

Purpose

The Illinois Project for Local Assessment of Needs (IPLAN) is a community health assessment and planning tool based on the National Association of County and City Health Officials Protocol for Excellence in Public Health (APEXPH) model. The Illinois Department of Public Health (IDPH) has made IPLAN their tool for the certification of local health departments as delineated in 77 ILL. Adm. Code 600.

The IPLAN process is a series of planning activities, led by the certified local health department that involves community participation in identifying the community's health problems, setting health priorities and completion of the community health needs assessment and community health plan.

This process requires a combination of subjective and objective observations, from data, surveys and input from community representatives based on professional expertise and life background.

There are three essential elements to IPLAN:

1. An organizational capacity assessment
2. A community needs assessment, and
3. A community health plan

The organizational capacity assessment purpose is to assess the internal status of the local health department in order to determine needs and strengths. The results can then serve as a guide for direction in the improvement of organizational capacity.

The community needs assessment is the process of determining the community themes and strengths, identifying the forces of changes in the community and reviewing pertinent health data, ultimately identifying the top health priorities of the community.

The purpose of the community health plan is to develop a five-year strategy to address selected health priorities in the community. It is intended to be a health plan that is created, embraced and addressed by the collective efforts of the various stakeholders.

Cass County Health Department IPLAN Priorities

1994-1999 Health Priorities:

1. Heart Disease
2. Breast Cancer
3. Low Infant Birth-weight

1999-2004 Health Priorities (Extended to 2007):

1. Cardiovascular Disease
2. Osteoporosis
3. Mental Illness

2007-2012 Health Priorities:

1. Heart Disease and Stroke
2. Lung and Prostate Cancer
3. Access to Health Care

2012-2017 Health Priorities:

1. Heart Disease
2. Cancer
3. Obesity

2017-2022 Health Priorities:

1. Access to Behavioral Health & Substance Abuse Providers
2. Heart Disease
3. Obesity

Background

County Description

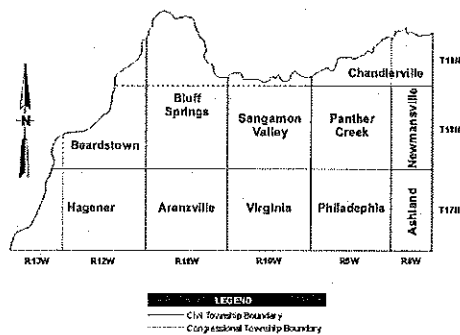
Cass County is located in west-central Illinois. According to the 2016 census estimates, it has a population of 12,676, which is a decrease of 7.1% from 13,638 in 2010. Its county seat is Virginia. It is the home of Jim Edgar Panther Creek State Fish and Wildlife Area.

Cass County was formed in 1837 out of Morgan County. It was named in honor of Lewis Cass who was a general in the War of 1812, Governor of the Michigan Territory, and United States Secretary of State in 1860. Cass was serving as Andrew Jackson's Secretary of War just before the County was named. The ancestry of Cass County is from a wide variety of countries, but the largest groups were German, Scotch-Irish, and English when the county was first formed in the 1800s.

According to the 2010 census, Cass County has a total area of 383.76 square miles (31 miles east to west and 17 miles north to south), of which 375.82 square miles is land and 7.95 square miles is water. The land is primarily allocated for corn and soybean production and for grazing livestock. Surrounded by fields and pastures, towns in Cass County are islands located miles from each other. There are 36.3 persons per square mile compared to 231.1 persons per square mile for the State of Illinois.

Adjacent counties include Mason County to the northeast, Menard County to the east, Sangamon County to the southeast, Morgan County to the south, Brown County to the west and Schuyler County to the northwest. The Illinois River divides Cass County from Schuyler County on the northwest and the Sangamon River divides Cass from Mason County on the northeast.

There are four major highways running through Cass County. They are US Route 67, Illinois Route 78, Illinois Route 100 and Illinois Route 125. Cass County is divided into two cities (Beardstown and Virginia) and three villages (Arenzville, Ashland, and Chandlerville). There are three other very small villages that no longer have post offices, which are Bluff Springs, Newmansville and Philadelphia. The county is divided into 11 townships that include: Arenzville, Ashland, Beardstown, Bluff Springs, Chandlerville, Hagener, Newmansville, Panther Creek, Philadelphia, Sangamon Valley and Virginia.



Populations of cities and villages:

Beardstown – 5,882
Virginia – 1,551
Ashland – 1,289
Chandlerville – 535
Arenzville – 398

Based on 2014 population estimates

There are three school districts in the county. A-C Central CUSD #262 has an elementary school in Chandlerville and a middle and high school in Ashland. Beardstown CUSD #15 has a middle and high school, Gard Elementary School, and Grand Avenue School in Beardstown. Virginia CUSD #64 has an elementary, junior high and high school located in one location in Virginia. There are a total of 3,158 children ages 3 and over enrolled in the three school districts. High school graduates in Cass County comprise 86% of the population compared to Illinois at 82%. Persons living in Cass County with Bachelor's degrees or higher degrees were only 14% of the population compared to 27.4% in Illinois.

Cass County is located in Illinois' 18th Congressional District, 93rd House of Representatives District, and 47th Senate District. There are 1,034 veterans living in Cass County.

Demographics

According to the United States Census of 2010, there were 13,642 people, 5,057 households, and 3,561 families residing in Cass County, Illinois. There were 5,836 housing units. The racial make-up of the county was 11,769 Whites, 419 African Americans, 44 Asians, 38 American Indian/Alaskan Natives, 1 Native Hawaiian or Pacific Islander, and 1,185 others. Persons identifying two or more races totaled 186. There were 2,291 Hispanics living in Cass County and 11,351 non-Hispanics. Census studies show that the State of Illinois had 2.03 million Hispanic residents in 2010 up from 1.53 million in 2000. The study stated that in all, 15.8% of Illinois residents identified themselves as Hispanic. It is believed that there are more Hispanics living in the county than reported in the census, however, since 65% of the children attending Gard Elementary and Grand Avenue schools in Beardstown are Hispanic. It seems to be very difficult to get an actual count of Hispanics living in Cass County because many of them are undocumented persons who do not wish to have any contact with census takers. The census shows that there are 987 persons residing in Cass County who are not U.S. citizens but we are sure this number is much higher. There are 201 naturalized U.S. citizens living in our county. More recently, an influx of Africans have moved into Cass County with many emigrating from Benin, Guinea, the Ivory Coast, Senegal, Nigeria, and Togo. The overall estimated population of immigrants in Cass County for 2015 was 18% Hispanic and 4% African via census.gov statistics.

There are 6,838 males and 6,804 females living in the county (2010 US Census). Children under the age of 18 total 3,401. Those 18 and over amount to 10,241. Other age groups are:

- 18 to 19 years old – 341 persons
- 20 to 24 years old – 771 persons
- 25 to 34 years old – 1,659 persons
- 35 to 49 years old – 2,755 persons
- 50 to 64 years old – 2,573 persons
- 65 years old and over – 2,142 persons

Languages spoken in Cass County include mostly English, Spanish and French. JBS, a pork processing plant located in Beardstown, has been responsible for bringing many new residents to Cass County from other countries including Mexico, Puerto Rico, Salvador, Guatemala, Cuba, Dominican Republic, and Togo (Africa). The people from Togo and other African countries speak French.

Cass County remains a poor county. The median family income in Illinois is \$51,914. The median family income in Cass County is \$51,624 however 1,671 of the 3,494 families' income was less than \$40,000. The median non-family income is \$25,362. Persons living below the poverty level between 2006 and 2010 were 12.9 percent of the population. The unemployment rate for Cass County as of December 2016 was 5.9%.

The health system in Cass County continues to improve over the past five years. Cass County still does not have a hospital and residents of the county rely on neighboring counties to provide hospital services. There are two ambulance services in the county. One is located in Virginia in the east side of the county and the other is located in Beardstown in the west side of the county. Hospitals most commonly used by Cass County residents include Culbertson Memorial Hospital in Rushville, Passavant Area Hospital in Jacksonville, St. John's Hospital in Springfield, and Memorial Medical Center in Springfield.

Cass County currently has three health clinics. Taylor Clinic is owned by Culbertson Memorial Hospital and employs a physician, a physician's assistant, and a nurse practitioner. The Cass County Health Department operates two Federally Qualified Health Centers in Cass County. They are located in Virginia and Beardstown. The Beardstown office employs one physician and the Virginia office has a nurse practitioner. The Cass County Health Department also has a dental clinic at their Virginia location. The dental clinic accepts private insurance, self-pay on a sliding fee scale, and Medicaid as do both health clinics. The health clinics also accept Medicare. Both Taylor Clinic and the Cass County Health Clinics offer outpatient behavioral health services.

Cass County Health Department

Besides two Federally Qualified Health Centers and dental clinic mentioned above, the health department also offers home health, hospice, Teen Reach, environmental health, and many other services to the residents of Cass County and the surrounding area. The clinics are also School-Linked Health centers providing services to all three school districts in the county. The health department also provides Women, Infants & Children (WIC) along with Family Case Management (FCM) services. The Cass County Health Clinics and the health department provide immunizations to all ages.

The Cass County Health Department's main office is located in the city of Virginia. Our satellite health department office is located in the city of Beardstown. The health clinics are also located in these offices. The dental clinic is in the Virginia office. Cass-Schuyler Area Hospice and Cass County Home Health are programs offered by the Cass County Health Department based out of our Virginia office. They are both Medicare-certified programs that service a five county area in West-Central Illinois.

The Cass County Health Department is committed to the health needs of Cass County residents and its mission:

"The Cass County Health Department (CCHD) is committed to the philosophy that each individual human being has the basic right to expect and secure prevention information and public health services that are necessary to promote and sustain their optimal physical, psychological, and spiritual well-being. Based on this philosophy, CCHD acknowledges its responsibility to promote health and wellness through progressive and effective programs that will prevent disease and its complications."

The goal of public health is to prevent disease and promote healthy choices. Public health is a dynamic field that must continue to respond and adapt to current health issues as well as maintain quality service to meet basic health needs. There are always new challenges as emerging diseases are discovered and the needs of the populations change over time.

Services

The range of services provided by Cass County Health Department (CCHD) is very comprehensive. CCHD offers programs that provide or ensure vaccinations; the control of infectious diseases; safe and healthier foods; health mothers, babies and children; safe drinking water and septic systems; prevention of chronic diseases; home health and hospice services; STD testing and education; vision and hearing screening; emergency preparedness for all citizens; preventative and restorative dental services; primary health care services; and an active after-school and summer Teen Reach program for children in the Virginia and Beardstown communities. A health educator is very active in the county schools providing education on various public health topics and prevention messages to all ages. Appendix A illustrates the current organizational chart of the Cass County Health Department.

