Carroll County Health Department

2019-2024 IPLAN

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CARROLL COUNTY HEALTH DEPARTMENT

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April 25, 2019

Kristin Campbell, IPLAN Administrator Division of Health Policy Illinois Department of Public Health 2nd Floor 525 West Jefferson Street Springfield, IL 62761-0001

Dear Kristin Campbell,

It is with great pleasure that I present the Carroll County Health Department's Plan for Local Assessment of Needs. The Carroll County Board of Health has reviewed and approved the IPLAN Community Health Assessment Plan, which was developed with the participation of health department staff and the local community health committee. The board of health is pleased that the employees of the Carroll County Health Department were able to work cooperatively with other community agencies and residents in the development of the plan and assessment.

The organizational capacity assessment was conducted and approved by the Board of Health on April 25, 2019.

The IPLAN Community Assessment and Health Plan were approved at our April 25, 2019 Board of Health meeting.

The Carroll County Board of Health will continue to support our staff members in their efforts to provide programs that are responsive to the needs of our community.

Sincerely,

David Reese, MD President Carroll County Board of Health

CARROLL COUNTY BOARD OF HEALTH 2019

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COMMUNITY HEALTH PLANNING COMMITTEE

Name & Affiliation

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Dawn Holland Carroll County Health Department

Sally Marken, RN Citizen

Chasity Welch Carroll County Farm Bureau

Ed Bochniak Carroll County Housing Authority

Connie Kraft United Way

Kevin Reible Chair, Carroll County Board

Roberta Smith Right Steps Family Center

Mike Doty Carroll County Administrator

Julie Katzenberger, Superintendent West Carroll Dist #314I

Vincent Wilczynski Church of God

Carol Geary Carroll County Substance Education Coalition

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Executive Summary

The Carroll County 2019-2024 Community Needs Assessment and Community Health Plan is a community health approach to improving the quality of life for the citizens of Carroll County. This is the third needs assessment and health plan written for the county. Each of the plans shares some similar characteristics, but each allows for growth, expansion, evaluation, and improvement on the selected health priorities. The Community Health Plan represents an attempt to address the three priority areas identified in the Needs Assessment process. The content of the plan includes a description of each priority area. The description includes an analysis of each problem or priority, and how the priority relates to state and national statistics, as well as the Year 2019 objectives. Objectives have been established for each priority, with intervention strategies listed to address each problem.

Statistical data were obtained from a variety of sources, with the primary sources being the Illinois Department of Public Health (IDPH) and US Census. Round 5 of the Illinois Behavioral Risk Factor Surveillance System (BRFSS) also provided important data for consideration. Data were summarized on tables and presented to the Carroll County Community IPLAN Committee.

Community input was from the IPLAN Committee. Participants were asked to review the list of perceived "most pressing health problems" for any additions and to fax or email them to the Carroll County Health Department, where the list was compiled. Staff also provided input on health problems, barriers to health care, and strategies to overcome the challenges.

The IPLAN Committee members determined that heart disease, cancer, obesity, substance abuse, depressive disorders, access to health care, low weight births, and accidents were the major problems facing Carroll County residents.

Health department supervisory staff provided input for the APEX organizational selfassessment. All health department staff had the opportunity to provide input on how the Carroll County Health Department (CCHD) provides the core functions of public health and the 10 essential services for public health.

The priorities identified in the needs assessment and to be addressed in the health plan are as follows:

- 1. Heart Disease
- 2. Cancer
- 3. Obesity

The staff of the Carroll County Health Department will continue to work toward the reduction of morbidity and mortality associated with the priority health areas, and intervention strategies will continue to be implemented. Evaluation of our progress will be conducted in Year 3 or 4 of the project.

Statement of Purpose:

The ultimate goal of a health needs assessment is to create a "Health Plan" that incorporates the input of the community and social organizations with statistical data so that we can target efforts to improve the health of the county. As indicated by the APEX manual, the Community Process strengthens the partnership between a local health department and its community by addressing major public health problems and building a healthy community. Simply, its community members create a health roadmap for Carroll County. A plan establishes goals, defines measurable objectives, and provides for self-evaluation. To improve health, the community must be an active participant in its own problems, solutions, and future. Something as simple as choosing the right direction can have a major impact on the health of the community.

This is the third IPLAN process (Illinois Project for the Local Assessment of Needs) ever undertaken for Carroll County, Illinois. (The first was done in 2004.) As part of the process of Local Health Department certification, the Carroll County Health Department conducted an Organizational Capacity Self-Assessment, completed a Community Health Needs Assessment, organized a Community Health Advisory Committee, and created a Community Health Plan using the IPLAN process. Meetings of the Community Health Advisory Committee were held on February 6, March 13, and April 12, 2019. The intent was to create a process to meet requirements for Local Health Department certification, as set forth in section 600.410, Title 77, Chapter I, of the State Administrative Code.

The Organization Capacity Self-Assessment was completed by the health department management group in April 2019 and approved by the Board of Health on April 25, 2019. The health department then created the Community Health Needs Assessment by gathering applicable statistics from the sources listed in the reference section of this document. The data included in the assessment were significant in that they showed either a rate or a percentage of disease in Carroll County that was higher than the State of Illinois or higher than that in rural counties comparable to Carroll County in frontier status, population, and income.

COMMUNITY HEALTH NEEDS ASSESSMENT PROCESS

Description of the Process:

At the first meeting on February 6, 2019, Craig Beintema presented an overview of the process, the purpose of IPLAN, and a brief history of the 2014 document. He discussed the 2014 health priorities and the definitions of "healthy community" and "health problem." The local health department certification process and the IPLAN community process flowchart were also explained. Deborah Lischwe, formally of Health Systems Research, University of Illinois, Chicago, presented the community data.

Participants were asked to review the list of perceived "most pressing health problems" for any additions and to fax them to the Carroll County Health Department, where the list was compiled. Each member was asked to read through the health data for evidence that would indicate health issues facing Carroll County residents and to bring along additional information that might clarify any of these points.

At the March 13, 2019, meeting, the committee reviewed the agenda along with issues identified during the 2014 IPLAN process. They also reviewed the process, defined "health problem," and listed the health issues identified by the previous IPLAN Committee in 2014 and those of the 2014 Committee.

The meeting began with a discussion of the vision for a "Healthy Community": "One that is safe with affordable housing and accessible transportation systems, work for all who want to work, a healthy and safe environment which provides opportunities for family activities, promotes community mindedness and volunteerism, maintains a sustainable ecosystem, and offers access to health care services which focus on prevention and staying healthy."

Deborah Lischwe presented an overview of the critical issues, and a discussion of critical issues was held. Each of the members was asked to provide his or her opinion of the critical issues that affect Carroll County residents, and these were formulated on a list. From the discussion, the following topics were identified as issues that affect Carroll County citizens: Obesity, Depressive disorders, Substance Abuse (Alcohol and Tobacco), Heart Disease, Cancer, Low weight births, and Accident Rates.

The committee then reviewed the Carroll County data to substantiate these issues and to identify others.

Based on the information, the following issues were identified as the most important:

- Depressive disorders
- Substance Abuse (Alcohol, Tobacco)
- Heart Disease
- Cancer
- Obesity
- Low weight births
- Accidents

The Hanlon Method for prioritizing health problems, from the APEXPH Manual, was used to determine which three of these health problems would be chosen. The final top three health problems for Carroll County's 2019 IPLAN were identified as:

- 1. Heart Disease
- 2. Cancer
- 3. Obesity

The April 12, 2019, meeting of the Carroll County IPLAN committee was devoted to completing the Health Problem Analysis Worksheets and the Community Health Plan Worksheets. This was a smaller convened workgroup of the committee. For each health priority, the group determined the risk factors, as well as direct and indirect contributing factors for each of the health problems. The workgroup set an outcome objective and the impact objectives for the health problem they were working on. The Healthy People 2020 objectives were used as a guideline. Each group then discussed proven intervention strategies that could be implemented, as well as possible programs, resources available, and possible barriers.

The committee was given a draft of the IPLAN report and asked for any changes.

