



# 2021 Community Health Needs Assessment

Northwestern Medicine Central DuPage Hospital



# Contents

<a href="#">Priorities and key dates</a> .....	3
<a href="#">Executive summary</a> .....	4
<a href="#">Introduction</a> .....	5
<a href="#">Identification of the NMCDH Community Service Area</a> .....	10
<a href="#">Process and methodology</a> .....	12
<a href="#">Comprehensive findings and analysis</a> .....	16
<a href="#">Primary and secondary data synthesis and analysis of significant health needs</a> ...	72
<a href="#">Summary of progress since prior NMCDH Community Health Needs Assessment</a> ...	82
<a href="#">Appendix A</a> .....	108

# Priorities and key dates

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## 2021 - 2023 Priorities:

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Access to Health Care

Mental Health and Substance Use Disorders

Chronic Disease

Social Determinants of Health

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## Key dates

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Adopted by the Northwestern Medicine Central DuPage Hospital Board of Directors on July 15, 2021\*

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Tax year 2020

Fiscal year 2021

Assessment time frame: November 2020 to February 2021

Prioritization time frame: March 2021 to April 2021

Open comment time frame: May 2021

Made available to the public on August 31, 2021

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\*Note: A copy of the minutes documenting Board approval of the CHNA is available on request.

# Executive summary

Since 2007, Northwestern Medicine Central DuPage Hospital (NMCDH) has formally completed a comprehensive Community Health Needs Assessment (CHNA) every three years, in accordance with federal IRS regulations §1.501(r)-3, thus allowing the hospital to better understand the population it serves as well as the health issues that are of greatest concern within its community. The goal of the CHNA is to assess the health needs of residents within the defined Community Service Area (CSA), identify and prioritize those needs, and identify resources potentially available to address priority health needs.

In 2020, NMCDH partnered with PRC Custom Research to conduct a systematic, data-driven approach to provide a CHNA that incorporated data from both quantitative and qualitative sources. After data collection and analysis, NMCDH took additional steps to review and interpret findings by soliciting community input and engaging with community partners.

This process identified areas of opportunity for community health improvement. Significant health needs were identified across all socioeconomic groups, races and ethnicities, ages (over 18 years old) and genders. The assessment highlighted health disparities and needs that disproportionately impact the medically underserved and uninsured.

While many health needs were identified through the CHNA process, NMCDH prioritized health needs of the largest magnitude, seriousness and trend, as well as those that would be best addressed through a coordinated response from a partnership of healthcare and community resources. Through the CHNA process, the 2021 NMCDH prioritized significant health needs were identified as follows:

Access to Health Care

Mental Health and Substance Use Disorders

Chronic Disease

Social Determinants of Health

In collaboration with dedicated healthcare, social service, public health and policy organizations, NMCDH will develop a three-year implementation plan, drawing on collective resources to make a positive impact on some of the most critical health needs of residents in its defined CSA. Information identified during the CHNA process will help NMCDH determine how to best commit resources to address priority health needs that improve the health of its community.

# Introduction

## About Northwestern Memorial HealthCare

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Northwestern Memorial HealthCare (NMHC) is committed to its mission to:

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1. Provide quality medical care, regardless of the patient's ability to pay
  2. Transform medical care through clinical innovation, breakthrough research and academic excellence
  3. Improve the health of the communities we serve
- 

NMHC is a not-for-profit, integrated academic health system committed to serving a broad community. NMHC provides world-class care at 11 hospitals, three medical groups, and more than 200 diagnostic and ambulatory locations in communities throughout Chicago and the north, northwest, west and south suburbs, one patient at a time. NMHC hospitals are pillars in their respective communities and lead efforts to positively impact the health of the populations they serve. From facilitating collaborations with community partners to serving as major economic drivers, NMHC strengthens our communities.

## About Northwestern Medicine

Working together as Northwestern Medicine® (NM), NMHC and Northwestern University Feinberg School of Medicine (Feinberg) share a vision to transform medical care through clinical innovation, breakthrough research and academic excellence to make a positive difference in people's lives and the health of our communities. Whether directly providing patient care or supporting those who do, every NM employee has an impact on the quality of the patient experience and the level of excellence we collectively achieve. This knowledge, expressed in our shared commitment to a single, patient-focused mission, unites us.

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NM is a premier integrated academic health system where the patient comes first.

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We are all caregivers or someone who supports a caregiver.

We are here to improve the health of our community.

We have an essential relationship with Feinberg.

We integrate education and research to continually improve excellence in clinical practice.

We serve a broad community and bring the best in medicine closer to where patients live and work.

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### **About Northwestern Medicine Central DuPage Hospital**

Northwestern Medicine Central DuPage Hospital (NMCDH) is an acute-care, 392-bed tertiary community hospital located in Winfield, Illinois. NMCDH has a deep, nearly 60-year history of caring for its community and providing quality health care to the residents of DuPage County and beyond. The hospital provides a full range of emergency, inpatient and outpatient services to patients in DuPage County. NMCDH also serves as a regional destination for clinical services including oncology, neurology, orthopaedics, pediatrics, behavioral health and cardiology, and offers the only proton therapy center in Illinois. Nearly 1,300 physicians are on the medical staff at NMCDH. In FY20, NMCDH had more than 19,000 inpatient admissions, and its ED had nearly 65,000 visits. NMCDH joined the Health System in 2014, connecting the residents of Chicago's western suburbs to specialty care across NMHC, including access to front-line clinical trials.

NMCDH is also home to Northwestern Medicine Proton Center: the only proton therapy center in Illinois that offers innovative radiation treatment to patients. Equipped with state-of-the-art proton therapy technology, and a team of experienced radiation oncologists and highly skilled medical professionals, NM Proton Center is dedicated to providing exceptional patient care for the effective treatment of multiple types of tumors and cancers.

NMCDH further serves the residents of the Village of Winfield and broader DuPage County through longstanding community relationships. NMCDH has served the residents of DuPage County throughout the COVID-19 pandemic. In addition to providing quality medical care and access to leading-edge COVID-19 treatments, NMCDH has partnered with local community organizations to provide regional leadership, help address food insecurity, and provide critically needed funding and other resources to help those in need.

### **Collective assets**

Northwestern Memorial HealthCare, Northwestern Medicine and all NM West Region hospitals, including NMCDH, work collaboratively to address the significant needs identified within our respective CHNAs. Through leading-edge clinical care, academic excellence, and a commitment to research and the communities we serve, we provide the resources available to address the identified health needs.

## Acknowledgements

NMCDH collaborated with PRC Custom Research (PRC) for its 2021 CHNA. PRC works with clients across the nation to drive community health improvement outcomes by assessing needs, developing focused strategies, identifying appropriate intervention programs, establishing monitoring systems, and implementing performance evaluation processes. To learn more about PRC Custom Research, please visit [prccustomresearch.com](http://prccustomresearch.com). The information contained within this report is extracted from PRC's 2021 Community Health Needs Assessment for Northwestern Medicine Central DuPage Hospital. All analyses conducted by PRC for this CHNA report are presented without citations. Data presented from other sources are cited as footnotes throughout the CHNA report.

NMCDH gratefully acknowledges the participation of a dedicated group of organizations that gave generously of their time and expertise to help guide this CHNA report. This group formed the basis for our External Community Health Council and was vital in assisting us in the community health needs prioritization process.

