Illinois Project
for
Local Assessment of Needs

Douglas County Health Department
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Executive Summary

The Douglas County Community Health Needs Assessment continues the Illinois Department of Public Health's project for determining local needs in community health. Through the IPLAN project we have been able to reevaluate the needs of our local community to help improve the quality of life. To help determine the needs of Douglas County, data was gathered from the IQuery Data Export System, the Community Commons Website, and the County Health Rankings and Roadmaps (University of Wisconsin). With this data, factors contributing to an individual's health were examined and these factors were used to help identify the needs of Douglas County. The factors examined include: demographics, socioeconomic status, general health and access to care, maternal and child health, chronic disease, infectious disease, and environmental and occupational health, and injury control. Input from the community was also included to help determine needs not identified by statistical data. With this information new health priorities for Douglas County were established. These priorities were identified as being Behavioral Health, Cardiovascular Disease, and Food Insecurities. A plan to improve these health priorities has been established and included in this report. The effectiveness of the plan will be reviewed and the plan will be revised to reach the goals set forth within this document.

Community Health Needs Assessment

Statement of Purpose

The Douglas County Community Health Needs Assessment was undertaken as the first step in the IPLAN process. The purpose was to provide a framework for identifying the health needs of the county and to determine how much progress is being made towards the goal of improving said needs. The needs of the county involved input from the community, as well as the analyzing of data collected by different data sets. The data provided the means to determine the statement of community needs and a strategy to identify high risk populations within said community.

Community Participation

The Local Community Health Committee was formed from many differing agencies throughout the county. The organizations host a wealth of experienced professionals and community members. Individuals from these groups were requested to attend several meeting sessions where their professional opinion was utilized to help identify the needs of the community. The members in attendance at least for one session of this project planning included:

Tim Flavin (MBA, Mi Raza)

Jane Faust (Community Member)

Dr. William Jones, DDS (Community Dentist)

Barbara Eckstein (Community Member)

Dianne Seaman (Community Member)

Allison Cler (Nursing Home Administrator)

Chris Brown (Church Pastor)

Lisa Sigrist (School Administration)

Allison Phillips (School Administration)

Tom Mulligan (School Administration)

Katie Hatfield (School Counselor)

Brad Allen (School Administration)

Devin Black (Librarian)

Lauren Christina (MSW, Mental Health)

Susan Hays (RN, DCHD)

Amanda Minor (MPH, DCHD)

Methods

A nominal group process was utilized to help identify the needs of the community. The members of the focus group were chosen by the Health Department's Administrator and program managers. Statistical data concerning the leading causes of death, hospitalizations, and relevant census information was provided to all participants prior to meeting. Objectives from Douglas County's previous IPLAN, and the progress made toward those objectives were also considered by the group when determining the needs of the community. Statistical data was obtained from various sources which included: Douglas County's BRFSS, I Sing the Body Electric Youth Risk Behaviors Surveillance Survey Report for East Central Illinois, Community Commons, County Health Rankings and Roadmaps, and the IDPH IQuery data system.

Results

Douglas County, Illinois (IL)

County population in 2014: 19,889 (38% urban, 62% rural); it was 19,922 in 2000
County owner-occupied with a mortgage or a loan houses and condos in 2010: 3,446
County owner-occupied free and clear houses and condos in 2010: 2,472
County owner-occupied houses and condos in 2000: 5,826
Renter-occupied apartments: 1,802 (it was 1,748 in 2000)
% of renters here: 23%
State: 33%

Land area: 417 sq. mi.

Water area: 0.6 sq. mi.

Population density: 48 people per square mile (average).

Mar. 2016 cost of living index in Douglas County: 85.4 **(less than average, U.S. average is 100)**

Race and Hispanic Origin

White alone, percent, July 1, 2015, 97.1%
White alone, percent, April 1, 2010 95.7%
Black or African American alone, percent, July 1, 2015, 0.7%
Black or African American alone, percent, April 1, 2010 0.3%
American Indian and Alaska Native alone, percent, July 1, 2015, 0.3%
American Indian and Alaska Native alone, percent, April 1, 2010 0.2%
Asian alone, percent, July 1, 2015, 0.7%
Asian alone, percent, April 1, 2010 0.4%
Native Hawaiian and Other Pacific Islander alone, percent, July 1, 2015. 0.1%
Native Hawaiian and Other Pacific Islander alone, percent, April 1, 2010 0.0%
Two or More Races, percent, July 1, 2015, 1.2%
Two or More Races, percent, April 1, 2010, 1.2%
Hispanic or Latino, percent, July 1, 2015, 7.4%
Hispanic or Latino, percent, April 1, 2010, 6.1%
White alone, not Hispanic or Latino, percent, July 1, 2015, 90.2%
White alone, not Hispanic or Latino, percent, April 1, 2010, 92.2%

