2018
KNOX COUNTY
COMMUNITY HEALTH IMPROVEMENT PLAN

Photo by Sam Miller

Photo by Daniel P. Younger

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Photo by Scott Swingle

Adopted on May 31st, 2018
Knox Health Planning Partnership

Table of Contents

Throughout the report, hyperlinks will be highlighted in dark gold text. If using a hard copy of this report, please see Appendix I for links to websites.

Foreword

The CHIP process was conducted in four sessions with Knox Health Planning Partnership members and community guests. The collaborative process included representatives from over 15 community partners and agencies. In addition to the MAPP assessments, community input was gathered and used as a guide in the creation of CHIP strategies.

The Knox Health Planning Partnership is proud to present the 2018-2021 Community Health Improvement Plan. It is the hope of the coalition that this plan will serve as a blueprint for positive change in our community and will assist you in your efforts to make Knox County a wonderful place to live, work, and play.

Sincerely,

Julie Miller, RN, MSN
Health Commissioner

Executive Summary

In 2011, Knox County began conducting community health assessments (CHA) for the purpose of measuring and addressing health status. The most recent Knox County Community Health Assessment was cross-sectional in nature and included a written survey of adults within Knox County. The questions were modeled after the survey instruments used by the Centers for Disease Control and Prevention (CDC) for their national and state Behavioral Risk Factor Surveillance System (BRFSS). This has allowed Knox County to compare the data collected in their CHA to national, state and local health trends.

The Knox County CHA also fulfills national mandated requirements for Knox Community Hospital. H.R. 3590 Patient Protection and Affordable Care Act states that in order to maintain tax-exempt status, not-for-profit hospitals are required to conduct a community health needs assessment at least once every three years, and adopt an implementation strategy to meet the needs identified through the assessment.

From the beginning phases of the CHA, community leaders were actively engaged in the planning process and helped define the content, scope, and sequence of the project. Active engagement of community members throughout the planning process is regarded as an important step in completing a valid needs assessment.

The Knox County CHA has been utilized as a vital tool for creating the Knox County Community Health Improvement Plan (CHIP). The Public Health Accreditation Board (PHAB) defines a CHIP as a long-term, systematic effort to address health problems based on the results of assessment activities and the community health improvement process. This plan is used by health and other governmental, education, and human service agencies, in collaboration with community partners, to set priorities and coordinate and target resources. A CHIP is critical for developing policies and defining actions to target efforts that promote health. It should define the vision for the health of the community inclusively and should be done in a timely way.

Knox Health Planning Partnership contracted with the Hospital Council of Northwest Ohio, a neutral regional non-profit hospital association, to facilitate the Community Health Improvement process. Key community leaders and decision makers were invited to participate in an organized planning process to improve the health of residents of the county. The National Association of County and City Health Official's (NACCHO) strategic planning tool, Mobilizing for Action through Planning and Partnerships (MAPP), was used throughout this process.

The MAPP Framework includes six phases which are listed below:

1. Organizing for success and partnership development
2. Visioning
3. Conducting the MAPP assessments
4. Identifying strategic issues
5. Formulating goals and strategies
6. Taking action: planning, implementing, and evaluation

The MAPP process includes four assessments: Community Themes & Strengths, Forces of Change, the Local Public Health System Assessment and the Community Health Status Assessment. These four assessments were used by Knox Health Planning Partnership to prioritize specific health issues and population groups which are the foundation of this plan. The diagram below illustrates how each of the four assessments contributes to the MAPP process.

Figure 1.1 2018-2021 Knox County CHIP Overview

Overall Health Outcomes		
↑ **Increase Health Status**		↓ **Decrease Premature Death**
Priority Topics		
Mental Health and Addiction *(includes depression, suicide, alcohol, and drug use)*	**Chronic Disease** *(includes obesity, nutrition, and heart disease)*	**Access to Care** *(includes preventive medicine, women's health, oral health, and sexual health)*
Priority Outcomes		
↓ Decrease suicide deaths ↓ Decrease depression ↓ Decrease drug dependency/use ↓ Decrease unintentional drug overdose deaths ↓ Decrease alcohol use	↓ Decrease obesity ↓ Decrease heart disease ↑ Increase fruit and vegetable consumption	↑ Increase preventive health screenings ↑ Increase sexual health education

Partners

The 2018-2021 Knox County Community Health Improvement Plan was drafted by agencies and service providers within Knox County. From April to May 2018, the committee reviewed many sources of information concerning the health and social challenges that Knox County adults, youth and children may be facing. They determined priority issues, which if addressed, could improve future outcomes; determined gaps in current programming and policies; and examined best practices and solutions. The committee has recommended specific actions steps they hope many agencies and organizations will embrace to address the priority issues in the coming months and years. We would like to recognize these individuals and thank them for their devotion to this process and this body of work:

Knox Health Planning Partnership:

Carmen Barbuto, Knox County Health Department
William Boone, Knox County Job and Family Services
Kelly Brenneman, United Way of Knox County
Nick Clark, YMCA of Mount Vernon
Larry Hall, OSU Extension
Joy Harris, Interchurch Social Services
Lori Jones, New Directions
Amy Ferketich, The Ohio State University College of Public Health/Kenyon College
Joyce Frazee, Knox County Health Department
Richard Mavis, Mount Vernon City
Scott McKnight, Mount Vernon Police Department
Julie Miller, Knox County Health Department
Jen Odenweller, Ariel Foundation
Nancy Omahan, Family and Children First Council
Ashley Phillips, Knox County Health Department & Knox Substance Abuse Action Team
Tami Ruhl, Knox County Health Department
Jeff Scott, Knox Community Hospital
David Shaffer, Knox County Sheriff's Office
Sherrie Simmons, Knox County Board of Developmental Disabilities
Chris Smith, Kenyon College
Kay Spergel, Mental Health and Recovery for Licking and Knox Counties
Peg Tazewell, Knox County Head Start
Mike Whitaker, Knox County Health Department
Dan Humphrey, TouchPointe Marriage & Family Resources

The community health improvement process was facilitated by Selena Coley, MPH, Community Health Improvement Coordinator, and Emily Stearns, MPH, Community Health Improvement Coordinator from the Hospital Council of Northwest Ohio.

Mission and Vision

Vision statements define a mental picture of what a community wants to achieve over time, while a mission statement identifies why an organization or coalition exists, what it does, who it does it for, and how it does what it does.

The Mission of Knox Health Planning Partnership:

Improving health and quality of life by mobilizing partnerships and taking strategic action in Knox County.

The Vision of Knox Health Planning Partnership:

Making healthy happen in Knox County through collaboration, prevention and wellness.

Alignment with National and State Standards

The 2018-2021 Knox County CHIP priorities align perfectly with state and national priorities. Knox County will be addressing the following priorities: mental health and addiction, chronic disease, and access to care.

Ohio State Health Improvement Plan (SHIP)

Note: This symbol ☙ will be used throughout the CHIP when a strategy or indicator directly aligns with the 2017-2019 SHIP.

The 2017-2019 Ohio State Health Improvement Plan (SHIP) serves as a strategic menu of priorities, objectives, and evidence-based strategies to be implemented by state agencies, local health departments, hospitals and other community partners and sectors beyond health including education, housing, employers, and regional planning.

The SHIP includes a strategic set of measurable outcomes that the state will monitor on an annual basis. Given that the overall goal of the SHIP is to improve health and wellbeing, the state will track the following health indicators:

- **Self-reported health status** (reduce the percent of Ohio adults who report fair or poor health)
- **Premature death** (reduce the rate of deaths before age 75)

In addition to tracking progress on overall health outcomes, the SHIP will focus on three priority topics:

1. **Mental health and addiction** (includes emotional wellbeing, mental illness conditions and substance abuse disorders)
2. **Chronic Disease** (includes conditions such as heart disease, diabetes and asthma, and related clinical risk factors-obesity, hypertension and high cholesterol, as well as behaviors closely associated with these conditions and risk factors- nutrition, physical activity and tobacco use)
3. **Maternal and Infant Health** (includes infant and maternal mortality, birth outcomes and related risk and protective factors impacting preconception, pregnancy and infancy, including family and community contexts)

The SHIP also takes a comprehensive approach to improving Ohio's greatest health priorities by identifying cross-cutting factors that impact multiple outcomes: health equity, social determinants of health, public health system, prevention and health behaviors, and healthcare system and access.

The 2018-2021 Knox County CHIP is required to select at least 2 priority topics, 1 priority outcome indicator, 1 cross cutting strategy and 1 cross-cutting outcome indicator to align with the 2017-2019 SHIP. The following Knox County CHIP priority topics, outcomes and cross cutting factors very closely align with the 2017-2019 SHIP priorities:

2018-2021 Knox CHIP Alignment with the 2017-2019 SHIP			
Priority Topics	*Priority Outcomes*	*Cross-Cutting Factors*	*Cross-Cutting Indicators*
Mental health and addiction	• Decrease depression • Decrease suicide • Decrease unintentional drug overdose deaths • Decrease drug dependency/abuse	• Public health system, prevention and health behaviors • Healthcare system and access	• Reduce suicide ideation • Increase quit attempts
Chronic Disease	• Decrease heart disease		

To align with and support *mental health and addiction*, Knox County will work to expand mental health first aid trainings and will increase awareness of trauma informed care as a cross cutting factor.

To align with and support *chronic disease*, Knox County will implement healthy food initiatives and will increase links to tobacco cessation as a cross cutting factor.

