42-22.92)	51	22.71	(16.74-30.11)	49	24.26	(17.89-32.16)			
Nephritis, nephrotic syndrome and nephrosis	2,651	16.68	(16.04-17.32)	42	17.12	(12.28-23.22)	30	14.41	(9.72-20.57)			

Influenza and pneumonia	2,428	15.41	(14.79-16.03)	36	15.51	(10.74-21.67)	40	20.69	(14.57-28.52)
Chronic liver disease and cirrhosis	1,685	11.37	(10.81-11.93)	28	12.56	(8.21-18.41)	22	13.02	(7.95-20.11)
Septicemia	1,696	10.70	(10.18-11.22)	26	11.29	(7.31-16.67)	28	14.83	(9.78-21.58)
Suicide/Intentional self-harm	1,362	10.54	(9.97-11.11)	22	12.16	(7.53-18.59)			
Parkinson disease	1,600	10.21	(9.71-10.72)				28	14.54	(9.66-21.01)
Essential hypertension and hypertensive renal disease	1,583	9.87	(9.38-10.37)						

<sup>1</sup> The following Underlying Cause of Death ICD-10 codes were used to pull the following mortality data. Diseases of the heart: I00-I09, I11, I13, I20-I51; malignant neoplasms: C00-C97; COVID-19: U07.1; accidents (unintentional injuries): V01-X59, Y85-Y86; cerebrovascular diseases: I60-I69; chronic lower respiratory diseases: J40-J47; and Alzheimer disease: G30.

<sup>2</sup> Values were suppressed for low numbers.

**APPENDIX C**

**SOCIODEMOGRAPHICS AMONG SURVEY RESPONDENTS**

	<b>Overall (N=1,226)</b>	
	<b>n</b>	<b>%</b>
<b>Gender</b>		
<i>Male</i>	277	23.22
<i>Female</i>	627	52.56
<i>Non-binary, transgender</i>	289	24.22
<b>Age</b>		
<i>Under 20 years old</i>	19	1.58
<i>Between 21-35 years old</i>	228	18.95
<i>Between 36-50 years old</i>	388	32.25
<i>Between 51-65 years old</i>	371	30.84
<i>Over 65 years old</i>	197	16.38
<b>Sexual Preferences</b>		
<i>Heterosexual</i>	1034	84.34
<i>Lesbian, Gay, Queer, or Bisexual</i>	72	5.87
<i>Prefer not to answer or missing</i>	120	9.79
<b>Race/ethnicity</b>		
<i>White/Caucasian</i>	1084	84.34
<i>Black/African American</i>	66	5.49
<i>Other</i>	52	4.33
<b>Education status</b>		
<i>Some high school, GED, or High School Diploma</i>	157	13.01
<i>Some college</i>	392	32.48
<i>Bachelors or Graduate Degree</i>	658	54.52
<b>Household income</b>		
<i>Less than \$20,000</i>	84	7.25
<i>Between \$20,001-\$40,000</i>	180	15.53
<i>Between \$40,001- \$60,000</i>	186	16.05
<i>Between \$60,001-\$80,000</i>	193	16.65
<i>Over \$80,001</i>	516	44.52
<b>Housing Stability</b>		
<i>Homeless</i>	33	2.76
<i>Unstable Housing</i>	81	6.77
<i>Stable Housing</i>	1083	90.48
<b>County</b>		
<i>Peoria</i>	465	37.93
<i>Tazewell</i>	389	31.73
<i>Woodford</i>	372	30.34