Report Area for 2015	Douglas
Total Deaths	201
Diseases of Heart	52
Cancer	49
Stroke	10
Chronic Lower Respiratory	11
Accidents	10
Alzheimer's Disease	10
Diabetes	4
Kidney Disease	5
Influenza and Pneumonia	6
Septicemia	5

Demographic & Socioeconomic Characteristics

Data from the 2014 census showed the population of Douglas County as being that of 19,889, a .2% decrease over that of the previous census in 2000. The population of the county is primarily made up of individuals that fall in the 18 year old and under age range.

Ethnicity data from the 2015 census shows a population distribution of: 90.2% White Not Hispanic or Latino, .7% Black, .7% Asian, and .3% Native American. The Hispanic population has grown to 7.4% surpassing that of the 6.1% persons in 2010. The Hispanic, the Black, and the Asian populations all increased over the course of the 5 years between census recordings. This shows that Douglas County may have an ever growing diverse population to serve, and must make changes to better serve this increasing portion of the population. There is also a very large population of Amish in the Douglas County area. In Douglas County work is done within the Amish community several times throughout the year by providing immunization and dental services that otherwise may not have been accessible.

Educational status plays a large part in the determining of socioeconomic status and in turn health equities. In Douglas County, 84% of residents reported having a high school education or higher, while 17.1% have obtained a Bachelor's degree or higher.

The poverty level of Douglas County in 2014 was reported to be 10% or, an increase of 4% from the prior census. The median household income was reported to be $51,701. Employment statistics for Douglas County, from the 2015 census, show that 6874 individuals were employed while a total of 895 were unemployed. These results showed an unemployment rate of 4.5%. This is a 2% increase in unemployment over the 5 years. The majority of individuals employed within the county work in the areas of service, manufacturing, and wholesale/retail trade. While there are other areas of employment these three make up the vast majority of the work force in Douglas County.

Maternal and Child Health

Maternal and Child health rates are difficult to find in a county with a population under 20,000. However, it appears that the infant mortality rate is lower than the state of Illinois by a small percentage. According to the Community Commons, Douglas County has a rate of 5.1 per 1000 births while the state of Illinois is 6.9 per 1000 births. Douglas County also has a lower percentage of low weight births than Illinois, as well. The percentage of low weight births for Douglas County was 6.4 % while the state of Illinois was 8.4%. It appears that Douglas County's maternal and child health is not at a high risk level for this priority.

