2020 Community Health Assessment & Priority Issue Identification

Executive Summary

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This document is a summary of the Community Health Assessment (CHA) that was conducted to identify current health status and social/economic needs of the Black Hawk County community. The process also led to the adoption of priority health issues by the Black Hawk County Board of Health. Planning for this assessment began in January of 2019 with the formation of an Extended Core Team that included representatives from the Black Hawk County Health Department, Peoples Community Health Clinic, MercyOne Waterloo Medical Center, UnityPoint Health - Allen Hospital and the Cedar Valley United Way. This team oversaw the implementation of the community-wide CHA and will guide the development and ongoing action cycle for the Community Health Improvement plan (CHIP).

**Method**

The CHA is based on the national Mobilizing for Action through Planning and Partnerships (MAPP) model, a community-wide strategic planning process for improving public health, as well as an action-oriented process to help communities prioritize public health issues, identify resources for addressing them, and taking action. MAPP provides a framework, guidance, structure, and best practices for developing healthy communities. This process was implemented in March of 2019 when representatives from the National Association of County & City Health Officials led community stakeholders through a training and visioning process for Black Hawk County. The six phases of the framework and four assessments are shown in Figure 1.

**Vision**

As part of the March 2019 training, stakeholders received an overview of the MAPP visioning process and participated in guided activities designed to brainstorming important facets of a community-wide vision. Using the elements identified during this workshop, the Extended Core Team adopted a final shared vision statement to guide the work of the CHA and CHIP: *Our community works together so all people have equitable opportunities & resources to lead healthier, more fulfilled lives.*
Summary of MAPP Assessments

The CHA process was conducted from June 2019 to December 2019 using the MAPP framework and with the involvement of key community partners. The CHA includes data collection and analysis of the four MAPP assessments that measured varying aspects of health for the Black Hawk County community:

- Community Health Status
- Community Themes and Strengths
- Forces of Change
- Local Public Health System

A summary of the four assessments is included in this document; additional data is categorized by the determinants of health and shown in Attachment 1. A detailed report for each of the assessments is also available through the Black Hawk County Health Department.

Community Health Status Assessment (CHSA)

The CHSA is a quantitative analysis which answers the questions, “How healthy is the community?” and “What does the health status of the community look like?” Results of the CHSA provide an understanding of the community’s health status and ensure that the community’s priorities consider specific health status issues such as rates of increasing chronic disease and sexually transmitted infections.

The Black Hawk County CHSA was compiled by reviewing data available through public datasets and Data Sharing agreements with the Iowa Department of Public Health (IDPH). This assessment was led by the Black Hawk County epidemiologist with the help of core staff. The focus of this assessment was to find public health data in order to understand the role of key health indicators in our county. The CHSA is comprised of two main sections. The first section is an explanation of the findings with graphs to help illustrate certain points. The second section is a table of county level data on key health indicators. The data in this section aims to show the trends between years for Black Hawk County.

Method

This assessment incorporated data from IDPH, Behavioral Risk Factor Surveillance System (BRFSS), the U.S. Census Bureau, Iowa Secretary of State, County Health Rankings, Iowa Youth Survey, CDC Wonder, Iowa Department of Education, Iowa Department of Transportation, Iowa State University, and the CDC 500 Cities Project. Some data in this report was obtained through a Data Sharing Agreement with IDPH. This data included births, mortalities, BRFSS, and inpatient and outpatient primary diagnosis. Datasets were analyzed by using SPSS, R, and Excel. The graphs were created using the same programs (SPSS, R, and Excel).

Findings

Black Hawk County was rated 61st/99 counties in Iowa for health outcomes according to the Robert Wood Johnson Foundation County Health Rankings, which was lower than the previous year rating of 58th/99. The total population has been decreasing over the past decade, and the racial and ethnic distributions are changing. The proportion of White non-Hispanic or Latino is decreasing, while all other racial and ethnic groups are increasing.
Black Hawk County has an increasing population that falls below the federal poverty level, and has a higher percentage of individuals below the federal poverty level than the state and national average. Furthermore, the total households using Food Stamps has been increasing. Residents with access to exercise opportunities is greatly increasing. Access to health care providers is also increasing annually.

Black Hawk County has lower 5 year age-adjusted mortality rates for transportation, poison, and fall mortality compared to Iowa. Motor vehicle traffic and all transportation mortality is much lower than the Iowa average.

Suicide rates for adults are higher in Black Hawk County than the state average. Since 2012, Iowa students that had a suicide plan within the last year increased by 53% and Black Hawk County has increased by 25.4%.

Compared to Iowa, Black Hawk County has a higher incidence rate for female breast cancer at all ages. The asthma hospitalization rate and emergency department visits for children under the age of 5 is much higher than the Iowa average. COPD hospitalization rates and emergency department visits for all age groups are higher than the state average. Black Hawk County has been consistently ranked one of the highest counties in the nation for overall sexually transmitted infection (STI) rates. These rates are much higher than the state average for the most common STIs (chlamydia and gonorrhea).