U.S. Department of Health and Human Services National Prevention Strategies

The Knox County CHIP also aligns with five of the National Prevention Strategies for the U.S. population: healthy eating, active living, mental and emotional well-being, preventing drug abuse, and excessive alcohol use.

Healthy People 2020

Knox County's priorities also fit specific Healthy People 2020 goals. For example:

- *Nutrition and Weight Status (NWS)-8*: Increase the proportion of adults who are at a healthy weight.
- *Mental Health and Mental Disorders (MHMD)-1*: Reduce the suicide rate.

The 3 Buckets of Prevention

The Knox County CHIP considered strategies that would fit into each of the 3 Buckets of Prevention and Population Health Framework (see Figure 1.3):

- *Bucket 1:* Increase the use of clinical preventive services.
- *Bucket 2:* Provide services that extend care outside the clinical setting.
- *Bucket 3:* Implement interventions that reach whole populations.

Alignment with National and State Standards, continued

**Figure 1.2 2017-2019 Ohio State Health Improvement Plan (SHIP) Overview**

State health improvement plan (SHIP) overview

Overall health outcomes
- ⬆ Health status
- ⬇ Premature death

3 priority topics

Mental health and addiction	Chronic disease	Maternal and infant health

10 priority outcomes

- ⬇ Depression
- ⬇ Suicide
- ⬇ Drug dependency/abuse
- ⬇ Drug overdose deaths

- ⬇ Heart disease
- ⬇ Diabetes
- ⬇ Asthma

- ⬇ Preterm births
- ⬇ Low birth weight
- ⬇ Infant mortality

Equity: Priority populations for each outcome

4 cross-cutting factors

Social determinants of health

Public health system, prevention and health behaviors

Healthcare system and access

Equity

Overview of guidance for local alignment with the SHIP

See *ODH guidance for aligning state and local efforts [link]* for details

Select at least 2 priority topics (based on best alignment with findings of CHA/CHNA)

Select at least 1 priority outcome indicator within each selected priority topic (see SHIP master list of indicators)

Identify priority populations for each priority outcome indicator (based on findings from CHA/CHNA) and develop targets to reduce or eliminate disparities

- **Select at least 1 cross-cutting strategy** relevant to each selected priority outcome (see Local Toolkit) **AND**
- **Select at least 1 cross-cutting outcome indicator** relevant to each selected strategy (see local toolkit)

For a stronger plan (optional), select 1 strategy and 1 indicator for <u>each</u> of the 4 cross-cutting factors.

- Prioritize selection of strategies likely to decrease disparities (see local toolkit)
- Ensure that delivery of selected strategies is designed to reach priority populations and high-need geographic areas

Definitions
CHA — Community health assessment led by a local health department
CHNA — Community health needs assessment led by a hospital
Indicator — A specific metric or measure used to quantify an outcome, typically expressed as a number, percent or rate. Example: Number of deaths due to suicide per 100,000 population.
Outcome — A desired result. Example: Reduced suicide deaths.

Priority population — A population subgroup that has worse outcomes than the overall Ohio population and should therefore be prioritized in SHIP strategy implementation. Examples include racial/ethnic, age or income groups; people with disabilities; and residents of rural or low-income geographic areas.
Target — A specific number that quantifies the desired outcome. Example: 12.51 suicide deaths per 100,000 population in 2019.

Figure 1.3 The 3 Buckets of Prevention Overview

Prevention and Population Health Framework: The 3 Buckets

Traditional Clinical Prevention

1

Increase the use of clinical preventive services

Innovative Clinical Prevention

2

Provide services that extend care outside the clinical setting

Community-wide Prevention

3

Implement interventions that reach whole populations

Health Care   Public Health

(Source: Auerbach J. The 3 Buckets of Prevention. Journal of Public Health Management and Practice)

Strategic Planning Model

Beginning in April 2018, Knox Health Planning Partnership met four (4) times and completed the following planning steps:

1. **Initial Meeting**- Review of process and timeline, finalize committee members, create or review vision

2. **Choosing Priorities**- Use of quantitative and qualitative data to prioritize target impact areas

3. **Ranking Priorities**- Ranking the health problems based on magnitude, seriousness of consequences, and feasibility of correcting

4. **Resource Assessment**- Determine existing programs, services, and activities in the community that address the priority target impact areas and look at the number of programs that address each outcome, geographic area served, prevention programs, and interventions

5. **Forces of Change and Community Themes and Strengths**- Open-ended questions for committee on community themes and strengths

6. **Gap Analysis**- Determine existing discrepancies between community needs and viable community resources to address local priorities; identify strengths, weaknesses, and evaluation strategies; and strategic action identification

7. **Local Public Health Assessment**- Review the Local Public Health System Assessment with committee

8. **Quality of Life Survey**- Review results of the Quality of Life Survey with committee

9. **Best Practices**- Review of best practices and proven strategies, evidence continuum, and feasibility continuum

10. **Draft Plan**- Review of all steps taken; action step recommendations based on one or more the following: enhancing existing efforts, implementing new programs or services, building infrastructure, implementing evidence based practices, and feasibility of implementation

Action Steps

To work toward **improving chronic disease outcomes,** the following action steps are recommended:

1. Implement healthy food initiatives
2. Increase businesses/organizations providing wellness programs & insurance incentive programs to their employees
3. Implement a community-wide physical activity campaign

To work toward **improving mental health and addiction outcomes,** the following actions steps are recommended:

Mental Health

1. Expand Mental Health First Aid Trainings

Addiction

2. Increase community awareness and education of substance abuse and prevention
3. Increase continuing education for primary care and substance use disorder providers

To work toward **improving access to care,** the following actions steps are recommended:

1. Increase awareness of existing healthcare services for preventive care
2. Increase awareness and availability of birth control
3. Increase sexual health education and prevention

To address **all priority areas**, the following cross-cutting strategies are recommended:

1. Increase awareness of Trauma-Informed Care
2. Increase links to tobacco cessation

Needs Assessment

Knox Health Planning Partnership reviewed the 2018 Knox County Community Health Assessment. The detailed primary data for each individual priority area can be found in the section it corresponds to. Each member completed an "Identifying Key Issues and Concerns" worksheet. The following tables were the group results.

What are the most significant health issues or concerns identified in the 2018 community health assessment report?

Key Issue or Concern	Percent of Population At risk	Age Group (or Income Level) Most at Risk	Gender Most at Risk
Weight Status (13 votes)			
Obese	37%	Age: 30-64 (44%), Income: <$25K (53%)	Female (39%)
Overweight	36%	Age: <30 (37%), Income: $25K Plus (41%)	Male (44%)
Did not participate in any physical activity	29%	N/A	N/A
Ate 5 or more servings of fruits and vegetables per day	18%	N/A	N/A
Substance Abuse (13 votes)			
Binge drinkers (defined as consuming more than four [women] or five [men] alcoholic beverages on a single occasion in the past 30 days)	17%	N/A	N/A
Current drinker (drank alcohol at least once in the past month)	18%	N/A	N/A
Misused prescription medication	7%	Income: <$25K (14%)	N/A
Mental Health (9 votes)			
Considered attempting suicide	3%	N/A	N/A
Felt sad, blue, or depressed almost every day for two weeks or more in a row in the past year	9%	Age: Under 30 (20%)	N/A
Social Determinants of Health (8 votes)			
Abused in the past year	4%	N/A	N/A
Had to choose between paying bills or buying food in the past year	8%	N/A	N/A
Experienced 4 or more adverse childhood experiences (ACEs)	13%	Among those who contemplated suicide in the past year (55%)	N/A

N/A- Data not available

Key Issue or Concern	Percent of Population At risk	Age Group (or Income Level) Most at Risk	Gender Most at Risk
Preventive Screenings (9 votes)			
Mammogram in the past year	28%	Age: 40+ (43%); Income: $25K Plus (26%)	Females
Breast exam in the past year	43%	Age: 40+ (41%); Income: <$25K (38%)	Females
Pap smear in the past year	34%	Age: 40+ (20%); Income: <$25K (26%)	Females
Prostate-Specific Antigen (PSA) in the past year	22%	Age: Under 50 (6%); Income: <$25K (25%)	Males
Digital Rectal exam in the past year	12%	Age: Under 50 (<1%); Income: <$25K (13%)	Males
Parenting (5 votes)			
Discussed birth control/condom use/STD prevention with their 12 to 17-year-old in the past year	19%	N/A	N/A
Oral Health (4 votes)			
Did not visit a dentist or dental clinic in the past year	37%	Income:<$25K (54%)	N/A
Nutrition (4 votes)			
Ate 5 or more fruits and/or vegetables per day	18%	N/A	N/A
Sexual Health (3 votes)			
Did not use any method of birth control	14%	N/A	N/A
Had sex without a condom	34%	N/A	N/A
Cardiovascular Health (3 votes)			
Diagnosed with angina or coronary heart disease	4%	Age: 65+ (13%)	N/A
Diagnosed with high blood pressure	35%	Age: 65+ (65%); Income: <$25K (46%)	Males (35%)
Diagnosed with high blood cholesterol	34%	Age: 65+ (56%); Income: <$25K (35%)	Females (34%)
Women's Health (3 votes)			
No usual source of services for female health concerns	15%	N/A	Females
Got a parental appointment in the first 3 months	54%	N/A	Females
Cancer (1 vote)			
Diagnosed with cancer at some point in their lives	14%	Age: 65+ (36%)	N/A

N/A- Data not available

Priorities Chosen

Based on the 2018 Knox County Community Health Assessment, key issues were identified for adults. Committee members then completed a ranking exercise, giving a score for magnitude, seriousness of the consequence and feasibility of correcting, resulting in an average score for each issue identified. Committee members' rankings were then combined to give an average score for the issue.