External Stakeholders	Populations Served/Social Determinants Addressed
Batavia Park District	General recreation; health and fitness
Family Shelter Services	Family support
Common Threads Organization	Healthy food and nutrition education
DuPage County Health Department	Community health; underserved; mental health; environmental health
NAMI DuPage	Suicide prevention
VNA Health Care	Health care; underserved; FQHC
DuPage Community Foundation	Community
West Chicago Library	Education; reading
Senior Services Association	Seniors
Secretary of State	Driving programs; transportation
DuPage PADs, Inc.	Homelessness
Carol Stream Police Department	Public safety
St. Charles Park District	General recreation; health and fitness
Association for Individual Development	Disabilities

<b>External Stakeholders</b> (continued)	<b>Populations Served/Social Determinants Addressed</b> (continued)
<b>B.R. Ryall YMCA of Northwestern DuPage County</b>	General recreation; health and fitness
<b>Winfield in Action</b>	Community
<b>Winfield Township</b>	Community
<b>Benedictine University</b>	Education; public health expertise
<b>Edward Hines VA Hospital</b>	Veterans' health care and support services
<b>Humanitarian Service Projects</b>	Service projects
<b>West Chicago Park District</b>	General recreation; health and fitness
<b>Access DuPage</b>	Access to care for underserved
<b>Catholic Charities</b>	Low income; underserved
<b>West Chicago Schools</b>	Education
<b>Northern Illinois Food Bank</b>	Food insecurity
<b>Wheaton Park District</b>	General recreation; health and fitness
<b>Glen Ellyn Park District</b>	General recreation; health and fitness
<b>Western DuPage Special Recreation Association</b>	Outdoor recreation; health and fitness
<b>Donka, Inc.</b>	Physical, visual and learning disabilities
<b>World Relief</b>	Immigrants; refugees
<b>CASA of DuPage County</b>	Child abuse and neglect; foster care
<b>DuPage Senior Citizens Council</b>	Seniors
<b>Winfield Park District</b>	General recreation; health and fitness
<b>West Chicago YMCA</b>	General recreation; health and fitness



External Stakeholders (continued)	Populations Served/Social Determinants Addressed (continued)
<b>Mutual Ground</b>	Domestic violence
<b>Meier Clinics</b>	Mental health
<b>Kensington International</b>	Children; education; development
<b>ProActive Kids</b>	Children's health and education
<b>Warrenville Park District</b>	General recreation; health and fitness
<b>SPR Consulting</b>	Community leader
<b>Almost Home Kids</b>	Children; ventilator support
<b>Bartlett Police Department</b>	Public safety
<b>DuPage Easter Seal</b>	Disabilities
<b>People's Resource Center</b>	Social services
<b>DuPage Health Coalition</b>	Health; underserved
<b>Samara Care</b>	Counseling

# Identification of the NMCDH Community Service Area

Defining the community is a key component of the CHNA process as it determines the scope of the assessment and implementation strategy. Stakeholders from NMHC Community Affairs and Government Relations met to discuss the NMCDH CSA definition. To define the NMCDH CSA for the current CHNA, the following factors were considered:

- NMCDH’s geographic area
- NMCDH’s principal functions
- High hardship areas (for example, differences in socioeconomic concerns across the county, such as education, housing, income, poverty, unemployment and dependents)
- Existing NM assets locations (for example, NM-supported clinics and programs) that serve Chicago communities
- Other local hospitals’ defined hospital service areas
- Any existing initiatives addressing community needs in Kane County

## NMCDH Community Service Area

The NMCDH Community Service Area (CSA) is located about 30 miles west of Chicago. The geographical boundary of the hospital’s CSA is home to an estimated 931,743 residents. The ZIP codes that define the NMCDH CSA are noted in Figure 1.

## Principal function and target population

NMCDH provides comprehensive, acute, emergent and specialty care for persons living in DuPage County. Care is provided for all persons, including but not limited to adults, children, women, seniors and people with disabilities. Special consideration is given to underserved and vulnerable populations.

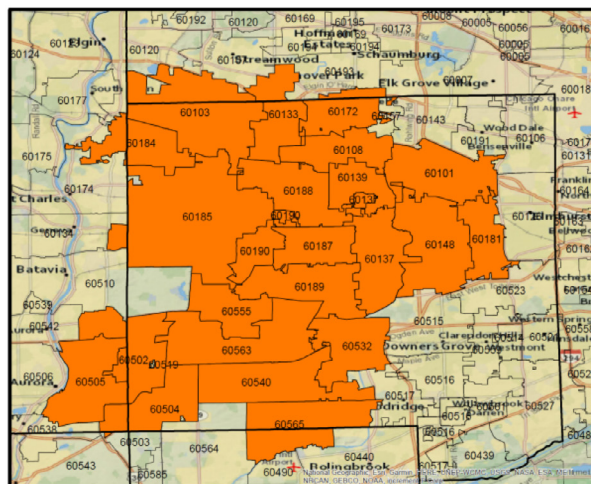


Figure 1

### **Inclusion of medically underserved, low-income or minority populations**

NMCDH is committed to improving the health of the community we serve, including all populations within our community. When developing our CSA, NMCDH considered all populations within our CSA, regardless of payor status, and did not exclude medically underserved, low-income or minority populations. When disseminating the community survey, special attention was given to the distribution of survey information to include homeless, senior, LGBTQ and migrant/refugee populations. Additionally, no exclusions were made based on whether or how much patients or their insurers pay for the care received, or whether patients are eligible for assistance under NMCDH's financial assistance program.

# The Community Health Needs Assessment: Process and Methodology

As noted previously, Northwestern Medicine Central DuPage Hospital collaborated with PRC Custom Research (PRC) for its 2021 CHNA.

## CHNA goals

The NMCDH CHNA serves as a tool to help reach three related goals:

- 1 Improve residents' health status, increase life spans and elevate overall quality of life.** A healthy community is one where its residents suffer little from physical and mental illness, and enjoy a high quality of life.
- 2 Reduce health disparities among residents.** By gathering demographic information along with health status and behavior data, it is possible to identify population segments that are most at risk for various diseases and injuries. Intervention plans targeting these segments may then combat some of the socioeconomic factors that have historically had a negative impact on residents' health.
- 3 Increase accessibility to preventive services for all residents.** Access to preventive services may improve health status, life spans and overall quality of life, and impact the cost associated with care for late-stage diseases resulting from a lack of preventive care.

## Collaboration

The CHNA process consisted of a systematic, data-driven approach to determine the health status, behaviors and needs of residents in the NMCDH CSA. The CHNA provided information to enable hospital leadership and key community stakeholders to collaboratively identify health issues of greatest concern among residents and decide how best to commit the hospital's resources to those areas, thereby achieving the greatest possible impact on the community's health status.

## Methodology

Two types of data were analyzed for this CHNA: primary and secondary data. Each type of data was gathered and analyzed using the methodology discussed below. Findings were organized by health topics. These findings were then synthesized into a comprehensive overview of the health needs in the NMCDH CSA.

## Secondary data sources and analysis

A variety of secondary data sources was consulted to complement the research quality of this CHNA. Secondary data for the NMCDH CSA was obtained from the following sources (specific citations are included within the graphs and throughout this report):

Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension, SparkMap (sparkmap.org)

Centers for Disease Control and Prevention, Office of Infectious Disease, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

Centers for Disease Control and Prevention, Office of Public Health Science Services, Center for Surveillance, Epidemiology and Laboratory Services, Division of Health Informatics and Surveillance (DHIS)

Centers for Disease Control and Prevention, Office of Public Health Science Services, National Center for Health Statistics

ESRI ArcGIS Map Gallery

National Cancer Institute, State Cancer Profiles

OpenStreetMap (OSM)

U.S. Census Bureau, American Community Survey

U.S. Census Bureau, County Business Patterns

U.S. Census Bureau, Decennial Census

U.S. Department of Agriculture, Economic Research Service

U.S. Department of Health & Human Services

U.S. Department of Health & Human Services, Health Resources and Services Administration (HRSA)

U.S. Department of Justice, Federal Bureau of Investigation

U.S. Department of Labor, Bureau of Labor Statistics

### Primary data collection and analysis: The Community Survey

A precise and carefully executed methodology was critical in asserting the validity of the results gathered in the PRC Community Health Survey. Thus, to ensure the best representation of the population surveyed, a mixed-mode methodology was implemented. This included surveys conducted via telephone (landline and cell phone), as well as through online questionnaires.

The sample design used for this effort consisted of a random sample of 500 individuals age 18 and older in the NMCDH CSA. Once the interviews were completed, responses were weighted in proportion to the actual population distribution to appropriately represent the NMCDH CSA as a whole. Administration of the surveys, data collection and data analysis were conducted by PRC. For statistical purposes, the maximum rate of error associated with a sample size of 500 respondents is  $\pm 4.4\%$  at the 95% confidence level.

Similar surveys were administered in the NMCDH CSA in 2009, 2012, 2015 and 2018 by PRC on behalf of Northwestern Medicine. Trending data, as revealed by comparison to prior survey results, is provided throughout this report whenever available. Historical data for secondary data indicators is also included for the purposes of trending.

To accurately represent the population studied, PRC minimized bias through the application of a telephone methodology and random-selection techniques. While this random sampling of the population produces a highly representative sample, it is a common and preferred practice to “weight” the raw data to improve this representativeness even further. This is accomplished by adjusting the results of a random sample to match the geographic distribution and demographic characteristics of the population surveyed (poststratification) so as to eliminate any naturally occurring bias. The sample design and the quality control procedures used in the data collection ensured that the sample was representative. Thus, the findings may be generalized to the total population of community members in the defined area with a high degree of confidence.