Data obtained for adverse childhood experiences (ACEs) showed that more children in Black Hawk County live under the poverty level than the state average. There was a higher rate of child abuse/neglect in Black Hawk County than the Iowa average. A higher percentage of children were uninsured than the state average.

Please see Attachment 1 of this document for data values categorized by the determinants of health and the full CHSA which is available through the Black Hawk County Health Department.
Community Themes and Strengths Assessment (CTSA)

The CTSA is a qualitative analysis of perceptions, thoughts, and opinions community members have regarding health and answers the questions, “What is important to the community?”, “How is quality of life perceived in the community?”, and “What assets does the community have that can be used to improve community health?” Black Hawk County completed the CTSA using questionnaires and gathering primary data at community events. Data was collected from summer 2019 to fall 2019, with analysis ending in the winter of 2019. The focus of this assessment was to understand the community perceptions over health topics, health behaviors, environmental factors, mental health, and preparedness. This information gathered from the community assisted in identifying the most important health issues in Black Hawk County.

Method

The CTSA was completed in two parts. First, a Community Health Survey was developed by the Extended Core Team to understand what factors were important in being healthy, personal health habits, and demographic questions. This survey, comprised of 41 questions, was administered in multiple ways. An online version using Survey Monkey was distributed through social media accounts and organizational websites. Paper versions of the survey were distributed through select community churches in order to obtain additional responses from under-represented community members. The last method used was in-person interviews conducted by EMBARC staff. EMBARC is a grassroots, community-based, non-profit organization founded by refugees and for refugees. Using these three methods, a total of 1621 survey responses were recorded.

The second stage of the CTSA was the use of a sticker board to identify the perceptions of a healthy community. The sticker board was used at six community events during the summer and fall of 2019. The sticker board displayed the question “What makes a community healthy?” at the top, and offered several options for the participants to choose from along with the ability add new factors. The stickers were tallied at the end of the event and recorded.

Findings

The top answers for the combined sticker board responses were school readiness and educational attainment, availability and utilization of quality mental health care, and adequate, affordable, and safe housing. Analysis of the three events with the lowest attendance showed that school readiness and educational attainment, community safety and security, and adequate, affordable, and safe housing were the top answers.

According to the Community Health Survey, the top factors for a healthy community were access to health care, jobs and healthy economy, and access to nutritional foods. Participants indicated that the top health problems in the community were obesity (57.1%), mental illness (54.6%), and diabetes (37.7%). Of the community members that took the survey, 97.4% were insured and 98.2% of the children were insured. Participants were also asked about their mental health and why there were not receiving help if they needed it. Individuals that did not receive help for their mental health issues did not do so because they felt ashamed talking about personal issues, it was too expensive, or they had unsuccessful past encounters. The top environmental threats in the community were unsafe housing (32%), radon exposure (19.4%), and outdoor air quality (17.8%).
Forces of Change Assessment (FOCA)
The FOCA identifies forces, opportunities, and threats that can affect, either now or in the future, the community and local public health system and answers the questions, “What is occurring or might occur that affects the health of the community or the local public health system?” and “What specific threats or opportunities are generated by these occurrences?”

Black Hawk County completed the Forces of Change Assessment as part of a systems mapping workshop held on June 27, 2019. The workshop was led and facilitated by consultants from Engaging Inquiry, and was attended by 47 community partners. The focus of the workshop was the development of a systems map on health inequities in the community and, it aligned closely with the MAPP process for completing the Forces of Change Assessment. The assessment focuses on what forces or events are occurring or have occurred in the community, and the threats and opportunities those forces pose on the community and local public health system. Forces could be trends in the community observed over time, discrete elements of the community, or one-time events that impacted the community. The forces can be either positive or negative impacts on the community. The assessment is conducted in two steps, first the participants are asked framing questions to identify forces, and then participants discuss the threats and opportunities each force identified poses to the community.

Method
Participants in the workshop were posed the framing question “What accounts for the current level of equity experienced by our communities?” and asked to brainstorm three negative forces and three positive forces. Like-forces were then categorized together into enablers and inhibitors, and participants voted on what the most significant forces were in the community. The top nine inhibitors and top four enablers were used in the second phase of the workshop, where the upstream causes and downstream impacts of the forces were brainstormed. Following the workshop, the causes and impacts were reviewed for common themes. Themes identified from inhibitors were classified as threats, and the themes identified from enablers were classified as opportunities.
Findings
The analysis following the workshop identified six threats and two opportunities posed by forces in the community. The forces, threats and opportunities are summarized in Figure 2 below. The difference in the number of threats and opportunities identified is likely due to the number of enabler and inhibitor forces used in the second phase of the workshop. Since fewer enabler forces had causes and impacts identified there were not as many to review for commonalities, and thus resulted in fewer opportunities being identified. There are likely additional opportunities that went unidentified by the method of analysis used.