Community Outreach

One of the essential public health services is to inform, educate and empower people about health issues. By maintaining a presence at community events, CCHD has provided the residents of Cass County with a wide range of information, from awareness of appropriate behavior at given developmental stages in a child's life; risk factors in the transmission of HIV and other sexually transmitted diseases, and other communicable diseases; vaccination scheduling;

modifiable risk factors for heart disease, cancer, and other life-style related diseases; emergency preparedness and response; environmental health; and a host of other topics.

The range of activities includes attendance at health fairs and school resource fairs; community events such as fairs and commemorative events; presentations to populations at risk for a variety of health problems such as seniors, children and adolescents in schools, and Latino and African mothers; and information disseminated through the media. Our two FQHC clinics and dental clinic have proven to be valuable assets to the public by providing immunizations, school and sports physicals, dental examinations and care, breast exams, blood work, and traditional screenings for chronic diseases.

Quality Assurance

As a public agency, Cass County Health Department is subject to scrutiny by a number of governmental, professional, funding and other regulatory agencies on an ongoing basis. Individually, license and certified staff go through periodic review for licensure, such as nursing and sanitation. Clinical areas and laboratories are subject to inspection for compliance standards, as well as ongoing monitoring of safety and efficiency.

Funding agencies require regular reports on the outcomes of many services such as lead screening, WIC, Family Case Management, immunizations, School-Linked Health Center and FQHC Clinics as well as other grant-dependent programs.

The health department employs a Quality Assurance Nurse who monitors all programs of the health department. Reviews are done on a monthly or quarterly basis, depending on the program. Her reports include chart reviews as well as investigation of any adverse events. A synopsis of the findings is then reviewed with the Administrator, department heads and staff of the program.

Regular meetings are held with department supervisors every other week and with the entire staff monthly to provide the opportunity to evaluate performance, assess and intervene in problem areas, and quickly disseminate changes in practice and policy that affect the outcomes of service. A monthly calendar is published for all staff members so that health department news and activities are up-to-date and quickly accessed by all employees.

The Cass County Board of Health meets on a monthly basis on the fourth Wednesday of each month. Board members are updated on health department performance for all programs and they in turn provide guidance to both the health department and the county on public health concerns.

Organizational Capacity Assessment

The Cass County Health Department completed the National Association of County and City Health Officials (NACCHO) Local Health Department Self-Assessment Tool. This tool is used to determine operational definition of a functional local health department capacity assessment for accreditation preparation.

To complete the self-assessment departmental leaders were polled via a questionnaire to determine the current status of health department function. Each operational definition was rated using the following scale:

- 0 = No Capacity: There is no capacity, planning, staff, resources, activities, or documentation to fulfill the indicator.
- 1 = Minimal Capacity: There is minimal planning and staffing capacity to fulfill the indicator but no implementation activity or documentation.
- 2 = Moderate Capacity: There is moderate planning, staffing and other resources to fulfill the indicator but only minimal activity and/or documentation.
- 3 = Significant Capacity: There is significant planning, staffing, and other resources and a moderate amount of activity and/or documentation.
- 4 = Optimal Capacity: There is significant planning, staffing and resources and significant to optimal activity and/or documentation to fulfill the indicator.

A high level of perceived importance was indicated for most areas of public health practice. The Cass County Health Department departmental leaders were in agreement that the health department has optimal capacity in the following areas:

1. Local Health Department uses appropriate equipment and technology.
2. LHD maintains and uses information systems (email, shared electronic database files, intranet).
3. LHD has an electronic linkage with local and statewide databases.
4. An electronic disease reporting system exists between the LHD, healthcare providers, and others in the community who are potential disease reporters.
5. LHD contributes to and/or maintains a registry (log of all known events of a certain type in the community such as immunization or communicable disease).
6. LHD staff can be contacted at all times.
7. There are LHD staff who are trained in selecting a community health assessment model, organizing and conducting a community health assessment process.
8. LHD organizes community health data for assessment purposes.
9. Broad participation of community stakeholders in the assessment process is secured.
10. A community health assessment process is conducted every five years.
11. Data is shared with community partners and integrated into the community health assessment.

12. LHD develops and maintains relationships with community and public health system partners.
13. Assessment processes by community agencies include the LHD and community partners as participants.
14. Completed community health assessment is shared with healthcare providers, community partners, local, state and federal governance.
15. LHD has personnel on staff that can carry out an outbreak investigation.
16. LHD has a surveillance system that triggers investigations.
17. LHD uses appropriate investigation techniques.
18. LHD has enough staff trained to alleviate adverse health events and/or has access to the appropriate expertise.
19. LHD informs and educates the public about adverse health events, including information such as the nature of the situation, how to respond, and where to find resources.
20. LHD implements the established epidemiological protocol for mitigation, including disease-specific procedures for alleviating an outbreak, such as providing prophylaxis, and conducting follow-up documentation and reporting.
21. LHD conducts routine programs to protect the public from vaccine preventable diseases, such as pneumonia and influenza.
22. LHD assists other governmental agencies in responding to specific health problems and hazards.
23. LHD coordinates a planning committee including a diverse set of public health partners to investigate and respond to health problems.
24. LHD routinely communicates with other governmental agencies on health problems in the community.
25. LHD coordinates action with other governmental agencies.
26. LHD staff demonstrates competency in preparing for and responding to public health emergencies.
27. Emergencies that trigger use of the response plan are defined.
28. LHD develops a plan with emergency response partners that outline responsibilities, communication networks, and evacuation procedures.
29. LHD leads the annual testing of its emergency response plan, through the use of drills and exercises, including coordination of public health response capacity with local, state, and federal agencies.
30. LHD leads in an annual revision of its emergency response plan.
31. LHD identifies volunteers and trains them.
32. LHD has staff that is competent in assisting other agencies when emergencies are not directly related to public health.
33. LHD staff attend preparedness planning meetings and exercises sponsored by other organizations.
34. LHD participates in local, regional and state all-hazards response planning.

35. LHD has adequately trained staff to collect and handle clinical and environmental samples in an appropriate manner.
36. LHD handles clinical and environmental laboratory samples appropriately, based on laboratory standards using state-wide laboratory protocol for reporting, collecting, handling and transporting laboratory specimens.
37. LHD assess the availability and maintains access to epidemiological and statistical expertise, including consultations with appropriately trained epidemiologists.
38. LHD has surge capacity including accessing available laboratory capacity when needed in response to an outbreak.
39. LHD has and maintains appropriate technology for 24/7 communications.
40. LHD maintains appropriate technology for electronic emergency communication and data exchange.
41. LHD uses multiple methods for dissemination of public health messages.
42. LHD tests its emergency data exchange capabilities annually.
43. Uses After Action Plan to address effectiveness of the emergency activities and to make improvements.
44. LHD develops and maintains a current database of local media partners and contact information.
45. LHD has staff competent in working with the media.
46. LHD provides media with updates on public health events and issues.
47. LHD has a media strategy that includes formal (press releases) and informal opportunities for communicating with the media and responding to media requests, along with routine communication to raise awareness of public health issues.
48. LHD works with a network of stakeholders to gather and share data and information.
49. LHD continuously develops current information on health issues that affect the community.
50. Responds to requests for information in a timely manner.
51. LHD uses principals of social marketing to understand the information needs of specific populations.
52. The public knows how to obtain health data and information from the department.
53. Accurate and current information is available and health education is provided in formats that are culturally appropriate, linguistically relevant and accessible to target and special populations.
54. LHD uses the community health assessment to develop health education information.
55. Members of the target population participate in the development and distribution of health education materials. Appropriate methods are used for distributing culturally appropriate materials.
56. LHD staff has health promotion knowledge and skills.
57. LHD provides technical assistance to communities and community agencies on health promotion activities.

58. LHD involves a variety of disciplines in the design and implementation of health promotion programs.
59. LHD identifies populations at risk as potential target populations for health promotion programming. LHD program designs use proven intervention strategies.
60. LHD evaluates health promotion efforts every two years, the results of which are used to improve programs.
61. LHD develops and revises performance measures, goals and objectives for annual program planning based on information obtained through evaluation of health promotion activities.
62. LHD has a community health planning structure in place, including community partners.
63. The planning team uses the community health assessment to inform the selection of priorities.
64. Community assets are identified.
65. Gaps are identified through analysis of the results with periodic surveys and other assessment information.
66. Community satisfaction is assessed and gaps are identified.
67. Partnership effectiveness in improving community health is assessed.
68. The performance of the public health system is assessed.
69. LHD leads a process to assess and analyze effectiveness of public policy and community environment to improve health and shares the results publicly.
70. Goals and objectives are established in the plan.
71. Plan identifies emerging issues which may require investigation.
72. Strategies and best practices are selected to increase potential for success.
73. LHD has current information on health issues that affect the community readily accessible.
74. LHD conducts a community education and marketing process to increase the awareness of the community health improvement plan and its recommendations.
75. LHD staff establishes and maintains partnerships with public and private organizations to perform collective work to address public health issues.
76. LHD partners with community organizations that contribute to the Essential Public Health services/program implementation.
77. Participate in coalitions addressing community health issues.
78. System partner organizations align their program activities and/or organization plans with community objectives.
79. LHD maintains a directory of community organizations and system partners.
80. LHD encourages constituent participation in community health activities.
81. LHD forms alliances or coalitions around specific public health policy issues.
82. LHD participates in coalitions led by other community partners.
83. LHD monitors its progress in implementing public health services and interventions and analyzes information to compare to performance to plan targets or benchmarks.

84. LHD maintains capacity to interact with the legislative process and governing body.
85. LHD submits a budget and justification that reflects program priorities and community needs.
86. LHD engages in public health policy development, identifying, prioritizing and monitoring public health policy issues.
87. LHD staff is up to date with current public health topics.
88. LHD staff is knowledgeable about the legislative process.
89. LHD maintains formal and informal relationships with legislative and governing body representatives.
90. LHD has a tracking system in place to monitor public health issues under discussion by governing and legislative bodies.
91. LHD staff attends appropriate legislative events.
92. LHD staff has the competencies/skills to advocate effectively for public health policy.
93. LHD maintains a directory of potential policy partners.
94. LHD engages community partners in policy development process and LHD legislative agenda.
95. LHD conducts advocacy for local, state, and national policies and legislation that protect and promote the public's health.
96. LHD develops a legislative agenda/strategy to reflect community needs and priorities.
97. LHD leadership recognizes need for and undertakes an organizational strategic planning process.
98. LHD staff has expertise to lead and facilitate the strategic planning process.
99. LHD conducts a formal strategic planning process that considers its mission, vision and role in the community in relation to the assurance of the 10 Essential Public Health Services.
100. LHD uses assessment data on community health problems and emerging health threats to develop annual program goals to develop policy.
101. LHD identifies new strategic opportunities for promoting public health activities.
102. The LHD widely disseminates its strategic plan and shares with the public and key stakeholders.
103. LHD has legal expertise, county attorney or other legal counsel, available to assist in the review of laws and regulations.
104. The LHD, with participation of its governing body, reviews policies and procedures within its legal scope of authority on a regular periodic basis.
105. LHD evaluates the need for changes in rules, regulations, and ordinances.
106. LHD identifies its legal authority to develop, implement and enforce public health policy.
107. LHD and governing body drafts modifications and/or formulations of laws and informal policy makers of the needed statutory and regulatory updates.
108. LHD uses a model public health emergency act in reviewing the local public health authority for managing emergencies.