**APPENDIX D**

**SELF-REPORTED HEALTH STATUS AMONG SURVEY RESPONDENTS**

	Average or above average physical health (n=1,043)		Below average physical health (n=177)		p-value
	n	%	n	%	
<b>Gender</b>					<b>0.18</b>
<i>Male</i>	240	23.58	35	20.47	
<i>Female</i>	524	51.47	101	59.06	
<i>Non-binary, transgender</i>	254	24.95	35	20.47	
<b>Age</b>					<b>0.04</b>
<i>Under 20 years old</i>	12	1.17	7	4.02	
<i>Between 21-35 years old</i>	187	18.26	39	22.41	
<i>Between 36-50 years old</i>	337	32.91	50	28.74	
<i>Between 51-65 years old</i>	314	30.66	57	32.76	
<i>Over 65 years old</i>	174	16.99	21	12.07	
<b>Sexual Preferences</b>					<b>0.03</b>
<i>Heterosexual</i>	890	85.33	141	79.66	
<i>Lesbian, Gay, Queer, or Bisexual</i>	53	5.08	18	10.17	
<i>Prefer not to answer or missing</i>	100	9.59	18	10.17	
<b>Race/ethnicity</b>					<b>0.71</b>
<i>White/Caucasian</i>	921	89.85	159	91.91	
<i>Black/African American</i>	58	5.66	8	4.62	
<i>Other</i>	46	4.49	6	3.47	
<b>Education status</b>					<b>&lt;0.01</b>
<i>Some high school, GED, or High School Diploma</i>	116	11.27	41	23.56	
<i>Some college</i>	324	31.49	66	37.93	
<i>Bachelors or Graduate Degree</i>	589	57.24	67	38.51	
<b>Household income</b>					<b>&lt;0.01</b>
<i>Less than \$20,000</i>	53	5.38	30	17.75	
<i>Between \$20,001-\$40,000</i>	137	13.89	43	25.44	
<i>Between \$40,001- \$60,000</i>	158	16.02	27	15.98	
<i>Between \$60,001-\$80,000</i>	168	17.04	25	14.79	
<i>Over \$80,001</i>	470	47.67	44	26.04	
<b>Housing Stability</b>					<b>&lt;0.01</b>
<i>Homeless</i>	28	2.75	5	2.86	
<i>Unstable Housing</i>	50	4.91	31	17.71	
<i>Stable Housing</i>	941	92.35	139	79.43	

<b>County</b>					0.17
<i>Peoria</i>	392	72.00	72	40.68	
<i>Tazewell</i>	324	31.06	62	35.03	
<i>Woodford</i>	327	31.35	43	14.51	

Notes: Other for race/ethnicity includes: Hispanic/LatinX, Pacific Islander, Native American, Asian/South Asian, Multiracial

**APPENDIX E**

**PHYSICAL ACTIVITY AMONG SURVEY RESPONDENTS**

	Does not exercise at least 3 times a week (n=745)		Exercise at least 3 times a week for 30 minutes (n=476)		p-value
	n	%	n	%	
<b>Gender</b>					<b>&lt;0.01</b>
<i>Male</i>	143	19.70	133	28.66	
<i>Female</i>	398	54.82	227	48.92	
<i>Non-binary, transgender</i>	185	25.48	104	22.41	
<b>Age</b>					0.24
<i>Under 20 years old</i>	9	1.23	10	2.12	
<i>Between 21-35 years old</i>	141	19.34	85	18.05	
<i>Between 36-50 years old</i>	241	33.06	147	31.21	
<i>Between 51-65 years old</i>	234	32.10	137	29.09	
<i>Over 65 years old</i>	104	14.27	92	19.53	
<b>Sexual Preferences</b>					0.47
<i>Heterosexual</i>	622	83.49	409	85.92	
<i>Lesbian, Gay, Queer, or Bisexual</i>	48	6.44	24	5.04	
<i>Prefer not to answer or missing</i>	75	10.07	43	9.03	
<b>Race/ethnicity</b>					0.20
<i>White/Caucasian</i>	650	89.04	432	92.11	
<i>Black/African American</i>	44	6.03	22	4.69	
<i>Other</i>	36	4.93	15	3.20	
<b>Education status</b>					<b>&lt;0.01</b>
<i>Some high school, GED, or High School Diploma</i>	107	14.64	50	10.57	
<i>Some college</i>	244	33.38	145	30.66	
<i>Bachelors or Graduate Degree</i>	380	51.98	278	58.77	
<b>Household income</b>					<b>&lt;0.01</b>
<i>Less than \$20,000</i>	58	8.18	24	5.37	
<i>Between \$20,001-\$40,000</i>	122	17.21	58	12.98	
<i>Between \$40,001- \$60,000</i>	115	16.22	71	15.88	
<i>Between \$60,001-\$80,000</i>	120	16.93	72	16.11	
<i>Over \$80,001</i>	294	41.47	222	49.66	
<b>Housing Stability</b>					<b>0.02</b>
<i>Homeless</i>	14	1.93	18	3.84	
<i>Unstable Housing</i>	58	7.99	23	4.90	
<i>Stable Housing</i>	654	90.08	428	91.26	