<table>
<thead>
<tr>
<th>Threats</th>
<th>Forces</th>
<th>Opportunities</th>
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<tbody>
<tr>
<td>Maintaining Status Quo</td>
<td>Financial Exclusion and Poverty</td>
<td>Attractive Community</td>
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<tr>
<td>Exploitation and Lack of Trust</td>
<td>Policies and Politics that Maintain Inequity</td>
<td>Population Growth</td>
</tr>
<tr>
<td>Division</td>
<td>Racism</td>
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<tr>
<td>Health and Mental Health Issues</td>
<td>Access to Mental and Physical Health Services</td>
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<tr>
<td>Perception and Bias</td>
<td>History and Legacy of Exclusion</td>
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<tr>
<td>Lack of Resources</td>
<td>Entrenched Mindsets</td>
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<td></td>
<td>Rejection of Others</td>
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<td></td>
<td>Fear</td>
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<td></td>
<td>Lack of Support to Families and Communities</td>
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<td></td>
<td>Lack of Awareness</td>
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<td></td>
<td>Quality and Access to Education</td>
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<td></td>
<td>Diversity of the Community</td>
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<td></td>
<td>Presence of Coalitions and Willingness to</td>
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<td></td>
<td>Work Together</td>
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<td></td>
<td>Strong Economy</td>
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Figure 2: Identified Forces, Threats, and Opportunities
Local Public Health System Assessment (LPHSA)

The LPHSA assesses how organizations within the system are doing in addressing the ten essential public health services and answers “What are the activities, competencies, and capacities of the local public health system?” and “How are the ten essential public health services being provided in the community?”

Black Hawk County completed the LPHSA between November 2019 and January 2020. The assessment used the National Public Health Performance Standards Local Public Health System Assessment Instrument and focused on the organizations that play a role in the delivery of public health services within the county; the limited number of participants was an identified gap for this assessment. The ten Essential Public Health Services provide the framework for the assessment by describing the public health activities that should be undertaken in all local communities. The performance measures related to each Essential Service describe an optimal level of performance and capacity to which all public health systems should reach.

Method

During phase 1, each model standard was evaluated by a targeted group of Black Hawk County Health Department staff through a series of three meetings. The meetings included an introduction to each model standard, a facilitated discussion, and performance measure voting. The strengths, weaknesses, and short/long-term improvement opportunities for each model standard were also documented.

The assessment team prepared a summary analysis from the initial phase of the LPHSA for review and discussion with the Extended Core Team. Through a facilitated discussion, this group performed the following functions for the LPHSA:

- Reviewed the process used during phase 1 and the overall performance for each of the ten Essential Public Health Services.
- Discussed the strengths, weakness and improvement opportunities for each of the ten Essential Public Health Services.
- Ranked the ten Essential Public Health Services in terms of importance and improvements needed.

The data obtained through both phases of the LPHSA was synthesized to determine a ranking and level of LPHS activity for each of the ten Essential Public Health Services along with calculating a priority rating for the 30 model standards. A summary of qualitative comments related to each model standard was also prepared.
Findings
Based on the level of activity for each measure, the local public health system’s strongest performance is in the following essential services:

- **Enforcement** of laws and regulations that protect health and ensure safety.
- **Diagnose** and **investigate** community health problems and hazards.
- **Research** for new insights and innovate solutions to health problems.

When the Extended Core Team considered both the priority of and performance level for each essential service, the following essential services were rated highest in terms of the need for improvement in the level of activity:

- **Inform** and **educate** and **empower** people about health issues.
- **Mobilize** community partnerships to identify and solve problems.
- **Link** people to needed personal health care services and assure the provision of healthcare when otherwise unavailable (tied with) **diagnose** and **investigate** community health problems and hazards.

Based on the ranking of priority essential services by the Extended Core Team and the measures of performance for each activity, the following model standards ranked highest in terms of having the potential for additional levels of activity by the public health system:

**Health and Risk Communication**
LPHS partners report that individual organizations distribute health information in a variety of ways but the lack of collaborative planning is a challenge and varies by the facet of public health. Many of the LPHS organizations have a trained spokesperson for public health but there is little forward planning for collaboration to take place during public health emergency response situations. While response partners participate in the regional preparedness partnership, there is not an active health preparedness planning coalition to address risk communication along with carrying out other preparedness planning activities. Another challenge with risk communication is identifying and reaching access and functional needs populations within the community.