General Health and Access to Care

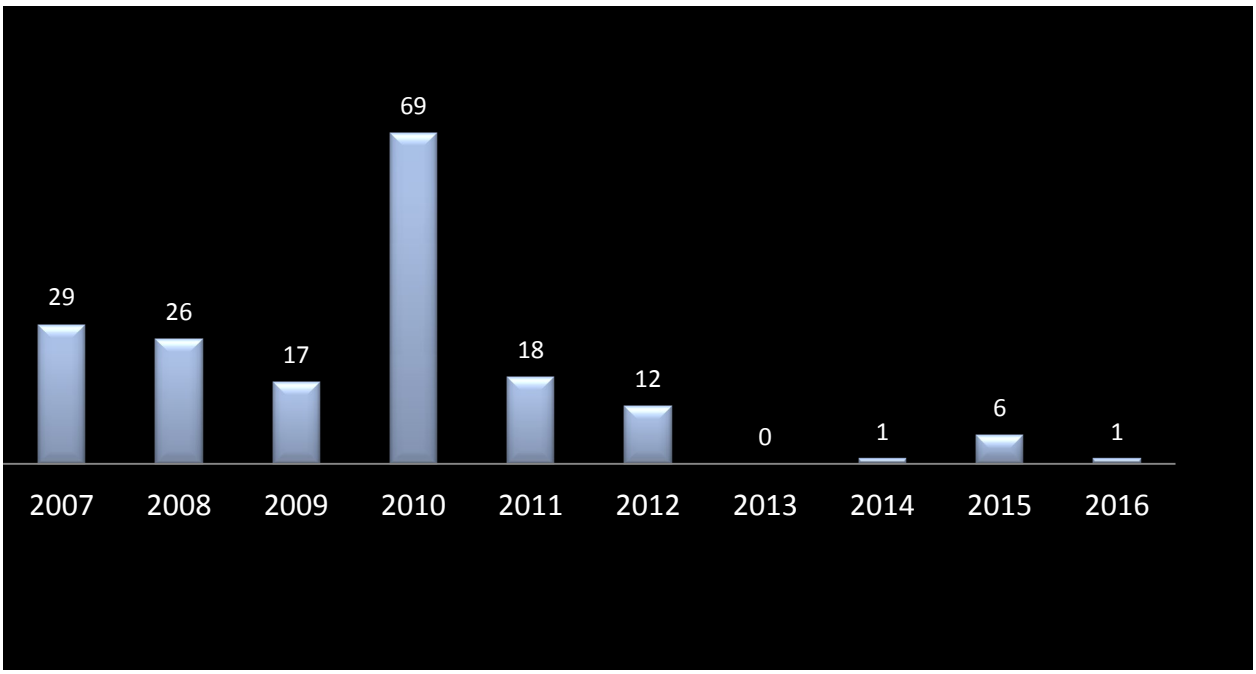
According to the Community Commons as well as the CHSI Information for Improving Community Health, there are many things in which Douglas County was able be considered better or moderate or at a level better than the rest of the state of Illinois. For mortality Douglas county was considered most favorable in Diabetes deaths as well as unintentional injury. In the Moderate category for mortality, it seemed that Alzheimer's disease, cancer, chronic kidney, coronary heart, female and male life expectancy, and stroke deaths were all selected.

The community commons provided data that Douglas County had 58.2 preventable hospital

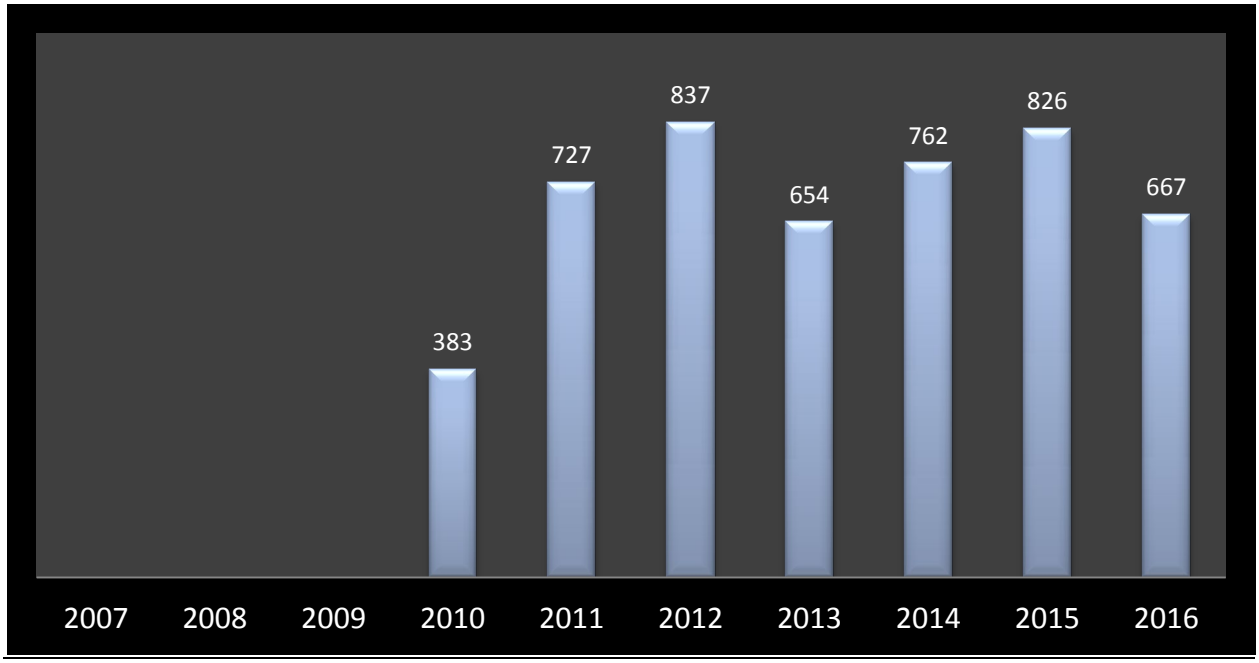
age-adjusted discharge rates per 1000 Medicare enrollees. This is considerably better than the state average of 51.9 discharge rates per 1000 Medicare enrollees. This information becomes surprising when looking at the number of primary care physicians for Douglas County. Their rate is 25.14 per 100,000 population and the State of Illinois' rate is 96.9 primary care physicians per 100,000 population.