<b>County</b>				0.31
<i>Peoria</i>	280	37.58	184	38.66
<i>Tazewell</i>	247	33.15	139	29.20
<i>Woodford</i>	218	29.29	153	32.14

Notes: Other for race/ethnicity includes: Hispanic/LatinX, Pacific Islander, Native American, Asian/South Asian, Multiracial

APPENDIX F

HEALTHY EATING AMONG SURVEY RESPONDENTS

	Eats less than 3 servings of fruits and vegetables (n=799)		Eats at least 3 Servings of Fruits and vegetables (n=418)		p-value
	n	%	n	%	
<b>Gender</b>					<b>0.02</b>
<i>Male</i>	194	24.97	80	19.56	
<i>Female</i>	411	52.90	212	51.83	
<i>Non-binary, transgender</i>	172	22.14	117	28.61	
<b>Age</b>					<b>&lt;0.01</b>
<i>Under 20 years old</i>	16	2.05	3	0.72	
<i>Between 21-35 years old</i>	153	19.62	74	17.79	
<i>Between 36-50 years old</i>	258	33.08	128	30.77	
<i>Between 51-65 years old</i>	248	31.79	120	28.85	
<i>Over 65 years old</i>	105	13.46	91	21.88	
<b>Sexual Preferences</b>					0.05
<i>Heterosexual</i>	667	83.48	361	86.36	
<i>Lesbian, Gay, Queer, or Bisexual</i>	56	7.01	15	3.59	
<i>Prefer not to answer or missing</i>	76	9.51	42	10.05	
<b>Race/ethnicity</b>					<b>0.01</b>
<i>White/Caucasian</i>	699	89.50	383	92.51	
<i>Black/African American</i>	51	6.53	11	2.66	
<i>Other</i>	31	3.97	20	4.83	
<b>Education status</b>					<b>&lt;0.01</b>
<i>Some high school, GED, or High School Diploma</i>	114	14.56	41	9.83	
<i>Some college</i>	281	35.89	106	25.42	
<i>Bachelors or Graduate Degree</i>	388	49.55	270	64.75	
<b>Household income</b>					<b>&lt;0.01</b>
<i>Less than \$20,000</i>	57	7.52	23	5.84	
<i>Between \$20,001-\$40,000</i>	134	17.68	46	11.68	
<i>Between \$40,001- \$60,000</i>	132	17.41	54	13.71	
<i>Between \$60,001-\$80,000</i>	125	16.49	66	16.75	
<i>Over \$80,001</i>	310	40.90	205	52.03	
<b>Housing Stability</b>					<b>&lt;0.01</b>
<i>Homeless</i>	23	2.96	9	2.17	
<i>Unstable Housing</i>	65	8.38	16	3.86	
<i>Stable Housing</i>	688	88.66	390	93.98	

<b>County</b>	0.28			
<i>Peoria</i>	311	38.92	150	35.89
<i>Tazewell</i>	257	32.17	129	30.86
<i>Woodford</i>	231	28.91	139	33.25

Notes: Other for race/ethnicity includes: Hispanic/LatinX, Pacific Islander, Native American, Asian/South Asian, Multiracial