- 109.LHD understands the intent of law and regulations.
- 110.LHD reviews its programs to determine whether program changes are needed to better carry out legal mandates.
- 111.LHD identifies organizations with regulatory and enforcement authority.
- 112.LHD staff is competent to provide education to regulated entities.
- 113.LHD makes written policies, local ordinances, administrative code, and enabling laws accessible to the public.
114. LHD provides appropriate education to regulated facilities at the time of inspection.
- 115.LHD invites regulated entities to education programs on new and/or updated regulations as appropriate.
116. LHD conducts inspections of regulated entities as appropriate and monitors compliance.
117. LHD staff is capable of analyzing data trend over time.
118. LHD has a system to track compliance records for each regulated entity over a period of time.
- 119.LHD workforce is skilled in enforcement procedures and credentialed as appropriate.
- 120.LHD uses a risk analysis method and a work plan to guide the frequency and scheduling of inspections of regulated facilities.
- 121.LHD routinely conducts enforcement activities according to procedures and protocols and rules are applied consistently.
122. LHD promptly conducts enforcement activities needed in response to an emergency.
123. Rapid communication capability can be demonstrated between the LHD and other enforcement entities.
124. LHD has a comprehensive knowledge of other agencies involved in enforcement in the protection of the public health.
- 125.LHD develops and executes communication protocols for the notification of other enforcement agencies.
126. LHD staff has an understanding of access to care issues in their community.
127. LHD staff are competent in program planning and community development methods.
- 128.LHD engages a diverse set of community partners, representing communities of color, tribal representatives and specific populations, to identify program gaps and barriers.
- 129.LHD, in partnership with community partners, interprets qualitative and quantitative information on program gaps, developed through surveys, focus groups, interviews or other means of primary data collection.
- 130.LHD uses criteria periodically to evaluate access, quality, appropriateness and effectiveness of preventative and personal health services in the community.
131. LHD identifies community health and prevention priorities to reduce access barriers every 5 years.
- 132.A plan is in place for prevention and health promotion which identifies efforts to link public and private partnerships into a network of personal health and prevention services.

- 133.LHD maintains the capacity to provide healthcare services when local needs and authority exist, and the appropriate agency capacity and adequate additional resources can be secured.
134. LHD convenes or participates in a collaborative process with community healthcare providers, social services organizations, and community stakeholders to coordinate service delivery and to reduce barriers to accessing primary and preventative services.
- 135.LHD develops and implements strategies to increase utilization of public health programs and services.
- 136.LHD, in partnership with other community agencies, identifies gaps in access to critical health services through analysis of the results of periodic surveys and other assessment information and work collaboratively to address the gaps.
137. LHD refers to personal healthcare resources as needed.
138. LHD uses a tracking system for healthcare referrals.
139. LHD engages local lay health advocates for outreach to special populations in need of healthcare.
140. LHD provides community outreach and linkage services, making referrals to a current, comprehensive list of community health and wellness resources.
141. LHD enrolls or links to enrollment agents potential beneficiaries in Medicaid or Medical Assistance Programs.
142. LHD informs the public, through a variety of methods, about services and resources available through the LHD to reduce specific barriers to access to care.
- 143.LHD has formally organized human resources function.
144. LHD has policies that promote and facilitate staff access to training.
145. LHD has a non-discriminatory employment policy.
146. LHD develops, uses, and revises job standards and position descriptions.
147. LHD determines needed competencies, composition, and size of its workforce and seeks job applicants to fill those needs.
148. LHD periodically assess its capacity in relation to the needs of the population it serves.
149. LHD provides new employee orientation, employee-in-service and continuing education experiences where appropriate.
150. A learning management system is in place to organize competency assessments and training and educational opportunities to address deficiencies.
151. Training and leadership opportunities are available.
- 152.LHD assesses its staff members to identify deficiencies in knowledge, skills and authority; and remedial action is taken when required.
153. LHD provides incentives for the workforce to pursue education and training.
154. LHD provides opportunities for continuing education and training.
155. LHD provides opportunity for leadership development for its staff.

156. LHD encourages or requires relevant certification and credentialing programs for individuals, not otherwise licensed or monitored by the state and whose activities can affect the health of the public.
157. LHD assures that each staff member has attended training within the past 24 months to maintain competency.
158. LHD provides a coordinated program of continuing education for staff which includes attendance at seminars, workshops, conferences, in-service training, and/or formal courses to improve employee skills and knowledge in accordance with their professional needs.
159. LHD supports staff conference attendance and peer exchange opportunities.
160. LHD has partnership agreements in place with universities, schools or programs of public health and/or colleges to enrich both public health practice and academic settings.
161. LHD partners with academic institutions to provide clinical sites for training programs and for using LHD staff as guest lecturers or adjunct professors.
162. LHD implements plans for developing research focused interactions with academic institutions, including practice based research projects.
163. LHD has agreements in place with public health systems partners for workforce assessment, training and professional education.
164. LHD shares best public health practices with community partners at meetings in the community.
165. LHD makes presentations at public health and healthcare conferences.
166. LHD has identified funding sources for workforce job support activities.
167. LHD routinely makes public health and discipline-specific journals available for staff to stay updated in the field.
168. LHD has data from the community health assessment on community health outcomes and risk factors readily available for evaluation purposes.
169. LHD has staff or external consultative resources with evaluation expertise assigned responsibility for evaluation within the organization.
170. LHD has plans in place to reduce specific gaps in access or make other improvements in public health services.
171. LHD has and executes an internal policy to guide its overall evaluation efforts, including frequency and scope of program evaluations, organizational evaluations, use of health outcomes as benchmarks for evaluations.
172. LHD monitors program performance measures and analyzes data to document the progress toward goals and grant/funding requirements.
173. LHD provides consultation and technical assistance on program implementation and evaluation of prevention services provided by other community agencies.
174. LHD partners with academic/research institutions of higher education that are interested in conducting public health research.
175. LHD disseminates research findings to public health colleagues, public health system partners, governing body, policymakers and the community at large.

176. LHD provides expertise in creating innovative solutions based upon research, and shares them with elected officials and community organizations involved in developing and analyzing public policy and in planning implementation of population-based strategies.
177. LHD implements, on a priority basis, newly developed and innovative strategies, methodologies, programs, and projects, which have been demonstrated to be effective in improving public health; and records outcomes for further validation and use in future planning.

The Cass County Health Department departmental leaders were in agreement that the health department has significant capacity in the following areas:

1. LHD staff has expertise and training to collect, manage, integrate and display health-related data.
2. LHD collects, reviews, and analyzes comprehensive primary data and secondary data from a variety of reliable sources.
3. LHD staff has the appropriate knowledge of standards and processes for conducting a community health assessment.
4. Comparison of local data to other jurisdictions and/or the state or nation.
5. LHD staff demonstrates capacity to develop materials and conduct education campaigns designed to improve health behaviors.
6. LHD has an overall strategy/plan for its delivery of population-based health promotion and disease prevention programs.
7. Financial and human resources are organized to conduct program activities and maintain partnerships.
8. LHD communicates routinely with legislative and governing bodies to raise awareness of current public health issues and emerging issues affecting the community.
9. LHD provides expertise to legislative and governing body(s) in setting public health priorities and planning public health programs.
10. LHD provides knowledge of disease trend, best practices and current public health science when needed for legal reviews.
11. LHD studies laws and understand public health issues that can only be addressed through laws.
12. LHD evaluates the quality of clinical and preventive population based programs, identifies the need for change and uses a quality improvement process to apply the evaluation findings.
13. LHD maintains data systems for capacity, availability, quality, cost and utilization of health services.
14. LHD has access to expertise to evaluate current research and participate in research and best practices dissemination activities.

The Cass County Health Department departmental leaders were in agreement that the health department has moderate capacity in the following areas:

1. Providers and other appropriate healthcare system partners are educated and trained in collecting and reporting data to the LHD.
2. LHD analyzes and identifies patterns in data.
3. LHD draws inferences from data to identify trends over time, health problems, environmental health hazards, and social and economic conditions that adversely affect the public's health.
4. LHD assesses the target population for how they accept information.
5. Implementation progress is systemically monitored.
6. LHD recruits individuals and organizations to play leadership roles on public health issues.
7. LHD conducts evaluation activities that include an analysis of local data with established community health goals, objectives and performance measures.
8. LHD identifies and uses community health target outcome as benchmarks for evaluating the effectiveness of public health programs and services.
9. LHD uses an acceptable evaluation framework that connects the public health intervention with health outcomes produced, based on the collection and use of evidence.
10. LHD periodically evaluates its key processes of service delivery for efficiency and effectiveness, using established criteria.
11. LHD makes formal efforts to identify best practices or benchmarks for evaluation purposes.
12. LHD has a systemic process for assessing consumer and community satisfaction with agency services.
13. LHD evaluates the accessibility, quality, and effectiveness of personal health services.
14. LHD has resources that make it possible for the LHD to participate in research.

The Cass County Health Department departmental leaders were in agreement that the health department has minimal capacity in the following areas:

1. Healthcare providers and other public health system partners receive reports and feedback on disease trends and clusters.
2. LHD makes data analysis usable to others.
3. LHD graphs and tables indicate whether the problems identified by the community health assessment are improving or worsening.
4. LHD allocates resources for strategic planning.
5. LHD develops or updates the agency strategic plan every 24 months.
6. LHD evaluates a selected number of enforcement actions each year to determine compliance with and effectiveness of enforcement procedures; Evaluation used for quality improvement (QI) activities.
7. LHD provides for staff training in cultural sensitivity and cultural competency.