Infectious Disease

After implementing an Amish Immunization Clinic in 2011, the vaccine preventable disease rate dropped drastically in our county. Also of great interest is the relationship of vaccine preventable diseases to total number of immunizations provided. The below graph represents the number of vaccine preventable diseases reported in Douglas County from 2007 through 2016. The highest number reported- 69, was in 2010 as a direct result of the Pertussis outbreak in the Amish community.



The number of vaccinations provided at the off-site Amish immunization clinic from inception to this year in Arthur are represented in the below graph.



For comparison purposes, you can see there is a direct correlation between providing vaccines to the Amish community and a significant decrease in reported vaccine preventable diseases.

Environmental/ Occupational/ Injury Control

The physical environment for Douglas County fair better for access to parks and housing stress according to the CHSI. The housing costs and the poverty level seemed to present at a better level; whereas, the on time high school graduation and unemployment was only moderately better. Douglas County was moderately better in limited access to healthy food and air quality. However, it appears that Douglas County was worse in living near highways and Violent crimes.

Sentinel Events

There were no significant sentinel events provided by the data for infants, children or adults as found in Iquery.

Deaths in Douglas County

Overall mortality rates for the county show that deaths were mostly caused by diseases of the heart. Over 26% of the deaths were caused by heart disease. The other larger contributor of causes of death was cancer at 24%. Stroke, respiratory, and Alzheimer's all come in around 5% of the cause of

death for Douglas County in 2015. These statistics align well with our IPLAN priorities. Because heart disease and cancers can be linked to obesity, diabetes, and substance abuse; the linkage between the deaths and the priorities are very consistent. The leading cause of death for individuals in Douglas County, as of 2006, was heart disease, cancer, stroke, chronic lower respiratory disease, and other causes. Unfortunately, it appears that the same causes of death almost 10 years ago are the same as 2015. According to the CHSI information for Improving Community Health, the worse Morbidity quartile consisted of adult diabetes, adult obesity, Alzheimer's diseases/dementia, cancer, and Older adult depression. The worse health care access and quality values were older adult preventable hospitalizations and uninsured. Whereas, the worse social factors and physical environment values were violent crimes and living near highways.

Priorities

The priorities for the Community Health Plan emerged as the Local Community Health Committee discussed the statistical data summarized above as well as the community knowledge from the group. With the data provided, the Community Health Committee was able to discuss and ultimately decide what the health needs of the county were and rank them due to priority according to the Hanlon Method.

The Hanlon Method is a quantitative tool that objectively ranks specific health problems based on the criteria of seriousness, magnitude and effectiveness. (www.naccho.org/chachipresources) First the health problem is given a numerical rating from 0-10 for the size of the health problem, the seriousness of the health problem, and the effectiveness of the interventions provided for the priorities. The score is then calculated through a formula of $D=[A+(2 \times B)] \times C$, where D is the priority score, A is the size of the problem, B is the seriousness of the problem, and C is the effectiveness of the intervention. Then the scores are ranked highest to lowest where the highest is the number one ranking and then the rest of the rankings follow in order.

After all of the data was presented and reviewed by the group it was determined that there were increasing needs for Behavioral Health in Douglas County. Thus, Behavioral Health was prioritized as a leading cause of illness within Douglas County as it has for the last 15 years. Similarly, when the Hanlon method was used on this presented data, Behavioral Health was prioritized number one within our health needs assessment ranking.