### Primary data collection and analysis: The Online Key Informant Survey

To solicit input from key informants, those individuals who have a broad interest in the health of the community, an Online Key Informant Survey was implemented. A list of local community partners was provided by Northwestern Medicine; this list included names and contact information for physicians, public health representatives, other health professionals, social service providers, and a variety of other community leaders. Potential participants were chosen because of their ability to identify primary concerns of the populations with whom they work, as well as of the community overall.

Key informants were contacted by email, introducing the purpose of the survey and providing a link to take the survey online; reminder emails were sent as needed to increase participation. In all, 23 community stakeholders took part in the Online Key Informant Survey, as outlined in the following table:

Online Key Informant Survey Participation

Key Informant Type	Number Participating
Community Leaders	2
Other Health Providers	1
Social Services Providers	20

Through this process, input was gathered from several individuals whose organizations work with low-income, minority or other medically underserved populations. The survey asked key informants to rate the degree to which various health issues are a problem in their own community. Follow-up questions asked them to describe why they identified problem areas as such and how these might better be addressed. Results of their ratings, as well as their verbatim comments, are included throughout this report as they relate to the various other data presented.

### **Existing community resources**

As a critical aspect of the primary data collection, community partners and staff were asked to list and describe resources available in the community. Although not reflective of every resource available, the list can help NMCDH build partnerships so as not to duplicate, but rather support existing programs and resources. This resource list is available in Appendix A.

### **Information gaps and data considerations**

Every effort was made to comprehensively collect and analyze CHNA data. However, several limitations of the data should be considered when reviewing the findings presented in this report. Although there is a wide range of health and health-related areas, there may be varying scope and depth of secondary data indicators and findings within each topic.

Regarding the secondary data, some health topic areas have a robust set of indicators, but for others there may be a limited number of indicators for which data is available.

For the primary data, the breadth of findings is dependent upon who was selected to be a key informant. Additionally, the community survey was a convenience sample, which means results may be vulnerable to selection bias and may be less generalizable.

For all data, every effort was made to include a wide range of secondary data indicators and community member expertise areas. NMCDH is committed to investigating strategies for addressing data system gaps for future assessment and implementation processes.

# The Community Health Needs Assessment: Comprehensive findings and analysis

The following sections present a short summary of each of the data sets obtained in the primary and secondary data. The reader is referred to respective tables for further details and source citation.

## Demographic overview

### Land area, population size and density

DuPage County is home to 931,743 individuals and occupies 327.73 square miles. The population density is 2,843.05 individuals per square mile.

**Total Population**  
(Estimated Population, 2014-2018)

	TOTAL POPULATION	TOTAL LAND AREA (square miles)	POPULATION DENSITY (per square mile)
DuPage County	931,743	327.73	2,843.05
Illinois	12,821,497	55,517.13	230.95
United States	322,903,030	3,532,068.58	91.42

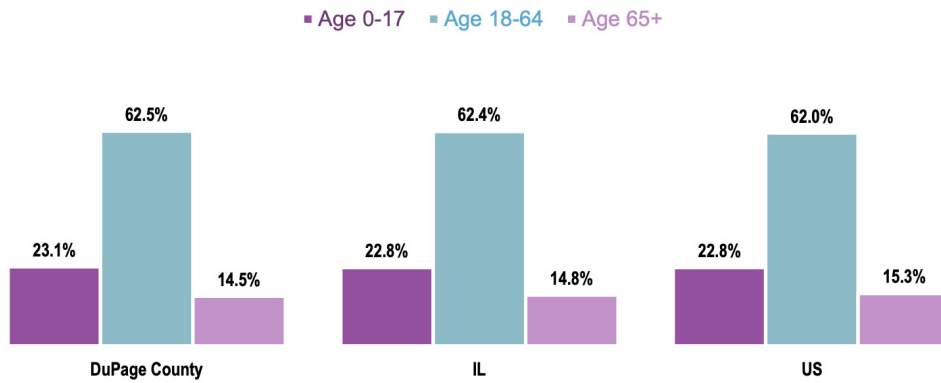
Sources: US Census Bureau American Community Survey 5-year estimates.  
Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap (sparkmap.org).



## Age

Age is a key consideration when assessing the health of a community, as different age groups have unique health needs. Of DuPage County residents, 62.5% are between 18 and 64 years of age, consistent with state and national data.

### Total Population by Age Groups (2014-2018)

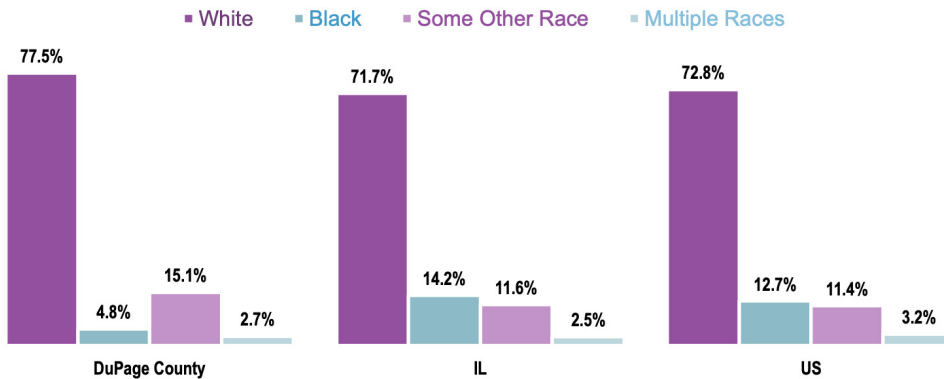


Sources: US Census Bureau American Community Survey 5-year estimates. Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap (sparkmap.org).

## Race and ethnicity

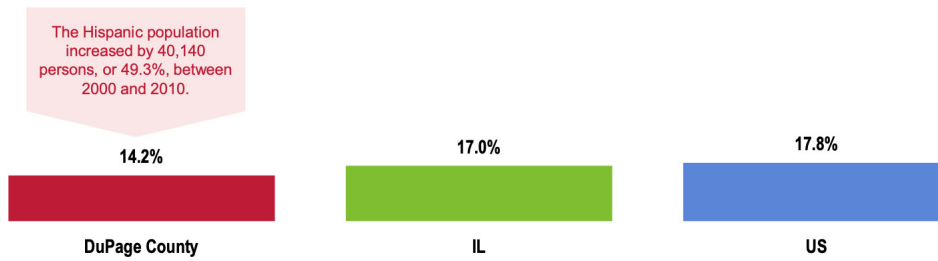
Of residents in DuPage County, 77.5% are white, 4.8% are Black, 15.1% self-report as “other race” and 2.7% self-report as multiple races. Data indicates that 14.2% of DuPage County residents are Hispanic, with an increase of 49.3% between 2000 and 2010.

### Total Population by Race Alone (2014-2018)



Sources: US Census Bureau American Community Survey 5-year estimates. Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap (sparkmap.org).

## Hispanic Population (2014-2018)



Sources: US Census Bureau American Community Survey 5-year estimates.  
Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap (sparkmap.org).

Notes: Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Hispanic, Latino, or Spanish may be of any race.

## Social determinants

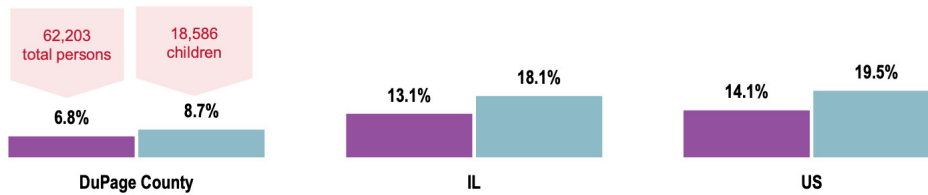
### Poverty

Data reports that 62,203 individuals (6.8%) in DuPage County live below the poverty level. Additionally, 18,586 of those individuals (8.7%) are children. This data is notably lower than state and national data. Additionally, 48.4% of low-income families reported not having enough cash on hand to cover a \$400 emergency expense.

### Population in Poverty (Populations Living Below the Poverty Level; 2014-2018)

Healthy People 2030 = 8.0% or Lower

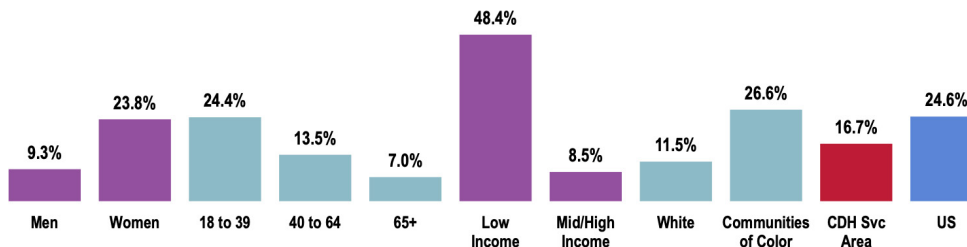
■ Total Population ■ Children



Sources: US Census Bureau American Community Survey 5-year estimates.  
Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap (sparkmap.org).  
US Department of Health and Human Services. Healthy People 2030. August 2020. <http://www.healthypeople.gov>

Notes: Poverty is considered a key driver of health status. This indicator is relevant because poverty creates barriers to access including health services, healthy food, and other necessities that contribute to poor health status.