The Cass County Health Department departmental leaders were in agreement that the health department has no capacity in the following areas:

1. LHD uses quality improvement process between LHD and providers to make it easy for providers to report.
2. LHD conducts a small area analysis using GIS.
3. LHD assures that a systemic process for assessing consumer and community satisfaction with external agency services is in place.
4. LHD has policies which endorse participatory research and ensures the rights of participants in local public health research programs.
5. LHD proposes public health practice issues to be used by academic institutions when they select research agendas, as appropriate.
6. LHD convenes community members and key community partners, as appropriate, to identify opportunities for the community to participate in research that would benefit the community.
7. LHD evaluates current research and participates in research translation activities.
8. LHD seeks information about applicable evidence-based research and program models before implementing interventions.
9. LHD provides technical assistance to external organizations in applying relevant research results.

Community Needs Assessment

Members of the Cass County Interagency Council and the Cass County Health Department Board of Health members represent a broad cross-section of the community and have a wide representation of community knowledge, awareness of issues across age, income, education, racial and ethnic backgrounds, administrative level viewpoints as well as grassroots program/service implementation experience. This well-established group agreed to serve as our IPLAN Community Committee to help us in conducting the Community Needs Assessment. The current health status of the community was assessed, needs were identified, and a comprehensive community health improvement plan was created to help improve our county's health by acquiring input from community partners, elected officials and residents.

Members of the Cass County Interagency Council include:

Tina Arnold	Alzheimer's Association
Melanie Adams	Alzheimer's Association
Debbie Deopere	Area Agency on Aging for Lincolnland
Terry Moore	Area Agency on Aging for Lincolnland
Vikki Torres	Area Agency on Aging for Lincolnland
Felicia Farmer	Area Agency on Aging for Lincolnland
Patricia Brewer	Cass County Council on Aging
Amy Thompson	Cass County Health Department
Shelly Taylor	Cass County Health Department
Teresa Armstrong	Cass County Health Department
Julie Goddard	Cass County Health Department
Andrew English	Cass County Health Department
Tiffany Angelo	Cass County Health Department
Nicole Roegge	Cass County Health Department
Delaney Sieving	Cass County Health Department
Mindy Marr	Cass County Health Department
Diana Feigl	Cass County Mental Health
Kevin Tavender	Cass Schuyler Public Transit
Lisa Kluge	Cedarhurst
Jo Turner	Crisis Center of Jacksonville
Dona Leanard	Crisis Center of Jacksonville
Yolanda Hernandez	Local HFS Office
Becky Stevens	DHS DRS
Becky Hatlee	Home Instead Senior Care
Susan Nolls	Jacksonville Area Center for Independent Living
Valarie LeSeure	Land of Lincoln Workforce Alliance
Sandra Lux	PACT for West Central Illinois
Lori Hartz	Passavant Area Hospital

Nancy Thorsen

Prairie Council on Aging

Members of the Cass County Board of Health include:

Ron Aggertt	Financial Advisor, West Central Bank
Joyce Brannan	County Board Member
Ann Chelette	Retired School Health Coordinator
Eva Lynn	County Board Member
Lesley Newell	Homemaker
Brent O’Daniell	Virginia School District Superintendent
Hollie Reid	Human Resources, Cass Communications
Amy Parlier	Controller, Cass Communications
Dr. Alan Deckard	Physician-Internal Medicine, SIU

The Cass County Health Department developed a survey which was distributed via a Survey Monkey link on the internet and also paper copies which were distributed at various employers throughout Cass County as well as several community events. The Survey Monkey link was accessible through the Cass County Health Department website and Facebook page as well as distributed via email through the Beardstown Chamber of Commerce. A copy of the survey results has been attached. (Appendix B)

Over the course of approximately one month, 153 individuals responded to the survey with 143 being Cass county residents. There were a total of 142 English responses, 7 Spanish responses, and 4 French responses. Of the 153 respondents 92.93% were White, non-Hispanic; 5.05% were Hispanic or Latino; 1.01% were Black or African American; and 1.01% identified as Other.

The total number of respondents from each community included:

8 (5%)	Arenzville
10 (7%)	Ashland
69 (45%)	Beardstown
3 (1%)	Bluff Springs
13 (9%)	Chandlerville
40 (26%)	Virginia
10 (7%)	Outside Cass County

From the survey, we learned that Cass County residents view the most significant health concerns to be drug and alcohol use and mental health. The leading causes of death are heart disease, cancer, and chronic lower respiratory disease, while many residents suffer from risk factors for chronic disease such as high blood pressure and high cholesterol. Inactivity, poor diet and nutrition and high smoking rates are identified as significant lifestyle behaviors that are most likely contributing to chronic disease rates.

Respondents cited insurance issues as a significant health issue or concern facing their community. Many residents feel that insurance premiums are much too expensive for little to no coverage for them or their families. Respondents agreed that medical, dental and mental health services were accessible in our county but ranked each discipline as “high” when asked to prioritize the improvement and expansion of these services. Many expressed concern over the issue of clinics keeping primary care physicians and the lack of a hospital in Cass County.

Respondents viewed family and social service programs as important and believed the county had numerous assets in this area, including faith-based services, food pantry and meal delivery services, pre-school programming for low-income children, and other support devices for low-income families. Many residents disagreed (39%) that there are affordable child-care services in Cass County or that childcare providers and services are adequate (41%). An increase in quality affordable daycare, pre-school and after-school programs are seen as much needed for parents of our communities.

Please see Appendix B for the Cass County Health Department Community Needs Assessment survey results. The results of this survey will be broken down by specific community and those results will be distributed to the communities at a later date.

Prioritization of Community Health Problems

Staff of the Cass County Health Department and members of the Cass County Interagency Council discussed the list of health-related issues using the simplex method that they felt should be addressed in Cass County. The list consisted of the following health problems.

- Drugs/Alcohol
- Insurance Issues
- Lack of hospital in Cass County
- Cancer
- Mental Health
- Keeping Physicians
- Health Education
- EMS Services in county
- Diabetes
- Lack of prompt care/weekend physician hours
- Obesity
- Heart Disease
- Smoking
- Stress
- Teen Pregnancy
- Communicable Disease Prevention
- Allergies
- Flu/Flu Vaccines
- Dental Care
- Water Quality
- Insect Issues

The top five problems that were decided upon by the committee were:

- Access to Behavioral Health & Substance Abuse Providers
- Obesity
- Heart Disease
- Cancer
- Diabetes

After much discussion, the IPLAN Committee chose three priority health needs that would be addressed by the Cass County Community Health Plan. These needs are:

1. Access to Behavioral Health & Substance Abuse Providers
2. Heart Disease
3. Obesity

Community Health Plan

Health Priority # 1: Access to Behavioral Health & Substance Abuse Providers

The first priority health that was chosen by the committee is Access to Behavioral Health & Substance Abuse providers. The term “behavioral health” is often used interchangeably with “mental health”. Mental health refers to an individual’s ability to negotiate the daily challenges and social interactions of life without experiencing undue emotional or behavioral incapacity. Mental health and mental disorders can be affected by numerous conditions ranging from biologic and genetic vulnerabilities to acute or chronic physical dysfunction to environmental conditions and stress. Addressing the range of these contingencies requires a balance of minimizing risk factors and maximizing protective factors and combining prevention with treatment. The committee felt that this health priority should be selected based on the number of survey responses indicating drugs and alcohol to be a major health concern (57) in Cass County paired with the lack of substance abuse and mental health counselors available in the area.

According to the Substance Abuse and Mental Health Service Administration’s 2014 National Survey on Drug Use and Health (NSDUH) an estimated 43.6 million (18.1%) Americans ages 18 and up experienced some form of mental illness. In the past year, 20.2 million adults (8.4%) had a substance use disorder. Of these, 7.9 million people had both a mental disorder and substance use disorder, also known as co-occurring mental and substance use disorders. Lifetime estimates of the prevalence of mental illness are even higher, making prevalence of mental illness comparable to that of many physical illnesses.

Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home. In 2014, about 21.5 million Americans ages 12 and older (8.1%) were classified with a substance use disorder in the past year. Of those, 2.6 million had problems with both alcohol and drugs, 4.5 million had problems with drugs but not alcohol, and 14.4 million had problems with alcohol only. It is important to note that not only adults but adolescents are also suffering from these problems as well. It is important to look at treatment for both of these populations.

Because Cass County is a very small and rural county, it is often very difficult to obtain statistical information relating to mental health and substance abuse specific to our area. When utilizing the IQUERY data reporting system it was found that the prevalence of drug and alcohol use and abuse was quite high for our area. In 2014 there were 54 residents hospitalized for amphetamine abuse and 11 residents visited the ER for a drug related reason. These numbers may not seem statistically significant but when you are looking at a county with an entire population of 13,000 residents, the numbers appear quite larger. The group also took into

consideration that because of the illegal nature of drug abuse the reported cases could show only a small snapshot of drug abuse in our county.

Alcohol use data for residents of Cass County is more easily accessible. According to IQUERY data there were 61 Cass County residents hospitalized for alcohol abuse with related assault in 2014. The Illinois Behavioral Risk Factor Surveillance System also classified 4,013 residents of Cass County as chronic drinking adults with an additional 1,998 residents at risk of acute/binge drinking between 2007 and 2009.

Healthy People 2020 identifies increasing the number of persons with co-occurring substance abuse and mental disorders who receive treatment for both disorders as one of its mental health and mental disorders objectives. This objective ties in perfectly with what our community health plan seeks to accomplish over the next five years. Increasing early access to mental health and substance abuse providers is a top priority of the Cass County Health Department.

Risk Factor: Biology

Biology plays a critical role in predisposition to addictive behaviors especially if the individual's first experience with abuse is early in life. Experimentation during the most critical stage of development can affect susceptibility and lead many into more serious abuse. During adolescent years, the brain is developing its ability to assess situations and manage emotions. Exposure to drugs and/or alcohol during this process can result in increased risk for poor decision-making and lead many towards more risky behavior. Trying drugs and continued use can have a substantial impact on mental functioning and cause long-lasting, potentially irreversible, consequences.

Mental illness and substance abuse are associated with many contributing factors. Genetics and other biological variables are examples of such factors that have been significantly linked to mental health. Hereditary, familial, and twin studies have long supported the possibility of genetic predispositions to mental illness. Genetic risk factors have been indicated as important in the causation of many mental disorders. Abnormal functioning of nerve cell circuits/pathways, including abnormal balances of neurotransmitters, and brain defects and injury have likewise been noted as potential causative factors of mental illness.