REFERENCES

APEXPH Assessment Protocol for Excellence in Public Health (1996)

National Association of County and City Health Officials 440 First Street, NW, Suite 450 Washington, DC 20001

Illinois Project for Local Assessment of Needs

IPLAN Data Set Illinois Department of Public Health Illinois Center for Health Statistics Springfield, IL 62761-0001

US Census 2010 Data for the State of Illinois American Community Survey 5-year estimates

U.S. Census Bureau Public Information Office 4600 Silver Hill Road Washington, DC 20233

Illinois County Behavioral Risk Factor Surveillance System (BRFSS), 2014

Illinois Department of Public Health Illinois Center for Health Statistics 525 West Jefferson Street Springfield, Illinois 62761

Illinois Youth Study

Center for Prevention Research and Development University of Illinois at Urbana-Champaign 510 Devonshire Drive Champaign, IL 61820

Healthy People 2020 Objectives

Office of Disease Prevention and Health Promotion 200 Independence Ave. SW Washington, DC 20201

II Dept. of Employment Security Labor Statistics

1300 South Ninth Springfield, IL 62703

Illinois State Cancer Registry (ISCR), Illinois Department of Public Health, 2017

Regional Economic Data, Bureau of Economic Analysis

COMMUNITY HEALTH PLAN PRIORITIES

Priority 1 Health Problem - Heart Disease

Justification: Priority 1

Heart disease is the leading cause of death for all people in the United States. Heart disease and stroke continue to be major causes of disability and significant contributors to increases in health care costs in the United States. Heart disease is the leading cause of death in Carroll County. The leading modifiable (controllable) risk factors for heart disease and stroke are: High blood pressure, High cholesterol, Cigarette smoking, Diabetes, Unhealthy diet and physical inactivity and Overweight and obesity. Over time, these risk factors cause changes in the heart and blood vessels that can lead to heart attacks, heart failure, and strokes. It is critical to address risk factors early in life to prevent these devastating events and other potential complications of chronic cardiovascular disease. (Healthy Peoples 2020)

High blood cholesterol is a major risk factor that can be modified. More than 50 million US adults have blood cholesterol levels that require medical advice and treatment. More than 90 million adults have cholesterol levels that are higher than desirable. Experts recommend that all adults aged 20 years and older have their cholesterol levels checked at least once every five years to help them take action to prevent or lower their risk. Lifestyle changes that prevent or lower high blood cholesterol include eating a diet low in saturated fat and cholesterol, increasing physical activity, and reducing excess weight.

High blood pressure is known as the "silent killer," and remains a major risk factor for heart disease. About 50 million adults in the US have high blood pressure. High blood pressure also is more common in older persons. Heart disease and stroke share several risk factors, including high blood pressure, cigarette smoking, high blood cholesterol, and overweight. Physical inactivity and diabetes are additional risk factors for heart disease.

Cigarette smoking is the single most preventable cause of disease and death in the US. Smoking results in more deaths each year in the US than AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle crashes, and fires—combined. Smoking is a major risk factor for heart disease, stroke, lung cancer, and chronic lung diseases—all leading causes of death. Other health effects of smoking result from injuries and environmental damage caused by fires (Healthy Peoples 2020).

Controlling risk factors for heart disease and stroke remains a challenge. High blood pressure, cigarette smoking, and high blood cholesterol are still major contributors to the national epidemic of cardiovascular disease. High blood pressure affects approximately 1 in 3 adults in the United States, and only about half of them have it under control. High sodium intake can increase blood pressure and the risk for heart

disease and stroke, yet about 90% of American adults exceed their daily recommendation for sodium intake

The risk of Americans developing and dying from cardiovascular disease would be substantially reduced if major improvements were made across the U.S. population in diet and physical activity, control of high blood pressure and cholesterol, smoking cessation, and appropriate aspirin use. (Healthy Peoples 2020)

Outcome Objective:

By 2024, decrease the number of adults who die from heart disease in Carroll County by 10% from 44 people in 2017 to 41 people (National Center for Health Statistics, CDC Wonder).

Risk Factor: Impact Objective:

Tobacco Use By 2021, decrease the proportion of adults, aged 18 and older, who use tobacco products from 14.3% to 13% (BRFSS Report, 2014).

Direct and Indirect Contributing Factors:

The contributing factors to Heart Disease that were identified include:

- access to preventative care
- stress
- lifestyle (including poor/high fat diet, lack of exercise, obesity)
- lack of transportation
- physician education practices
- heredity
- social acceptance and perception of tobacco use
- self-esteem issues
- tobacco marketing and availability
- lack of law enforcement of tobacco use
- addiction and mental health issues, and
- socio/economic factors.

Proven Intervention Strategies:

1. Provide low cost screenings such as cholesterol, glucose, and blood pressure at Carroll County Health Department and other community locations.

- 2. Provide health education on healthy eating and physical activity to the public, school-aged children, pregnant women, and WIC clients.
- **3.** Support the enforcement of *Smoke-Free Illinois* legislation by investigating complaints.
- **4.** Provide health education on hypertension to families and providers by utilizing DHHS guidelines. This would be provided through WIC, FCM, and public forums.
- 5. Acknowledge businesses that promote healthy lifestyles.
- 6. Begin a restaurant campaign to acknowledge the restaurants that offer healthy choices.
- 7. Provide regular low-cost cholesterol and blood pressure screenings.

Resources Available:

There are five clinics in Carroll County with typical heart disease treatment programs. Four hospitals (CGH, FHN, KSB, and Mercy Medical) that include a cardiac rehabilitation unit and a cardiology clinic are located outside the county, all at least 40 minutes away. These medical facilities provide community outreach, blood pressure screening, and cholesterol clinics. The health department has started a cholesterol screening program, and local newspapers have done extensive reporting on heart-and health-related topics. The University of Illinois County Extension has various programs that address nutrition and substance abuse programs. The health department currently operates several programs that provide health education to children and adults on not smoking and healthy choices, including the *Wise Woman*, Cessation Classes. In addition, the health department works in collaboration with the *Illinois Tobacco Quit Line. The Smoke-Free Illinois* legislation will also have an impact on this issue.

Barriers:

Possible barriers to meeting this goal include:

- lack of access to preventative care
- economic factors
- cost of transportation
- stigma attached to addiction
- peer pressure and social norms
- tobacco marketing
- lack of funding
- geographic (much rural area, difficult to enforce existing laws)
- denial of community about alcohol-related issues, and
- lack of physical activity.

Information on nutrition, regular exercise, weight reduction, and other preventative measures is available, but not utilized fully.

Program Evaluation:

Evaluating the effects of the heart disease prevention programs will focus on measuring the achievements of the outcome and impact objectives. This will include measuring:

- the number of programs and presentations offered and the number of attendees
- the number of people who quit smoking, including pregnant women
- the number of respondents to the *IL BRFSS Report* who identify themselves as either overweight or obese
- the number of respondents to the *IL BRFSS Report* who identify themselves as having had their blood cholesterol checked within the last year
- the number of individuals screening for cholesterol, and
- the number of participants in the prevention programs.

ANTICIPATED SOURCES OF FUNDING: Funding is limited.

Illinois Department of Public Health (Illinois Tobacco Free Coalition) (~\$20,000)

Fees for service

WIC (~\$40,000)

Local School System (In-kind)

Healthy Peoples 2020 objectives

HDS-1(Developmental) Increase overall cardiovascular health in the U.S. population HDS-2Reduce coronary heart disease deaths

HDS-3Reduce stroke deaths

HDS-4Increase the proportion of adults who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high.

COMMUNITY HEALTH PLAN PRIORITIES

Priority 2. Health Problem - Cancer

Justification (Priority 2)

Research, detection, and treatment have resulted in a decline in both incidence and death rates for all cancers (Healthy People 2020). These advances show that more than half of people who contract cancer will be alive in 5 years. Even with new advances, cancer remains a leading cause of death in the United States, second only to heart disease. In Carroll County cancer is the second leading cause of death. Healthy People 2020 objectives reflect the importance of promoting screening for cervical, colorectal, and breast cancer. They also highlight the importance of monitoring the incidence of invasive cancer (cervical and colorectal) and late-stage breast cancer, which are intermediate markers of cancer screening success.

Many factors contribute to cancer incidence and death among racial, ethnic, and underserved groups. The most obvious factors are associated with a lack of health care coverage and low socioeconomic status (SES). An individual's status would include other factors such as educational levels and geographic location (where the person lives). Rural areas with access to care issues and no hospitals contribute to higher incidences of cancer. This is further enhanced with the lack of health insurance. Rural areas such as Carroll County will have lower household incomes than more populated areas and greater distances to travel for health care. All of these factors are associated with the risk of developing and surviving cancer (Healthy People 2020).

As with most diseases, prevention has the utmost importance. Cancer is preventable by reducing risk factors such as: use of tobacco products, physical inactivity, poor nutrition, Ultraviolet light exposure and obesity. Many studies show that early detection through screening greatly increases survival rates of specific cancers including breast, cervical, and colorectal. Other cancers can be prevented by getting vaccinated against human papillomavirus (HPV) and hepatitis B virus. Screening is effective in identifying some types of cancers in early, often highly treatable including: Breast cancer (using mammography), Cervical cancer (using Pap test alone or combined Pap test and HPV test) and Colorectal cancer (using stoolbased testing, sigmoidoscopy, or colonoscopy) For cancers with evidence-based screening tools, early detection must address the continuum of care from screening to appropriate follow-up of abnormal test results and referral to cancer treatment.

In the past decade, overweight and obesity have emerged as new risk factors for developing certain cancers, including but not limited to colorectal, breast, uterine corpus (endometrial), pancreas, and kidney cancers. The impact of the current weight trends on cancer incidence will not be fully known for several decades. Continued

focus on preventing weight gain will lead to lower rates of cancer and many chronic diseases. (Healthy People 2020).

Cigarette smoking is the single most preventable cause of disease and death in the United States. Smoking results in more deaths each year in the United States than AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle crashes, and fires—combined (Healthy People 2020).