**Community Partnerships**
Participants identified a number of single-issue partnerships and community coalitions but noted that a broad-based community health improvement committee has not been formalized. Although there is openness to coming together, a broad-based partnership would need to be defined and common goals identified.
Prioritization

Community Stakeholders
Following the completion of the four MAPP assessments, community stakeholders were invited to a workshop on February 18, 2020 where the preliminary results from the assessments were shared. Fifty five community partners attended the workshop. The results were categorized by the determinants of health including: social, behavioral, economics, environmental & disaster preparedness, education, and health. Following the data presentation, attendees engaged in structured small group reflection for a specific determinant of health, large group sharing, and voting on initial priority issues for consideration by the public and the Black Hawk County Board of Health.

Summary of Community Stakeholder Discussion Questions

<table>
<thead>
<tr>
<th>What is the Data telling us?</th>
<th>What are the Root Causes?</th>
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<tbody>
<tr>
<td>• Exercise, sleep, nutrition are key determinants of mental health</td>
<td>• Lack of jobs that pay a living wage</td>
</tr>
<tr>
<td>• Residents identify physical inactivity as high risk but especially Black/AA population who report low rates of exercise</td>
<td>• Lack of mental health funding and treatment centers</td>
</tr>
<tr>
<td>• Over ¼ of residents get 7 or less hours of sleep</td>
<td>• Lack of support</td>
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<tr>
<td>• Concern for DUI is higher among Black/AA population</td>
<td>• Staff resources and expertise for data analysis</td>
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<tr>
<td>• Poverty rate is higher than Iowa rate</td>
<td>• Lots of data; missing information</td>
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<tr>
<td>• Household income is steady</td>
<td>• Lack of knowledge</td>
</tr>
<tr>
<td>• Graduation gap – difference in perception of what we perceive is important</td>
<td>• Plans are cheap &amp; solutions are expensive</td>
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<tr>
<td>• Lack of knowledge about disaster preparedness</td>
<td>• Poverty</td>
</tr>
<tr>
<td>• Aged data</td>
<td>• Policies</td>
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<tr>
<td>• Eating the wrong kinds of food</td>
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<tr>
<td>• Cost variance</td>
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<tr>
<td>• Food policy (low fat foods = high calories, sugar, etc.)</td>
<td></td>
</tr>
<tr>
<td>• Education for nutrition is needed</td>
<td></td>
</tr>
<tr>
<td>• Mental health: access, nutrition, exercise, social connection, healthier environments</td>
<td></td>
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<tr>
<td>• STI: pregnancy down, STIs up – leads to follow-up questions to get at root causes</td>
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<tr>
<td>• Birthweight</td>
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<tr>
<td>• Mental health needs are not being met in the community leading to an increase in violence to meet needs and perception that parents are raising kids right</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Who is Most Impacted?</th>
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</thead>
<tbody>
<tr>
<td>• Non-whites</td>
</tr>
<tr>
<td>• Non-English speaking</td>
</tr>
<tr>
<td>• Foreign-born/Immigrants</td>
</tr>
<tr>
<td>• Marginalized citizens</td>
</tr>
<tr>
<td>• Veterans</td>
</tr>
<tr>
<td>• Lower socioeconomic classes</td>
</tr>
<tr>
<td>• All community members are impacted by poverty</td>
</tr>
<tr>
<td>• Those without access to generational wealth</td>
</tr>
<tr>
<td>• Those without access to income sources</td>
</tr>
<tr>
<td>• 50% of individuals who are not prepared for disasters</td>
</tr>
<tr>
<td>• Those in poverty</td>
</tr>
<tr>
<td>• Children</td>
</tr>
<tr>
<td>• Those in survival mode</td>
</tr>
</tbody>
</table>
As part of the small group discussion, participants were asked to reach consensus on the initial priority issue for the selected determinant of health. The final task for participants was to vote on the initial priority issues using the criteria listed below:

1. Is this issue something that will affect us now and in the future?
2. Will the issue require us to change the way we function?
3. Are there long-term consequences of not addressing this issue?
4. Does the issue require involvement of more than one organization?
5. Does the issue create tensions in the community?

<table>
<thead>
<tr>
<th>Initial Priority Issue by Determinant of Health</th>
<th>Number of Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowering people to move from basic (survival) needs to wellness</td>
<td>30</td>
</tr>
<tr>
<td>Access to resources to attend school and be successful</td>
<td>20</td>
</tr>
<tr>
<td>Knowledge of health behaviors – moving from treatment to wellness</td>
<td>12</td>
</tr>
<tr>
<td>Community members informed of how to respond to trauma</td>
<td>9</td>
</tr>
<tr>
<td>Lack of knowledge about disaster planning</td>
<td>1</td>
</tr>
<tr>
<td>Better information broken down for income</td>
<td>0</td>
</tr>
</tbody>
</table>

Extended Core Team Review
On March 2, 2020, the Extended Core Team reconvened to review the determinants of health data, root causes, impacted populations, and initial priority issues as identified by the community stakeholders. As a result of this analysis, the potential priority issues proposed for consideration by the public and the Board of Health were poverty, education, healthy behaviors, and mental health & trauma.