Substance abuse and mental health are not a matter of weak will power or lack of morals. The chemical reactions that happen in your brain when you have an addiction or mental illness are quite different from those that happen in someone without one. Heredity is a major risk factor for both substance abuse and mental illness. According to the National Institute on Drug Abuse, up to half of a person's risk of addiction to alcohol, nicotine, or other drugs is based on genetics. If a person has family members who have experienced addiction they are more likely to experience it too. Many people may feel inclined to believe that just because a family member has struggled

with mental illness or substance abuse in the past they will not have such an issue. This could lead them to not seek out treatment or services at an early stage or possibly seek no treatment at all. There is a large stigma associated with mental health and seeking help for these types of issues in our world today. Many feel that it is a sign of weakness and will not seek out the proper diagnosis or treatment for their ailment.

Gender can also be a significant biological risk factor for mental illness and substance abuse. Data from the 2014 National Survey on Drug Use and Health showed that the rate of substance dependence or abuse for males ages 12 and up was greater than the rate for females (10.7% vs. 5.7%). While women may have alcohol and substance abuse rates lower than men, women are more likely to have serious psychological distress than men. Women aged 18 and older in 2014 were more likely than men to have serious mental illness in the past year (5% vs. 3.1%). Women between the years of 2005 and 2008 made 29.4 million of the ambulatory care visits with a primary mental health diagnoses, compared with 18.5 million for men. However, in 2014, the percentage of adult males with a past-year co-occurring mental illness and substance use disorder was higher than that among adult females (3.6% vs. 3%). When conducting research on this topic specific to Cass County it was found that of all emergency room visits which were alcohol related in 2014 16 of them were male while less than 10 were female (an exact number was not given). Many women may feel that they do not have a substance abuse issue as it is not the norm for the community that they live in. Many women may choose to treat a co-morbid mental health issue such as anxiety or stress by using alcohol and/or drugs as a coping mechanism. They may not feel as though they have a problem or may not seek treatment because they feel that their illness is unimportant and they must take care of everyone else before themselves. Men can also fall into many of the same thought processes as women as far as seeking treatment for mental illness and/or substance abuse.

Mental health and the development of co-occurring disorders can amplify the side effects of drug and alcohol abuse. Many with issues such as depression use these substances in an attempt to self-medicate. In reality, the combination of mind-altering substances with mood disorders can intensify symptoms and increase mental distress. Early life experiences and biological factors can leave many predisposed to the development of disorders and addictions. Use of various substances to numb pain and help those who are victimized by violence is common. To prevent further damage to family or to themselves, many do not seek medical help and use illicit substances to temporarily relieve pain and self-medicate. Substance abuse in these situations is especially vicious due to the “rebound effect” in which an individual coming off the effects of drugs and/or alcohol often experiences greater pain both mentally and physically. Those under the influence of substances operate without consideration for their actions. Alcohol and drugs can lower inhibitions, cloud judgement and cause some to abuse their loved ones. This, however, does not mean substance abuse causes violence; merely, it can be a catalyst for some.

Risk Factor: Environment

Numerous environmental factors are associated with mental illness and substance abuse. Stressors compose a large majority of these types of environmental factors. There are many examples of stressors that can have major influences on mental health and substance abuse. These stressors can create strain that often times develop into or contribute to a diagnosable mental disorder. Stressors, especially chronic stressors, can increase an individual's chances of developing mental health issues. This is especially true if the individual already displays symptoms of mental illness and/or is predisposed to the genetic inheritance of a mental disorder.

Cultural and social factors are other types of environmental factors that can also be associated with mental illness. According to the article "Cultures as a causative of mental disorder" by A.H. Leighton and J.M. Hughes, culture impacts mental health in a variety of ways including; predetermining the pattern of specific mental disorders; producing mental disorders through certain child-rearing practices; perpetuating mental disorders by rewarding it in prestigious roles; producing mental illness through certain stressful roles; affecting mental disorders through the indoctrination of its members with particular kinds of sentiment; affecting the distribution of mental disorders through patterns of breeding; and affecting the distribution of mental illness through patterns which result in poor physical hygiene.

Social factors such as exposure to racism and discrimination, violence, poor educational achievement, and poverty can also negatively impact mental health. According to a study by the U.S. Department of Health and Human Services in 2001 people in the lowest strata of income, education, and occupation are about two to three times more likely than those in the highest strata to have a mental disorder. Cass County is a very culturally diverse community with a large population of both Hispanic and African residents. This can cause an increase in discrimination and racism between all races. According to 2010 census data approximately 12% of Cass County residents are living in poverty. Many residents cited better paying jobs and education opportunities as issues negatively affecting their communities during our community assessment survey. These increased risk factors make Cass County susceptible to a large population of residents with mental health and related issues. Stigma surrounding mental illness in certain cultures and social settings is a large barrier to detecting, diagnosing, and treating mental disorders.

Prenatal environment has also been identified as a possible determinant of mental health. Exposure to viruses, toxins, alcohol, and/or drugs during prenatal development can contribute to mental illness. Research has indicated that exposure to lead, mercury, cocaine, alcohol, cigarettes, and antidepressants throughout pregnancy can have negative neurodevelopmental effects. Many women do not understand the correlation between these types of exposure and the potential negative effects they can have on their unborn child. This is especially true of immigrant women who may not have had early access to prenatal medical care or mental health services.

Physical health factors can also be associated with mental illness. Physical and mental health both have a significant influence on an individual overall quality of life and general well-being. Good physical fitness and health behaviors can positively affect mental health. Exercise or physical activity can have prominent mental health benefits in individuals with elevated levels of depression and anxiety. According to the Illinois Behavioral Risk Factor Surveillance System 2012 report, 68.4% of Cass County residents were classified as overweight or obese. Many residents may not be aware that physical fitness and overall general well-being can influence their mental health so therefore it is deemed unimportant. Obesity is also one of the health priorities discussed in this IPLAN.

Various medical diseases such as cardiovascular disease, diabetes, cancer, and obesity have been linked with mental illness. Individuals with type 2 diabetes have almost a 24% increased risk of developing depression compared to those who are not diabetic. Obesity is also found to increase the risk of depression and vice versa. The top two leading causes of death for Cass County residents as reported by IDPH were heart disease and cancer. Because of the correlation between disease and mental illness this could mean that a large portion of Cass County residents will suffer from mental illness at some point in their life. Unhealthy behaviors such as tobacco use and excessive drinking can also contribute to mental health issues and substance abuse.

Proven Intervention Strategy

The Cass County Health Department recognizes the need for increased mental health services in its community. Currently the Cass County Health Department contracts with a local mental health provider for behavioral health services. However, due to continual staff changes, it has been difficult for patients to access these services. Patients want continuity with their counselor and many stop services due to counselor turnover. The need for substance abuse services are very much needed in our community as well. Cass County currently has no methadone program and no physician prescribers of buprenorphine. Cass County is located in IDHS Region 4 for the State of Illinois. Regions 4 and 5 have 12 of the counties with the highest population rates of opioid overdose in 2016. These two regions also have the lowest levels of currently available opioid use disorder (OUD) medication assisted treatment (MAT) resources in the State of Illinois.

In order to increase access for both mental health as well as substance abuse providers the Cass County Health department plans to hire the following staff members. To support the expansion of mental health the Cass County Health Department plans to hire a Licensed Clinical Professional Counselor (LCPC). To support services focusing on the treatment, prevention, and awareness of substance abuse issues a substance abuse provider will be hired as well as a community health worker. CCHD will also be applying for a MAT waiver for their Nurse Practitioner who will complete the required MAT training. The LCPC will provide counseling services on-site to patients. The LCPC will diagnose and treat mental health disorders and will collaborate with the substance abuse provider. They will use an integrated approach to

diagnosing and treating co-occurring mental health and substance abuse disorders. Behavioral health services will utilize evidence-based tools and strategies such as Screening, Brief Intervention, and Referral to Treatment (SBIRT), Cognitive Behavioral Therapy (CBT), Solution Focused Therapy (SFT), Emotionally Focused Therapy (EFT), Dialectical Behavioral Therapy (DBT), client centered therapy, play therapy and Strategic Family Therapy. The substance abuse provider will diagnose and treat substance use disorders focusing on the treatment, prevention, and awareness of opioid abuse, and will work collaboratively with the medical providers to support MAT treatment. The substance abuse provider will also use an integrated approach to work with the LCPC to diagnose and treat co-occurring mental health and substance abuse disorders. The community health worker will provide educational programs for patients, families, communities, and personnel to increase awareness of, patient access to, and patient retention in mental health and/or substance abuse disorder treatment programs. The community health worker will collaborate with existing community resources to address factors that impact the onset and/or recurrence of substance use disorders. The community health worker will also support patient engagement and self-management training.

The Cass County Health Department will utilize community resources from a number of different avenues in order to implement this strategy for increased access. The Cass County Health Department will work closely with the Cass County Mental Health Association in the hiring and training of new staff for the mental health and substance abuse program. Once the program is running and staff has been trained, the community health worker will provide education to local physician offices as well as local probation/parole officers and law enforcement officials so they can be aware of potential patients/clients that could benefit from this program. We feel that these will be the best referral sources.

The estimated funding needed for implementation of this project is \$174,877. The Cass County Health Department has applied for the FY 2017 Access Increases in Mental Health and Substance Abuse Services (AIMS) grant. This supplemental funding opportunity was made available for existing Health Center Program award recipients through the Health Resources and Services Administration (HRSA). The AIMS grant would be responsible for \$150,000 of the funding needed for implementation of this program. The other \$24,877 would come from other non-federal funding sources such as program income once the project has begun.

Outcome Objective

One of the outcome objectives that the Cass County Health Department plans to cover over the next five years is to establish a network that would help facilitate access to mutual self-help activities, resources, and information for people and their family members who are experiencing emotional distress resulting from mental illness and/or substance abuse. We hope to accomplish this goal with the help of our community health worker. We will work to ensure that the citizens of Cass County know where to go when they or a loved one are suffering with a mental illness and seek help or resources needed to overcome their issues.

The community health worker will work with community partners such as the Cass County Mental Health Association to provide education and resources for families. Information about mental illness and substance abuse will be given out through articles in local newspapers, through pamphlets and other educational information at grocery stores, pharmacies and church groups. The Cass County Health Clinic health educator can also assist the community health worker's efforts by taking pamphlets and information to various community events and health fairs she attends to help spread the word as well.

A second outcome objective for this health priority will be to increase the population of primary care providers who routinely review with patients their patient's cognitive, emotional and behavioral functioning and the resources available to deal with any problems that are identified to 60%. To monitor this statistic, health department staff will monitor the increase in utilization of mental health resources in the community. Substance abuse and suicide rates for Cass County will also be monitored. Primary care providers will also be surveyed regarding their ability to review mental health with their clients on a yearly basis.