Outcome Objective

By 2024, decrease the age-adjusted cancer death rate by 5% from 157.5/100,000 to 149.7/100,000. [Baseline 157.5/100,000 2015-17 vs. 163/100,000, 2015-17, IL, (CDC, NCHS)]

Risk Factor: Tobacco Use	Impact Objective: By 2021, decrease the proportion of adults ages 18 and over who use tobacco products from 14.3% to 13% (BRFSS, 2014)
Early detection	By 2021, increase the proportion of women ages 40 and older who have received a mammogram within the last year from 93.4% to 95%. [Baseline 93.4% vs. 57.2% IL (BRFSS, 2014)] By 2021, increase the proportion of adults ages 18 and over who have ever had home blood stool tests 22.7% to 25.7%. [Baseline 22.7% vs. 23.86% IL (BRFSS, 2014)]

Contributing Factors (Indirect/Direct):

The contributing factors to cancer that were identified include:

- local social influence
- low perception of risk or harm
- family structure
- social/community norms
- physical dependency
- availability, acceptability, and peer pressure
- addiction
- genetic
- social influences
- environment
- lack of support systems
- access to care

- poor diet and inactivity
- obesity

Proven Intervention Strategies:

- 1. Support the enforcement of the Smoke-Free Illinois Act.
- 2. Provide health education about early detection to the public, pregnant women, WIC clients, and school-aged children.
- 3. Increase the number of pregnant mothers participating cessation classes.
- 4. Support enforcement of Smoke-Free Illinois Policy changes schools, communities, retailers.
- 5. Promote and recruit women for the IL Breast & Cervical Cancer Program.
- 6. Increase the number of individuals who utilize public transportation to the closest Federally Qualified Healthcare Center.
- 7. Provide community education of early detection.
- 8. Increase the number of individuals using home colorectal screening test.

Resources Available:

Carroll County has a very active Substance Education Coalition that brings together leaders from several professions to deal with youth issues. The health department has coordinated several tobacco prevention programs such as "Smoke Free That's Me," "Smoke Free Illinois" surveillance and others. The Carroll County Sheriff's Department and local police departments participate in substance abuse prevention programs and a Local Law Enforcement Drug Task Force. The health department participates in the Illinois Breast and Cervical Cancer Program that provides direct education and links women with providers. The health department has initiated a home colorectal cancer test kit program via a private foundation donation.

Barriers

Possible barriers to meeting this goal include:

- 1. cultural traditions
- 2. addictions (pre-existing)
- 3. lack of funding
- 4. demographics lots of rural areas, difficult to enforce existing laws
- 5. stigma attached to addiction
- 6. denial by community and individuals about dietary-related issues
- 7. lack of insurance
- 8. demographics lots of rural areas, difficult to reach early detection/prevention
- 9. stigma attached to cancer
- 10. apathy to early detection.

Further potential barriers include limited funding for prevention programs, social norms/ environments, negative peer pressure, resistance to change, cultural traditions, rural demographics, and denial of having cancer and tobacco-related issues.

Program Evaluation

Evaluating the effects of the cancer prevention programs will focus on measuring the achievements of the outcome and impact objectives. This will include measuring:

- the number of programs and presentations offered and the number of attendees
- the number of people who quit smoking, including pregnant women
- the number of individuals who use home colorectal kits.
- the number of respondents to the *IL BRFSS Report* who identify themselves as having used tobacco
- the proportion of responding women to the *IL BRFSS Report* ages 40 and older who have received a mammogram within the last year
- the number of participants in the prevention programs.
- the number of youth mentored, and
- policy changes.

ANTICIPATED SOURCES OF FUNDING

Federal funding Local Law Enforcement Funding (In-kind) DHS grants IDPH: Illinois Tobacco Free Communities funds (~\$20,000) Other grants Fees for Service Allan & Letha Rahn Foundation (tsmJ) \$5,000 per year

Healthy People 2020 Objectives

C-1Reduce the overall cancer death rate C-2Reduce the lung cancer death rate C-3Reduce the female breast cancer death rate C-4Reduce the death rate from cancer of the uterine cervix C-5Reduce the colorectal cancer death rate C-6Reduce the oropharyngeal cancer death rate C-7Reduce the prostate cancer death rate C-8Reduce the melanoma cancer death rate C-9Reduce invasive colorectal cancer C-10Reduce invasive uterine cervical cancer

C-11Reduce late-stage female breast cancer

COMMUNITY HEALTH PLAN PRIORITIES

Priority 3. Health Problem – Obesity.

Justification

Obesity ties to community overarching issues, namely, poverty and unemployment, along with the priority health issues. In Carroll County 72.6% are considered overweight or obese. The percent of adult obesity has increased over 10 percentage points since 2007. (BRFSS 2014 and 2007)

Healthy People 2020 indicate overweight and obesity substantially raise the risk of illness from high blood pressure, high cholesterol, type 2 diabetes, heart disease and stroke, gallbladder disease, arthritis, sleep disturbances and problems breathing, and certain types of cancers. Obese individuals also may suffer from social stigmatization, discrimination, and lowered self-esteem. Overweight and obesity are major contributors to many preventable causes of death. On average, higher body weights are associated with higher death rates. The number of overweight children, adolescents, and adults has risen over the past four decades. Total costs (medical cost and lost productivity) attributable to obesity alone amounted to an estimated \$99 billion in 1995.

Healthy People 2020 further indicate obesity is a result of a complex variety of social, behavioral, cultural, environmental, physiological, and genetic factors. Efforts to maintain a healthy weight should start early in childhood and continue throughout adulthood, as this is likely to be more successful than efforts to lose substantial amounts of weight and maintain weight loss once obesity is established.

A healthy diet and regular physical activity are both important for maintaining a healthy weight. Over time, even a small decrease in calories eaten and a small increase in physical activity can help prevent weight gain or facilitate weight loss. It is recommended that obese individuals who are trying to lose substantial amounts of weight seek the guidance of a healthcare provider. Weight is influenced by calories consumed and expended, interventions to improve weight can support changes in diet or physical activity. They can help change individuals' knowledge and skills, reduce exposure to foods low in nutritional value and high in calories, or increase opportunities for physical activity. Interventions can help prevent unhealthy weight gain or facilitate weight loss among obese people. They can be delivered in multiple settings, including health care settings, worksites, or schools. (Healthy People 2020)

Outcome Objective

By 2024, decrease the proportion of individuals who are overweight or obese from 72.6% to 65.3% (Baseline: 72.6% vs 63.7% IL, BRFSS 2014).

Risk Factor:	Impact Objective:
Physical inactivity	By 2021, increase the proportion of adults age 18 years and older who who engage in any physical exercise in the last 30 days from 74% to 81%. (Baseline 74% vs 76%, IL; BRFSS 2014)
Nutrition	By 2021, increase the proportion of 10 th graders who consume fruit at least 3 times a day from 11% to 15%. Baseline 11% vs 7%, IL; IL Youth Survey, 2017)

Contributing Factors (Indirect/Direct):

The contributing factors for obesity/ exercise that were identified include:

- limited funding for prevention programs,
- social norms/environments,
- Lifestyle/person motivation,
- resistance to change,
- Physical and mental health,
- Poor exercise habits
- apathy.
- distance to exercise facility
- limited knowledge of simple exercise
- unemployment
- availability and cost of preventative care.

Proven Intervention Strategies:

- 1. Establish a county-wide health education committee to evaluate "best practices" for target populations.
- 2. Provide nutrition and exercise education to the public, pregnant women, WIC clients, and school-aged children.
- 3. Encourage participation in the Win with Wellness program that includes TOPS and Heart to Heart wellness initiatives.
- 4. Educate and motivate the public concerning nutrition and lifestyle changes that support good health.
- 5. Encourage area clinics to increase proportion of overweight/obese adults who receive advice about weight loss.
- 6. Coordinate services between area providers and educators such as schools, CGH, FHN, DHS, and CCHD.
- 7. Encourage workplace wellness programs.
- 8. Parents of children enrolled in WIC program who are identified as obese/overweight will be provided information regarding: the health risks of

being overweight, improvement of dietary habits and opportunities for increasing physical activity.

Resources Available:

There are five medical clinics in Carroll County operated by two hospitals. Four hospitals (CGH, FHN, KSB, and Mercy Medical) are located outside the county and are, on average, 40 minutes away. Carroll County Health Department is an active partner Education Coalition that brings together leaders from several professions to deal with health and youth issues, Carroll County Substance Education Coalition) The health department partners with the nutritional and exercise program called Win with Wellness. The health department also administers the WIC and FCM programs from there facility. The local hospital clinics can be encouraged to provide educational information regarding weight loss, exercise and nutrition.

Barriers

Potential barriers include:

- limited funding for prevention programs,
- social norms/environments,
- resistance to change,
- Physical and mental health,
- apathy.

Evaluating the effects of the obesity prevention programs will focus on measuring the achievements of the outcome and impact objectives. This will also include measuring:

- the number of programs and presentations offered and the number of attendees.
- the number of respondents to the *IL BRFSS Report* who identify themselves as either overweight or obese.
- the number of respondents to the *IL BRFSS Report* who identify themselves as seeing a physician within the last two years.
- the number of WIC children who are identified as obese/overweight and receive nutrition and exercise education.
- the number of school age children who are identified as obese/overweight.
- the number of school age children who receive nutrition and exercise education.
- the number of restaurants and grocery stores that provide healthy eating education to their consumers.