Public Comment
Representatives from the Black Hawk County Health Department, Peoples Community Health Clinic, MercyOne Waterloo Medical Center, UnityPoint Health Allen Hospital and the Cedar Valley United Way met with members of the local media to introduce the results from the CHA and potential priority issues to the public. Infographics (Attachment 1) for the determinants of health were published on the Black Hawk County Health Department’s website and social media platforms as well as released by the media. Individuals were invited to complete a short survey regarding the data and potential priority issues. 41 individuals responded to the survey listing priority areas and additional comments for consideration by the Board of Health. Comments relating to the priority health issues include:

- “I think a lot of risky behaviors stem from mental health issues so if people can address those it will trickle down and help in other areas as well.”
• “Obesity is a symptom of many problems. Trauma, mental health, poverty, lack of access to healthy foods. I would hate to see us focus on obesity as problem, it is a symptom.”
• “Focus on the education gap between races.”
• “There is trauma regarding racial discrimination.”

Black Hawk County Board of Health
The Black Hawk County Board of Health participated in a work session on April 8, 2020 with staff from the health department. The Board reviewed the CHA, initial priority issues recommended by the community stakeholders and the Extended Core Team as well as feedback from the general public. The Board of Health identified the following priorities for this cycle of the CHA:

- Systems Thinking
- Mental Health & Trauma
- Healthy Behaviors

Systems Thinking

Definition
System thinking is a tool that describes behavior that perpetuates inequity in income, education, health outcomes, and vulnerability to natural and man-made calamities. Systems thinking approaches expand the range of choices available for solving health inequity and its root causes by broadening our thinking and helping us articulate problems in new ways. At the same time, the principles of systems thinking make us aware that there are no perfect solutions; the choices we make will have an impact on other parts of the system. For example, increased use of farm inputs to increase productivity can increase the content of hazardous material that are harmful to human health. By anticipating the impact of each trade-off, we can minimize its severity or even use it to our advantage. Considering the impact, both positive and negative, of decisions through systems thinking enables us to make balanced, informed choices as a community.

Key Data Points
The system mapping inquiry, using qualitative data, investigated how a system contributes to the current level of inequity in our community. The inquiry raised a valid question as to whether our current socio-economic system inevitably is creating or sustaining poverty. The inquiry also helped to identify threats to our society and the opportunities that the system thinking approach would provide to remove or alleviate these threats. The data from this inquiry showed that the current system that perpetuates financial exclusion, maintains inequities, and sustains racial inequality, allows for measurable economic disparity leading to poverty.
Quality and access to education in Black Hawk County is presented as a positive force of change; however, systemic racism is viewed as a continuing corrosive and widespread problem in our society. History and legacy of exclusion have perpetuated segregation in many of our schools. Schools attended predominately by people of color are chronically underfunded and understaffed, and there is a noticeable graduation gap between students of color and their white counterparts. In general, the data shows that educational experiences for minority students have continued to be substantially separate and unequal. Systems thinking can serve not only as a problem-solving framework but also as a restructuring tool for creating a more equitable educational system.

The CHA showed that environmental health is one of the major problems in our society, largely affecting people of color. For example, 74% of respondents from refugee and immigrant households said unsafe housing is the biggest threat to their community. Additional concerns that were mentioned included low access to grocery stores, and 47% of the surveyed individuals reported they were not prepared for disaster. There is consensus among stakeholders and the Board of Health that addressing these environmental health issues requires application of system thinking, mainly because it incorporates understanding the interplay of the policy environment, racial justice, and public health in developing a solution.

**Priority Identification Stakeholder/Board of Health**

Community stakeholders highlighted the importance of addressing the root causes for the potential priority issues. In addition, stakeholders recognized the complexity of these issues and that a deliberate focus will need to be given to health equity as well as the upstream issues of systems and policy change.

The Board of Health advocates that the local public health system continues to engage in systems thinking practices to see the underlying complex patterns of poverty, education, and the built environment. In addition, the goals, objectives, and strategies that are developed as part of the CHIP should seek to leverage the system for the highest health impact for the Black Hawk County community.

**Mental Health & Trauma**

**Definition**

According to the World Health Organization (WHO), mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. It is more than just the absence of mental illness and can be influenced by the culture that defines it. Trauma can be defined as a psychological, emotional response to an event or an experience that is deeply distressing or disturbing. Because events are viewed subjectively, this broad definition of a trauma is more of a guideline as everyone processes a traumatic event differently because we face them through the lens of prior experiences in our lives.

**Key Data Points**

Mental health was one of the top three perceived health problems noted in the Community Health Survey. This information, coupled with the data on the prevalence of depression, increased feelings of hopeless or sadness and the number of 11th graders reporting they made a plan for suicide highlights areas of concern. Adverse childhood experiences, or ACES, are linked to chronic health problems,
mental illness and substance misuse in adulthood and 12.9% of Black Hawk County residents reported experiences 4 or more ACEs while 56% of adult Iowans reported at least one ACE.