The second ranked priority was newly introduced during this 2016 IPLAN; it was Food Insecurity. Food Insecurities have become an increasing need within our communities. According to the community commons, the percent of the population with low food access was 11.75%; whereas, the percentage for the state of Illinois was 19.36%. Although Douglas County is lower than the state, anything above 1% is too much to not become concerned. Because of the increase in food costs and the decrease in expendable funds, many families struggle with the insecurity of not knowing where, what, or when they will receive their next meal. Through the Hanlon method for prioritizing the needs; Food Insecurities became the number two priority for Douglas County.

Looking at the data it was easy to see that heart disease was the leading cause for illness and death for the county and has been a top priority for the past 20 years. It was determined that the leading cause for heart disease was Obesity and some of the contributing factors to this were high blood pressure and inactivity. Thus, this then become classified as Obesity in the health problem ranking. Much of the data showed increases in obesity related illnesses; however, when the Hanlon method was applied, Obesity (heart disease) was ranked third in our priorities. Other areas of concern indicated by our Local Community Health Committee were that of substance abuse.

According to the Community Commons other items were calculated higher than that of the state of Illinois; however, did not make the top three priorities. One of these is the preventable hospital events. According to the Community Commons, Douglas County had a percentage of 58.25 of Ambulatory care sensitive condition discharge rate; while the state of Illinois was at 51.9%.

Community Health Plan

Purpose Statement

The overall goal of the Douglas County Health Department is to improve the health of all county residents. Towards that goal, an updated countywide health plan has been developed using the Illinois Plan for Local Assessment of Needs (IPLAN). The purpose of this plan is to address the critical health priorities identified by the community health needs assessment and prioritized by the Local Community Health Committee. Targeted outcome and impact objectives with corresponding intervention strategies have been developed for each priority. These will be used to guide the department's planning and daily activities over the next five years.

Community Participation & The Health Plan Process

As with the needs assessment, health committee members met to develop a plan for addressing the health priorities identified. These included for each priority; outcome objectives, process objectives, and intervention strategies. These objectives give a framework with which to build upon for a healthier community.

Douglas County Health Priorities

Priority 1: Behavioral Health

Behavioral Health has presented in the top five priorities for the Douglas County Health IPLAN for the last 15 years. This year Behavioral Health had three different subcategories. These were; Depression, Bullying, and Lack of Coping Skills. Of the 3.2 Million children that live in Illinois (Source: 2009 U. S. Census Bureau), 7.5 percent of the children ages 3-17 are reported to have moderate or severe social or emotional difficulties. For children living in poverty, rates of the mental

and emotional difficulties are reported even higher, at 14.6 percent (Source: Voices for Illinois Children, 2007). In Illinois, about 105,000 adolescents aged 12-17 per year in 2013-2014 had at least one Major Depressive Episode within the year. (Source: SAMHSA.gov. 2015 BHBarometer)
In addition, the percentage of Medicare population in Douglas County with depression was 18.6% in 2014. The State of Illinois' rate for depression within the Medicare population is 14.8% and the U.S. is 16.2%. Thus, Douglas County is highlighted because of the higher incidence of this occurring than in Illinois or the U.S. (CommunityCommons.org) In Douglas County, this is an increase from 2013 and continues to increase over the years since 2010. These numbers correlate with the Health People 2020. The rates for adolescents who experience major depressive episodes (MHMD-4.1) had a baseline of 8.3% in 2008, with an increase to 10.7% in 2013. These rates were for adolescents aged 12-17 years who experienced a major depressive episode (MDE) in the past 12 months. Healthy People 2020 target is a 10% improvement over the baseline with 7.5% being the new targeted rate for MDE in this population.

The IPLAN committee assessed risk factors for Behavioral Health and determined the corrective actions that need to be implemented. The risk factors are; being bullied at home, immigration status, and lack of support. Some of the direct contributing factors associated with these risks are; increased pressure from peers and society, transportation and stress. Some of the indirect contributing factors can be characterized as poor nutrition along with lowered social economic status to provide for basic needs. Many of these factors can become stressors for depression and other Behavioral Health Conditions; but when many of the county's population have coupled risk factors, the rate increases exponentially.