ANTICIPATED SOURCES OF FUNDING: Funding is limited.

Illinois Department of Public Health Grants WIC

Community Foundation fee for service local school systems

Healthy People 2020 Objectives

NWS-1 Increase the number of States with nutrition standards for foods and beverages provided to preschool-aged children in child care

NWS-2 Increase the proportion of schools that offer nutritious foods and beverages outside of school meals

NWS-2.1 Increase the proportion of schools that do not sell or offer calorically sweetened beverages to students

NWS-2.2 Increase the proportion of school districts that require schools to make fruits or vegetables available whenever other food is offered or sold

NWS-8 Increase the proportion of adults who are at a healthy weight NWS-9 Reduce the proportion of adults who are obese

State Health Improvement Plan Concurrence

Carroll County concurs and aligns with the long-term outcome and intermediate outcomes listed in the State Plan (SHIP 2021).

Health Priority Heart Disease: Concurrence with State Health and Improvement Plan.

- Reduce the percentage of Illinois adults reporting smoking. Baseline: 16.7% Illinois overall; BRFSS | Target: 15.4% (5% reduction)
- 2. Reduce the rate of age-adjusted ischemic heart disease mortality. Baseline: 91.5 per 100,000; Vital Records | Target: 87 per 100,000 (5% reduction)

Health Priority Cancer: Concurrence with State Health and Improvement Plan.

1. Reduce the percentage of Illinois adults reporting smoking. Baseline: 16.7% Illinois overall; BRFSS | Target: 15.4% (5% reduction)

Health Priority Obesity: Concurrence with State Health and Improvement Plan.

- Reduce the percentage of obesity among children ages 10-17. Baseline: 19.3% for Illinois overall; National Survey of Children's Health | Target: 18.3% (5% reduction)
- 2. Reduce the percentage of obesity among adults. Baseline: 29.5% for Illinois overall; BRFSS | Target: 28.0% (5% reduction)
- 3. Reduce the percentage of Illinois adults reporting no physical activity in the last 30 days. Baseline: 24% for Illinois overall; BRFSS | Target: 22.8 (5% reduction)
- Reduce the percentage of Illinois children who report not engaging in vigorous physical activity. Baseline: 8% for Illinois overall; National Survey of Children's Health | Target: 7.6% (5% reduction)

Section 3

Health Plan Worksheets

Carroll County Community Health Plan Worksheet

Healt	n Problem:	Outcome Objective (5 year goal for change
		in the health problem):
Heart	Disease	By 2024, decrease the number of adults who
		die from heart disease in Carroll County by10%
		from 44 people to 41. [Baseline: 44 people,
		2017, (NCHS)]
Risk I	Factors:	Impact Objectives (2 – 3 year goal for
		change in a risk factor):
		By 2021, decrease the proportion of adults,
Tobac	co Use	aged 18 and older, who use tobacco products
		from 14.3% to 13%. (BRFSS Report, 2014)
Contr	ibuting Factors:	Proven Intervention Strategies
		(1 – 2 year goal for change in contributing
0	Access to preventative care	factors):
0	Stress	
0	Lack of transportation	• Provide health education to the public,
0	Physician education practices	school-aged children, pregnant women,
0	Social Acceptance/Perception of	WIC clients and Family Practitioners.
	tobacco use	 Support the enforcement of Smoke-
0	Self Esteem	Free Illinois.
0	Candy Cigarettes/Flavored	Advertisement
	Tobacco Lack of Law Enforcement	Quitline Provide low cost screenings and PP
0	Lack of Parental Involvement	 Provide low cost screenings and BP
0	Mental Health/Dependency	
Reso	urces Available:	Barriers:
	Support groups	
	Dept. of Human Services	 Cultural traditions.
	Local Churches	 Addiction (pre-existing).
	Schools	 ○ Lack of funding.
0	FHN Corroll County Report of Health	 Demographics – lots of rural areas;
0	Carroll County Board of Health	difficult to enforce existing laws.
0	Carroll County Substance Education Coalition	 Stigma attached to addiction.
	U of I Extension	 Denial of community and individuals
0	Riverview Center	about tobacco-related issues.
0	Local Government Agencies	 Tobacco marketing
0	Lucal Government Agencies	

Community Health Plan Worksheet

Health	n Problem:	Outcome Objective (5 year goal for change in
		the health problem):
Canc	er Rates	By 2024, decrease the age-adjusted cancer death rate by 5% from 157.5/100,000 to 149.7/100,000. [Baseline 157.5/100,000 2015-17 vs 163/100,000, 2015-17, (CDC, NCHS)]
	Factors:	Impact Objectives (2 – 3 year goal for change in a risk factor): By 2021, decrease the proportion of adults ages 18 and over who use
0	Early detection	tobacco products from 14.3% to 13% (BRFSS,
		2014) By 2021, increase the proportion of adults 18 and older who have ever had home blood stool tests from 22.7% to 25.7% [Baseline 22.7% vs 23.86% IL, (BRFSS 2014)]
Contr	ibuting Factors:	Proven Intervention Strategies
0	Addiction	(1 – 2 year goal for change in contributing
0	Genetic	factors):
	Social Influences	 Provide community education
	Environment	 Support Illinois Tobacco Quitline
0	Lack of Support	 Support enforcement of Smoke-Free
0	Access to Care	Illinois
0	Lack of education	 Provide low cost home colorectal screening kits
Resou	irces Available:	Barriers:
	Support groups	 Cultural traditions
	Dept of Human Services	 Addictions (pre-existing)
0	Local churches	 Lack of funding
0	Schools	 Demographics – lots of rural areas,
	Family interventions/support	difficult to enforce existing laws
0	FHN	 Stigma attached to addiction
0	Carroll County Board of Health	 Denial by community and individuals
0	Carroll County Substance Education Coalition	about dietary-related issues
		 Reluctant to do colorectal testing Apathy to partly detection
0	Rahn Foundation (tsmJ) Local government agencies	 Apathy to early detection
0	Local government agencies	

Community Health Plan Worksheet

Health Problem:	Outcome Objective (5 year goal for change in
	the health problem):
Cancer Rates	By 2024, decrease the age-adjusted cancer death rate by 5% from 157.5/100,000 to 149.7/100,000. [Baseline 157.5/100,000 2015-17 vs 163/100,000, 2015-17, (CDC, NCHS)]
Risk Factors:	Impact Objectives (2 – 3 year goal for change in a risk factor): By 2021, increase the proportion of women ages 40 and older who have received a mammogram within the last year from 93.4% to 95%. [Baseline 93.4% vs 57.23% IL BRFSS, 2014)
Contributing Factors:	Proven Intervention Strategies
 Addiction Genetic Social Influences Environment Lack of Support Access to Care 	 (1 – 2 year goal for change in contributing factors): Support and refer women to the Illinois Breast and Cervical Cancer program. Provide community education Support Illinois Tobacco Quitline Support enforcement of Smoke-Free Illinois Provide referral for uninsured individuals to obtain health insurance.
Resources Available:	Barriers:
 Support groups Dept of Human Services Sinnissippi Centers Local churches Schools Family interventions/support FHN, CGH, KSB Carroll County Board of Health Carroll County Substance Education Coalition Riverview Center Local government agencies 	 Cultural traditions Addictions (pre-existing) Lack of funding Demographics – lots of rural areas, difficult to enforce existing laws Stigma attached to cancer

Carroll County Community Health Plan Worksheet

Health Problem:	Outcome Objective (5 year goal for change
Obesity	in the health problem): By 2024, decrease the proportion of adults 18 yr and older who are overweight or obese from 72.6% to 65.3%. [Baseline: 72.6% vs. 63.7% (BRFSS 2014)]
Risk Factors:	Impact Objectives (2 – 3 year goal for
 Physical activity Nutrition 	 change in a risk factor): By 2021, increase the proportion of adults 18 yrs and older who engage in any physical exercise in the last 30 days from 74% to 81%. [Baseline:74% vs 81% IL, BRFSS 2014] By 2021, increase the proportion of 10th graders who consume fruit at least 3 times a day from 11% to 15%.in the last 30 days from 74% to 81%. [Baseline:11% vs 7% IL, IL Youth
Direct/Indirect Contributing Factors:	Survey 2017] Proven Intervention Strategies
Direction and the contributing Factors.	(1 – 2 year goal for change in contributing
 Lack of knowledge of nutrition and 	factors):
 of the diabesity and metabolic complex o Food cost/availability/quality o limited funding for prevention 	 Establish a county-wide health education committee to evaluate "best practices" for target populations. Provide nutrition and exercise education to
 programs, social norms/environments, 	 the public, pregnant women, WIC clients, and school-aged children. Encourage participation in the Win with
 Lifestyle/person motivation, resistance to change, 	Wellness program that includes TOPS and Heart to Heart wellness initiatives.
 Physical and mental health, Poor exercise habits apathy. 	 Educate and motivate the public concerning nutrition and lifestyle changes that support good health.
 distance to exercise facility limited knowledge of simple exercise 	 Encourage area clinics to increase proportion of overweight/obese adults who receive advice about weight loss.
 unemployment 	 Coordinate services between area providers and educators such as schools
 availability and cost of preventative care. 	 and educators such as schools. Encourage workplace wellness programs. Parents of children enrolled in WIC program who are identified as obese/overweight will be provided information regarding: the health risks of being overweight, improvement of dietary habits and opportunities for increasing physical activity.
Resources Available:	Barriers:

 Cultural traditions limited funding for prevention programs, social norms/environments, resistance to change, Physical and mental health, apathy Stigma attached to obesity 	
Support groups Dept of Human Services Sinnissippi Centers Local churches Schools Family interventions/support FHN, CGH, KSB Carroll County Board of Health Carroll County Substance Education Coalition Riverview Center Local government agencies	 Dept of Human Services Sinnissippi Centers Local churches Schools Family interventions/support FHN, CGH, KSB Carroll County Board of Health Carroll County Substance Education Coalition Riverview Center Cultural traditions Iimited funding for prevention programs, social norms/environments, resistance to change, Physical and mental health, apathy Stigma attached to obesity
	 limited funding for prevention programs, social norms/environments, resistance to change, Physical and mental health,

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Community Health Needs Assessment

Illinois Project for Local Assessment of Needs (IPLAN)

IPLAN is a process that the health department is using to assess the health of our community and to plan programs that address our specific local health needs. This Community Health Needs Profile is a group of statistics and reports on the health status of Carroll County and is the first step in evaluating what the health needs are in our community.

Previous IPLANs

Carroll County 2004 - 2009

Health Problems Identified:

- 1. Access to Care
- 2. Inadequate Parenting Skills
- 3. Substance Abuse
- 4. Higher Cancer Rates

Carroll County 2009 - 2014

Health Problems Identified:

- 1. Access to Care
- 2. Substance Abuse
- 3. Diseases of the Heart
- 4. Higher Cancer Rates

Carroll County 2014 - 2019

Health Problems Identified:

- 1. Heart Disease
- 2. Cancer
- 3. Access to Care
- 4. Substance Abuse

Carroll County 2019 - 2024

Health Problems Identified:

- 1. Heart Disease
- 2. Cancer
- 3. Obesity

Statistical Indicators for Carroll County Community Health Needs Assessment

Healthy People - The Leading Health Indicators

The Behavioral Risk Factor Surveillance System (BRFSS 2014)

• Demographics of respondents

Measures of Death

• Leading cause of mortality

Demographic and Socioeconomic Characteristics

- Dependency indicators
- Estimated minority population
- Carroll County poverty rate

Access to Health Care

- Carroll County physician to patient ratio
- Medicaid enrollees to physician vendors
- Physicians registered to accept Medicaid
- Lack of public transportation

Substance Abuse

- Smokers in Carroll County
- Mothers who smoke during pregnancy
- Carroll County school age substance use and antisocial behavior

Chronic Disease Indicators

- Overweight and obesity
 - 1. Obesity risk factor/weight control
 - 2. Nutrition total servings of fruits and vegetables per day
- Heart Disease
 - 1. Cholesterol
 - 2. Hypertension
 - 3. Tobacco use
- Cancer Incidence

Health Indicators – Other

• Number of uninsured

• Infectious and communicable diseases

This Community data present a comprehensive overview of Carroll County by describing the population through secondary sources of information. Topics include population size, race/ethnicity, age, gender, income, employment, crime, births, deaths, health behaviors, morbidity, infectious/communicable diseases and health care utilization.

Two major sources of information for the Community Overview are the U.S. Census Bureau and the Illinois Department of Public Health, with other data from numerous federal, state, and regional entities. Much of the detailed Census information comes from 2010 actual population counts and the 2013-2017 American Community Survey five-year estimates. Replacing the Census Bureau's "long form" which had been administered as part of the decennial Census through 2000, the American Community Survey collects detailed demographic, economic, social, and housing data on an annual basis from a sample of households.

Other data sources include the National Center for Health Statistics, Illinois Department of Employment Security, Illinois Uniform Crime Reporting System, Illinois Department of Children and Family Services, Illinois Department of Healthcare and Family Services, SAIPE Small American Income Poverty Estimates 2017 and Illinois Youth Survey.

Healthy People 2020 Leading Health Indicators

Healthy People 2020 is a comprehensive set of 26 disease prevention and health indicators that are organized into 12 categories. It identifies a wide range of public health priorities and specific, measurable objectives called "Leading Health Indicators." The Leading Health Indicators will be used to measure the health of the nation over the next 10 years.

As a group, the Leading Health Indicators reflect the major health concerns in the United States at the beginning of the 21st century. The Leading Health Indicators were selected on the basis of their ability to motivate action, the availability of data to measure progress, and their importance as public health issues.

Healthy People 2020

Leading U.S. Health Indicator Categories

- Access to Health Services
- Clinical Prevention Services
- Environmental Quality
- Injury and Violence
- Maternal Infant and Child Health
- Mental Health
- Nutrition, Physical Activity and Obesity
- Oral Health
- Reproductive and Sexual Health
- Social Determinants
- Substance Abuse
- Tobacco Use

Behavioral Risk Factor Surveillance System (BRFSS)

The **Behavioral Risk Factor Surveillance System (BRFSS)** is a unique survey conducted state-wide that gathers information on risk factors among Illinois adults 18 years of age and older through monthly telephone surveys. Established in 1984 as collaboration between the U.S. Centers for Disease Control and Prevention (CDC) and state health departments, the BRFSS has grown to be the primary source of information on behaviors and conditions related to the leading causes of death for adults in the general population.

In 2014, Carroll County had 415 respondents in the BRFSS system. While this information is not as solid statistically as the other information cited, it gives a unique look into individual attitudes and the perception of health risk factors. Knowing the profile of respondents is essential when evaluating the impact of the statistics specific to Carroll County. Highlighted lines indicate Carroll County percentages higher than Illinois or U.S. percentages.

	Percent of Population 18 Years & Older		
	Carroll (County	Illinois
Health Behaviors	2014	2007	2014
Obesity			
Underweight/normal	27.4%	33.5%	36.3%
Overweight	33.9%	38.3%	34.2%
Obese	38.7%	25.1%	29.5%
Drinking			
At risk for acute/binge drinking ¹	20.2%	15.0%	20.3%
Smoking Status			
Current smoker	14.9%	20.3%	16.7%
Former smoker	29.4%	26.5%	23.8%
Non-smoker	55.7%	53.1%	55.6%

CARROLL COUNTY AND ILLINOIS SELF-REPORTED HEALTH BEHAVIORS: 2007 AND 2014

¹Consumed five or more drinks on at least one occasion within past month.

Source: Illinois Department of Public Health, Behavioral Risk Factor Surveillance Survey

	Percent of Population		
	Carroll	Illinois	
Procedure	County	2008	
Women			
Had a mammogram, ages 40+	93.4%	92.2%	
Within past year	75.5%	81.6%	
Had a pap smear	96.1%	89.2%	
Within the past year	63.6%	67.5%	
Men, Ages 40+			
Had PSA test	64.2%	62.4%	
Had digital rectal exam	68.0%	73.1%	
All Adults, Ages 50+			
Had colon/sigmoidoscopy	68.4%	58.8%	

CARROLL COUNTY AND ILLINOIS UTILIZATION OF CANCER SCREENING PROCEDURES: 2014

Source: Illinois Department of Public Health, Behavioral Risk Factor Surveillance Survey

Measure of Mortality

Mortality data have historically been the standard data for evaluating health problems. Included are five years of data summarizing the causes of death in Carroll County. They are ranked by number of deaths and percentage of total that occurred from that specific disease/condition for the 5-year period. The highlighted lines indicate an area where the percentage of individuals who died of a specific cause is higher than the State percentage. The leading cause of death by age group is also listed. Individuals < 65 years of age show malignant neoplasms (cancers), diseases of the heart, and accidents as the leading causes of death. In contrast, people over 65 years of age show diseases of the heart, malignant neoplasms (cancers), and cerebrovascular disease as the leading causes of death. Highlighted lines indicate Carroll County percentages higher than Illinois and/or U.S. percentages.

	Carroll	County	Illinois	U.S.
Year	Deaths	Rate ¹	Rate ¹	Rate ¹
2017	194	13.4	8.6	8.6
2016	177	12.2	8.4	8.5
2015	193	13.2	8.3	8.4
2014	188	12.8	8.2	8.2
2013	190	12.7	8.0	8.2
2012	197	13.1	8.0	8.1
2011	179	11.8	7.9	8.1
2010	200	13.0	7.8	8.0
2005	200	12.6	8.1	8.3
2000	196	11.8	8.6	8.5

CARROLL COUNTY, ILLINOIS AND U.S. TOTAL RESIDENT DEATHS AND DEATH RATES: 2000-2017

¹Deaths per 1,000 population.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER

AGE-ADJUSTED DEATH RATE: 2017				
Area	Crude Rate	Age-Adjusted Rate ¹		
Carroll County	13.4	7.5		
Illinois	8.6	7.2		
U.S.	8.6	7.3		

CARROLL COUNTY, ILLINOIS AND U.S. AGE-ADJUSTED DEATH RATE: 2017

¹Per 1,000 population adjusted to U.S. standard population 2000.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER

	Number Rate Per 100,000 Pop.			
Cause	2013-2017	2013-2017	2003-2007	Difference
Heart disease	256	349.3	373.0	-6.4%
Cancer (malignant neoplasms)	215	293.3	313.0	-6.3%
Chronic lower respiratory diseases ¹	55	75.0	55.1	+36.1%
Stroke (cerebrovascular diseases)	50	68.2	78.9	-13.6%
Accidents (unintentional injuries)	47 ²	64.1	43.8	+46.3%
Nephritis, nephrotic syn., and nephrosis	19	25.9	20.0	+29.5%
Influenza and pneumonia	18	24.6	23.8	+3.4%
Diabetes mellitus	18	24.6	32.5	-24.3%
Alzheimer's disease	12	16.4	15.0	+9.3%
Suicide (intentional self-harm)	12	16.4	NA	NA

CARROLL COUNTY DEATH RATES FOR TEN LEADING CAUSES: 2013-2017 COMPARED TO 2003-2007

¹Also referred to as chronic obstructive pulmonary disease (COPD).