Priority Identification Stakeholder/Board of Health
The impacts of trauma on mental and physical health, access to mental health services, reducing the stigma associated with receiving treatment, and the need for all community members to be aware and informed of mental health and trauma sensitive practices were all voiced by community stakeholders. These discussions led to the concurrence of the potential priority issues of “empowering people to move from basic (survival) needs to wellness” and “community members informed of how to respond to trauma.” The Board of Health concurred that mental health & trauma is a priority issue for inclusion in the CHIP.

Healthy Behaviors

Definition
Health behaviors are actions taken by individuals that affect health or mortality. These actions may be intentional or unintentional and can promote or detract from the health of the individual or others. Healthy behaviors are activities undertaken by individuals and/or community for the purpose of preventing (primary prevention) and detecting health problems (secondary prevention), maintaining or enhancing personal and community health (tertiary prevention), and improving quality of life. Health behaviors are associated with a multitude of health and well-being outcomes at the individual and population levels.

Key Data Points
The CHA data supports the inclusion of Healthy Behaviors as a priority issue for the Black Hawk County community based on specific health indicators and community perceptions. Data gathered during the CHA include rates related to obesity, exercise, fruit/vegetable consumption, alcohol abuse, and hours of sleep. Community members also report that they consider physical inactivity as the top risky behavior in the community and that obesity is one of the top three perceived health problems for the community along with mental health and diabetes.

Priority Identification Stakeholder/Board of Health
The promotion of healthy behaviors is traditionally identified as a priority issue for local public health systems and this was validated in Black Hawk County. At a deeper level, stakeholders recognized that using a determinants of health approach allows the focus to be on social organization and the myriad of institutions, structures, inequalities, and ideologies that form the foundation of observed variations in health behaviors. The Board of Health concurred that healthy behaviors is a priority issue for inclusion in the CHIP.
Community Assets and Resources

The CHA identified existing assets and resources that will be leveraged to address the priority health issues adopted by the Black Hawk County Board of Health. During the systems mapping workshops described in the forces of change assessment, participants were given the framing question of, “What accounts for the current level of equity experienced by our community?” Enabling forces, or assets, prioritized by the stakeholders were:

- Quality and Access to Education
- Diversity of the Community
- Presence of Coalitions & the Willingness to Work Together
- Strong Economy

The assessment also listed the upstream causes and downstream impacts for each of the enabling forces. Community partners will convene later in 2020 to identify leverage points for strategic interventions.

As part of the February 18th Community Stakeholder meeting, participants were asked to brainstorm initial resources that could or are already influencing change for the priority issues identified by the determinants of health. Community organizations and coalitions listed as resources will be invited to participate in the development of the CHIP.

<table>
<thead>
<tr>
<th>Determinant of Health</th>
<th>Resources</th>
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<tbody>
<tr>
<td>Behavioral</td>
<td>Success Street, Black Hawk County National Alliance on Mental Illness (NAMI), Peoples Community Clinic, community gardens, school wellness initiatives, ACES Coalition, EMBARC, Center for Urban Education, workforce development, ISU Extension</td>
</tr>
<tr>
<td>Economics</td>
<td>MAPP framework, community resources for research (interns, professors, student projects)</td>
</tr>
<tr>
<td>Education</td>
<td>Health services, food, transportation, safe/affordable housing, well-paying jobs = a living wage, affordable/accessible child care, family support</td>
</tr>
<tr>
<td>Environmental Health &amp; Disaster Preparedness</td>
<td>Cities/community development departments, U.S. Department of Health &amp; Urban Development</td>
</tr>
<tr>
<td>Health</td>
<td>Schools, parenting program, public health programming, community foundations, recreational opportunities in the Cedar Valley</td>
</tr>
<tr>
<td>Social</td>
<td>Black Hawk Grundy Mental Health, Boys &amp; Girls Club, churches, employers, schools, Iowa Workforce Development</td>
</tr>
</tbody>
</table>

The MAPP core team affirmed that organizations and coalitions are engaging stakeholders to address specific areas of need for the community. The MAPP Extended Core Team will be the overarching coalition providing the planning framework to address the priority health issues adopted by the Board of Health.
Economics
Black Hawk County Health Department

Black Hawk County has a higher population below the federal poverty level than the Iowa and U.S. average.

In Black Hawk County, 14.9% of Whites, 25.6% of Two or More races, and 27.5% of Black/African Americans were below the Federal Poverty Level in the last 12 months (2017).

16.5% of children in Black Hawk County were living below the Federal Poverty Level compared to 12.6% of the Iowa average (2017).