Priority 2: Food Insecurities

USDA defines Food Insecurities as a lack of access, at times, to enough food for an active,

healthy life for all household members and limited or uncertain availability of nutritionally adequate foods. This may not be a constant state and can depend on the need to trade-off between basic needs and purchasing nutritionally adequate foods.

Food insecurities became evident during the IPLAN process. Many of the teachers as well as the staff working with seniors had heartfelt stories of children and adults with food insecurities. Even one person in Douglas County with food insecurities is too much. Yet, Douglas County has over 2,160 people living with food insecurities. This is over 10% of the county population that is food insecure. Of this 10%, 27% is above the nutrition program threshold of 185% poverty; 22% is between 130%-184% poverty; and 51% is below the SNAP threshold of 130% poverty. (Source: feedingamerica.org) With the average cost of a meal totaling $2.62, Douglas County would need $1M to meet the food requirements for the county.

According to Community Commons, Feeding America has over 200 food banks and is the largest hunger-relief charity in the United States. Every year 3 Billion pounds of food and grocery products are distributed through 61,000 agencies nationwide. This provides food assistance to an estimated 37 million people in need. This agency also provides funds to help with hunger studies and assist communities with learning about food insecurities nationally and at the local level.

According to Health People 2020, there was an increase for the proportion of the U.S. households that report experiencing food insecurities during a 12-month period (i.e., food insufficiency and hunger, at adult and child levels, resulting from inadequate household resources). (Source: Current Population survey- Food Security Supplement (CPS-FSS), Department of Commerce/Census Bureau) The rates increased from 11.9% in 1995 to 14.5% in 2012. HP2020's target is 6.5% of the households reporting insecurities with hunger.

Some of the risk factors associated with this priority are lack of income and decreased assessable resources. The direct contributing factors associated with the risk factors become social

economic factors, decrease in economic opportunities, and lack of accessible governmental programs. The indirect contributing factors become skill and education, increased funds to help elderly with medication, and access to affordable transportation for accessible food, medicines and employment.

Priority 3: Obesity (Heart Disease)

"Heart disease is the leading cause of death in the United States." (Healthy People 2020) These words have rang true in the United States since the 1970's and still ring true today. Even today, heart disease is still the leading cause of death for individuals in Douglas County.

There are multiple risk factors linked to heart disease. The most important risk factors are the ones that can be self modified to help decrease risk. These risk factors include high blood pressure, cigarette smoking, and high cholesterol. Some of the direct contributing factors become diabetes, poor diet, physical inactivity, and overweight/obesity. Some of the indirect factors can be described as financial barriers and lack of enforcement, substandard environment, and family norms and lifestyles. . "Over time, these risk factors cause changes in the heart and blood vessels that can lead to heart attacks, heart failure, and strokes." (Healthy People 2020) According to the Community Commons data from Douglas County residents, ~4,600 or 31% of adults have been told they have high blood pressure. This percent for Douglas County is higher than both Illinois and the United States (28%).

Obesity becomes another risk factor for heart disease. Over 30% of Douglas County adults are considered obese with a BMI over 30. This rate again becomes very alarming because the state of Illinois and the U.S. have rates of 27%. I appears that the males in Illinois are at a greater risk with 2265 males having a BMI over 30; while only 2145 females in Illinois report a BMI over 30. This becomes a 3% difference of Males over Females.

Physical inactivity is a risk that can also leads to heart disease. Again Douglas County ranks over 3-4% higher in Illinois than in the entire U.S. Illinois is 22% and the US is 23%; while Douglas County shows up as almost 26%. There is no discernible difference between the males and the females

in terms of physical inactivity. It appears that this rate is on a downward trajectory. Since 2009 the percentage was almost as high as 28% and then in 2012 it is less than 26%. Through the positive encouragement and breaking down the barriers, it is hopeful that this stay at a steep decline. Healthy people 2020 says, "It is critical to address risk factors early in life to prevent the potentially devastating complications of heart disease." It is for this reason that education of the youth may be the most important factor in reducing the rate of heart disease not only in Douglas County but the entire United States.

Obesity plays a large role in the risk for heart disease in addition to its role in the risk for type II diabetes. Obesity like diabetes can easily be brought under control through increasing physical activity and the eating of a healthier diet. A decrease in weight would result in lower triglyceride levels and thus a decrease in the risk for heart disease. Again education is a key factor in decreasing the number of people who are obese in our society.