²Of these deaths, 21 were motor vehicle accidents and 26 non-transport (divided almost equally between falls and accidental poisoning and exposure to noxious substances.)

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER

CARROLL COUNTY, ILLINOIS AND U.S. AGE-ADJUSTED DEATH RATES¹ FOR LEADING CAUSES: 2006-2008 AND 2015-2017

	Carroll County		Illinois	U.S.	
Cause	2015-2017	2006-2008	2015-2017	2015-2017	
Heart disease	192.9	227.3	166.8	166.3	
Cancer (malignant neoplasms)	157.5	184.7	163.0	155.3	
Accidents (unintentional injuries)	61.9	46.9	40.4	46.7	
Chronic lower respiratory diseases ²	40.1	44.2	38.0	41.0	
Stroke (cerebrovascular disease)	36.1	42.3	38.4	37.5	

¹Deaths per 100,000 population adjusted per 2000 U.S. standard population.

²Previously known as chronic obstructive pulmonary disease (COPD).

- Notes: 1) Causes shown that account for 20+ deaths during three-year period for Carroll County. Rates based on < 20 deaths considered unreliable.
 - Nephritis, etc. cited as sixth leading cause in both time periods, but n=14, 2015-2017 so no rate computed. Nephritis accounted for 20 deaths, 2006-2008, 25.2 age-adj. rate.
- Source: Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER

CARROLL COUNTY

LE/	LEADING DEATH CAUSES AS PERCENT OF ALL: 2003-2007 AND 2013-2017					
	Cause	2013-2017	2003-2007			
	All Causes	100.0%	100.0%			
	Heart disease	27.2%	31.0%			
	Cancer (malignant neoplasms)	22.8%	26.0%			
	Chronic lower respiratory diseases ¹	5.8%	4.6%			
	Stroke (cerebrovascular diseases)	5.3%	6.6%			
	Accidents (unintentional injuries)	5.0%	3.6%			
	Nephritis, nephrotic syn., and nephrosis	2.0%	1.7%			
	Influenza and pneumonia	1.9%	2.0%			
	Diabetes mellitus	1.9%	2.7%			
	Alzheimer's disease	1.3%	1.2%			
	Suicide (intentional self-harm)	1.3%	NA			
	Septicemia	1.2%	NA			
	Parkinson's disease	NA	1.2%			
	All others	24.3%	20.6%			

 ¹Also known as chronic obstructive pulmonary disease (COPD).
 Note: NA because CDC suppresses causes with fewer than 10 deaths.
 Source: Percentages computed from Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER

CARROLL COUNTY

Cause	Total Deaths	Before 65	Percent < 65
All	1900	373	19.6%
Suicide	25	21	84.0%
Accidents	97	55	56.7%
Cancer	469	103	22.0%
Chronic lower respiratory diseases ¹	135	22	16.3%
Heart disease	477	70	14.7%
Stroke	98	11	11.2%

DEATHS BEFORE 65 FOR SELECTED CAUSES: 2008-2017

Note: Causes shown had 10 or more deaths to ages <65 in this ten-year period. ¹Also known as chronic obstructive pulmonary disease (COPD).

Source: Percentages computed from Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER

LEADING DEATH CAUSES BY AGE GROUP: 2008-2017				
Age Group (Total Deaths)	Number	Percent in Age Group		
1-24 Years (22)				
1. Accidents*	13	54.2%		
25-44 Years (46)				
1. Accidents*	19	41.3%		
45-64 Years (295)				
1. Cancer	99	33.6%		
2. Heart disease	67	22.7%		
3. Accidents	23	7.8%		
4. Chronic lower respiratory diseases ¹	21	7.1%		
5. Stroke	11	3.7%		
65-74 Years (377)				
1. Cancer	159	42.2%		
2. Heart disease	88	23.3%		
3. Chronic lower respiratory diseases	35	9.3%		
4. Stroke	23	6.1%		
5. Accidents	10	2.7%		
75 Years and Older (1,150)				
1. Heart disease	319	27.7%		
2. Cancer	207	18.0%		
3. Chronic lower respiratory diseases	78	6.8%		
4. Stroke	64	5.6%		
5. Nephritis, etc.	34	3.0%		
6. Accidents	32	2.8%		

CARROLL COUNTY LEADING DEATH CAUSES BY AGE GROUP: 2008-2017

 $^{\ast}11$ of 13 accidents for ages 1-24 and 10 of 19 ages 25-44 were transport accidents.

Note: Only one cause had 10 or more deaths in age groups 1-24 and 25-44. CDC suppresses causes with fewer than 10 deaths.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, CDC WONDER

Demographic and Socioeconomic Characteristics

The following information has been extracted from 2000 U.S. Census Statistics and the IPLAN Data System.

I. Dependency Indicators

Dependency is defined as a population of non-working, either pre-productive or postproductive individuals (generally defined as <18 or >64) who are dependent on the productive population for social or economic support. When compared to state and national percentages, Carroll County has a **higher dependency indicator for its elderly population (>64).** The Carroll County total population and age distribution for dependency has remained relatively unchanged with the exception of a decrease in the percentage of people less than 18 years of age.

POPULATION: 1950-2017			
Year	Population	Change	
2017	14,518	-5.6%	
2010	15,387	-7.7%	
2000	16,674	-0.8%	
1990	16,805	-10.5%	
1980	18,779	-2.6%	
1970	19,276	-1.2%	
1960	19,507	+2.8%	
1950	18,976		

CARROLL COUNTY

Source: U.S. Census Bureau, 2017 Population Estimates and decennial Censuses

De	pend	lency	Indica	<u>ators</u>

CARROLL COUNTY AND U.S. AGE GROUPS: 2017

Carroll County				
			U.S.	
Age Group	Number	Percent	Percent	
Total	14,518	100.0%	100.0%	
Under 5 years	760	5.2%	6.1%	
5-14 years	1,544	10.6%	12.6%	
15-24 years	1,557	10.7%	13.3%	
25-34 years	1,471	10.1%	13.9%	
35-44 years	1,499	10.3%	12.5%	
45-54 years	1,753	12.1%	13.0%	
55-64 years	2,336	16.1%	12.9%	
65-74 years	1,996	13.7%	9.1%	
75-84 years	1,090	7.5%	4.5%	
85 years & older	512	3.5%	2.0%	
Median Age (years)	47	' .5	38.0	
Major Age Groups				
Under 15 years	2,304	15.9%	18.7%	
15-44 years	4,527	31.2%	39.7%	
45-64 years	4,089	28.2%	25.9%	
65 years & older	3,598	24.8%	15.6%	

Source: U.S. Census Bureau, 2017 Population Estimates

MEDIAN AGE: 2000, 2010 AND 2017				
8.0				
' .2				
5.3				

CARROLL COUNTY AND U.S.

Source: U.S. Census Bureau, decennial Censuses and 2017 Population Estimates

Estimated Minority Population

CARROLL COUNTY AND U.S. PERSONS BY RACE AND ETHNICITY: 2017

	Carroll County		U.S.
Race/Ethnicity	Number	Percent	Percent
Total	14,518	100.0%	100.0%
Not Hispanic or Latino	13,953	96.1%	81.9%
White	13,503	93.0%	60.7%
Black or African American	148	1.0%	12.5%
American Indian, Alaska Native	46	0.3%	0.7%
Asian	82	0.6%	5.6%
Native Hawaiian, Pacific Islander	2	0.0%	0.2%
Multiple Races	172	1.2%	2.1%
Hispanic or Latino	565	3.9%	18.1%

Source: U.S. Census Bureau, 2017 Population Estimates

Demographic and Socioeconomic Characteristics

Carroll County Poverty Rate

CARROLL COUNTY, ILLINOIS AND U.S. POVERTY FOR ALL PERSONS AND CHILDREN: 2010 AND 2017

	Carroll	County	Illinois	U.S.		
Year	Number Percent1		Percent	Percent		
2017						
All persons	1,647	11.5%	12.5%	13.4%		
Children 0-17 years	532	19.2%	17.0%	18.4%		
2010						
All persons	1,969	13.0%	13.8%	15.3%		
Children 0-17 years	644	21.0%	19.4%	21.6%		

¹ 90% confidence intervals are ± 2 percentage points for all ages, ± 4 percentage points for ages 0-17.