Population Below Poverty Level in Last 12 Months

<table>
<thead>
<tr>
<th>Year</th>
<th>Black Hawk County</th>
<th>Iowa</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>12.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>15.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>13.7%</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Food Insecurity in Black Hawk County

Percent of total households receiving Food Stamps/SNAP (2017): 14.2%

Percent of children eligible for free or reduced price lunch (2017): 50.0%

Percent of food insecurity for Black Hawk County population (2014-2016): 14.3%

Number of emergency food pantries in Black Hawk County: 18

Number of Meals given through Kids Cafe: 75,499

Income in Black Hawk County

Black Hawk County had a lower median household income than the Iowa and United States average.

According to the Community Health Survey, self-reported family gross annual income before taxes differed by race and ethnicity.

Unemployment rate in Black Hawk County was 5.3% (2017).

Median Household Income

<table>
<thead>
<tr>
<th>Year</th>
<th>Black Hawk County</th>
<th>Iowa</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>$49362</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>$54736</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>$60336</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source
Census Bureau
Behavioral Risk Factor Surveillance System
Child and Family Policy Center
Community Health Survey
Behavioral
Black Hawk County Health Department

Community Health Survey

Riskiest behaviors identified were alcohol abuse, illegal drug use, and physical inactivity.

Three behaviors listed as top factors that positively and negatively affect mental health: exercise, sleeping habits, and diet.

Top Risky Behaviors of Adults

- Alcohol abuse: 57.1%
- Illegal drug use: 50.9%
- Physical inactivity: 42.2%
- Texting or using a cell phone while driving: 34.4%

Exercised in Past 30 Days

- White: 75.3%
- Black/African American: 53.4%
- Average: 71.5%

Iowa’s adults that meet the daily vegetable intake recommendation: 7.0%

Iowa’s adults that meet the daily fruit intake recommendation: 10.7%

Eat at Least 1 Fruit a Day

- United States: 67.6%
- Iowa: 58.3%
- Black Hawk County: 50.2%

Adults Reporting <7 Hours of Sleep a Night

- United States: 35.1%
- Cedar Rapids: 28.4%
- Iowa City: 27.5%
- Waterloo: 30.4%
- Average: 27%

Alcohol Impaired Driving Deaths

- Black Hawk County: 12%
- Iowa: 28%

Source

Community Health Survey
Behavioral Risk Factor Surveillance System
Iowa Youth Survey
Iowa Department of Transportation

Excessive drinking prevalence in Black Hawk County was 22% (2016)

Students reporting binge drinking in Black Hawk County has decreased from 8.2% to 3.8% (2012-2018)

Total motor vehicle crashes in Black Hawk County related to drugs or alcohol was 4.3% (2017)

Alcohol impaired driving deaths was 13% for Black Hawk County compared to 28% for the Iowa average (2013-2017)
**Economics**

Black Hawk County Health Department

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</tr>
<tr>
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<td>12.2%</td>
<td>13.7%</td>
<td>15.3%</td>
</tr>
<tr>
<td>2016</td>
<td>14.7%</td>
<td>17.1%</td>
<td>14.0%</td>
</tr>
<tr>
<td>2017</td>
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<td>15.9%</td>
<td>13.4%</td>
</tr>
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**Food Insecurity in Black Hawk County**

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<tr>
<th>Category</th>
<th>Iowa</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
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<tbody>
<tr>
<td>2015</td>
<td>$48369</td>
<td>$54736</td>
<td>$55775</td>
</tr>
<tr>
<td>2016</td>
<td>$50348</td>
<td>$56247</td>
<td>$57617</td>
</tr>
<tr>
<td>2017</td>
<td>$50916</td>
<td>$58570</td>
<td>$60336</td>
</tr>
</tbody>
</table>

---

**Source**

Census Bureau

Behavioral Risk Factor Surveillance System

Child and Family Policy Center

Community Health Survey

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17
Education
Black Hawk County Health Department

Graduation Rate

Average graduation rate or Black Hawk County is 92.3% (2018)
Graduation rates range from 84.2% to 97.7% for Black Hawk County school districts (2018)

Overall Graduation Rates for Black Hawk County Schools

Overall Graduation Rates for Cedar Falls and Waterloo Combined

<table>
<thead>
<tr>
<th>Black/African American</th>
<th>Hispanic</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>83.5%</td>
<td>88.8%</td>
<td>90.2%</td>
</tr>
</tbody>
</table>

Based on a survey conducted in 2019 at 6 events, “school readiness and educational attainment” was reported as the top factor that makes a community healthy.
Survey locations included Juneteenth, Waterloo Urban Farmers Market, Peoples Clinic Tent Event, North End Fest, Cedar Valley Pridefest, and Veteran’s Stand Down.

A workshop with community leaders was held on June 27th, 2019 to understand what accounts for the current level of equity experienced by our community.

"Quality and access to education" was reported as the most positive enabling force for the community.