**APPENDIX G**

**WEIGHT STATUS AMONG SURVEY RESPONDENTS**

	Not overweight (n=665)		Overweight (n=561)		p-value
	n	%	n	%	
<b>Gender</b>					<b>&lt;0.01</b>
<i>Male</i>	178	27.68	99	18.00	
<i>Female</i>	310	48.21	317	57.64	
<i>Non-binary, transgender</i>	155	24.11	134	24.36	
<b>Age</b>					<b>&lt;0.01</b>
<i>Under 20 years old</i>	12	1.85	7	1.26	
<i>Between 21-35 years old</i>	143	22.10	85	15.29	
<i>Between 36-50 years old</i>	207	31.99	181	32.55	
<i>Between 51-65 years old</i>	184	28.44	187	33.63	
<i>Over 65 years old</i>	101	15.61	96	17.27	
<b>Sexual Preferences</b>					0.47
<i>Heterosexual</i>	566	85.11	468	83.42	
<i>Lesbian, Gay, Queer, or Bisexual</i>	34	5.11	38	6.77	
<i>Prefer not to answer or missing</i>	65	9.77	55	9.80	
<b>Race/ethnicity</b>					0.96
<i>White/Caucasian</i>	584	89.98	500	90.42	
<i>Black/African American</i>	36	5.55	30	5.42	
<i>Other</i>	29	4.47	23	4.16	
<b>Education status</b>					0.72
<i>Some high school, GED, or High School Diploma</i>	91	13.96	66	11.89	
<i>Some college</i>	195	29.91	197	35.50	
<i>Bachelors or Graduate Degree</i>	366	56.13	292	52.61	
<b>Household income</b>					0.57
<i>Less than \$20,000</i>	56	9.03	28	5.19	
<i>Between \$20,001-\$40,000</i>	79	12.74	101	18.74	
<i>Between \$40,001- \$60,000</i>	101	16.29	85	15.77	
<i>Between \$60,001-\$80,000</i>	95	15.32	98	18.18	
<i>Over \$80,001</i>	289	46.61	227	42.12	
<b>Housing Stability</b>					<b>&lt;0.01</b>
<i>Homeless</i>	26	4.04	7	1.25	
<i>Unstable Housing</i>	38	5.91	43	7.76	
<i>Stable Housing</i>	579	90.05	504	90.97	

<b>County</b>	<b>&lt;0.01</b>			
<i>Peoria</i>	266	40.00	199	35.47
<i>Tazewell</i>	184	27.67	205	36.51
<i>Woodford</i>	215	32.23	157	27.99

Notes: Other for race/ethnicity includes: Hispanic/LatinX, Pacific Islander, Native American, Asian/South Asian, Multiracial

**APPENDIX H**

**MENTAL HEALTH CONDITION AMONG SURVEY RESPONDENTS**

	No mental health conditions (n=983)		Mental health condition (n=243)		p-value
	n	%	n	%	
<b>Gender</b>					<b>&lt;0.01</b>
<i>Male</i>	250	26.23	27	11.25	
<i>Female</i>	463	48.58	164	68.33	
<i>Non-binary, transgender</i>	240	25.18	49	20.42	
<b>Age</b>					<b>&lt;0.01</b>
<i>Under 20 years old</i>	6	0.62	13	5.37	
<i>Between 21-35 years old</i>	143	14.88	85	35.12	
<i>Between 36-50 years old</i>	301	31.32	87	35.95	
<i>Between 51-65 years old</i>	325	33.82	46	19.01	
<i>Over 65 years old</i>	186	19.35	11	4.55	
<b>Sexual Preferences</b>					<b>&lt;0.01</b>
<i>Heterosexual</i>	845	85.96	189	77.78	
<i>Lesbian, Gay, Queer, or Bisexual</i>	36	3.66	36	14.81	
<i>Prefer not to answer or missing</i>	102	10.38	18	7.41	
<b>Race/ethnicity</b>					0.80
<i>White/Caucasian</i>	867	90.22	217	90.04	
<i>Black/African American</i>	54	5.62	12	4.98	
<i>Other</i>	40	4.16	12	4.98	
<b>Education status</b>					0.31
<i>Some high school, GED, or High School Diploma</i>	127	13.15	30	12.45	
<i>Some college</i>	321	33.23	71	29.46	
<i>Bachelors or Graduate Degree</i>	518	53.62	140	58.09	
<b>Household income</b>					<b>&lt;0.01</b>
<i>Less than \$20,000</i>	55	5.96	29	12.29	
<i>Between \$20,001-\$40,000</i>	124	13.43	56	23.73	
<i>Between \$40,001- \$60,000</i>	148	16.03	38	16.10	
<i>Between \$60,001-\$80,000</i>	157	17.01	36	15.25	
<i>Over \$80,001</i>	439	47.56	77	32.63	
<b>Housing Stability</b>					<b>&lt;0.01</b>
<i>Homeless</i>	25	2.62	8	3.32	
<i>Unstable Housing</i>	47	4.92	34	14.11	
<i>Stable Housing</i>	884	92.47	199	82.57	

<b>County</b>	<b>&lt;0.01</b>			
<i>Peoria</i>	350	35.61	115	47.33
<i>Tazewell</i>	306	31.13	83	34.16
<i>Woodford</i>	327	33.27	45	18.52