### Do Not Have Cash on Hand to Cover a \$400 Emergency Expense (CDH Service Area, 2021)



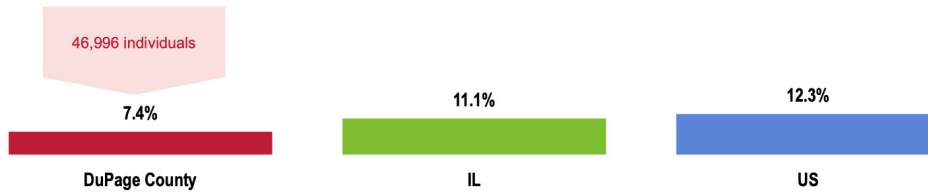
Sources: 2021 PRC Community Health Survey, PRC, Inc. [Item 63]  
2020 PRC National Health Survey, PRC, Inc.

Notes: Asked of all respondents.  
Includes respondents who say they would not be able to pay for a \$400 emergency expense either with cash, by taking money from their checking or savings account, or by putting it on a credit card that they could pay in full at the next statement.

## Education

When queried, 7.4% of DuPage residents over age 25 report having no high school diploma.

### Population With No High School Diploma (Population Age 25+ Without a High School Diploma or Equivalent, 2014-2018)

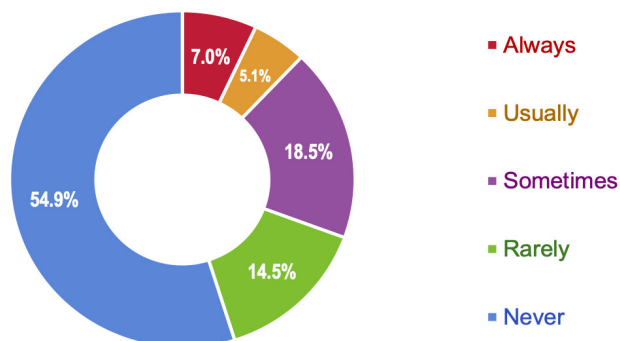


Sources: US Census Bureau American Community Survey 5-year estimates.  
Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap (sparkmap.org).  
Notes: This indicator is relevant because educational attainment is linked to positive health outcomes.

## Housing insecurity

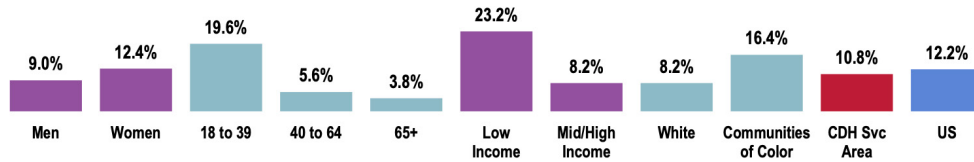
When queried regarding how often they have had worry or stress over paying rent or mortgage in the past year, 18.5% of individuals reported “sometimes,” 5.1% reported “usually,” and 7.0% reported “always.” Additionally, 23.2% of low-income individuals reported living in unhealthy or unsafe living conditions in the past year.

### Frequency of Worry or Stress Over Paying Rent or Mortgage in the Past Year (CDH Service Area, 2021)



Sources: 2021 PRC Community Health Survey, PRC, Inc. [Item 66]  
Notes: Asked of all respondents.

## Unhealthy or Unsafe Housing Conditions in the Past Year (CDH Service Area, 2021)



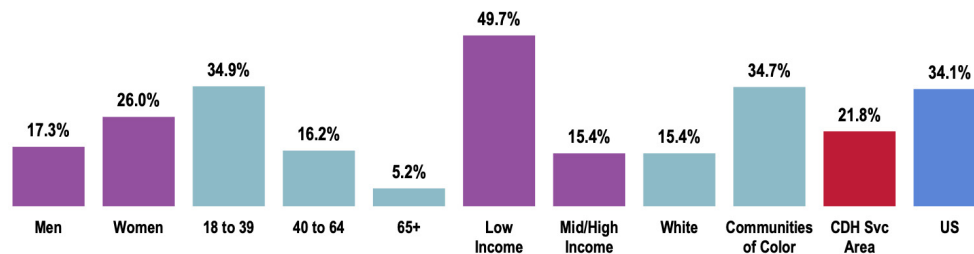
Sources: 2021 PRC Community Health Survey, PRC, Inc. [Item 65]  
2020 PRC National Health Survey, PRC, Inc.

Notes: Asked of all respondents.  
Includes respondents who say they experienced ongoing problems in their current home with water leaks, rodents, insects, mold, or other housing conditions that might make living there unhealthy or unsafe.

## Food insecurity

When queried, 49.7% of low-income families reported concerns related to insufficient food or food not lasting until the next paycheck.

## Food Insecurity (CDH Service Area, 2021)



Sources: 2021 PRC Community Health Survey, PRC, Inc. [Item 112]  
2020 PRC National Health Survey, PRC, Inc.

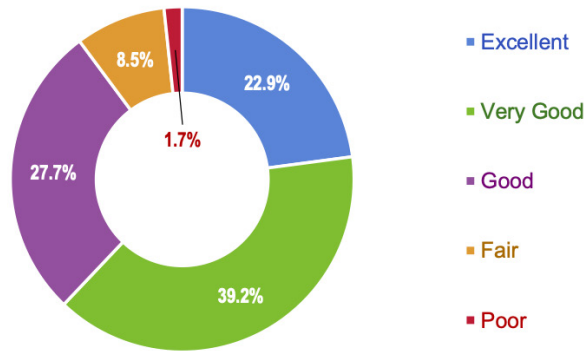
Notes: Asked of all respondents.  
Includes adults who A) ran out of food at least once in the past year and/or B) worried about running out of food in the past year.

## Health status

### Overall health perception

When interviewed, 39.2% of survey respondents described their overall health as “very good” in comparison to 27.7% who described their health as “good” and 22.9% as “excellent.”

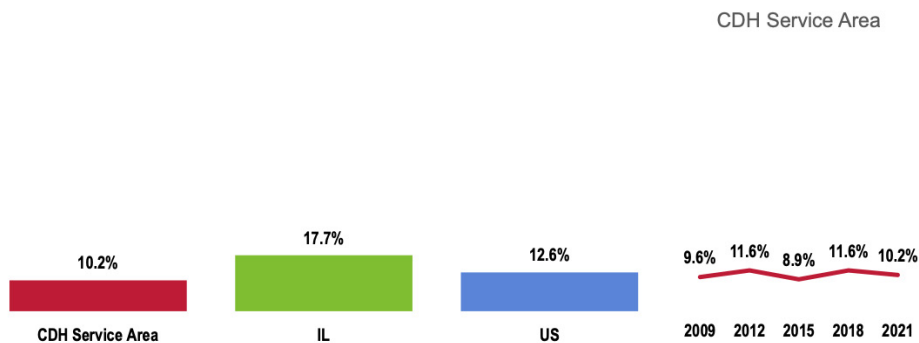
**Self-Reported Health Status**  
(CDH Service Area, 2021)



Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Item 5]  
Notes: • Asked of all respondents.

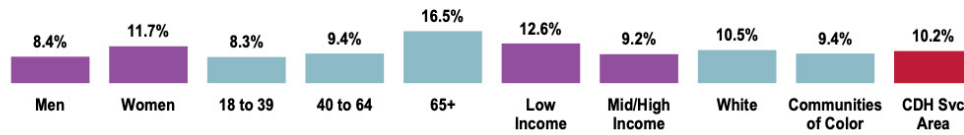
Additionally, 10.2% described their overall health as “fair” or “poor.” This was lower than both state and national data. It was also trending somewhat consistently over the last 12 years, down slightly from 2018.

### Experience “Fair” or “Poor” Overall Health



Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Item 5]  
• Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2019 Illinois data.  
• 2020 PRC National Health Survey, PRC, Inc.  
Notes: • Asked of all respondents.