Health Issue	Average Score
Weight status and nutrition	24.6
Substance abuse	24.5
Mental health	24.2
Preventive medicine	23.8
Parenting	23.1
Cardiovascular	22.5
Adult alcohol consumption	21.9
Access to healthcare	21.8
Women's health	21.8
Sexual health	20.4
Oral health	20.2

Knox County will focus on the following three priority areas over the next three years:

1. Chronic disease 🔵 (includes obesity, nutrition, and heart disease)
2. Mental health and addiction 🔵 (includes depression, suicide, alcohol, and drug use)
3. Access to Care (includes preventive medicine, women's health, oral health, and sexual health education)

Forces of Change Assessment

Knox Health Planning Partnership was asked to identify positive and negative forces which could impact community health improvement and overall health of this community over the next three to five years. This group discussion covered many local, state, and national issues and change agents which could be factors in Knox County in the near future. The table below summarizes the forces of change agent and its potential impacts.

Force of Change	Potential Impact
1. Opiate epidemic	• More resources needed to support those addicted to opioids
2. Low wages in the workforce	• Potential decrease in employee retention
3. Inconsistent changes in the climate	• Difficulty producing a thriving crop for farmers • Increase in communicable diseases
4. Technology/social media	• Changes how much people interact socially • Increase in sedentary behaviors
5. Revitalization of downtown	• More opportunity for new business
6. Increased gun violence/school shootings	• Re-allocation of community resources
7. Fixed route public transportation system	• Increased transportation opportunities
8. Less funding available for higher education	• Limits recruitment for an optimal workforce
9. Lack of affordable housing/subsidy	• Increased poverty rates
10. Medicaid expansion	• Uncertainty of changes to come
11. Access to/cost of health care	• Residents not able to retire
12. Knox County Health Center opened in 2017	• Increased resources to offer the community
13. Drug Free Communities Grant (DFC)	• More funding towards Knox Substance Abuse Action Team (KSAAT) and Mandated Education and Referral into Treatment (MERIT) Drug Court Program
14. Mental health issues	• Increased conversations around the issue of adverse childhood experiences (ACEs) • The potential need to address effective strategies • More opportunity to apply for grants
15. Increase in vector borne and sexually transmitted diseases (STDs)	• Possible increase of HIV transmissions • Can lead to an increase in health problems (i.e. cancer)
16. YMCA renovations	• Increased opportunities for physical activity
17. Change in governor	• Potential changes in the Ohio Department of Health
18. Farm Bill – SNAP funding limited	• Less services available to the community
19. Family planning/sex education	• Help sustain population growth
20. Changes in family unit	• No impact identified

Force of Change	Potential Impact
21. Limited health education in school curriculum	• Loss of basic life skills • Increase in unhealthy lifestyles
22. Siemens Mount Vernon closing in 2018	• Loss of jobs and unemployment rates increasing
23. Population increasing in the Southwest corner of the county	• Providing more services/resources in the area
24. Potential increase in inpatient substance abuse	• Mental health treatment opportunities

Community Themes and Strengths Assessment

Knox Health Planning Partnership participated in an exercise to discuss community themes and strengths. The results were as follows:

1. **Knox County community members believed the most important characteristics of a healthy community were:**
   - Inclusion within the community
   - Employment opportunities
   - Affordable housing
   - A strong economy
   - Access to health services
   - Easy access to healthy food
   - Easy access to physical activity
   - Collaboration between agencies
   - Excellent educational infrastructure

2. **Community members were most proud of the following regarding their community:**
   - Community philanthropy; there is support for all community residents
   - Numerous indoor and outdoor activities available
   - Natural resources
   - Collaboration among local agencies
   - Overall sense of community among residents

3. **The following were specific examples of people or groups who have worked together to improve the health and quality of life in the community:**
   - Community Foundation
   - Knox Health Planning Partnership
   - Get Healthy Knox
   - Knox Chamber of Commerce
   - Knox County Community Health Center
   - Knox Substance Abuse Action Team
   - Kenyon College Office for Community Partnerships
   - Knox Community Hospital
   - Knox County Board of Developmental Disabilities

4. **The most important issues that Knox County residents believed must be addressed to improve the health and quality of life in their community were:**
   - Obesity
   - Drug epidemic
   - Workforce and/or economic development
   - Transportation in rural areas
   - Housing
   - Sustainable wages
   - Poverty

5. **The following were barriers that have kept the community from doing what needs to be done to improve health and quality of life:**
   - Lack of access to health care
   - Lack of community engagement
   - Lack of awareness of local resources
   - Lack of funding
   - Lack of economic development
   - Poverty

6. **Knox County residents believed the following actions, policies, or funding priorities would support a healthier community:**
   - Additional affordable recovery centers
   - Additional funding for workforce trainings
   - Mandated Education and Referral into Treatment (MERIT) Drug Court Program
   - Affordable housing/tiny homes initiative
   - Additional pre-K and child care services
   - Additional family planning education and services
   - Increased access to healthier foods
   - Increased access to transportation

7. **Knox County residents were most excited to get involved or become more involved in improving the community through:**
   - Excitement among partners to get engaged
   - Increased resources
   - Overall passion to address community priorities
   - Increased resources and time

The Local Public Health System

Public health systems are commonly defined as "all public, private, and voluntary entities that contribute to the delivery of essential public health services within a jurisdiction." This concept ensures that all entities' contributions to the health and well-being of the community or state are recognized in assessing the provision of public health services.

The public health system includes:

- Public health agencies at state and local levels
- Healthcare providers
- Public safety agencies
- Human service and charity organizations
- Education and youth development organizations
- Recreation and arts-related organizations
- Economic and philanthropic organizations
- Environmental agencies and organizations
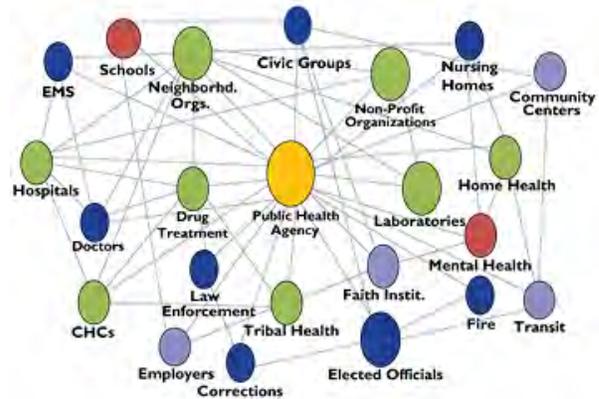
The 10 Essential Public Health Services

The 10 Essential Public Health Services describe the public health activities that all communities should undertake and serve as the framework for the National Public Health Performance Standards (NPHS).

Public health systems should:

1. Monitor health status to identify and solve community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships and action to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. Assure competent public and personal health care workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10. Research for new insights and innovative solutions to health problems.
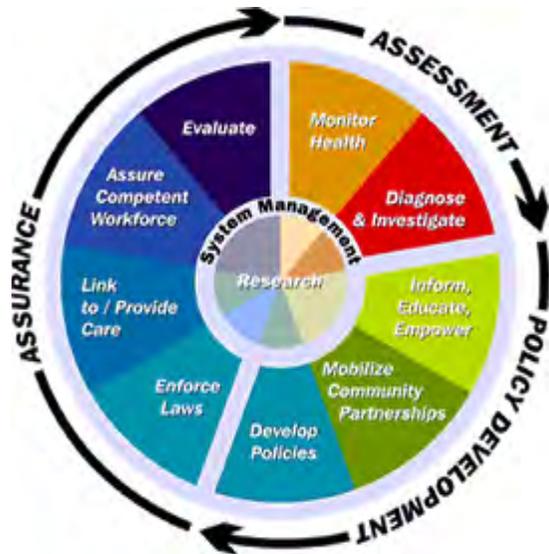
(Source: **Centers for Disease Control; National Public Health Performance Standards; The Public Health System and the 10 Essential Public Health Services**)

The Local Public Health System Assessment (LPHSA) answers the questions, "What are the components, activities, competencies, and capacities of our local public health system?" and "How are the Essential Services being provided to our community?"

This assessment involves the use of a nationally recognized tool called the **National Public Health Performance Assessment Instrument**.

Members of the Knox Health Planning Partnership completed the performance measures instrument. The LPHSA results were then presented to the full CHIP committee for discussion. The 10 Essential Public Health Services and how they are being provided within the community, as well as each model standard, was discussed and the group came to a consensus on responses for all questions the challenges and opportunities that were discussed were used in the action planning process.

The CHIP committee identified 30 indicators that had a status of "minimal" and two indicators that had a status of "no activity." The remaining indicators were all moderate, significant or optimal.
As part of minimum standards, local health departments are required to complete this assessment at least once every five years.

To view the full results of the LPHSA, please contact Carmen Barbuto from the Knox County Health Department at 740-392-2200 or at cbarbuto@knoxhealth.com.