Source: U.S. Census Bureau, Small Area Income and Poverty Estimates

Median Household Income

CARROLL COUNTY, ILLINOIS AND U.S. MEDIAN INCOME BY HOUSEHOLD TYPE: 2017

Household Type	Carroll County	Illinois	U.S.
Household median	\$50,555	\$61,229	\$57,652
Family median	\$63,856	\$76,533	\$70,850
Married couple, no children at home	\$70,741	\$91,973	\$85,031
Married-couple w/children <18	\$79,000	\$98,037	\$91,621
Single female parent w/children <18	\$21,094	\$26,773	\$26,141
Nonfamily median	\$28,738	\$36,233	\$34,611
Per capita	\$27,605	\$32,924	\$31,177
Median earnings for full-time, year-round			
Male	\$46,418	\$54,366	\$50,859
Female	\$31,879	\$42,357	\$40,760

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

Access to Health Care (Healthy People 2010 Leading US Health Indicator)

In 1976, Carroll County was designated by the U.S. Dept. of Health & Human Services, Health Resources Services Administration (HRSA), as a Medically Underserved Area (MUA) with a score of 60. The County is also designated as a **Federally Underserved Area for primary medicine and dental services**.

There are three medical clinics in Carroll County operated by two hospitals. Four hospitals (CGH, FHN, KSB, and Mercy Medical) are located outside county boundaries and are, on average, 40 minutes away.

	Total Persons		Type of Beneficiary				
Fiscal Year	Number	Percent of Population	Children	Adults w/ Disabilities	ACA	Other Adults	Seniors
2017	2,749	18.9%	1,216	246	522	623	142
2016	2,809	19.2%	1,254	275	531	621	128
2015	3,338	22.8%	1,474	319	562	805	178
2014	2,606	17.6%	1,192	270	309	681	154
2013	2,589	17.3%	1,419	283		739	148
2012	3,105	20.5%	1,698	307		921	179
2011	3,004	19.8%	1,638	286		896	184
2010	2,949	19.2%	1,609	275		889	176

CARROLL COUNTY MEDICAID RECIPIENTS: 2010-2017

Note: Includes medical assistance for adults and children. Numbers reflect persons eligible for comprehensive benefits, not partial benefits enrollees.

Source: Illinois Department of Healthcare and Family Services

HEALTH PROVIDERS POPULATION PER PROVIDER: 2015, 2016, 2017 Carroll County Illinois Provider Type (Year) Number **Population Per Provider** Primary care physicians (2015) 5 2,920:1 1,240:1 Dentists (2016) 4 3,630.1 1,330.1 Mental health (2017) 17 860.1 530.1

Source: Area Health Resource File and CMS, National Provider Identification in County Health Rankings

<http://www.countyhealthrankings.org/app/illinois/2018>

			2010 2010			
Hospital/Medical						
Year	Percent of Population	Total	Original Medicare	Medicare Advantage, Other Hlth Plans		
2018 (Nov.)	28.8%	4,163	3,083	1,083		
2017	28.2%	4,101	3,071	1,031		
2016	27.9%	4,075	3,153	922		
2015	27.6%	4,038	3,176	862		
2014	27.0%	3,998	3,220	778		
2013	26.3%	3,937	3,367	570		
Prescription D)rugs					
Year	Percent of Population	Total	Prescription Drug Plans	Medicare Adv. Prescription Drug Plans		
2018 (Nov.)	21.4%	3,091	2,155	936		
2017	20.6%	2,991	2,120	871		
2016	19.8%	2,893	2,118	775		
2015	19.3%	2,828	2,076	753		
2014	18.4%	2,713	2,038	675		
2013	16.8%	2,509	2,023	485		
Note: Percentages computed using year-specific population estimates. Source: Centers for Medicare and Medicaid Services, <www.cms.gov research-statistics-data-and-systems=""></www.cms.gov>						

CARROLL COUNTY MEDICARE ENROLLMENT: 2013-2018

Substance Abuse is One of the Healthy People 2020 Leading U.S. Health Indicators

The percentage of Carroll County residents who smoke has decreased from 2007 to 2014 and is less than Illinois; however, all years are well above the Healthy People 2020 target of 12%. The percentage of 8th, 10th, and 12th graders in Carroll County who had used tobacco in the past month at school was substantially higher than the State percentage.

SELF-REPORTED HEALTH BEHAVIORS: 2007 AND 2014				
	Percent of Population 18 Years & Older			
	Carroll (County	Illinois	
Health Behaviors	2014	2007	2014	
Obesity				
Underweight/normal	27.4%	33.5%	36.3%	
Overweight	33.9%	38.3%	34.2%	
Obese	38.7%	25.1%	29.5%	
Alcohol Use	·			
At risk for acute/binge drinking ¹	20.2%	15.0%	20.3%	
Smoking Status				
Current smoker	14.9%	20.3%	16.7%	
Former smoker	29.4%	26.5%	23.8%	
Non-smoker	55.7%	53.1%	55.6%	
Exercise Within Past Month				
None	26.0%	24.0%	NA	

Smokers in Carroll County

CARROLL COUNTY AND ILLINOIS

¹Consumed five or more drinks on at least one occasion within past month.

Source: Illinois Department of Public Health, Behavioral Risk Factor Surveillance Survey

Substance Use and Antisocial Behavior CARROLL COUNTY AND ILLINOIS

YOUTH USE OF TOBACCO, ALCOHOL, AND OTHER SUBSTANCES

BY	GRADE	LEVEL:	2018	

	Ca	rroll Coun	ty		Illinois	
Substance	8 th	10 th	12 th	8 th	10 th	12 th
F	Percent Rep	porting Use	e Past Mo	nth		
Any tobacco or vaping product	10%	25%	30%	10%	21%	32%
Alcohol	12%	23%	38%	15%	23%	40%
Marijuana	5%	14%	12%	5%	13%	26%
Prescription drugs not prescribed to you	3%	4%	2%	2%	2%	3%
Percent Reporting Use in Past Two Weeks						
Binge drinking ¹	3%	7%	17%	5%	9%	20%

¹Five or more alcoholic drinks in a row.

Source: Illinois Department of Human Services, Illinois Youth Survey 2018 (available through Center for Prevention Research and Development

About Illinois Youth Survey – All eligible schools in Carroll County (three middle and three high schools) participated in 2018. Of 501 eligible students, 338 (67%) completed the survey.

*Highlighted lines indicate Carroll County percentages higher than State percentages.

Chronic Disease Indicators Overweight and Obesity

* Overweight and Obesity is one of the Healthy People 2020 Leading Health Indicator

In (2014 BRFSS), over two thirds (72.6%) of Carroll County residents were either overweight or obese. Nutrition data showed only 11% of Carroll County students ate at least three servings of fruits a day.

Obesity Risk Factor / Weight Control

	Percent of Population 18 Years & Older			
	Carroll C	Illinois		
Health Behaviors	2014 2007		2014	
Obesity				
Underweight/normal	27.4%	33.5%	36.3%	
Overweight	33.9%	38.3%	34.2%	
Obese	38.7%	25.1%	29.5%	

CARROLL COUNTY AND ILLINOIS SELF-REPORTED HEALTH BEHAVIORS: 2007 AND 2014

Nutrition – Total Servings of Fruits & Vegetables per Day IL Youth Survey 2018

2018 Total Servings of Fruits/day	Carroll County 10 th grade	Illinois 10 th graders
2 times	19%	15%
3 times	11%	7%
4 times	7%	8%

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Chronic Disease Indicators-Diseases of the Heart

Throughout the medical literature, elevated cholesterol and blood pressure levels are significant risk factors for contracting diseases of the heart. Further, smoking is also a risk factor. Regular screenings at all ages will identify high risk individuals. Heart disease and stroke are the top leading causes of death and also the major causes of disability. Smoking is one of the main risk factors for heart disease and stroke.

Prevention efforts, coupled with effective disease management, can reduce the incidence of heart attacks and strokes and reduce the number of deaths from these diseases. The Illinois Heart Disease and Stroke Prevention Program focuses on achieving six priorities with emphasis on two: controlling high blood pressure and controlling high cholesterol.

SELF-REPORTED HEALTH BEHAVIORS: 2007 AND 2014				
	Percent of Population 18 Years & Older			
	Carroll C	County	Illinois	
Health Behaviors	2014	2007	2014	
Obesity				
Underweight/normal	27.4%	33.5%	36.3%	
Overweight	33.9%	38.3%	34.2%	
Obese	38.7%	25.1%	29.5%	
Alcohol Use				
At risk for acute/binge drinking ¹	20.2%	15.0%	20.3%	
Smoking Status				
Current smoker	14.9%	20.3%	16.7%	
Former smoker	29.4%	26.5%	23.8%	
Non-smoker	55.7%	53.1%	55.6%	
Exercise Within Past Month				
None	26.0%	24.0%	NA	

Smokers in Carroll County

CARROLL COUNTY AND ILLINOIS SELF-REPORTED HEALTH BEHAVIORS: 2007 AND 20

¹Consumed five or more drinks on at least one occasion within past month.