Notes: Other for race/ethnicity includes: Hispanic/LatinX, Pacific Islander, Native American, Asian/South Asian, Multiracial

**APPENDIX I**

**SELF-REPORTED MENTAL HEALTH STATUS AMONG SURVEY RESPONDENTS**

	Average or above average mental health (n=938)		Below average mental health (n=166)		p-value
	n	%	n	%	
<b>Gender</b>					<b>0.10</b>
<i>Male</i>	236	23.51	29	16.76	
<i>Female</i>	522	51.99	103	59.54	
<i>Non-binary, transgender</i>	246	24.50	41	23.70	
<b>Age</b>					<b>&lt;0.01</b>
<i>Under 20 years old</i>	9	0.89	10	5.71	
<i>Between 21-35 years old</i>	170	16.83	57	32.57	
<i>Between 36-50 years old</i>	318	31.49	68	38.86	
<i>Between 51-65 years old</i>	331	32.77	33	18.86	
<i>Over 65 years old</i>	182	18.02	7	4.00	
<b>Sexual Preferences</b>					<b>&lt;0.01</b>
<i>Heterosexual</i>	883	85.81	137	76.97	
<i>Lesbian, Gay, Queer, or Bisexual</i>	46	4.47	26	14.61	
<i>Prefer not to answer or missing</i>	100	9.72	15	8.43	
<b>Race/ethnicity</b>					<b>0.16</b>
<i>White/Caucasian</i>	907	89.71	164	94.25	
<i>Black/African American</i>	56	5.54	6	3.45	
<i>Other</i>	48	4.75	4	2.30	
<b>Education status</b>					<b>&lt;0.01</b>
<i>Some high school, GED, or High School Diploma</i>	115	11.32	36	20.69	
<i>Some college</i>	332	32.68	58	33.33	
<i>Bachelors or Graduate Degree</i>	569	56.00	80	45.98	
<b>Household income</b>					<b>&lt;0.01</b>
<i>Less than \$20,000</i>	47	4.84	33	19.30	
<i>Between \$20,001-\$40,000</i>	125	12.87	51	29.82	
<i>Between \$40,001- \$60,000</i>	156	16.07	28	16.37	
<i>Between \$60,001-\$80,000</i>	174	17.92	18	10.53	
<i>Over \$80,001</i>	469	48.30	41	23.98	
<b>Housing Stability</b>					<b>&lt;0.01</b>
<i>Homeless</i>	27	2.68	6	3.43	
<i>Unstable Housing</i>	47	4.66	33	18.86	
<i>Stable Housing</i>	934	92.66	136	77.71	

<b>County</b>				<b>0.16</b>
<i>Peoria</i>	385	37.41	72	40.45
<i>Tazewell</i>	323	31.39	63	35.39
<i>Woodford</i>	321	31.20	43	24.16

Notes: Other for race/ethnicity includes: Hispanic/LatinX, Pacific Islander, Native American, Asian/South Asian, Multiracial

**APPENDIX J**

**SELF-REPORTED HEALTH STATUS BY REGION**

	<b>Average or above average physical health (n=692)</b>		<b>Below average physical health (n=129)</b>		
<b>Location</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>p-value</b>
<b>Peoria</b>					0.68
<i>Peoria/West Peoria</i>	123	32.71	26	38.24	
<i>North Peoria/Peoria Heights</i>	131	34.84	17	25.00	
<i>Bartonville/Limestone</i>	34	9.04	8	11.76	
<i>South West Peoria County</i>	24	6.38	4	5.88	
<i>North West Peoria County</i>	30	7.98	5	7.35	
<i>North East Peoria County</i>	34	9.04	8	11.76	
<b>Tazewell</b>					0.26
<i>North Tazewell County</i>	135	42.72	28	45.90	
<i>South Tazewell County</i>	38	12.03	5	8.20	
<i>East Tazewell County</i>	56	17.72	6	9.84	
<i>West Tazewell County</i>	87	27.53	22	36.07	
<b>Woodford</b>					0.33
<i>East Woodford County</i>	135	58.95	28	71.79	
<i>Central Woodford County</i>	38	16.59	5	12.82	
<i>West Woodford County</i>	56	24.45	6	15.38	