### Experience “Fair” or “Poor” Overall Health (CDH Service Area, 2021)



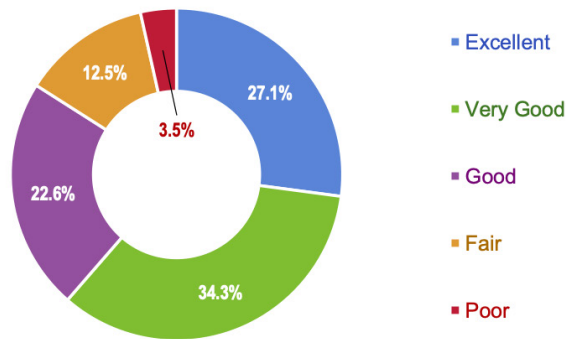
Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Item 5]  
Notes: • Asked of all respondents.

## Mental health

### Overall mental health perception and treatment

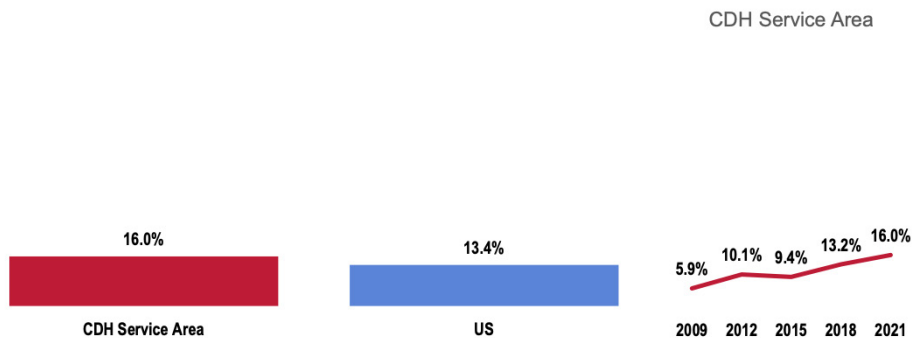
When interviewed, 34.3% of survey respondents described their mental health as “very good” in comparison to 22.6% who described their mental health as “good” and 27.1% as “excellent.” Additionally, 16% described their mental health as “fair” or “poor.” This was higher than national data. It was also trending significantly upward from 5.9% in 2009 to 16.0% in 2021. Further, 20.1% of respondents described having been diagnosed with a depressive disorder, which is higher than state but lower than national data. Also, 47.7% of low-income respondents acknowledged having had two or more years in their life when they have felt depressed or sad on most days.

**Self-Reported Mental Health Status**  
(CDH Service Area, 2021)



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 90]  
Notes: ● Asked of all respondents.

### Experience “Fair” or “Poor” Mental Health



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 90]  
● 2020 PRC National Health Survey, PRC, Inc.  
Notes: ● Asked of all respondents.



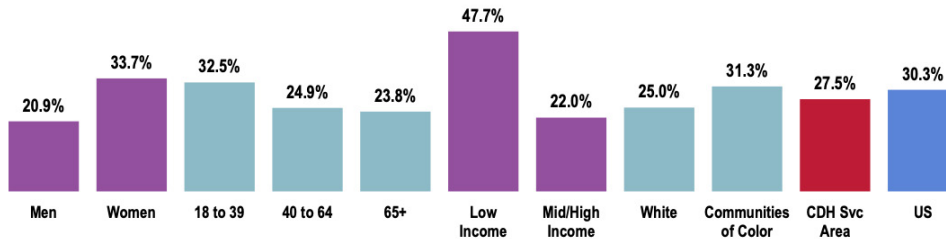
## Have Been Diagnosed With a Depressive Disorder

CDH Service Area



- Sources:
- 2021 PRC Community Health Survey, PRC, Inc. [Item 93]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Illinois data.
  - 2020 PRC National Health Survey, PRC, Inc.
- Notes:
- Asked of all respondents.
  - Depressive disorders include depression, major depression, dysthymia, or minor depression.

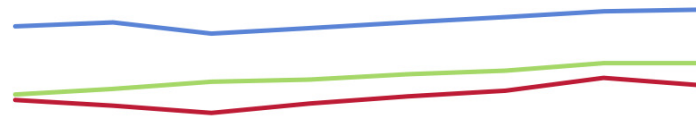
## Have Experienced Symptoms of Chronic Depression (CDH Service Area, 2021)



- Sources:
- 2021 PRC Community Health Survey, PRC, Inc. [Item 91]
  - 2020 PRC National Health Survey, PRC, Inc.
- Notes:
- Asked of all respondents.

DuPage County reported age-adjusted suicide mortality trends that were lower than both state and national trends. The number of mental health providers (666) in DuPage County far exceeds both state and national reports. When interviewed, 16.6% of respondents in the NMCDH service area stated they are currently receiving mental health treatment. This is up slightly from 14.7% in 2018. Of low-income respondents, 23.3% verbalized the inability to obtain mental health services in the past year. Additionally, 59.1% of key informants perceived mental health as a major problem.

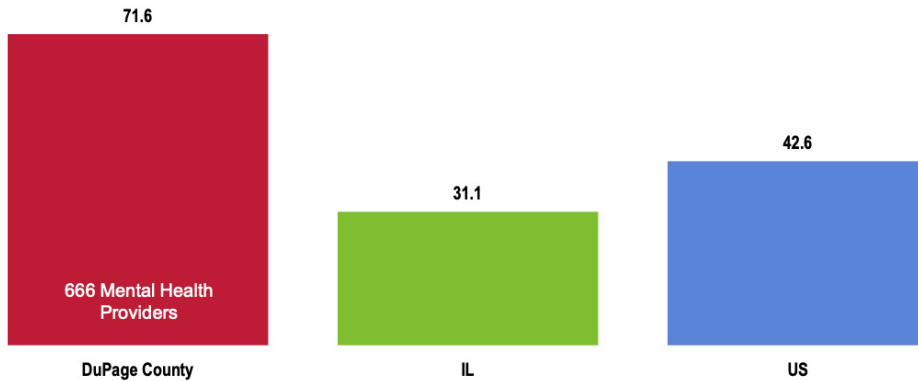
### Suicide: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2030 = 12.8 or Lower



	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019
DuPage County	9.1	8.8	8.4	8.9	9.3	9.6	10.3	9.9
Illinois	9.4	9.7	10.1	10.2	10.5	10.7	11.1	11.1
US	13.1	13.3	12.7	13.0	13.3	13.6	13.9	14.0

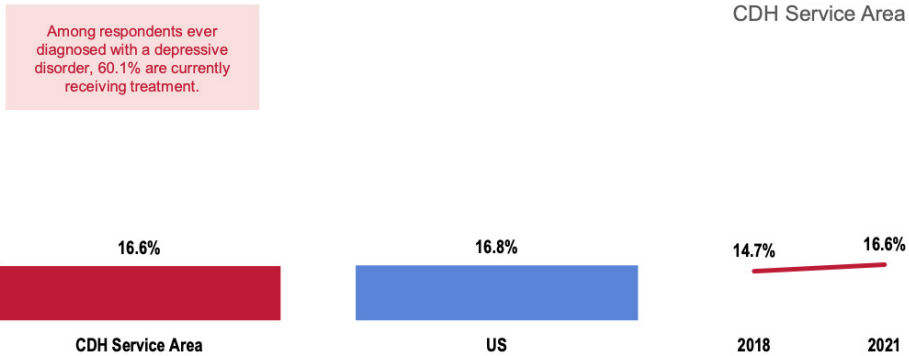
Sources:   
 • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.   
 • US Department of Health and Human Services. Healthy People 2030. August 2030. <http://www.healthypeople.gov>

### Access to Mental Health Providers (Number of Mental Health Providers per 100,000 Population, 2020)



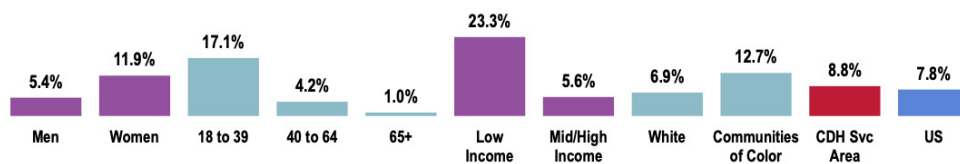
Sources:   
 • University of Wisconsin Population Health Institute, County Health Rankings.   
 • Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap ([sparkmap.org](http://sparkmap.org)).   
 Notes:   
 • This indicator reports the rate of the county population to the number of mental health providers including psychiatrists, psychologists, clinical social workers, and counselors that specialize in mental health care.

## Currently Receiving Mental Health Treatment



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 94]  
 ● 2020 PRC National Health Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.  
 ● "Treatment" can include taking medications for mental health.