Knox County Local Public Health System Assessment 2018 Summary

Summary of Average ES Performance Score

	Score
Average Overall Score	51.4
ES 1: Monitor Health Status	44.4
ES 2: Diagnose and Investigate	76.4
ES 3: Educate/Empower	44.4
ES 4: Mobilize Partnerships	52.1
ES 5: Develop Policies/Plans	58.3
ES 6: Enforce Laws	51.0
ES 7: Link to Health Services	59.4
ES 8: Assure Workforce	48.8
ES 9: Evaluate Services	41.3
ES 10: Research/Innovations	37.5
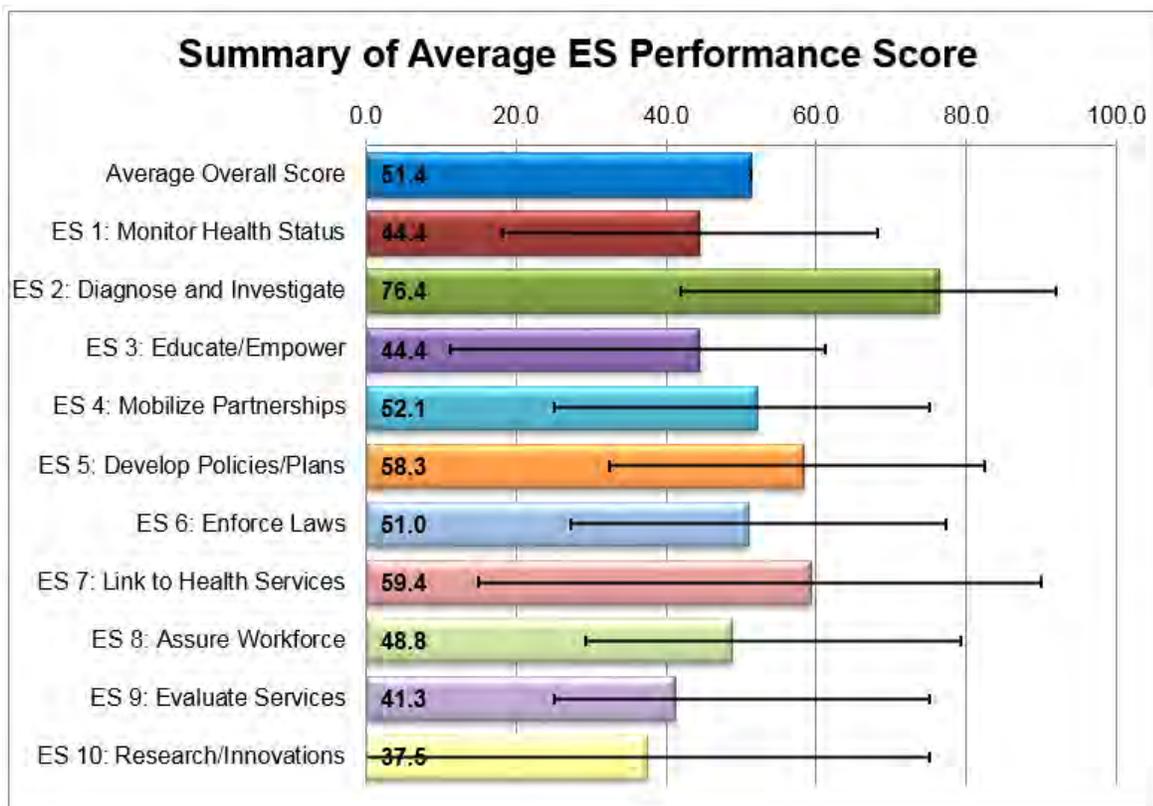
Quality of Life Survey

Knox Health Planning Partnership encouraged community members to fill out a short Quality of Life Survey via Survey Monkey. There were **788** Knox County community members who completed the survey. The anchored Likert Scale responses were converted to numeric values ranging from 1 to 5, with 1 being lowest and 5 being highest. For example, an anchored Likert Scale of:

- Very Satisfied = 5
- Satisfied = 4
- Neither Satisfied or Dissatisfied = 3
- Dissatisfied = 2
- Very Dissatisfied = 1

For all responses of "Don't Know," or when a respondent left a response blank, the choice was a non-response, was assigned a value of 0 (zero) and the response was not used in averaging responses or calculating descriptive statistics.

Quality of Life Questions	Likert Scale Average Response
1. Are you satisfied with the quality of life in our community? (Consider your sense of safety, well-being, participation in community life and associations, etc.) [IOM, 1997]	3.14
2. Are you satisfied with the health care system in the community? (Consider access, cost, availability, quality, options in health care, etc.)	3.14
3. Is this community a good place to raise children? (Consider school quality, day care, after school programs, recreation, etc.)	3.65
4. Is this community a good place to grow old? (Consider elder-friendly housing, transportation to medical services, churches, shopping; elder day care, social support for the elderly living alone, meals on wheels, etc.)	3.50
5. Is there economic opportunity in the community? (Consider locally owned and operated businesses, jobs with career growth, job training/higher education opportunities, affordable housing, reasonable commute, etc.)	2.88
6. Is the community a safe place to live? (Consider residents' perceptions of safety in the home, the workplace, schools, playgrounds, parks, and the mall. Do neighbors know and trust one another? Do they look out for one another?)	3.43
7. Are there networks of support for individuals and families (neighbors, support groups, faith community outreach, agencies, or organizations) during times of stress and need?	3.57
8. Do all individuals and groups have the opportunity to contribute to and participate in the community's quality of life?	3.43
9. Do all residents perceive that they — individually and collectively — can make the community a better place to live?	3.13
10. Are community assets broad-based and multi-sectoral? (There are a variety of resources and activities available county-wide)	3.18
11. Are levels of mutual trust and respect increasing among community partners as they participate in collaborative activities to achieve shared community goals?	3.33
12. Is there an active sense of civic responsibility and engagement, and of civic pride in shared accomplishments? (Are citizens working towards the betterment of their community to improve life for all citizens?)	3.26

Resource Assessment

Based on the chosen priorities, Knox Health Planning Partnership was asked to complete a resource inventory for each priority topic area. The resource inventory allowed the committee to identify existing community resources, such as programs, exercise opportunities, free or reduced cost health screenings, and more. The committee was then asked to determine whether a program or service was evidence-based, a best practice, or had no evidence indicated based on the following parameters:

An **evidence-based practice** has compelling evidence of effectiveness. Participant success can be attributed to the program itself and have evidence that the approach will work for others in a different environment. A **best practice** is a program that has been implemented and evaluation has been conducted. While the data supporting the program is promising, its scientific rigor is insufficient. A **non-evidence based practice** has either no documentation that it has ever been used (regardless of the principles it is based upon) nor has been implemented successfully with no evaluation.

The committee's resource assessment can be found at the following:

- **Knox Community Hospital**
  htpps://www.kch.org

- **Knox County Head Start**
  http://www.knoxheadstart.org

- **Knox County Health Department**
  http://www.knoxhealth.com

- **Knox County Sheriff's Office**
  http://www.knoxcountysherrif.com

- **Mental Health and Recovery for Licking and Knox Counties**
  http://www.mhrlk.org

- **OSU Extension Knox County**
  https://knox.osu.edu

- **United Way of Knox County**
  https://www.uwayknox.org

Chronic Disease Indictors

Weight Status

In 2018, 37% of adults were classified as obese by Body Mass Index (BMI) calculations (BRFSS reported 32% for Ohio and 30% for the U.S. in 2016). 36% of adults were classified as overweight (BRFSS reported 35% for Ohio and 35% for the U.S. in 2016).

Knox County adults did the following to lose weight or keep from gaining weight: ate less food, fewer calories, or foods low in fat (49%); drank more water (49%); exercised (46%); ate a low-carb diet (13%); smoked cigarettes (4%); took diet pills, powders or liquids without a doctor's advice (3%); used a weight loss program (3%); went without eating 24 or more hours (1%); used health coaching (1%); took prescribed medications (1%); participated in a prescribed dietary or fitness program (1%); had bariatric surgery (1%); took laxatives (<1%); and vomited after eating (<1%).

Physical Activity

More than one-fourth (29%) of adults did not participate in any physical activity in the past week, including 2% who were unable to exercise.

Nutrition

In 2018, 18% of Knox County adults ate 5 or more servings of fruits and/or vegetables per day. Forty-three percent (43%) ate 3 to 4 servings of fruits and/or vegetables per day, and 37% ate 1 to 2 servings per day. Two percent (2%) reported not eating any fruits and/or vegetables per day.

Knox County adults reported the following barriers in consuming fruits and vegetables: too expensive (10%), did not like the taste (8%), did not know how to prepare them (1%), no variety (1%), stores did not take EBT (1%), no access (<1%), transportation (<1%), and other reasons (3%). Seventy-nine percent (79%) reported no barriers to consuming fruits and vegetables.

Heart Disease

Four percent (4%) of adults reported they had angina or coronary heart disease, increasing to 13% of those over the age of 65.

In 2018, 7% of Knox County adults reported they had survived a heart attack or myocardial infarction, increasing to 17% of those over the age of 65. Five percent (5%) of Ohio and 4% of U.S. adults reported they had a heart attack or myocardial infarction in 2016.

More than one-third (35%) or 15,796 adults had been diagnosed with high blood pressure. The 2015 BRFSS reports hypertension prevalence rates of 34% for Ohio and 31% for the U.S.

More than one-third (34%) or 15,344 adults had been diagnosed with high blood cholesterol. The 2015 BRFSS reported that 37% of Ohio and 36% of U.S. adults have been told they have high blood cholesterol.