**APPENDIX K**

**PHYSICAL ACTIVITY BY REGION**

	<b>Does not exercise at least 3 times a week (n=504)</b>		<b>Exercise at least 3 times a week for 30 minutes (n=318)</b>		
<b>Location</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>p-value</b>
<b>Peoria</b>					0.82
<i>Peoria/West Peoria</i>	87	32.58	63	35.59	
<i>North Peoria/Peoria Heights</i>	90	33.71	58	32.77	
<i>Bartonville/Limestone</i>	26	9.74	16	9.04	
<i>South West Peoria County</i>	14	5.24	13	7.34	
<i>North West Peoria County</i>	24	8.99	11	6.21	
<i>North East Peoria County</i>	26	9.74	16	9.04	
<b>Tazewell</b>					0.17
<i>North Tazewell County</i>	93	39.24	71	50.35	
<i>South Tazewell County</i>	31	13.08	12	8.51	
<i>East Tazewell County</i>	42	17.72	20	14.18	
<i>West Tazewell County</i>	71	29.96	38	26.95	
<b>Woodford</b>					0.10
<i>East Woodford County</i>	93	56.02	71	68.93	
<i>Central Woodford County</i>	31	18.67	12	11.65	
<i>West Woodford County</i>	42	25.30	20	19.42	

APPENDIX L

HEALTHY EATING BY REGION

	Eats less than 3 servings of fruits and vegetables (n=552)		Eats at least 3 Servings of Fruits and vegetables (n=267)		
Location	n	%	n	%	p-value
<b>Peoria</b>					0.06
<i>Peoria/West Peoria</i>	109	36.33	39	27.86	
<i>North Peoria/Peoria Heights</i>	94	31.33	51	36.43	
<i>Bartonville/Limestone</i>	31	10.33	11	7.86	
<i>South West Peoria County</i>	19	6.33	9	6.43	
<i>North West Peoria County</i>	26	8.67	9	6.43	
<i>North East Peoria County</i>	21	7.00	21	15.00	
<b>Tazewell</b>					0.40
<i>North Tazewell County</i>	87	36.86	51	43.97	
<i>South Tazewell County</i>	27	11.44	16	13.79	
<i>East Tazewell County</i>	43	18.22	19	16.38	
<i>West Tazewell County</i>	79	33.47	30	25.86	
<b>Woodford</b>					0.61
<i>East Woodford County</i>	102	59.30	62	63.92	
<i>Central Woodford County</i>	27	15.70	16	16.49	
<i>West Woodford County</i>	43	25.00	19	19.59	

**APPENDIX M**  
**WEIGHT STATUS BY REGION**

	<b>Not overweight (n=439)</b>		<b>Overweight (n=385)</b>		
<b>Location</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>p-value</b>
<b>Peoria</b>					0.65
<i>Peoria/West Peoria</i>	88	33.98	62	33.33	
<i>North Peoria/Peoria Heights</i>	86	33.20	62	33.33	
<i>Bartonville/Limestone</i>	20	7.72	22	11.83	
<i>South West Peoria County</i>	19	7.34	9	4.84	
<i>North West Peoria County</i>	22	8.49	13	6.99	
<i>North East Peoria County</i>	24	9.27	18	9.68	
<b>Tazewell</b>					0.88
<i>North Tazewell County</i>	75	41.67	90	45.23	
<i>South Tazewell County</i>	22	12.22	21	10.55	
<i>East Tazewell County</i>	31	17.22	31	15.58	
<i>West Tazewell County</i>	52	28.89	57	28.64	
<b>Woodford</b>					0.72
<i>East Woodford County</i>	75	58.59	90	63.38	
<i>Central Woodford County</i>	22	17.19	21	14.79	
<i>West Woodford County</i>	31	24.22	31	21.83	

**APPENDIX N**

**MENTAL HEALTH CONDITION BY REGION**

	<b>No mental health conditions (n=623)</b>		<b>Mental health condition (n=201)</b>		
<b>Location</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>p-value</b>
<b>Peoria</b>					0.09
<i>Peoria/West Peoria</i>	101	30.61	49	42.61	
<i>North Peoria/Peoria Heights</i>	109	33.03	39	33.91	
<i>Bartonville/Limestone</i>	33	10.00	9	7.83	
<i>South West Peoria County</i>	25	7.58	3	2.61	
<i>North West Peoria County</i>	27	8.18	8	6.96	
<i>North East Peoria County</i>	35	10.61	7	6.09	
<b>Tazewell</b>					0.65
<i>North Tazewell County</i>	128	43.69	37	43.02	
<i>South Tazewell County</i>	30	10.24	13	15.12	
<i>East Tazewell County</i>	49	16.72	13	15.12	
<i>West Tazewell County</i>	86	29.35	23	26.74	
<b>Woodford</b>					0.50
<i>East Woodford County</i>	128	61.84	37	58.73	
<i>Central Woodford County</i>	30	14.49	13	20.63	
<i>West Woodford County</i>	49	23.67	13	20.63	