Source: Illinois Department of Public Health, Behavioral Risk Factor Surveillance Survey

Chronic Disease Indicators-Cancer

Higher cancer rates were identified in the 2004, 2009 and 2014 IPLANs. Although age adjusted rates were lower than the rate of Illinois, it was still one of the top two leading causes of mortality. Bladder, lymphoma and breast cancers were higher than Illinois. The following incidence rates were found to be significant by the IPLAN committee.

CARROLL COUNTY AND ILLINOIS AVERAGE ANNUAL CANCER INCIDENCE ALL SITES: 2011-2015

	Age-Adjusted Rate Per 100,000 Population				
Area	All Male Female				
Carroll County	492.2	486.0	506.1		
Illinois	470.3	516.3	441.1		

Source: Illinois Department of Public Health, Illinois County Statistics Review Incidence, 2011-2015, April 2018

CARROLL COUNTY

CANCER INCIDENCE RATES THAT VARY FROM STATE: 2011-2015						
	Number Cases 2011-2015	Age-Adjusted Rate Per 100,000				
Cancer Site	Carroll County	Carroll County	Illinois	Comparison		
Both Genders						
Lung and Bronchus	75	57.8	66.0	Low		
Urinary Bladder	34	28.0	21.5	High		
Non-Hodgkin Lymphoma	30	26.6	19.5	High		
Female						
Breast (invasive)	73	148.2	131.7	High		

Note: While no Carroll County cancer incidence rate differs by a statistically significant amount from the state, the widest differences exist for sites above. Sites with <25 cases not included due to very wide confidence intervals.

Source: Illinois Department of Public Health, *Illinois County Statistics Review Incidence,* 2011-2015, April 2018

PROJECTED CANCER INCIDENCE: 2015-2019					
	Number Average Annu				
Cancer Site	5 Years	Number			
All	570	115			
Colon and Rectum	55	10			
Lung and Bronchus	75	15			
Female Breast	75	15			
Male Prostate	70	15			

CARROLL COUNTY PROJECTED CANCER INCIDENCE: 2015-2019

Note: Projections based on latest cancer incidence data from Illinois State Cancer Registry.

Source: Illinois Department of Public Health, County Cancer Projections 2015-2019, April 2018

DEATH RATES FOR TEN LEADING CAUSES: 2013-2017 COMPARED TO 2003-2007						
	Number					
	2013-	2013-	2003-			
Cause	2017	2017	2007	Difference		
Heart disease	256	349.3	373.0	-6.4%		
Cancer (malignant neoplasms)	215	293.3	313.0	-6.3%		
Chronic lower respiratory	55	75.0	55.1			
diseases1				+36.1%		

CARROLL COUNTY

Health Data – Other

CARROLL COUNTY AND ILLINOIS HEALTH AND DENTAL CARE UTILIZATION: 2007 AND 2014

HEALTH AND DENTAL CARE UTILIZATION. 2007 AND 2014					
	Percent Population 18+				
	Carroll County		Illinois		
Indicator	2014 2007		2014		
Health/Medical Care					
Have health coverage	95.8%	85.0%	88.1%		
Have usual person as health care provider	88.6%	84.8%	80.9%		
Avoided doctor due to cost during past year	9.4%	6.0%	11.2% ¹		
Dental Care					
Last dental visit < 1 year	71.3%	70.2%	63.9%		
Last dental visit 1 year or more/never	28.7%	29.8%	36.1%		

¹State 2016 rate used to match wording which was different in 2014 and 2015. Source: Illinois Department of Public Health, Behavioral Risk Factor Surveillance Survey

CARROLL COUNTY MEDICARE ENROLLMENT: 2013-2018

Hospital/Medical					
Year	Percent of Population	Total	Original Medicare	Medicare Advantage, Other Hlth Plans	
2018 (Nov.)	28.8%	4,163	3,083	1,083	
2017	28.2%	4,101	3,071	1,031	
2016	27.9%	4,075	3,153	922	
2015	27.6%	4,038	3,176	862	
2014	27.0%	3,998	3,220	778	
2013	26.3%	3,937	3,367	570	
Prescription D	rugs				
Year	Percent of Population	Total	Prescription Drug Plans	Medicare Adv. Prescription Drug Plans	
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2013	16.8%	2,509	2,023	485	
Note: Percentages computed using year-specific population estimates. Source: Centers for Medicare and Medicaid Services, <www.cms.gov research-statistics-data-and-systems=""></www.cms.gov>					

HEALTHINSOKANCE STATUS BTAGE, EMPLOTMENT AND INCOME. 2017					
	Carroll C	County			
	Number		Illinois	U.S.	
Characteristic	Uninsured	Percent	Percent	Percent	
All Persons	1,000 ¹	6.9%	8.5%	10.5%	
Age Group					
0-18	86	2.9%	3.3%	5.7%	
19-64	906	11.1%	12.3%	14.8%	
Employment Status (Ages 19-64)					
Worked full-time, year-round	295	6.9%	8.7%	10.7%	
Worked less than full-time, year- round	435	18.6%	16.0%	20.0%	
Did not work	176	11.3%	17.2%	18.5%	
Ratio of Income to Poverty					
At or below 138% poverty	393	16.7%	16.0%	19.1%	

CARROLL COUNTY, ILLINOIS AND U.S. HEALTH INSURANCE STATUS BY AGE, EMPLOYMENT AND INCOME: 2017

¹Includes 8 uninsured 65+

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

	SEL DISEASE	5. 2010-20	/10
Disease	2018	2017	2016
Campylobactor		8	-
Cryptosporidiosis		2	1
E. coli 0157:H7		-	-
Enteropathogenic Ecoli		1	-
Giardiasis		-	1
Group Beta A Strep		1	-
Hepatitis A		-	-
Hepatitis B		-	2
Hepatitis B Chronic		1	-
Hepatitis C		-	1
Hepatitis C Chronic		2	-
Histoplasmosis		2	-
Lyme disease		3	10
Pertussis (whooping cough)		-	2
Rabies Exposure (potential)		8	-
Salmonella		2	4
Shigellosis		-	-
Strep, Invasive Group A		1	-
Vibriosis		1	-

CARROLL COUNTY REPORTED COMMUNICABLE DISEASES¹: 2016-2018

¹Except sexually transmitted diseases, number of confirmed cases. Source: Carroll County Health Department

CHLAMYDIA AND GONORRHEA: 1990-2016						
	Chlamydia			Gonor	rhea ¹	
	Car	roll		Carroll		
	Cou	nty	Illinois	County	Illinois	
Year	Number	Rate	Rate	Number	Rate	
2016	24	164.3	564.0	2	165.6	
2015	37	252.6	542.5	1	133.5	
2014	42	284.1	518.6	3	124.5	
2013	26	173.8	497.2	3	128.3	
2012	21	139.0	490.4	1	141.5	
2011	29	193.2	470.4	1	132.8	
2010	26	171.1	439.5	1	123.0	
2005	12	72.0	407.1	0	161.2	
2000	11	66.0	324.9	2	199.8	
1995	11	65.5	216.3	0	179.5	
1990	18	107.1	211.2	0	334.1	

CARROLL COUNTY AND ILLINOIS SEXUALLY TRANSMITTED DISEASES CHLAMYDIA AND GONORRHEA: 1990-2016

¹No county rate computed because annual number \leq 3.

Source: Illinois Department of Public Health, Health Statistics for 1990-2009 and IQuery for 2010-2016 Additional Information Provided During Community Meetings

ISSUES THAT AFFECT RESIDENTS OF CARROLL COUNTY

1. <u>SENIOR ISSUES</u>

- a. Transportation
 - i. Lack of public transportation
 - ii. Senior vans
 - iii. Need transportation to doctors' appointments
- b. Lack of preventative care
- c. Cost of medications; no assistance
- d. Grandparents raising grandchildren
- e. Age-related health issues because of an aging population (heart disease)

2. YOUTH & FAMILY ISSUES

- a. Child Care
- b. Limited Vision & Dental insurance
- d. Smoking and tobacco use among both youth & adults
- e. Prenatal care
- f. Parenting skills

3. <u>SUBSTANCE ABUSE</u>

- a. Alcohol
- b. Smoking
- c. Perception of acceptability
- d. Limited enforcement
- e. Mixed messages

4. ACCESSING SERVICES ISSUES

a. Limited transportation to/access to services (care is a distance away)

- b. Accessing preventive services
- c. Stigma attached to utilizing publicly-supported services
- e. Physician to population ratio; access to after-hours care
- f. Lack of access to physical fitness and recreational options

5. <u>ENVIRONMENTAL HEALTH & ECONOMICS ISSUES</u>

- a. Housing conditions, especially for low-income families with children; seniors also vulnerable
- b. Health-related issues due to elevated poverty rate
- c. Loss of jobs/declining population/out-migration of youth

6. <u>OTHER HEALTH ISSUES</u>

- a. Poor dental health among people of all ages
- b. High cancer rates and cancer clusters
- c. Obesity: improper diet and lack of exercise
- d. Mental illness
- e. Outreach/education for better health