## Unable to Get Mental Health Services When Needed in the Past Year (CDH Service Area, 2021)



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 95]  
 ● 2020 PRC National Health Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

### Perceptions of Mental Health as a Problem in the Community (Key Informants, 2021)



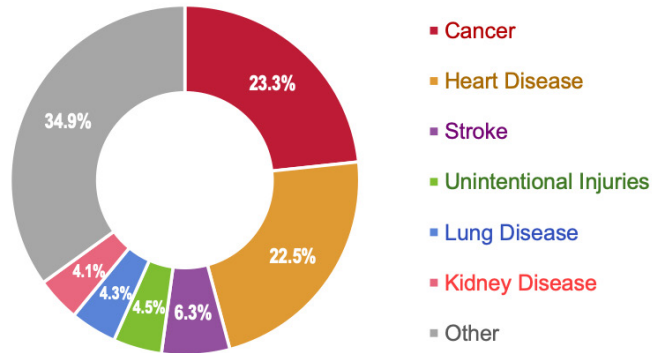
Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
Notes: ● Asked of all respondents.

## Morbidity, mortality and chronic conditions

### Mortality

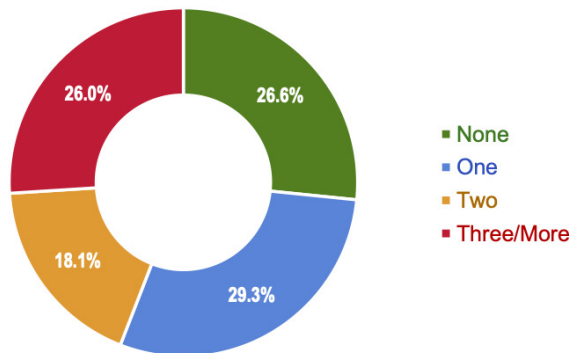
Cancer and heart disease were the two leading individual causes of death in DuPage County. Age-adjusted mortality trends for heart disease and stroke were lower in DuPage County than state and national indicators.

**Leading Causes of Death**  
(DuPage County, 2019)



Sources: ● CDC WONDER Online Query System, Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.  
Notes: ● Lung disease is CLRD, or chronic lower respiratory disease.

**Number of Current Chronic Conditions**  
(CDH Service Area, 2021)



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 123]  
Notes: ● Asked of all respondents.  
● In this case, chronic conditions include lung disease, cancer, kidney disease, heart attack/angina, stroke, asthma, high blood pressure, high blood cholesterol, diabetes, obesity, chronic pain, and/or diagnosed depression.

**Age-Adjusted Death Rates for Selected Causes**  
(2016-2018 Deaths per 100,000 Population)

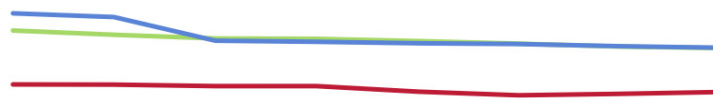
	DuPage County	Illinois	US	HP2030
<b>Malignant Neoplasms (Cancer)</b>	129.1	154.4	149.3	122.7
<b>Diseases of the Heart</b>	127.0	163.1	163.4	127.4*
<b>Fall-Related Deaths (65+)</b>	39.6	49.9	65.1	63.4
<b>Cerebrovascular Disease (Stroke)</b>	34.7	38.3	37.2	33.4
<b>Unintentional Injuries</b>	30.3	44.6	48.9	43.2
<b>Chronic Lower Respiratory Disease (CLRD)</b>	24.7	36.3	39.6	n/a
<b>Alzheimer's Disease</b>	23.2	25.1	30.4	n/a
<b>Drug-Induced</b>	14.9	19.7	18.8	n/a
<b>Kidney Disease</b>	12.2	16.7	12.9	n/a
<b>Diabetes Mellitus</b>	11.7	18.6	21.5	n/a
<b>Pneumonia/Influenza</b>	10.8	15.1	13.8	n/a
<b>Intentional Self-Harm (Suicide)</b>	9.9	11.1	14.0	12.8
<b>Cirrhosis/Liver Disease</b>	6.3	9.5	11.1	10.9
<b>Motor Vehicle Deaths</b>	4.9	8.7	11.3	10.1
<b>Firearm-Related</b>	4.1	11.3	11.9	10.7
<b>Homicide</b>	2.0	8.4	6.1	5.5
<b>HIV/AIDS</b>	0.4	1.4	1.9	n/a

\*The Healthy People 2030 Heart Disease target is adjusted to account for all diseases of the heart.

## Heart disease and stroke

The age-adjusted mortality trends for heart disease and stroke continue to remain lower than state and national trends. When interviewed, 6.6% of survey respondents in the NMCDH CSA reported an affirmative history or prevalence of heart disease, slightly higher than state (5.7%) and national (6.1%) data. However, only 1.4% of respondents reported a history of stroke, lower than both state and national trends. Respondents in the CSA also reported a lower prevalence of cardiac risk factors—elevated blood pressure and cholesterol—than state and national trends. Additionally, 77.3% of key informants perceived heart disease and stroke as a moderate problem in the community.

### Heart Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2030 = 127.4 or Lower (Adjusted)



	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019
DuPage County	133.3	133.0	131.8	131.8	127.4	124.4	125.7	127.0
Illinois	177.5	173.9	171.1	170.7	169.0	166.8	164.3	163.1
US	191.6	188.5	169.1	168.4	167.0	166.3	164.7	163.4

Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.  
● US Department of Health and Human Services. Healthy People 2030. August 2030. <http://www.healthypeople.gov>

Notes: ● The Healthy People 2030 Heart Disease target is adjusted to account for all diseases of the heart.

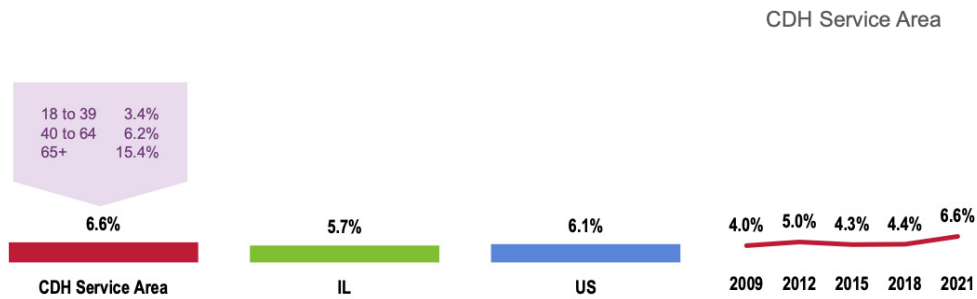
### Stroke: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2030 = 33.4 or Lower



	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019
DuPage County	32.3	30.9	29.8	30.8	32.0	34.0	34.1	34.7
Illinois	38.5	37.7	37.3	37.5	37.9	38.4	38.0	38.3
US	41.8	40.9	36.5	36.8	37.1	37.5	37.3	37.2

Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.  
● US Department of Health and Human Services. Healthy People 2030. August 2030. <http://www.healthypeople.gov>

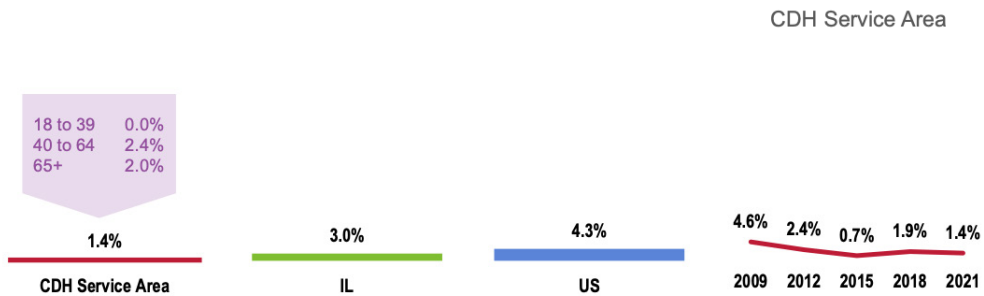
## Prevalence of Heart Disease



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 114]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2019 Illinois data.  
 ● 2020 PRC National Health Survey, PRC, Inc.

Notes: ● Asked of all respondents.  
 ● Includes diagnoses of heart attack, angina, or coronary heart disease.

## Prevalence of Stroke



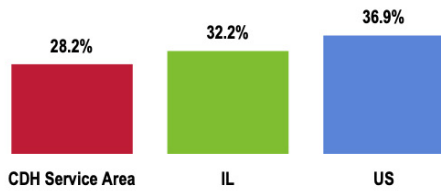
Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 29]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2019 Illinois data.  
 ● 2020 PRC National Health Survey, PRC, Inc.