Objectives:

Objectives for Behavioral Health

Outcome Objective:

Decrease the rate of suicides by 10% before 2021. Provide avenues to help support teens and reduce bullying and depression by 5% before the year 2021. Partner with local agencies to reduce the rate of substance abuse by 5% before the year 2021.

Impact Objective:

Reduce the number of deaths linked to suicides and overdoses. Decrease the rate of individuals that feel depressed more than 3 days a week by 5% by the year 2021.

Intervention Strategy:

Stigma will be reduced through education and team building exercises with family programs and schools. Extra-curricular activities will be provided through affordable mechanisms as well as

diversified for the different segments of the students. Staff will educate and provide more information and assistance to families on the benefits of the supplemental food programs and other offered services. Agencies will provide outreach activities about coping skills and other community needs to the residents through fun and interactive mechanisms. The community Plan is for the construction and development of a civic center or a YMCA look-a-like to provide not only fitness activities but also be able to conduct classes and other outreach programs.

Community resources from different agencies such as the DCHD, the Douglas County Mental Health Department, Douglas County Probation, and the Douglas County schools will provide education and presentations. Funding can be absorbed through the different agencies for education; however, a county-wide developmental plan will need to be implemented and funding secured for a civic center or YMCA look-a-like. Some of this funding can be provided through foundations as well as fundraisers.

Objectives for Food Insecurities

Outcome Objective:

Increase awareness of food insecurities and available programs by 25% by 2021. Decrease the rate of food insecure children in Douglas County from 20% to 18% by 2021.

Impact Objective:

Provide two programs to increase food distribution to those in need by 2021. Increase test scores in the school system by 3% after implementation of a food program. Increase food pantries within the county by 2.

Intervention Strategy:

Partner with businesses and the economic development to increase job availability as well as increase wages. Provide transportation to grocery stores and have the ability to transport multiple bags of food. Find programs that will assist with prescription costs; thus, freeing up some funds for food.

Change policies for age restrictions on food and other programs. Reduce the stigma of receiving food from food pantries and other food programs.

Continue food programs during the summer for the children. Conduct programming to educate families on stretching your food dollar. Change policy to use the link card to buy food online and have it delivered. Provide programs that utilize farmers markets and share in the resources. Implement mentoring programs such as Big Sister/Big Brother throughout the communities.

Community resources from different agencies such as the DCHD, the Douglas County Mental Health Department, Douglas County Probation, and the Douglas County schools will provide education and presentations. Funding can be absorbed through the different agencies for education; however, a county-wide developmental plan will need to be implemented and funding secured for a civic center or YMCA look-a-like. Some of this funding can be provided through foundations as well as fundraisers.

Objectives for Heart Disease, and Obesity

Outcome Objective:

Decrease the hospitalization rate associated with diabetes, and heart disease by 5% by the year 2021. Reduce the obesity rate for Douglas County by 5% by the year 2021.

Impact Objective:

Reduce the number of deaths linked to heart disease to less than 300 deaths, and deaths linked to diabetes to less than 25 by round 6 of the Illinois Behavioral Risk Factor Surveillance System. Increase the rate of individuals participating in regular physical activity by 5% by the year 2021.

Intervention Strategy:

Increase awareness and provide education and activities in the schools, businesses, and community service organizations. Distribute information on diabetes, heart disease, and obesity to senior centers to help educate the senior population. Meet with directors for public aid and the local

food pantry to ensure proper education is being implemented to ensure individuals taking advantage of these services are eating a healthy diet. Objectives will be reached by partnering with the University of Illinois extension office, local fitness centers, and local health professionals.

Community resources from different agencies such as the DCHD, the Douglas County Mental Health Department, Douglas County Probation, and the Douglas County schools will provide education and presentations. Funding can be absorbed through the different agencies for education; however, a county-wide developmental plan will need to be implemented and funding secured for a civic center or YMCA look-a-like. Some of this funding can be provided through foundations as well as fundraisers.

Sources

CommunityCommons.org

Current Population survey- Food Security Supplement (CPS-FSS), Department of Commerce/Census Bureau

Healthy People 2020

Feedingamerica.org

SAMHSA.gov. 2015 BHBarometer

Voices for Illinois Children, 2007

USDA