**APPENDIX O**

**SELF-REPORTED MENTAL HEALTH STATUS BY REGION**

	<b>Average or above average mental health (n=680)</b>		<b>Below average mental health (n=135)</b>		
<b>Location</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>p-value</b>
<b>Peoria</b>					<b>0.02</b>
<i>Peoria/West Peoria</i>	112	30.60	32	45.07	
<i>North Peoria/Peoria Heights</i>	123	33.61	24	33.80	
<i>Bartonville/Limestone</i>	33	9.02	9	12.68	
<i>South West Peoria County</i>	27	7.38	1	1.41	
<i>North West Peoria County</i>	32	8.74	2	2.82	
<i>North East Peoria County</i>	39	10.66	3	4.23	
<b>Tazewell</b>					<b>0.98</b>
<i>North Tazewell County</i>	138	43.95	27	42.19	
<i>South Tazewell County</i>	35	11.15	8	12.50	
<i>East Tazewell County</i>	51	16.24	11	17.19	
<i>West Tazewell County</i>	90	28.66	18	28.13	
<b>Woodford</b>					<b>0.92</b>
<i>East Woodford County</i>	138	61.61	27	58.70	
<i>Central Woodford County</i>	35	15.63	8	17.39	
<i>West Woodford County</i>	51	22.77	11	23.91	

# Appendix D



# Forces of Change Assessment

May 2022 – January 2023

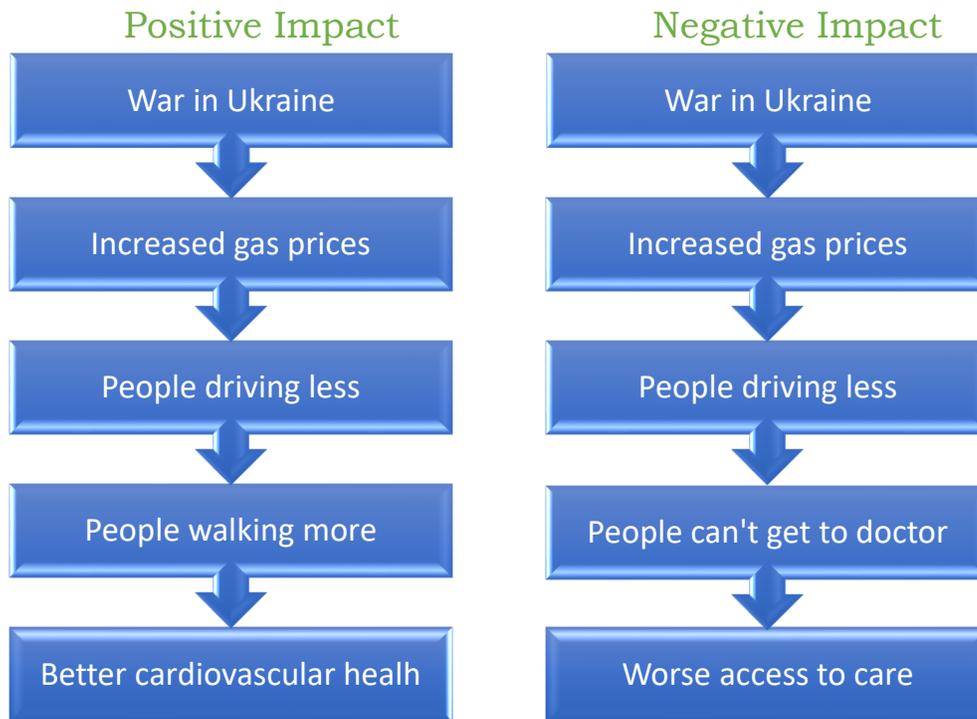
## Introduction

The forces of change assessment are designed to determine what is occurring locally, nationally, and globally that can impact the health of the community. As a recommended practice according to the National Association for City and County Health Officials (NACCHO), it serves to compliment the Community Health Needs Assessment and to inform the Community Health Improvement Plan.