Notes: ● Asked of all respondents.

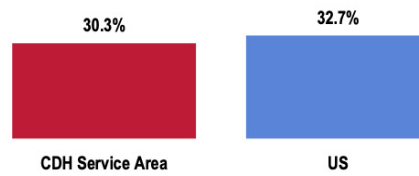


### Prevalence of High Blood Pressure

Healthy People 2030 = 27.7% or Lower



### Prevalence of High Blood Cholesterol

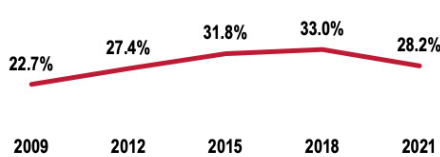


Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Items 35, 36]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2019 Illinois data.  
 • 2020 PRC National Health Survey, PRC, Inc.  
 • US Department of Health and Human Services. Healthy People 2030. August 2030. <http://www.healthypeople.gov>

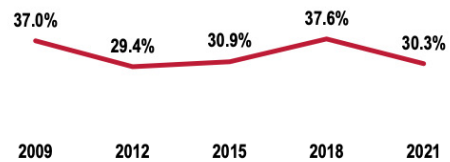
Notes: • Asked of all respondents.

### Prevalence of High Blood Pressure (CDH Service Area)

Healthy People 2030 = 27.7% or Lower



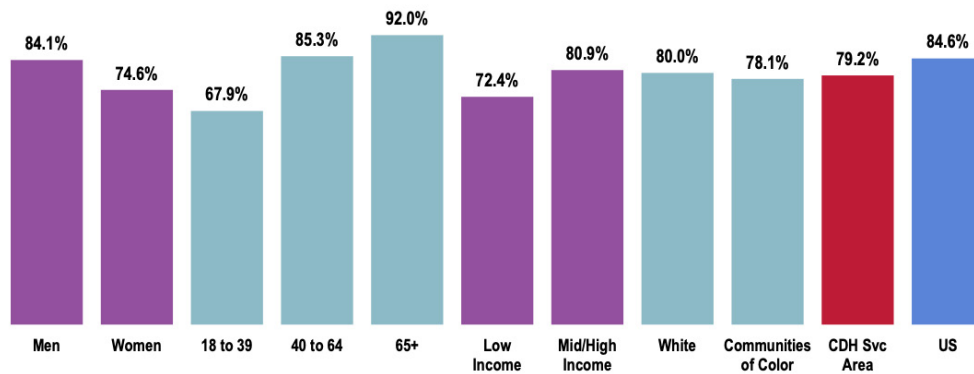
### Prevalence of High Blood Cholesterol (CDH Service Area)



Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Items 35, 36]  
 • US Department of Health and Human Services. Healthy People 2030. August 2030. <http://www.healthypeople.gov>

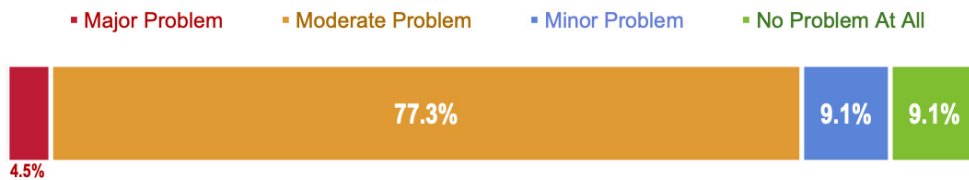
Notes: • Asked of all respondents.

### Present One or More Cardiovascular Risks or Behaviors (CDH Service Area, 2021)



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 115]  
 Notes: ● Reflects all respondents.  
 ● Cardiovascular risk is defined as exhibiting one or more of the following: 1) no leisure-time physical activity; 2) regular/occasional cigarette smoking; 3) high blood pressure; 4) high blood cholesterol; and/or 5) being overweight/obese.

### Perceptions of Heart Disease and Stroke as a Problem in the Community (Key Informants, 2021)

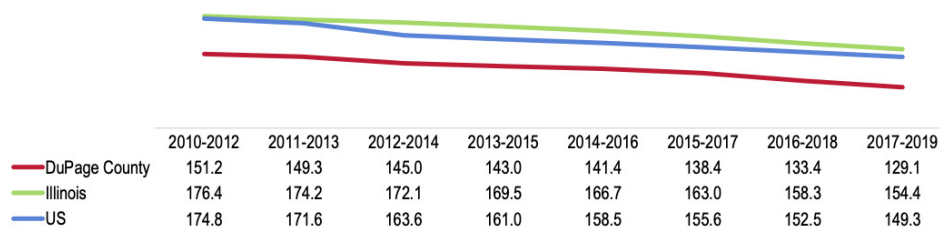


Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

## Cancer

Age-adjusted mortality trends related to cancer are lower for residents in DuPage County as compared to state and national data. Lung cancer was the leading cause of cancer deaths in the NMCDH CSA, second to female breast cancer.

**Cancer: Age-Adjusted Mortality Trends**  
(Annual Average Deaths per 100,000 Population)  
Healthy People 2030 = 122.7 or Lower



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.  
● US Department of Health and Human Services. Healthy People 2030. August 2030. <http://www.healthypeople.gov>

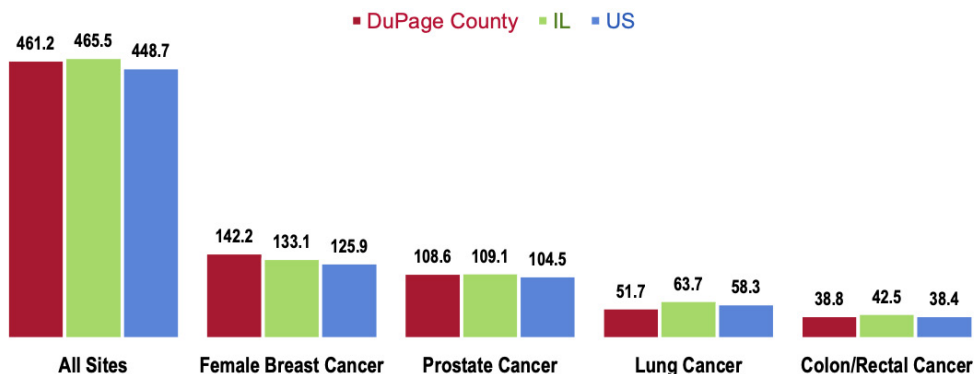
**Age-Adjusted Cancer Death Rates by Site**  
(2016–2018 Annual Average Deaths per 100,000 Population)

	DuPage County	Illinois	US	HP2030
<b>ALL CANCERS</b>	<b>129.1</b>	<b>154.4</b>	<b>149.3</b>	<b>122.7</b>
<b>Lung Cancer</b>	<b>28.5</b>	<b>37.1</b>	<b>34.9</b>	<b>25.1</b>
<b>Female Breast Cancer</b>	<b>18.2</b>	<b>20.6</b>	<b>19.7</b>	<b>15.3</b>
<b>Prostate Cancer</b>	<b>16.0</b>	<b>19.2</b>	<b>18.6</b>	<b>16.9</b>
<b>Colorectal Cancer</b>	<b>11.5</b>	<b>14.3</b>	<b>13.4</b>	<b>8.9</b>

Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.  
● US Department of Health and Human Services. Healthy People 2030. August 2030. <http://www.healthypeople.gov>

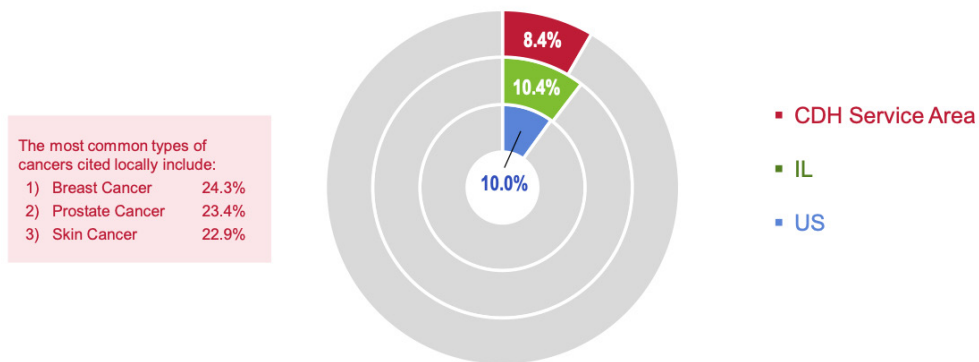
Cancer incidence rates were similar among DuPage County residents and state and national rates. Cancer prevalence rates were slightly lower among CSA residents as compared to state and national rates.