Impact Objective

The Cass County Health Department will work to increase education to primary care providers about the need to screen patients for mental illness and educate their patients about depression. Physicians are a vital part of catching mental illness early and are a primary referral source to programs that patients need. The community health worker will work to educate physicians on risk factors and other potential indicators that can make an individual more susceptible to mental illness and substance abuse such as family history, socioeconomic status and past medical history.

The Cass County Health Department will also continue to update their Cass County Resource guide yearly and as needed. This guide provides residents with a wide range of information regarding service providers and services offered to Cass County families. The hard copies of the guide are available at both Cass County Health Department locations as well as electronically on the Cass County Health Department website.

Health Priority #2: Heart Disease

The second priority health need chosen by the committee is heart disease. Heart disease is a broad term used to describe a range of diseases that affect your heart. The various diseases that fall under the umbrella of heart disease include diseases of the blood vessels, such as coronary artery disease; heart rhythm problems (arrhythmias); heart infections; and heart defects (congenital heart defects).

The term “heart disease” is often used interchangeably with “cardiovascular disease”. Cardiovascular disease generally refers to conditions that involve narrowed or blocked blood vessels that can lead to a heart attack, chest pain (angina), or stroke. Other heart related conditions, such as infections and conditions that affect the heart’s muscle, valves, or beating rhythm, also are considered forms of heart disease.

Heart disease and stroke is the first and fifth leading cause of death in the United States. One quarter of all Americans have some form of heart disease. Heart disease is responsible for more than 6 million hospitalizations each year. Heart disease is a major cause of disability and contributes significantly to the rising cost of health care in the United States. Heart disease also remains the biggest cause of deaths worldwide, though over the last two decades, cardiovascular mortality rates have declined in high-income countries. At the same time, cardiovascular or heart disease deaths have increased at an astonishing rate in low and middle-income countries.

In 2015, heart disease was the leading cause of death among Cass County residents as it has been for many years. From “Statewide Leading Causes of Death by Resident County, Illinois Residents, 2015” from the Illinois Department of Public Health, there were a total of 144 deaths in Cass County in 2015. Thirty-four or 23.6 percent of these deaths were from heart disease. The percentage of deaths from heart disease in Illinois for the same time period was 24 percent.

Almost all heart disease in a population can be explained in terms of a limited number of factors; age, gender, high blood pressure, high serum cholesterol levels, tobacco smoking, excessive alcohol consumption, family history, obesity, lack of physical activity, psychosocial factors, diabetes mellitus, and air pollution.

The Cass County Health Department and its partners will work to educate and try to eliminate as many risk factors as possible from the residents of Cass County to reduce the incidence of heart disease. The risk factors that the health department and its partners will focus on include high blood pressure, high serum cholesterol levels, tobacco smoking, excessive use of alcohol, obesity, and lack of physical activity. Community health improvement strategies through the Cass County Health Department, Cass County Health Clinics and School-Linked Health Centers will include education and marketing that focuses on early screenings, interpreting screening results, and the prevention of chronic disease through health lifestyle choices. In addition, organized efforts to reduce tobacco use and exposure to secondhand smoke in Cass County will be utilized to reduce the incidence of heart disease in Cass County residents. We will also

provide education to the public on diabetes as heart disease is the leading cause of illness and death in the diabetic patient. Good nutrition and physical activity will also be stressed as an important way to reduce heart disease. The health department will work with our on-site behavioral health counselors to educate the public about excessive use of alcohol.

Risk Factor: High Blood Pressure and High Serum Cholesterol Levels

The definition of uncontrolled high blood pressure is a measured systolic blood pressure of 140mm HG or more, or a diastolic blood pressure of 90 mm Hg or more, based on an average of up to three measurements. The definition of high LDL cholesterol is a measured level of LDL above the treatment goals established by the National Cholesterol Education Program's Adult Treatment Panel III guidelines: less than 160 mg/dL for low-risk groups, less than 130 mg/dL for intermediate-risk groups and less than 100 mg/dL for high-risk groups. Blood pressure is easily screened in any doctor's office or pharmacy. Serum cholesterol levels can be checked by medical providers by blood work.

According to the Illinois Behavioral Risk Factor Surveillance System Survey conducted in 2009, 38.6 percent of Cass County adults have been told that they have high blood pressure. A total of 76.4 percent of Cass County residents who took the survey are taking medication prescribed for blood pressure. The survey also showed that 37.5 percent of Cass County residents have been told that they have high cholesterol. According to the question when was the last time your cholesterol was checked, 66.3 percent stated within the past year; 21.9 percent said over a year ago; and 11.8 percent stated they have never had their cholesterol checked.

Risk Factor: Smoking

Twenty percent of all heart disease deaths are caused by cigarette smoking. Smoking is the single largest preventable cause of heart disease in the United States. Smoking actually triples the risk of dying from heart disease. People who use tobacco are more likely to have heart attacks, high blood pressure, blood clots, strokes, hemorrhages, aneurysms, and other disorders of the cardiovascular system. Cigarette smoking, a major cause of stroke, increases clotting factors in the blood, decreases HDL cholesterol levels, increases triglyceride levels, and damages the lining of blood vessels. The risk for stroke increases as the number of cigarettes smoked increases.

According to the Illinois Behavioral Risk Factor Surveillance System Survey conducted of Cass County in 2012, 18.6 percent of persons surveyed were smokers. The percentages of smokers in 2009 were 28.6 percent, which was a slight decrease. Most of the smokers surveyed started smoking under the age of 18.

Secondhand smoke is a much greater problem than people realize. Secondhand smoke is a combination of the smoke given off by the burning end of a cigarette, pipe, or cigar and the smoke exhaled from the lungs of smokers. There is no evidence of a safe level of exposure to secondhand smoke. In fact, long-term exposure to secondhand smoke has been shown to cause a

30 percent increase in the risk of heart disease in non-smokers. It is estimated that 37,000 coronary heart disease deaths per year are caused by exposure to secondhand smoke. Exposure to secondhand smoke also negatively affects heart disease by decreasing exercise endurance, damaging blood vessel walls, and increasing the tendency of blood platelets to clot, contributing to heart attacks. Many people think that only the person smoking the cigarette is getting the harmful effects from the smoke but all people around the smoker are being harmed also.

Risk Factor: Nutrition (Obesity) and Physical Activity

Other risk factors for heart disease include obesity, nutrition and physical activity.

Obesity is a chronic condition defined by an excess amount of body fat. A certain amount of body fat is necessary for storing energy, heat insulation, shock absorption, and other functions. The normal amount of body fat (expressed as percentage of body fat) is between 25-30 percent in women and 18-33 percent in men, women with over 30 percent body fat and men with over 25 percent body fat are considered obese. One in three Americans are now considered obese. The 2012 Illinois Behavioral Risk Factor Surveillance System Survey in Cass County showed that 35.5 percent of the population was obese and 32.9 percent was considered overweight. In 2009, the same survey showed that 30.7 percent of the population was obese and 39.4 percent overweight. Both categories have small decreases but it is clear that obesity is still a large problem in our small county. According to the 2009 survey persons who stated they have been advised about their weight were 18.4 percent compared to 81.6 percent who stated they had not been advised about this problem. Of those surveys, 39.8 percent stated that they are now trying to lose weight although 60.2 percent were not trying. Those trying to maintain their current weight amounted to 74.5 percent. Statistics and information for the 2012 surveys were not available for Cass County.

Good nutrition is one of the key factors in preventing heart disease. Eating a balanced diet low in fat and salt is one way to prevent heart disease. In Cass County in the 2009 Illinois Behavioral Risk Factor Surveillance System Survey, 57 percent of the people surveyed stated they at less than three servings of fruits and vegetables a day while only 7.9 percent stated they ate five or more servings a day. Many people do not realize that good nutritional habits can help decrease their risk of heart disease later in life. Many times people feel as though they cannot afford the fruits and vegetables that should be consumed for good nutritional quality.

Physical activity is another aspect of preventing heart disease. According to the 2012 IBRFSS survey only 72.1 percent of Cass County residents had exercised in the past 30 days compared to 27.9 percent who had not. Without any other details it is hard to know whether or not those who responded yes to the question regarding exercise are actually meeting the vigorous activity standards at least three times a week for twenty minutes. Many residents may not realize that this is the type of exercise that is actually needed in order to prevent heart disease.

Resources Available

Resources available for programming in Cass County are limited, however, the resources we have are very valuable. Health department resources that are available through grant-funding sources include the Illinois Department of Public Health and the Illinois Department of Human Services. The health department also has the very valuable resources of the two Cass County Health Clinics that employ one physician and two nurse practitioners, providing services not only to Cass County but the surrounding area as well. Our resources include, but are not limited to, the following:

- Illinois Department of Public Health
- Illinois Department of Human Services
- American Lung Association
- American Heart Association
- Cass County Health Clinics (FQHC)
- Parks in all communities in county
- 340B Drug Program
- Women's Health Night (Annual event to promote women's health that includes programs given by our medical providers)
- Illinois Tobacco Program (QUITLINE)
- Virginia 5K Race sponsored by CCHD at the Virginia BBQ annually
- Women, Infants & Children (WIC)
- Breastfeeding Peer Counselor Program
- University of Illinois Extension
- SNAP – Supplemental Nutrition Assistance Program
- Public fitness centers in Virginia and Beardstown
- School districts
- Cass-Schuyler Area Public Transit
- JBS
- Cass County Health Department Staff

The Illinois Department of Public Health provides funding, educational materials, brochures and guidance. The Illinois Department of Human Services provides the same. The American Lung Association and the American Heart Association are excellent sources of materials and education that can be handed out to patients at our clinics and health department, as well as at health fairs, community events and schools.

Our health clinics have already implemented measures to make sure that all patients receive blood pressure screenings and education if they have elevated screenings. They also measure BMIs on all children and adults and provide education on nutrition and physical activity when needed. Clinic staff also asks if the patient smokes and education information is given to anyone

who responds that they do smoke. The clinics and health department offices provide blood work and screenings to help reduce the incidence of heart disease every day and at special clinic events.

The parks in Cass County provide a place to walk, run and play for children and adults of all ages. The park in Beardstown has exercise equipment available as well. Beardstown, Virginia, Ashland, Arenzville and Chandlerville all have summer baseball programs for girls and boys in their towns plus some offer adults programs such as softball and basketball as well. All three school districts participate in baseball, basketball, and football. The Hispanic and African populations in the Beardstown area have a large soccer field that is used frequently as well.

The Cass County Health Clinic has implemented the 340B drug program for patients without prescription drug coverage. This helps patients who have been diagnosed with high blood pressure or high cholesterol receive their medications at a lessor cost to them. Many patients were not filling their prescriptions for these medications because the out of pocket cost was very high.