The forces of change assessment can be useful in determining threats and opportunities. The opportunities can be leveraged when planning for interventions. The interventions planned with the threats that have been identified are more likely to be successful as they can incorporate strategies to mitigate these threats.

This assessment is done with a group of community members who are asked to think about things occurring in the world that might impact the health of the community. These should be outside of one's control, but that could still cause change to the health of people, whether that be through change in economics, infrastructure, access to care, education, or other categories. Although some forces may not have obvious impacts, part of the thought exercise is to make the connection to health.

The example below shows both the potential positive and negative impacts of one issue, the war in the Ukraine, that could be a force of change.



Some forces may only have positive impacts, and some forces of change may only have negative impacts, but all should be carefully considered.

## Methodology

The forces of change assessment was conducted across several sessions between May, 2022 and January, 2023. The first session occurred during the prioritization meeting for the Community Health Needs Assessment in May of 2022, and the subsequent sessions occurred during some of the initial meetings for the Community Health Improvement Plans in December of 2022 and January of 2023. Individuals participating in the sessions included people across the major healthcare systems, health departments, and community organizations.

At the sessions, participants were asked the following questions:

- What are some things, beyond our control, that could impact the health of our community?
- What is happening locally, regionally, or nationally, that could be a barrier to the health of our community?
- What is happening locally, regionally, or nationally, that could be helpful to the health of our community?
- What characteristics of our jurisdiction or state may pose an opportunity or threat?
- Are there any trends that may impact the health of our community?

With the community health improvement plan sessions, the questions focused on the interventions, and what may impact those. With the Community Health Needs Assessment prioritization session, the discussion was centered around the top priority areas as well as the current impact of local and national issues on the community.

The data were compiled across all sessions and categorized by main themes including jobs/economy, social, and environmental/structural. Additional input at the discussions, which was not part of the forces of change assessment, but would still fall under this category, was also included in the results.

## Results

### Identified Threats by Category

#### Jobs/Economy

- Healthcare workforce shortage
  - Difficulties with recruitment and retention
  - Difficulties finding individuals for job training programs
  - Burnout in workforce
  - Shortage of volunteers for programs
  - Difficulties building a diverse workforce
  - COVID-19 pandemic hurting the quality of education and quality of future workforce
- Rise in cost of living
- Supply chain issues
- Lack of viable businesses
- Increase in poverty
- Inability to sustain programs without secured funds for future
- Unknown if insurance companies continue to cover telehealth visits

#### Social

- Crime and increased violence
- Fear and apathy
- Diverse regions and diverse needs
- Organizations working in silos/not collaborating
- Increasing elderly population
- Social support decreasing
  - Lack of childcare
- Adverse childhood experiences that impact development

- After the pandemic will people want to be more social or is there inertia to stay home?
- Stigma around physical activity for individuals who are not fit
- Unknown if people have motivation to engage in lifestyle changes

### **Environmental/structural**

- Climate change
- Lack of a built environment
- Lack of internet in many areas
- Lack of access to nutritious food
- Lack of access to spaces to exercise
- Lack of good quality affordable housing

## **Identified Opportunities by Category**

### **Jobs/Economy**

- Creativity and innovation for workforce development
- Collaboration/consolidation of services to reduce duplication
- Funding opportunities to address issues

### **Social**

- Reduction of stigma around mental health and substance use
- Diversity, equity, and inclusion
- Giving services in different places that communities may see as more familiar

### **Environmental/structural**

- Using data to predict what may happen (proactive)
- Climate change as an opportunity to teach people about growing cycles and the social/regional/economic impact of climate change.

## **Summary**

The Forces of Change assessment identified many threats, including some that may impact the interventions in the Community Health Improvement Plan. For example, increasing telehealth visits for mental health could be impacted if insurers, whether public or private, change their stance on covering telehealth visits for patients. Workforce development was a large concern as this would impact both the success of interventions and the social determinants of health. Opportunities were seen through increased collaboration, increasing diversity, equity, and inclusion, and using some of the threats as a teaching tool to help drive positive change.