Map: Population with Limited Food Access

Population with Limited Food Access, Low income, Population by Tract, FARA 2015
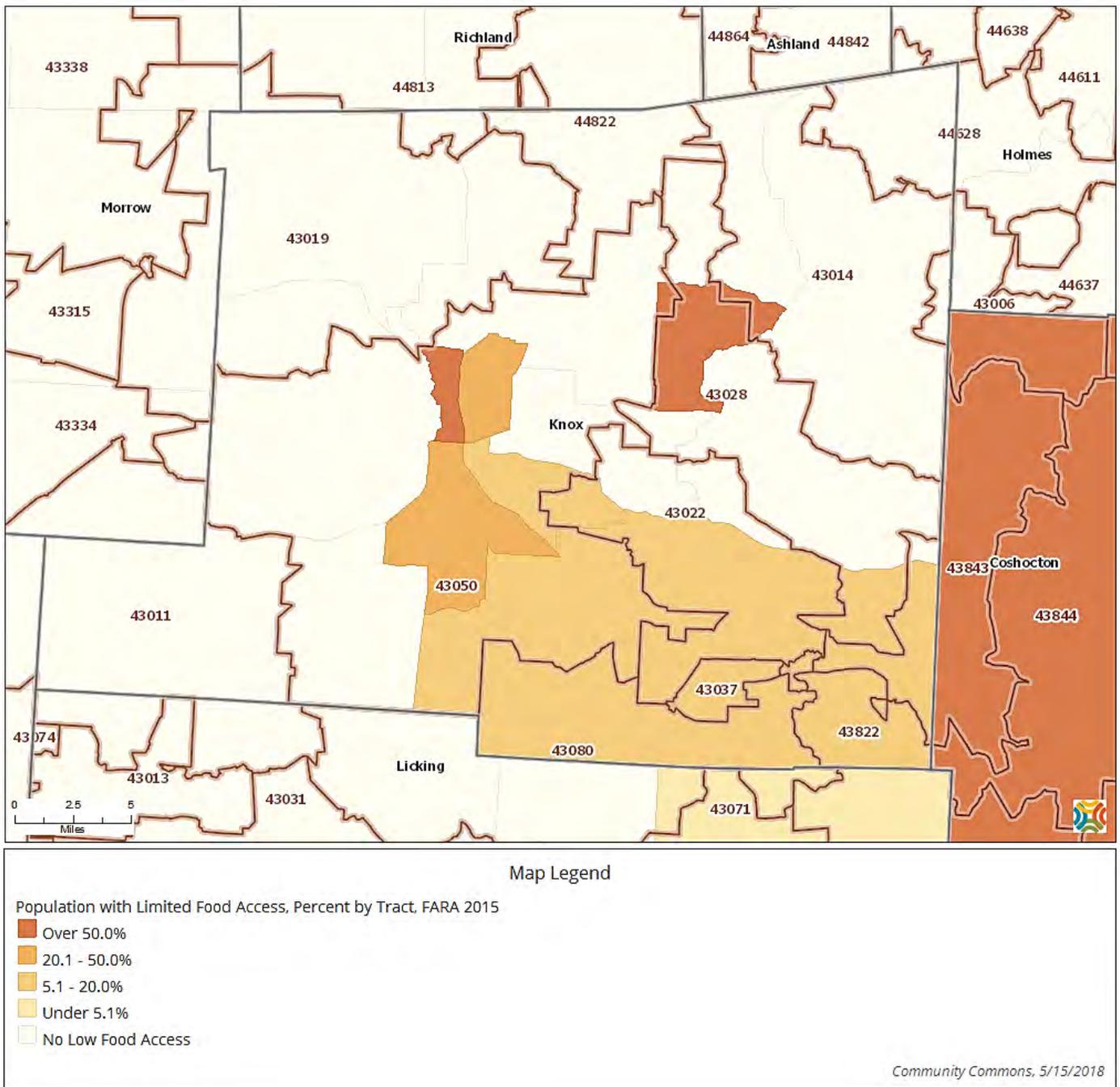
(Source: US Department of Agriculture, Economic Research Service 2015, as compiled by Community Commons)

Gaps and Potential Strategies

Chronic Disease Gaps	Potential Strategies
1. Healthy eating on a budget	• Promote health and wellness education in non-traditional areas (i.e. car repair shops). • Consider developing and/or utilizing a smart app to help with meal planning on a budget.
2. Lack of opportunities for families to be active together	• Consider finding a space within Knox County that could accommodate classes for families.
3. Lack of easy on-the-go recipes	• Consider developing an app that would provide quick and healthy recipes, as well as instructions on how to prepare them.
4. Nutrition education for all ages	• Develop a policy to have standardized nutrition education in schools. • Work on developing a consistent approach for nutrition education among local agencies and health care providers; also, to help provide support of healthcare providers in addressing nutrition issues among their patients.
5. Lack of accessibility to affordable healthy food choices	• Consider implementing school-based community gardens throughout school districts. • Research the raised bed garden program through Recovery Housing in Union County to possibly implement in Knox County. • Work to revive the Knox County Local Food Council. • Increase awareness of available community gardens in the county. • Consider developing a cooking class to help demonstrate the diverse ways to prepare vegetables grown from community gardens. • Consider implementing the Farm-to-School program in local school districts.
6. Lack of awareness of the impact of adverse childhood experiences (ACEs) and available resources	• Provide more education of what ACEs are and how they impact health to youth, health professional, and parents. • Work to increase intervention resources.
7. Lack of cessation resources	• Increase trainings for individuals to become cessation specialists. • Work to offer cessation trainings/programs in local businesses.
8. Lack of affordable recreation and exercise opportunities	• Consider implementing worksite policies to help encourage more physical activity among employees. • Consider adopting Complete Streets policy.
9. Lack of youth tobacco prevention programing within schools	• Implement school-based tobacco prevention programs to educate youth on the negative effects of tobacco use on their health.

Gaps and Potential Strategies, continued

Chronic Disease Gaps	Potential Strategies
10. Lack of parental awareness of how their tobacco use impacts their child's health	• Provide parental education on the effects of second-hand smoking (i.e. lung issues), common tobacco products youth are using, and ways to quit smoking.
11. Lack of overall understanding of healthy living practices	• Consider implementing an evidence-based wellness prevention campaign. • Work to bring programs where people are, to decrease transportation barriers. • Consider offering healthy food incentives at events.
12. Lack of knowledge of school nutrition policies	• Conduct an analysis of current policies within schools regarding healthy food options. • Work with schools to develop policies/improve current policies.

Chronic Disease Best Practices

The following programs and policies have been reviewed and have proven strategies to **reduce chronic disease**:

1. **Community-wide physical activity campaigns:** Community-wide physical activity campaigns involve many community sectors, include highly visible, broad-based, multi-component strategies (e.g., social support, risk factor screening or health education) and may address cardiovascular disease risk factors (CG-Physical activity).

   Expected Beneficial Outcomes
   - Increased physical activity
   - Improved physical fitness

   Other Potential Beneficial Outcomes
   - Improved weight status

2. **Community Gardens:** A community garden is any piece of land that is gardened or cultivated by a group of people, usually for home consumption. Community gardens are typically owned by local governments, not-for-profit groups, or faith-based organizations; gardens are also often initiated by groups of individuals who clean and cultivate vacant lots. Local governments, non-profits, and communities may support gardens through community land trusts, gardening education, distribution of seedlings and other materials, zoning regulation changes, or service provision such as water supply or waste disposal.

   Expected Beneficial Outcomes
   - Increased access to fruits and vegetables
   - Increased fruit and vegetable consumption
   - Increased physical activity

   Other Potential Beneficial Outcomes
   - Increased food security
   - Increased healthy foods in food deserts
   - Reduced obesity rates
   - Improved mental health
   - Improved sense of community
   - Improved neighborhood safety

Action Step Recommendations & Plan

To work toward **improving chronic disease outcomes,** the following action steps are recommended:

1. Implement healthy food initiatives 🦫
2. Increase businesses/organizations providing wellness programs & insurance incentive programs to their employees
3. Implement a community-wide physical activity campaign 🦫

Action Plan

Priority Topic: Chronic Disease				
Strategy 1: Implement healthy food initiatives 🦫				
Year 1: Obtain baseline data regarding how many school districts, churches, senior living, recovery housing, and other local organizations currently have **community gardens**. Research grants and funding opportunities to increase the number of community gardens. Create and distribute a map of all available community gardens in Knox County. Update the map on an annual basis.	**Priority Outcomes:** 1. Reduce obesity 2. Increase adult fruit consumption 3. Increase adult vegetable consumption **Priority Indicators:** 1. Percent of adults that report body mass index (BMI) greater than or equal to 30 2. Percent of adults who had five or more servings of fruit per day 3. Percent of adults who had five or more servings of vegetables per day	Adult	**Carmen Barbuto** Knox County Health Department	May 31, 2019
Year 2: Assist school districts and other local organizations applying for grants to obtain funding to start a garden. Focus on more rural areas of the county and areas within the county classified as a "food desert". Research the raised bed garden program through Recovery Housing in Union County to possibly implement in Knox County.				May 31, 2020
Year 3: Implement community gardens in various locations and increase the number of organizations with community gardens by 10% from baseline.				May 31, 2021

Priority Topic: Chronic Disease

Strategy 2: Increase businesses/organizations providing wellness programs & insurance incentive programs to their employees

Action Step	Priority Outcome & Indicator	Priority Population	Person/ Agency Responsible	Timeline
Year 1: Begin to collect baseline data on businesses and organizations offering wellness and insurance incentive programs to employees. Educate county businesses about the benefits of implementing these programs. Encourage businesses and organizations to offer free or subsidized evidence-based programs such as Weight Watchers to their employees and their spouses.	**Priority Outcomes:** 1. Reduce coronary heart disease 2. Reduce obesity **Priority Indicators:** 1. Percent of adults ever diagnosed with coronary heart disease 2. Percent of adults that report body mass index (BMI) greater than or equal to 30	Adult	**Tami Ruhl** Knox County Health Department	May 31, 2019
Year 2: Enlist 1 small and 1 large businesses/organizations to initiate wellness and/or insurance incentive programs. Partner with Knox Community Hospital when appropriate.				May 31, 2020
Year 3: Double the number of businesses/organizations providing wellness and insurance incentive programs from baseline.				May 31, 2021