Source
Community Themes and Strengths Assessment
Forces of Change Assessment
Iowa Department of Education
Environmental Health and Disaster Preparedness

Black Hawk County Health Department

Blood Lead Levels

Black Hawk County children under 6 years testing positive for elevated Blood Lead Levels decreased from 1.1% in 2014 to 0.6% in 2018.

Homes built before 1949 and children in families with income below the federal poverty level is associated with lead risk.

Environmental Indicators

Unsafe Housing

Unsafe housing was reported as the top concern for environmental threats.

Food Deserts

Approximately 1 in 3 census tracts in Black Hawk County are reported as having low income and low access to a grocery store.

Disaster Preparedness

Individuals and Families Prepared for a Disaster

- 49.1% Yes
- 47.2% No
- 3.7% I Don't Know

Over 50% of the respondents to the Community Health Survey reported that they were not prepared or did not know enough about preparedness.

A large portion of immigrant participants reported they did not know if they were prepared for a disaster.

Source

Community Health Survey

Iowa Department of Public Health

United States Department of Agriculture
**Health**

**Black Hawk County Health Department**

### Asthma

- Children under age 5 made up 29.4% of the asthma inpatient visits and 8.9% of the outpatient visits.
- 75% of the inpatient visits and 50.1% of the outpatient visits for asthma of all ages were initially seen in the emergency room.

![Asthma Rates per 100k for Children Under 5 Years](chart)

**Access to Healthcare: Community Health Survey**

- **Mental Healthcare**: 6.6% of people reported they struggle with mental health issues and are not receiving help.
- **Uninsured**: 3/4 of the people that reported they were uninsured were Black/African American.
- **Costs**: Between 20.4% - 26.9% of people reported they can not access mental service, insurance, and healthcare due to income.
- **Childcare**: 19.7% of people reported they do not have access to childcare due to income.

### Low Birthweight

- 7.7% of births in Black Hawk County were low birthweight births in 2018.
- Low birthweight rates were different between races:
  - White = 325/100,000
  - Black/African American = 1,534/100,000

![Proportion of Low Birthweight Births by Race](chart)

**Sexually Transmitted Infections (STI)**

- Iowa was ranked comparatively low in STI rates as compared to other U.S. states with a rate of 467/100,000.
- Black Hawk County was ranked one of the highest amongst U.S. counties.
- In 2018, Black Hawk County had a rate of 757/100,000 (Iowa = 467/100,000) for chlamydia and 310/100,000 (Iowa = 154/100,000) for gonorrhea.

**Source**

- Iowa Department of Public Health
- Community Health Survey
- Center for Disease Control and Prevention
40.6% of the respondents to the community health survey reported their community is less healthy, and 59.4% reported their community maintained health or is healthier.

The top perceived community health problems were reported as obesity, mental health, and diabetes.

**Mental Health**

**Adverse Childhood Experiences**
- 56% of Iowans reported at least 1 ACE and 14.5% reported 4 or more ACEs
- 12.9% of Black Hawk County residents reported experiencing 4 or more ACEs

**Feelings of Hopelessness**
- 22% of students in Black Hawk County had feelings of sadness or hopelessness in 2018
- 40% of females and 25% of males in 11th grade reported feelings of sadness or hopelessness

**Depression**
- 18% of Black Hawk County residents reported they had a depressive disorder
- Depression prevalence ranged from 17.4% for Whites and 22.9% for Black/African American

**Requested Public Health Service**
- The most requested public health service was help with access to mental health care.

**Obesity**

Iowa was ranked one of the highest states for prevalence of self-reported obesity in 2018.

Obesity prevalence in Iowa in 2018 was 35.3%.

The average obesity prevalence for Black Hawk County from 2011 to 2018 was 30.3%.

The average obesity prevalence in Black Hawk County ranged from 29.3% to 49.6% depending on the racial group.

**Source**

Behavioral Risk Factor Surveillance System (BRFSS)
Community Health Survey
Iowa Youth Survey
ACEs 360
Community Health Survey

- 30.1% of the participants reported feeling ashamed or uncomfortable talking about personal issues.
- 58.3% of participants are using personal relationships for support for their childhood trauma.
- 35.2% of the respondents reported parenting skills as the top health concern for children's health.

Top Barriers for Accessing Mental Health Services

- Feeling ashamed or uncomfortable talking about personal issues: 30.1%
- Services are too expensive: 22.5%
- Have tried mental health services but they were unsuccessful: 12%

Sources of Support for Childhood Trauma

- Service Provider: 41.7%
- Family Members: 20.8%
- Friends: 16.7%
- Spouse: 12.5%
- Community Leaders: 8.3%

Access to Guns and Violent Crime

- Difficulty of Obtaining a Handgun

- Violent Crime Rate

22% of 11th graders reported that it would be easy or very easy to obtain a handgun in the community (2018).

Violent crime rate in Black Hawk County was 511/100,000 (2014 & 2016 avg).

Source

Community Health Survey
Behavioral Risk Factor Surveillance System
Iowa Youth Survey