The health department's annual Women's Health Night was first held over 8 years ago with approximately 20 women in attendance. It has now grown to two events (one in Beardstown and one in Virginia) with over 60 women in attendance. Both of our clinic physicians give presentations on various subjects including menopause, eating healthy, screenings and other women's health related topics. Our on-site behavioral health counselor has also participated with presentations about stress management and other mental health topics.

WIC is a very important program in our poor, rural county. Many pregnant mothers and their children need this program to help them eat properly. The Maternal Child Health staff provides nutrition education through WIC as well as advises pregnant moms against smoking or drinking when pregnant and after their children are born. The WIC program also offers coupons so that its participants can choose nutritional foods including fresh fruits and vegetables for their families. The MCH program has also implemented the Breastfeeding Peer Counselor program that informs new mothers or mothers-to-be that breastfed children tend to not become overweight as they grow and mature. The MCH program as well as Public Health uses information and educational materials from the University of Illinois Extension to advise their patients on weight, loss, physical activity, etc.

All three school districts in Cass County are always open to have our health educator and nurses come to the schools to provide talks about obesity, nutrition, smoking, and physical activity. We provide talks on whatever the teacher of a class would like their students to know more about.

The Cass-Schuyler Public Transit system is up and going in our county. This transportation system helps provide patients with transportation to and from their medical appointments both with local medical providers as well as with specialists in the Springfield area.

JBS (formerly Cargill Meat Solutions) welcomes health department staff to come to their plant to provide education to their employees on a monthly basis.

Barriers

- Patient apathy and denial of risks are barriers that can be expected to occur when educating people about the risk of heart disease.
- Patients tend to be noncompliant with treatment for heart disease. Appointments are often cancelled for various reasons.
- Financial resources could offer another barrier for Cass County residents as 12.9 percent of them live below the poverty level.
- Language is always a barrier in Cass County as we continue to learn and work with our Spanish speaking and French speaking populations. Persons from Hispanic cultures other than Mexico often have different dialects that we must learn to interpret. Trained and trusted interpreters are often hard to find and keep employed. We are fortunate enough to have two full time Spanish and one full time French interpreter on staff. We also use Stratus Video for any interpreting services we may need for languages such as ASL (American Sign Language).
- Medications are expensive and many people, especially our senior population, are finding the laws that Illinois government has put into place have made it very difficult to buy their prescription drugs and healthy food choices. Sometimes they must choose which to buy on a monthly basis. Because they have to eat, they often do not take their medications as prescribed for their high blood pressure or cholesterol or do not purchase them at all.
- There are a couple of community parks in the county that offer nice walking paths but more walking or biking paths and more public exercise facilities would be helpful to many people who cannot afford the price of a gym membership.
- There are very few employee wellness programs in the county. Some employers will pay for their employees to get a flu shot but more is needed to prevent heart disease and employers could help with this plan if they would implement wellness programs at their place of business for employees. Cass Communications has implemented a “Lunch and Learn” program for its employees. This program allows our health educator to visit their business once a month and give a presentation on a health related topic for employees during their lunch hour. Topics covered have included healthy eating, preventive screenings, and diabetes. The hope for this program is that other community businesses will implement programs like this in the near future.

- There are different education levels and cultures in Cass County and some of the cultures believe that a fat baby is a healthy baby. The WIC and Maternal Child Health programs are working towards changing this believe.
- Nutritious foods are expensive and there are cheap fast food places in the count that offer non-nutritious foods very inexpensively. Many families find it easier to eat out at a fast food restaurant than to fix a home cooked meal because of school and sporting events.

Community Health Improvement Goals

By the year 2022, reduce the rate of deaths from heart disease in Cass County residents from 23.6 percent (Statewide Leading Causes of Death by Resident County, Illinois Residents, 2015) to no more than 21 percent of total deaths. This goal ties in with the Healthy People 2020 goal to reduce coronary heart disease deaths.

Community Health Improvement Objectives

By August 2022, reduce the number of Cass County residents who smoke from 18.6 percent (2012 Illinois Behavioral Risk Factor Surveillance System Survey) to 15 percent.

By August 2022, reduce the percentage of Cass County residents who are considered overweight from 32.9 percent to 30 percent and obese from 35.5 percent to no more than 32 percent (2012 Illinois Behavioral Risk Factor Surveillance System Survey).

Community Health Improvement Strategies

- The Cass County Health Department will provide QUITLINE information to Cass County smokers to receive counseling about quitting the tobacco habit. The health department can no longer provide patches to help smokers quit but they can be mailed to the patient by request using the QUITLINE.
- The Cass County Health Department will continue to enforce Smoke Free Illinois in all public establishments.
- Staff of the Cass County Health Clinic will ask all clients who are thirteen years of age and older if they smoke. If they respond that they smoke, education will be given about the hazards of smoking and information about the Illinois QUITLINE.
- The Cass County Health Clinic health educator will provide education to children at all three school districts in Cass County about tobacco and the health issues that it can cause.
- The Cass County Health Clinic health educator will work with the cooks in school cafeterias to provide nutritional education about the meals they serve to children.
- Wellness fairs will be conducted at community events and county businesses to educate residents on good nutrition and physical activity to help control weight.
- Nutrition and physical activity education will be provided to all WIC moms.

- WIC staff will encourage all moms to join the Breastfeeding Peer Counselor Program.
- Education will be provided to all patients at Cass County Health Clinics regarding high measurements of blood pressure and/or high cholesterol. Medication, diet and physical activity instructions, along with information about heart disease will be given to patients as needed.
- Education will be provided to all patients at Cass County Health Clinics regarding obesity including information about proper diet and physical activity. BMIs will be taken on all patients including children.
- Education will be provided to children and their parents when the children come for school and sports physicals about the importance of a proper diet and physical activity. Information will include proper nutrition that includes at least five servings of fruits and vegetables per day.
- Routine health screenings will be conducted at clinics, health fairs and other events throughout Cass County.
- The Cass County Health Department will continue to work with minority populations to promote good nutrition and physical activity among their cultures.
- The Cass County Health Clinic health educator will continue to meet with patients one on one to discuss healthy behaviors that will help decrease their risk of heart disease.

The Cass County Health Department has once again applied for the Illinois Tobacco Free Communities grant. The amount of this grant will total \$20,710 and will be used to continue most of the interventions and programs related to this health priority. The remainder of funding will come from the Cass County Health Clinic's HRSA grant as they are a federally funded FQHC. Many of the employees tasked with the education programs presented in this IPLAN are employees of the Cass County Health Clinic and so are compensated under this grant program. Grant funding for heart disease is very rare in Illinois at this time.

Evaluation

Evaluation of this priority will include behavioral risk assessment surveys, vital statistics data, pre and posttests were applicable, and information gathered from health department program reports.

Health Priority #3: Obesity

Obesity in the United States has been increasingly cited as a major health issues in recent decades. While many industrialized countries have experienced similar increases, obesity rates in the United States are among the highest in the world. Of all countries, the United States has the one of the highest rates of obesity. More than one-third (36.5%) of U.S. adults have obesity. The Illinois Behavior Risk Factor Surveillance System Survey for Cass County Illinois in 2012 reported that 32.9 percent of residents were considered overweight while 35.5 percent were obese. This accounts for over 68 percent of the population of Cass County.

Obesity rates have increased for all population groups in the United States over the last several decades. Non-Hispanic blacks have the highest age-adjusted rates of obesity (48.1%) followed by Hispanics (42.5%), non-Hispanic whites (34.5%), and non-Hispanic Asians (11.7%). Obesity is higher among middle age adults age 40-59 years (40.2%) and older adults age 60 and over (37.0%) than among younger adults age 20–39 (32.3%) (Centers for Disease Control).

Historically, obesity primarily afflicted adults, but this has changed in the last two decades. Childhood obesity is a serious problem in the United States putting kids at risk for poor health. Despite recent declines in the prevalence among preschool-aged children, obesity amongst all children is still too high. In 2011-2014 children and adolescents aged 2-19 years the prevalence of obesity has remained fairly stable at about 17% and affects about 12.7 million children and adolescents. The prevalence of obesity was higher among Hispanics (21.9%) and non-Hispanic blacks (19.5%) than among non-Hispanic whites (14.7%). The prevalence of obesity was lower in non-Hispanic Asian youth (8.6%) than in youth who were non-Hispanic white, non-Hispanic black, or Hispanic. The prevalence of obesity was 8.9% among 2- to 5-year-olds compared with 17.5% of 6- to 11-year-olds and 20.5% of 12- to 19-year-olds. Childhood obesity is also more common among certain populations (Centers for Disease Control). The MCH Director of the Cass County Health Department reports that her staff feels this study is very accurate based on the characteristics of the large Hispanic population the health department serves. The MCH Director stated that the Hispanic population's culture believes that their children are not healthy if they are not "chubby".

Risk Factors

Obesity occurs when a person eats and drinks more calories than he or she burns through exercise and normal daily activities. The human body stores these extra calories as fat. Obesity usually results from a combination of causes and contributing factors, including:

- Genetics – A person's genes may affect the amount of body fat that is stored and where that fat is distributed. Genetics may also play a role in how efficiently the body converts food into energy and how the body burns calories during exercise. Even when someone

has a genetic predisposition, environmental factors ultimately can cause a person to gain more weight.

- Inactivity – If a person is not active, he or she does not burn as many calories. With a sedentary lifestyle, it is easy to take in more calories every day that burn off the calories through exercise and normal daily activities.
- Unhealthy diet and eating habits – Having a diet that is high in calories, eating fast food, skipping breakfast, intake of most of daily calories at night, drinking high-calorie beverages, and eating oversized portions all contribute to weight gain. Many people may feel that having one unhealthy meal from a fast food restaurant occasionally isn't a big deal but over time these meals add up and can cause weight gain.
- Lack of sleep – Getting less than seven hours of sleep a night can cause changes in hormones that increase appetite. It can cause a person to crave foods high in calories and carbohydrates, which can contribute to weight gain. Many people may not view getting enough sleep as potential risk factor for obesity as the two issues do not seem to go together.
- Certain medications – Some medications can lead to weight gain if a person does not compensate through diet or activity. These medications include some antidepressants, anti-seizure medications, diabetes medications, antipsychotic medications, steroids and beta-blockers.
- Medical problems – Obesity can sometimes be traced to a medical cause, such as Prader Willi syndrome, Cushing's syndrome, polycystic ovary syndrome, and other diseases and conditions. Some medical problems, such as arthritis, can lead to decreased activity, which may result in weight gain. A low metabolism is unlikely to cause obesity, as in having low thyroid function.

Even if a person has one or more risk factors, it does not mean that he or she is destined to become obese. Most risk factors can be counteracted through diet, physical activity and exercise and behavior changes. The Cass County Health Department will focus on nutrition and physical activity for the next five years.