Priority Topic: Chronic Disease				
Strategy 3: **Implement a community-wide physical activity campaign** 🔷				
Action Step	**Priority Outcome & Indicator**	**Priority Population**	**Person/ Agency Responsible**	**Timeline**
Year 1: Collaborate with local schools, businesses, healthcare providers, religious organizations, and other organizations in Knox County to create a **community-wide physical activity campaign.** Appoint at least one representative from each organization to serve on a steering committee for the community campaign. Establish a brand for the campaign and identify strategies to implement unified physical activity and wellness initiatives and policies within Knox County (for example, 5-2-1-0). Meet with decision-makers from various businesses, schools, and other organizations to provide education on physical activity initiatives and types of wellness policies. Work with at least one Knox County organization to implement a physical activity initiative or policy.	**Priority Outcomes:** 1. Reduce coronary heart disease 2. Reduce obesity **Priority Indicators:** 1. Percent of adults ever diagnosed with coronary heart disease 2. Percent of adults that report body mass index (BMI) greater than or equal to 30	Adult	**Nick Clark** YMCA of Mount Vernon **Kelly Brenneman** United Way of Knox County	May 31, 2019
Year 2: Continue efforts from year 1. Review campaign goals, objectives, and strategies. Work with at least 3 additional Knox County organizations to implement a physical activity initiative or policy. Obtain baseline data on races and other organized physical activities in the county and if they offer a child or family component. Meet with organized physical activity leadership to assess the feasibility of integrating child and family components into current planned events and activities.				May 31, 2020
Year 3: Continue efforts from years 1 and 2. Work with at least 5 additional Knox County organizations to implement a physical activity initiative or policy. Increase child and family participation at organized physical activity events by 10%.				May 31, 2021

Mental Health and Addiction Indicators

Tobacco Use

Fifteen percent (15%) or 6,770 Knox County adults were current smokers (those who indicated smoking at least 100 cigarettes in their lifetime and currently smoked some or all days). The 2016 BRFSS reported current smoker prevalence rates of 23% for Ohio and 17% for the U.S.

Knox County adults used the following tobacco products in the past year: cigarettes (19%), chewing tobacco/snuff/dip/betel quid (6%), cigars (4%), e-cigarettes/vape pens (2%), cigarillos (2%), roll-your-own (2%), pipes (1%), hookah (1%), little cigars (1%), pouch (1%), and dissolvable tobacco (<1%).

Alcohol Use

One in six (17%) or 7,672 Knox County adults reported they had five or more alcoholic drinks (for males) or four or more drinks (for females) on an occasion in the last month and would be considered binge drinkers. Of those who drank in the past month, 34% had at least one episode of binge drinking. The 2016 BRFSS reported binge drinking rates of 18% for Ohio and 17% for the U.S.

In the past month, 16% of adults reported driving after drinking any alcoholic beverages, increasing to 28% of males.

Drug Use

Six percent (6%) or 2,708 Knox County adults had used recreational marijuana in the past 6 months, increasing to 9% of males and those with incomes less than $25,000.

Seven percent (7%) or 3,159 of adults had used medication not prescribed for them or they took more than prescribed to feel good, high, more active, and/or alert during the past 6 months, increasing to 14% of those with incomes less than $25,000.

Adults who misused medications obtained them from the following: primary care physician (79%), ER or urgent care doctor (16%), multiple doctors (8%), free from a friend or family member (5%), bought from a family member (5%), and bought from a drug dealer (5%).

Mental Health

In the past year, 9% (approximately 4,062) of Knox County adults had a period of two or more weeks when they felt so sad or hopeless nearly every day that they stopped doing usual activities, increasing to 20% those under the age of 30.

Three percent (3%) or 1,354 Knox County adults considered attempting suicide in the past year.

Knox County adults indicated the following caused them anxiety, stress or depression: financial stress (35%), job stress (32%), death of close family member or friend (19%), poverty/no money (17%), other stress at home (15%), marital/dating relationships (14%), sick family member (12%), fighting at home (11%), caring for a parent (9%), family member with a mental illness (8%), unemployment (5%), divorce/separation (4%), not having a place to live (2%), not having enough to eat (2%), not feeling safe in the community (2%), not feeling safe at home (1%), sexual orientation/gender identity (1%), and other causes (11%).

Gaps and Potential Strategies

Mental Health & Addiction Gaps	Potential Strategies
1. Stigma surrounding mental health and substance abuse	• Provide mental health first aid trainings in the community to help identify red flags. • Consider developing an awareness campaign on the stigma surrounding mental health and substance abuse.
2. Lack of mental health treatment facilities and providers	• Lobby/advocate for residential treatment facilities. • Recruit mental health service providers to provide services in Knox County. • Work to develop a mental health treatment facility in Knox County.
3. Lack of general understanding of the seriousness of mental health-especially among the youth	• Continue showings of the Resilience Film and expand showings throughout the school districts. • Consider implementing a peer-to-peer support program.
4. Lack of parental understanding of how their substance use effects their child's health	• Provide parent education.
5. An increase of babies born to addicted mothers	• No potential strategy identified.
6. Lack of empathy for mental health and addiction issues	• Provide education on the prevalence of mental health and addiction in the county. • Incorporate personal testimonies from addicts to help make the issue more relatable to understand.
7. Lack of integration of mental/behavioral health with physical health	• Provide education to healthcare providers. • Develop a patient centered medical home.
8. Lack of recovery housing/sober-living housing and activities	• Provide activities targeted to men, women, and women with children. • Advocate to state/county leaders to support recovery housing. • Develop a community center that is in a centralized location in the county.
9. Lack of a comprehensive approach to prevention education	• Consider youth-led prevention programs. • Consider having Knox Substance Abuse Action Team coordinate appropriate distribution of prevention materials.
10. Lack of treatment available for post-partum depression once identified	• Work to coordinate comprehensive resources and treatment.
11. Lack of awareness about adverse childhood experiences (ACEs)	• Implement a school-based intervention program, such as Calm Classroom. • Develop partnerships with agencies in the community to provide effective trauma recovery activities (i.e. arts, music, etc.). • Continue showings of the Resilience Film across the county to bring awareness of trauma informed care.
12. Lack of psychological services in the county	• Promote current providers to residents.

Best Practices

The following programs and policies have been reviewed and have proven strategies to **improving mental health and addiction:**

1. **Mental Health First Aid:** Mental Health First Aid is an adult public education program designed to improve participants' knowledge and modify their attitudes and perceptions about mental health and related issues, including how to respond to individuals who are experiencing one or more acute mental health crises (i.e., suicidal thoughts and/or behavior, acute stress reaction, panic attacks, and/or acute psychotic behavior) or are in the early stages of one or more chronic mental health problems (i.e., depressive, anxiety, and/or psychotic disorders, which may occur with substance abuse).

   The intervention is delivered by a trained, certified instructor through an interactive 12-hour course, which can be completed in two 6-hour sessions or four 3-hour sessions. The course introduces participants to risk factors, warning signs, and symptoms for a range of mental health problems, including comorbidity with substance use disorders; builds participants' understanding of the impact and prevalence of mental health problems; and provides an overview of common support and treatment resources for those with a mental health problem. Participants also are taught a five-step action plan, known as ALGEE, for use when providing Mental Health First Aid to an individual in crisis:

   - A—Assess for risk of suicide or harm
   - L—Listen nonjudgmentally
   - G—Give reassurance and information
   - E—Encourage appropriate professional help
   - E—Encourage self-help and other support strategies

   In addition, the course helps participants to not only gain confidence in their capacity to approach and offer assistance to others, but also to improve their personal mental health. After completing the course and passing an examination, participants are certified for 3 years as Mental Health First Aiders.

   In the studies reviewed for this summary, Mental Health First Aid was delivered as a 9-hour course, through three weekly sessions of 3 hours each. Participants were recruited from community and workplace settings in Ashtabula or were members of the general public who responded to recruitment efforts. Some of the participants (7%-60% across the three studies reviewed) had experienced mental health problems

2. **Prescription Drug Monitoring Programs (PDMP's)** are electronic databases, housed in state agencies, that track prescribing and dispensing of controlled substances. Most states monitor drugs on Schedules II - IV of the Drug Enforcement Administration's drug schedule; many also include drugs on Schedule V and other controlled substances. Schedule I drugs (e.g., heroin) are not included. PDMPs can be used by prescribers and pharmacists to view prescriptions written for and dispensed to individual patients, by law enforcement agencies to identify drug diversion or pill mills, or by state medical boards to identify potentially problematic prescribers. Drugs monitored, individuals authorized to use the system, functionality, and use varies from state to state.