Risk Factor: Nutrition and Physical Activity

Obesity is a chronic condition defined by an excess amount of body fat. A certain amount of body fat is necessary for storing energy, heat insulation, shock absorption, and other functions. The normal amount of body fat (expressed as percentage of body fat) is between 25-30 percent in women and 18-33 percent in men, women with over 30 percent body fat and men with over 25 percent body fat are considered obese. One in three Americans are now considered obese. The 2012 Illinois Behavioral Risk Factor Surveillance System Survey in Cass County showed that 35.5 percent of the population was obese and 32.9 percent was considered overweight. In 2009, the same survey showed that 30.7 percent of the population was obese and 39.4 percent overweight. Both categories have small decreases but it is clear that obesity is still a large

problem in our small county. According to the 2009 survey persons who stated they have been advised about their weight were 18.4 percent compared to 81.6 percent who stated they had not been advised about this problem. Of those surveys, 39.8 percent stated that they are now trying to lose weight although 60.2 percent were not trying. Those trying to maintain their current weight amounted to 74.5 percent. Statistics and information for the 2012 surveys were not available for Cass County. The risk of developing heart disease increases three to four times in women who have a body mass index (BMI) greater than 29.

Good nutrition is one of the key factors in preventing obesity. Eating a balanced diet low in fat and calories is one way to prevent obesity. In Cass County in the 2009 Illinois Behavioral Risk Factor Surveillance System Survey, 57 percent of the people surveyed stated they ate less than three servings of fruits and vegetables a day while only 7.9 percent stated they ate five or more servings per day.

Physical activity is another aspect of preventing obesity. Persons (27.9 percent) stated in the 2012 IBRFSS survey that they had no exercise in the previous thirty-day period. In the 2009 IBRFSS survey that only 38.9 percent of residents surveyed meet the moderate activity standards while 71.7 percent of them did not meet vigorous activity standards at least three times a week for twenty minutes. These two questions were not asked on the 2012 survey so old data was used.

Resources Available

Resources available for programming in Cass County are limited, however, the resources we have are very valuable. Health department resources that are available through grant-funding sources include the Illinois Department of Public Health and the Illinois Department of Human Services. The health department also has the very valuable resources of the two Cass County Health Clinics that employ one physician and two nurse practitioners, providing services not only to Cass County but to the surrounding area as well. Our resources include, but are not limited to, the following:

- Illinois Department of Public Health
- Illinois Department of Human Services
- American Heart Association
- Cass County Health Clinics (FQHC)
- Parks in all communities in county
- 340B Drug Program
- Women's Health Night (Annual event to promote women's health that includes programs given by our medical providers)
- Illinois Tobacco Program (QUITLINE)
- Virginia 5K Race sponsored by CCHD at the Virginia BBQ annually
- Women, Infants & Children (WIC)

- Breastfeeding Peer Counselor Program
- University of Illinois Extension
- SNAP – Supplemental Nutrition Assistance Program
- Public fitness centers in Virginia and Beardstown
- School districts
- Cass-Schuyler Area Public Transit
- JBS
- Cass County Health Department Staff

The Illinois Department of Public Health provides funding, educational materials, brochures and guidance. The Illinois Department of Human Services provides the same. The American Heart Association is an excellent source of materials and education that can be handed out to patients at our clinics and health department, as well as at health fairs, community events and schools.

Our health clinics have already implemented measures to make sure that all patients are weighed at each visit and providers give education about proper body weight. They also measure BMIs on all children and adults and provide education on nutrition and physical activity when appropriate.

The health department's annual Women's Health Night was first held over 8 years ago with approximately 20 women in attendance. It has now grown to two events (one in Beardstown and one in Virginia) with over 60 women in attendance. Both of our clinic physicians give presentations on various subjects including menopause, eating healthy, screenings and other women's health related topics. Our on-site behavioral health counselor has also participated with presentations about stress management and other mental health topics.

The parks in Cass County provide a place to walk, run and play for children and adults of all ages. The park in Beardstown has exercise equipment available as well. Beardstown, Virginia, Ashland, Arenzville and Chandlerville all have summer baseball programs for girls and boys in their towns plus some offer adults programs such as softball and basketball as well. All three school districts participate in baseball, basketball, and football. The Hispanic and African populations in the Beardstown area have a large soccer field that is used frequently as well.

WIC is a very important program in our poor, rural county. Many pregnant mothers and their children need this program to help them eat properly. The Maternal Child Health staff provides nutrition education through WIC as well as advises pregnant moms against smoking or drinking when pregnant and after their children are born. The WIC program also offers coupons so that its participants can choose nutritional foods including fresh fruits and vegetables for their families. The MCH program has also implemented the Breastfeeding Peer Counselor program that informs new mothers or mothers-to-be that breastfed children tend to not become overweight as

they grow and mature. The MCH program as well as Public Health uses information and educational materials from the University of Illinois Extension to advise their patients on weight, loss, physical activity, etc.

There are some physical fitness centers in Beardstown and Virginia that offer work out equipment for minimal fees.

All three school districts in Cass County are always open to have our health educator come to the schools to provide talks about obesity, nutrition and physical activity. We provide talks on whatever the teacher of a class would like their students to know more about.

The Cass-Schuyler Public Transit system is up and going in our county. This transportation system helps provide patients with transportation to and from their medical appointments both with local medical providers as well as with specialists in the Springfield area.

JBS (formerly Cargill Meat Solutions) welcomes health department staff to come to their plant to provide education to their employees on a monthly basis.

Barriers

- Patient apathy and denial of risks are barriers that can be expected to occur when educating people about the risk of heart disease.
- Patients tend to be noncompliant with medical provider's encouragement to lose weight.
- Financial resources could offer another barrier for Cass County residents as 12.9 percent of them live below the poverty level.
- Language is always a barrier in Cass County as we continue to learn and work with our Spanish speaking and French speaking populations. Persons from Hispanic cultures other than Mexico often have different dialects that we must learn to interpret. Trained and trusted interpreters are often hard to find and keep employed. We are fortunate enough to have two full time Spanish and one full time French interpreter on staff. We also use Stratus Video for any interpreting services we may need for languages such as ASL (American Sign Language).
- Medications are expensive and many people, especially our senior population, are finding the laws that Illinois government has put into place have made it very difficult to buy their prescription drugs and healthy food choices. Sometimes they must choose which to buy on a monthly basis. Because they have to eat, they often do not take their medications as prescribed for their high blood pressure or cholesterol or do not purchase them at all.
- There are a couple of community parks in the county that offer nice walking paths but more walking or biking paths and more public exercise facilities would be helpful to many people who cannot afford the price of a gym membership.

- There are very few employee wellness programs in the county. Some employers will pay for their employees to get a flu shot but more is needed to prevent heart disease and employers could help with this plan if they would implement wellness programs at their place of business for employees. Cass Communications has implemented a “Lunch and Learn” program for its employees. This program allows our health educator to visit their business once a month and give a presentation on a health related topic for employees during their lunch hour. Topics covered have included healthy eating, preventive screenings, and diabetes. The hope for this program is that other community businesses will implement programs like this in the near future.
- There are different education levels and cultures in Cass County and some of the cultures believe that a fat baby is a healthy baby. The WIC and Maternal Child Health programs are working towards changing this believe.
- There is a lack of fresh fruits and vegetables in the county. There is a farmer’s market held in the summer and fall months in Beardstown but one is needed in each community. Fresh fruits and vegetables in the county’s grocery stores are expensive to purchase.
- Nutritious foods are expensive and there are cheap fast food places in the count that offer non-nutritious foods very inexpensively. Many families find it easier to eat out at a fast food restaurant than to fix a home cooked meal because of school and sporting events.

Community Health Improvement Goals

By the year 2022, reduce the rate of obesity in Cass County residents from 35.5 percent (2012 Illinois Behavioral Risk Factor Surveillance System Survey) to no more than 32 percent. This goal ties in with the Health People 2020 goal of increasing the proportion of adults who are obese.

Community Health Improvement Objectives

By August 2022, reduce the percentage of Cass County residents who are considered overweight from 32.9 percent (2012 Illinois Behavioral Risk Factor Surveillance System Survey) to 30 percent.

By August 2022, increase the percentage of Cass County residents who participate in physical activity at least once in the past 30 days from 27.9 percent (2012 Illinois Behavioral Risk Factor Surveillance System Survey) to 30 percent.

Community Health Improvement Strategies

- The Cass County Health Clinic health educator will work with the cooks in school cafeterias to provide nutritional education about the meals they can serve children.

- Wellness fairs will be conducted at community events and county businesses to educate residents on good nutrition and physical activity to help control weight.
- Nutrition and physical activity education will be provided to all WIC moms.
- Information about breastfeeding to reduce child obesity will be provided to all WIC moms through breastfeeding classes.
- WIC Staff will encourage all moms to join the Breastfeeding Peer Counselor Program.
- Education will be provide to all patients at the Cass County Health Department screening clinics regarding diet and physical activity instructions who are considered overweight or obese.
- Education will be provided to all patients at the Cass County Health Clinics regarding obesity including information about proper diet and physical activity. BMIs will be taken on all patients including children.
- Education will be provided to children and their parents when the children come for school and sports physicals about the importance of a proper diet and physical activity. Information will include proper nutrition that includes at least five fruits and vegetables a day.
- Access to nutrition education will be available on computers in both health department offices for public use.
- Routine health screenings will be conducted at clinics, health fairs and other events throughout Cass County.
- The health department will work to implement employee wellness programs with employers in the county.

The Cass County Health Department and Cass County Health Clinics plan to fund these various intervention strategies with funds from the Local Health Protection Grant from the Illinois Department of Public Health, and the WIC grant through the Department of Human Services. These grants total \$126,017, however obesity screening and education is just a small portion of the services provided through these grant funds. Our federally-funded HRSA grant will also fund a portion of these intervention strategies through their work in primary care and health fairs.

Evaluation

Evaluation of this priority will include behavioral risk assessment surveys, vital statistics data, pre and posttests when applicable, and information gathered from health department program reports.

Board of Health Approval

The Cass County Board of Health unanimously approved the 2017 IPLAN at its regular Board of Health meeting on August 23, 2017. Please refer to Appendix C for the Board of Health IPLAN Approval Letter.

Appendix

Appendix A: Cass County Health Department Organizational Chart

Appendix B: Cass County Community Needs Assessment Survey Results

Appendix C: Board of Health Approval Letter

Appendix D: IDPH IQUERY System Reports

Appendix E: Illinois Behavioral Risk Factor Surveillance System Data for Cass County, Illinois