Action Step Recommendations & Plan

To work toward **improving mental health and addiction outcomes,** the following action steps are recommended:

Mental Health action step:
1. Expand Mental Health First Aid Trainings 🛡

Addiction action steps:
2. Increase community awareness and education of substance abuse and prevention
3. Increase continuing education for primary care and substance use disorder providers 🛡

Mental Health Action Plan

Priority Topic: Mental Health				
Strategy 1: Expand Mental Health First Aid Trainings 🛡				
Action Step	**Priority Outcome & Indicator**	**Priority Population**	**Person/ Agency Responsible**	**Timeline**
Year 1: Determine who is currently offering trainings and where are they located. Market the trainings to Knox County area churches, schools, law enforcement, chamber of commerce, city councils, college students majoring in social work/mental health, emergency rooms, and primary care providers. Work with ER and primary care providers as well as community agencies to assess what information and/or materials they may be lacking to provide better resources for patients with mental health and/or substance abuse issues. Develop a training on the mental health and substance abuse services available in Knox County. Provide at least 2 trainings.	**Priority Outcomes:** 1. Reduce suicide deaths 2. Reduce depression **Priority Indicators:** 1. Number of deaths due to suicide per 100,000 populations (age adjusted) 2. Percentage of adults that felt sad or hopeless for two or more weeks in a row	Adult	**Kay Spergel** Mental Health and Recover for Licking and Knox Counties	May 31, 2019
Year 2: Provide 3 additional trainings and continue marketing efforts.				May 31, 2020
Year 3: Continue efforts from year 2.				May 31, 2021

Addiction Action Plan

Priority Topic: Addiction				
Strategy 2: Increase community awareness and education of substance abuse and prevention				
Action Step	**Priority Outcome & Indicator**	**Priority Population**	**Person/ Agency Responsible**	**Timeline**
Year 1: Plan a community awareness campaign to increase education and awareness of risky behaviors and substance abuse trends. Include information on alcohol use, opiates, e-cigarettes, prescription drug abuse, marijuana use, heroin use, other illegal drug use, risky behaviors and substance use trends. Determine best ways to educate community and develop prevention materials by involving the Knox Substance Abuse Action Team and youth-led prevention groups (such as the Teen Advisory Council).	**Priority Outcomes:** 1. Reduce drug dependency/use 2. Reduce alcohol use **Priority Indicators:** 1. Percent of adults who reported illegal drug use within the past six months 2. Percent of adults reporting binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days 3. Percent of youth reporting using alcohol in the past year (PRIDE survey)	Adult and youth	**Ashley Phillips** Knox County Health Department & Knox Substance Abuse Action Team (KSAAT)	May 31, 2019
Year 2: Increase awareness of prescription drug abuse and the locations of existing prescription drug collection boxes. Encourage local pharmacies to provide information on prescription drug abuse and collection boxes. Plan awareness programs/workshops focusing on different "hot topics" such as the "In Plain Sight" Program. Attain media coverage for all programs/workshops.				May 31, 2020
Year 3: Continue efforts from years 1 and 2.				May 31, 2021

Priority Topic: Addiction				
Strategy 3: Increase continuing education for primary care and substance use disorder providers 🦋				
Action Step	**Priority Outcomes & Indicators**	**Priority Population**	**Person/ Agency Responsible**	**Timeline**
Year 1: Work with primary care and substance use disorder providers to assess what information and/or materials they are lacking to provide better care for patients with substance use issues and disorders. Develop a training on opioid prescribing guidelines and the use of **OARRS (Ohio Automated Rx Reporting System)**. Offer the training to local primary care and substance use disorder providers.	**Priority Outcomes:** 1. Reduce drug dependency/use 2. Reduce unintentional drug overdose deaths 3. Reduce sales of opioid pain relievers **Priority Indicators:** 1. Percent of persons age 12+ who report past-year illicit drug dependence or abuse 2. Number of deaths due to unintentional drug overdoses per 100,000 population (age-adjusted) 3. Kilograms of opioid pain relievers sold per 100,000 population	Adult	**Kay Spergel** Mental Health and Recovery for Licking and Knox Counties **Jeff Scott** Knox Community Hospital	May 31, 2019
Year 2: Offer CME (Continuing Medical Education) trainings for primary care and substance use disorder providers to provide better care for patients with substance abuse issues. Increase training opportunities for prescribers on safe opioid prescription practices and train at least 5 primary care physicians on the use of OARRS.				May 31, 2020
Year 3: Continue efforts from years 1 and 2. Increase the number of trainings by 20%.				May 31, 2021

Access to Care Indicators

Access to Health Care

In the past year, 11% (approximately 4,964) of adults were uninsured, increasing to 15% of those with incomes less than $25,000. The 2016 BRFSS reported uninsured prevalence rates as 7% for Ohio and 10% for U.S. adults

Three-fifths (60%) of Knox County adults visited a doctor for a routine checkup in the past year, increasing to 83% of those over the age of 65.

Half (50%) of Knox County adults reported they had one person they thought of as their personal doctor or healthcare provider, decreasing to 34% of those with incomes less than $25,000 and 29% of those who were uninsured. One-third (33%) of adults had more than one person they thought of as their personal healthcare provider, and 16% did not have one at all.

Health Screenings

More than two-fifths (43%) of women ages 40 and older had a mammogram in the past year, and 65% had one in the past two years. The 2016 BRFSS reported that 74% of women 40 and over in Ohio and 72% in the U.S. had a mammogram in the past two years.

Eighty-seven percent (87%) of Knox County women had a clinical breast exam at some time in their life, and 43% had one within the past year. More than three-fifths (62%) of women ages 40 and over had a clinical breast exam in the past two years.

General Screening Results	Total 2018 Sample
Diagnosed with High Blood Pressure	35%
Diagnosed with High Blood Cholesterol	34%
Diagnosed with Diabetes	11%
Survived a Heart Attack	7%
Survived a Stroke	2%

Oral Health

In the past year, 63% of Knox County adults had visited a dentist or dental clinic, decreasing to 46% of those with incomes less than $25,000.

Women's Health

During their last pregnancy, 54% of Knox County women indicated they got a prenatal appointment in the first 3 months.

Sexual Health

Four percent (4%) or 1,805 adults reported they had intercourse with more than one partner in the past year, increasing to 9% of those under the age of 30.

Fourteen percent (14%) of Knox County adults did not use any method of birth control.

Gaps and Potential Strategies

Access to Care Gaps	Potential Strategies
1. Lack of sexual education among youth and parents	• Consider implementing policies in schools to provide the science behind sexual health. • Provide educational materials to parents to assist in their discussions with their children about sexual health and life choices.
2. Lack of family planning	• Research opportunities for long-lasting birth control to be distributed on demand. • Education regarding pregnancy spacing.
3. Lack of easily accessible healthcare services	• Work to get the mobile unit up and running to potentially provide medical services, such as oral care. • Designate stopping locations and secure funding.
4. Lack of medical literacy-patients do not know what kind of questions to ask during doctor visits	• Encourage healthcare providers to elaborate in simple terms medical information they discuss with their patients regarding their health. • Consider a health literacy campaign to teach adults how they can improve their knowledge about their overall health.
5. Lack of prenatal care	• Work on increasing the number of mothers who make their first initial prenatal appointment in their first trimester.
6. Dentists not accepting Medicaid	• No potential strategy identified.

Access to Care Best Practices

The following programs and policies have been reviewed and proven strategies to **improve access to care**:

1. **Contraceptive Counseling:** Improving the quality of contraceptive counseling is one strategy to prevent unintended pregnancy. Aspects of relational and task-oriented communication in family planning care can assist providers in meeting their patients' needs. Approaches to optimizing women's experiences of contraceptive counseling include working to develop a close, trusting relationship with patients and using a shared decision-making approach that focuses on eliciting and responding to patient preferences. Providing counseling about side effects and using strategies to promote contraceptive continuation and adherence can also help optimize women's use of contraception.

Action Step Recommendations & Plan

To work toward **improving access to care**, the following action steps are recommended:

1. Increase awareness of existing healthcare services on preventive care
2. Increase awareness and availability of birth control
3. Increase sexual health education and prevention

Action Plan

Priority Topic: Access to Care					
Strategy 1: Increase awareness and access of existing healthcare services on preventive care					
Action Step	Priority Outcome & Indicator	Priority Population	Person/ Agency Responsible	Timeline	
Year 1: Coordinate efforts between the hospital, health department and other community organizations to increase community outreach and education on available preventive health services (many of which are free or at a reduced cost). Increase community education on the importance of preventive health care. Include information on what accounts for preventive care, what does insurance cover and different screening guidelines (mammograms, PSA's, etc.). Update 2-1-1 to reflect all organizations providing free or reduced cost preventive healthcare services. Increase awareness of 2-1-1 as a community resource.	**Priority Outcome:** Increase preventive health screenings **Priority Indicators:** 1. Percent of women ages 40 and older who had a mammogram within the past 2 years 2. Percent of men ages 40 and over who had a PSA test within the past 2 years	Adult	**Jeff Scott** Knox Community Hospital	May 31, 2019
Year 2: Continue community outreach efforts. Update 2-1-1 as needed. Explore funding opportunities and the feasibility of mobile dentistry.				May 31, 2020
Year 3: Increase efforts from years 1 and 2.				May 31, 2021

Priority Topic: Access to Care				
Strategy 2: Increase awareness and availability of birth control 🗺				
Year 1: Collect baseline data on the number of health care providers that provide sexual health patient counseling and discuss contraceptive options in Knox County. Present health care providers with Knox County sexual behavior data and train primary care and women's healthcare providers to offer patient counseling on the full-range of efficacy-based **contraceptive options**.	**Priority Outcome:** Increase sexual health education **Priority Indicator:** Percent of adults who engaged in sexual intercourse without a reliable method of protection	Adult	**Carmen Barbuto** Knox County Health Department	May 31, 2019
Year 2: Continue efforts from year 1. Conduct an environmental scan on the number of community health centers, clinics, and other community-level providers that offer sexual health education, birth control, and STI screenings. Identify and work with at least one new clinical provider to offer sexual health education and services. Increase awareness of services to the community.				May 31, 2020
Year 3: Continue efforts from years 1 and 2.				May 31, 2021

Priority Topic: Access to Care				
Strategy 3: Increase sexual health education and prevention				
Action Step	**Priority Outcome & Indicator**	**Priority Population**	**Person/ Agency Responsible**	**Timeline**
Year 1: Conduct an environmental scan of sexual health education and prevention programs that are currently being implemented in Knox County schools. Collect information including but not limited to: school, type of prevention (general education or program), grade level, and the time frame in which the prevention is administered (semi-annually, annually, ongoing, one-time, etc.). Present the environmental scan findings and supporting sexual health-related youth data to superintendents and express the need for an increased effort of sexual health education and prevention. Work with schools to complete the Centers for Disease Control and Prevention's **Health Education Curriculum Analysis Tool (HECAT)** in order to inform decisions regarding health curriculum.	**Priority Outcome:** Increase sexual health education **Priority Indicator:** Number of births per 1,000 female population ages 15-19 (ODH)	Youth	**Lori Jones** New Directions	May 31, 2019
Year 2: Utilizing the findings from the HECAT analysis, work with schools to plan and implement necessary changes or modifications to the health education curriculum. Research pregnancy or other risky sexual behavior prevention programs. Determine which program to implement in each school. Supplement school-based sexual health education with community-based education. Send home educational materials to parents in each school regarding risky sexual behaviors, and **how to communicate with youth about these topics.**				May 31, 2020
Year 3: Continue efforts from years 1 and 2. Implement one risky sexual behavior prevention program in each school district.				May 31, 2021

Cross-cutting Outcomes

In addition to tracking progress on the CHIP priority outcome objectives, the county will evaluate the impact of strategies implemented by also measuring progress on a set of cross-cutting outcome objectives. Examples of cross-cutting outcomes are listed below. See the **master list of SHIP indicators** for the complete list of the SHIP cross-cutting outcome indicators and the community toolkits for a recommended set of aligned community indicators to track progress related to each CHIP strategy.

Social determinants of health: Examples of crosscutting outcomes that address all priorities
- Improve third grade reading proficiency
- Reduce chronic absenteeism in school
- Reduce high housing cost burden
- Reduce secondhand smoke exposure for children

Prevention, public health system and health behaviors: Examples of cross-cutting outcomes that address all priorities
- Increase adult vegetable consumption
- Reduce adult physical inactivity
- Reduce adult smoking

Healthcare system and access: Examples of cross-cutting outcomes that address all priorities
- Reduce percent of adults who are uninsured
- Reduce percent of adults unable to see a doctor due to cost
- Reduce primary care health professional shortage areas

Specific, measurable objectives for selected cross-cutting outcomes will be included in the following action plans.

Cross-Cutting Best Practices

1. **Trauma Informed Care:** Trauma informed care (TIC) is a framework that requires change to organizational practices, policies, and culture that reflect an understanding of the widespread impact of trauma and potential paths for recovery, and actively seeks to prevent re-traumatization. In health care, TIC usually includes universal trauma precautions and practice changes for patients with a known trauma history. Universal trauma precautions emphasize patient-centered communication and care, often with careful screening for trauma, safe clinical environments (e.g., quiet waiting areas), and shared decision-making for all patients. Under a trauma-informed clinical approach, providers collaborate across disciplines, use streamlined referral pathways, and remain aware of their own trauma histories and stress levels when they know patients have experienced trauma. TIC can also be implemented in oral health settings.

Cross-Cutting Strategies

Action Step Recommendations & Plan

To address all priority areas, the following **cross-cutting strategies** are recommended:

1. Increase awareness of Trauma-Informed Care 🛡️
2. Increase links to tobacco cessation 🛡️

Action Plan

Cross-Cutting Factors: Healthcare system and access				
Strategy 1: Increase awareness of Trauma-Informed Care 🛡️				
Action Step	**Priority Outcome & Indicator**	**Priority Population**	**Person/ Agency Responsible**	**Timeline**
Year 1: Facilitate an assessment among healthcare providers, teachers, social service providers, and other community members on their awareness and understanding of trauma informed care, including toxic stress and adverse childhood experiences. Facilitate Trauma Informed Care trainings in the community to increase education and understanding of trauma. Assess interest and expand the showing of the Resilience Film in Knox County schools, faith-based organizations, and other local organizations.	**Cross-Cutting Outcome:** Reduce suicide ideation in adults **Cross-Cutting Indicator:** Percent of adults who seriously considered attempting suicide in the past 12 months	Adult	**Kay Spergel** Mental Health and Recovery for Licking and Knox Counties	May 31, 2019
Year 2: Continue efforts from year 1. Develop and implement a trauma screening tool for social service agencies who work with at risk populations.				May 31, 2020
Year 3: Continue efforts from years 1 and 2. Increase the use of trauma screening tools by 15%.				May 31, 2021

Cross-Cutting Factors: Public health system, prevention and health behaviors				
Strategy 2: Increase links to tobacco cessation 🪶				
Action Step	**Cross-cutting Outcome & Indicator**	**Priority Population**	**Person/ Agency Responsible**	**Timeline**
Year 1: Collect baseline data on the availability of evidence-based tobacco cessation programs in Knox County. Create an informational brochure/guide that highlights all organizations in Knox County that provide tobacco cessation services. Include information on transportation options and which organizations offer free services; offer a sliding fee scale, and which insurance plans are accepted.	**Cross-cutting Outcome:** Increase quit attempts **Cross-cutting Indicator:** Percent of adult smokers who made a quit attempt in the past year	Adult	**Mike Whitaker** Knox County Health Department	May 31, 2019
Year 2: Create a presentation on available tobacco cessation and cancer prevention services and present to Knox County area churches, law enforcement, chamber of commerce, city council, service clubs, and businesses. Include information on benefits of screenings and early detection to increase community awareness. Increase participation in tobacco cessation programs by 10% from baseline. Look for opportunities to reduce out of pocket costs for cessation therapies				May 31, 2020
Year 3: Continue efforts of years 1 and 2 and expand outreach.				May 31, 2021

Progress and Measuring Outcomes

The progress of meeting the local priorities will be monitored with measurable indicators identified for each strategy found within the action step and recommendation tables within each of the priority sections. Most indicators align directly with the SHIP. The individuals that are working on action steps will meet on an as needed basis. The full committee also known as the Knox Health Planning Partnership will meet monthly to report out the progress. The committee members must have decision-making authority for their organization. The committee will form a plan to disseminate the Community Health Improvement Plan to the community. Action steps, responsible person/agency, and timelines will be reviewed at the end of each year by the committee. Edits and revisions will be made accordingly.

Knox County will continue facilitating a community health assessment every three years to collect and track data. Primary data will be collected for adults using national sets of questions to not only compare trends in Knox County, but also be able to compare to the state, the nation, and Healthy People 2020. This data will serve as measurable outcomes for each of the priority areas. Indicators have already been defined throughout this report and are identified with the 🛡 icon.

In addition to outcome evaluation, process evaluation will also be used on an ongoing basis to focus on how well action steps are being implemented. Areas of process evaluation that the CHIP committee will monitor will include the following: number of participants, location(s) where services are provided, number of policies implemented, economic status and racial/ethnic background of those receiving services (when applicable), and intervention delivery (quantity and fidelity).

Furthermore, all action steps have been incorporated into a Progress Report template that can be completed at all future Knox Health Planning Partnership meetings, keeping the committee on task and accountable. This progress report may also serve as meeting minutes.

Contact Us

For more information about any of the agencies, programs, and services described in this report, please contact:

Carmen Barbuto, MPA
Data Analysis & Policy Development
Administrative Services and Operations
Knox County Health Department
11660 Upper Gilchrist Rd.
Mount Vernon, OH 43050
(740)-392-2200
cbarbuto@knoxhealth.com

Appendix I: Website Links

Title of Link	Website URL
Centers for Disease Control; National Public Health Performance Standards; The Public Health System and the 10 Essential Public Health Services	http://www.cdc.gov/nphpsp/essentialservices.html
Contraceptive counseling	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4216627/
Contraceptive options	http://www.cdc.gov/sixeighteen/pregnancy/index.htm
Community gardens	www.countyhealthrankings.org/policies/community-gardens
Community-wide physical activity campaigns	www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/community-wide-physical-activity-campaigns
Contraceptive counseling	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4216627/
Contraceptive options	http://www.cdc.gov/sixeighteen/pregnancy/index.htm
Health Education Curriculum Analysis Tool (HECAT)	https://www.cdc.gov/healthyyouth/hecat/index.htm
How to communicate with youth about these topics	http://www.advocatesforyouth.org/the-facts-parent-child-communication
Increase awareness of prescription drug abuse and drop-off box locations in Knox County	https://www.samhsa.gov/prescription-drug-misuse-abuse/samhsas-efforts
Implement a community-wide physical activity campaign	http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/community-wide-physical-activity-campaigns
Implement fruit and vegetable incentive programs	www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/competitive-pricing-for-healthy-foods
Increase links to tobacco cessation	https://www.cdc.gov/sixeighteen/docs/6-18-evidence-summary-tobacco.pdf
Master list of SHIP indicators	http://www.odh.ohio.gov/sha-ship
Mental health first aid	https://www.mentalhealthfirstaid.org/
Prevention and Population Health Framework: The 3 Buckets	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5558207/
Prescription drug monitoring programs (PDMPs)	www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/prescription-drug-monitoring-programs-pdmps
Trauma-informed care	http://www.countyhealthrankings.org/policies/trauma-informed-health-care

Knox
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Released with gratitude for our community and its efforts to improve the lives of all Knox County residents