### Cancer Incidence Rates by Site (Annual Average Age-Adjusted Incidence per 100,000 Population, 2013-2017)

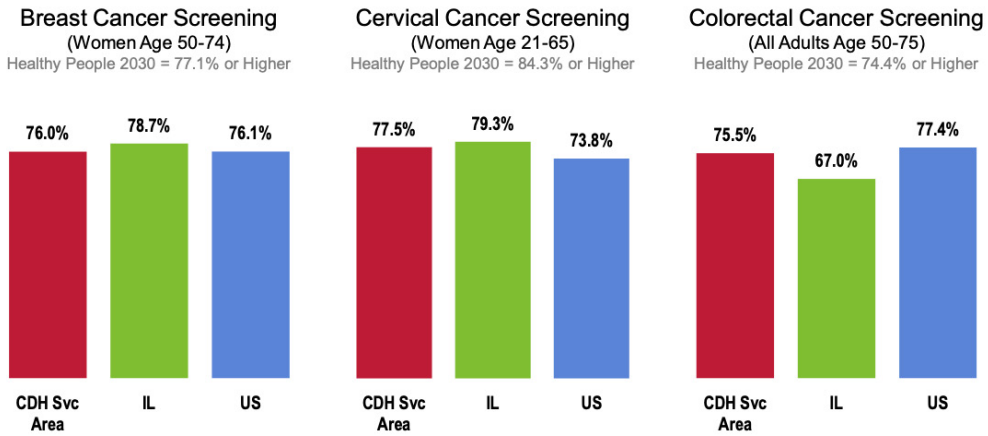


Sources: ● State Cancer Profiles.  
 ● Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap (sparkmap.org).  
 Notes: ● This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of cancers, adjusted to 2000 US standard population age groups (under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

### Prevalence of Cancer

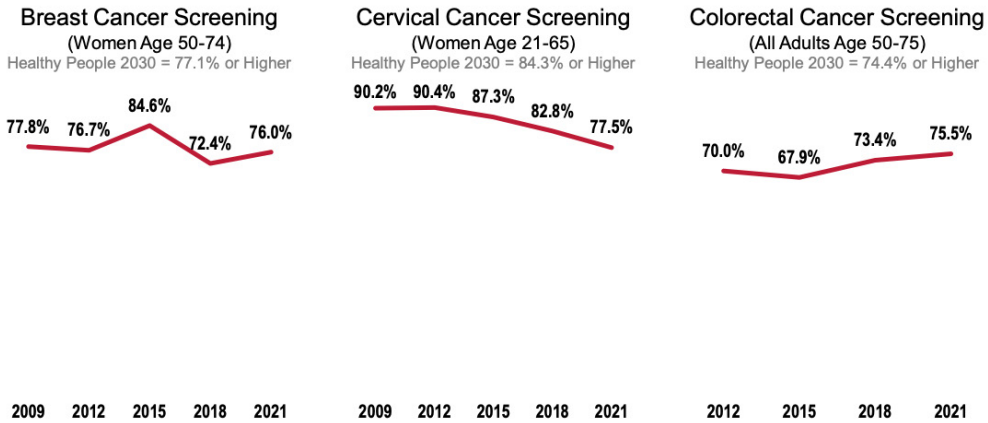


Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Items 25-26]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2019 Illinois data.  
 ● 2020 PRC National Health Survey, PRC, Inc.  
 Notes: ● Reflects all respondents.



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Items 116, 117, 118]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2018 Illinois data.  
 ● 2020 PRC National Health Survey, PRC, Inc.  
 ● US Department of Health and Human Services. Healthy People 2030. August 2030. <http://www.healthypeople.gov>

Notes: ● Each indicator is shown among the gender and/or age group specified.

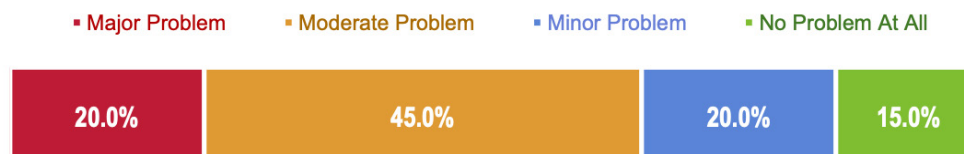


Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Items 116, 117, 118]  
 ● US Department of Health and Human Services. Healthy People 2030. August 2030. <http://www.healthypeople.gov>

Notes: ● Each indicator is shown among the gender and/or age group specified.

Cancer screening rates are similar among state and national rates, although cervical cancer screening has seen a decline from 90.2% in 2009 to 76.0% in 2021. Key informants surveyed perceived cancer as a moderate problem in the community.

## Perceptions of Cancer as a Problem in the Community (Key Informants, 2021)



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
Notes: ● Asked of all respondents.

Among those rating this issue as a “major problem,” reasons related to the following:

### **Incidence/Prevalence**

There seem to be more cases. -Social Services Provider

I feel that DuPage County has a high rate of diagnosis. -Social Services Provider

I know you addressed cancer, but I feel as though there should be a heightened awareness and funding to go into research for pancreatic cancer. -Social Services Provider

### **Screening**

Cancer is a major incidence and mortality in the county. There are many screenings out there to prevent and detect cancer at an early stage and patients are not accessing these services. Additionally, the pandemic has caused a major decrease in cancer screenings which will cause all the death trends to uptick over the next decade or two. -Social Services Provider

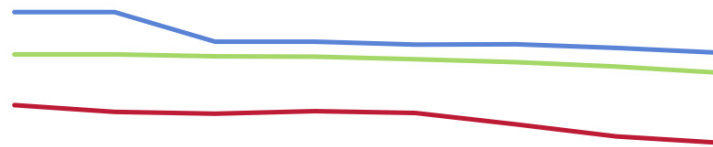
### **Environmental Contributors**

I think there are environmental factors that are causing an increase in certain areas. One specific area of DuPage County, Darien, Illinois has several people on the same street all diagnosed with the same type of leukemia. It is these situations that make it specific to our area. -Social Services Provider

## Respiratory disease

Chronic lower respiratory diseases (CLRD) are diseases affecting the lungs. The deadliest of these is chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis. Mortality trending for CLRD is illustrated in the charts that follow.

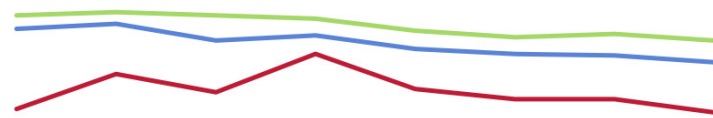
**CLRD: Age-Adjusted Mortality Trends**  
(Annual Average Deaths per 100,000 Population)



	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019
DuPage County	30.9	29.8	29.5	29.9	29.6	27.7	25.7	24.7
Illinois	39.3	39.3	39.0	38.9	38.5	38.0	37.3	36.3
US	46.3	46.3	41.4	41.4	40.9	41.0	40.4	39.6

Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.  
Notes: ● CLRD is chronic lower respiratory disease.

**Pneumonia/Influenza: Age-Adjusted Mortality Trends**  
(Annual Average Deaths per 100,000 Population)

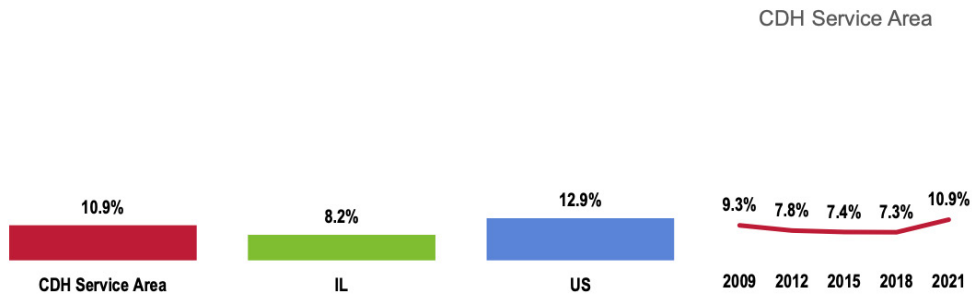


	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019
DuPage County	11.0	13.1	12.0	14.3	12.2	11.6	11.6	10.8
Illinois	16.6	16.8	16.6	16.4	15.7	15.3	15.5	15.1
US	15.8	16.1	15.1	15.4	14.6	14.3	14.2	13.8

Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.

The overall prevalence of asthma is higher in the NMCDH CSA (10.9%) than state data, but lower than the national rate of 12.9%. The prevalence of asthma in children is lower in the NMCDH CSA (6.4%) than nationally.

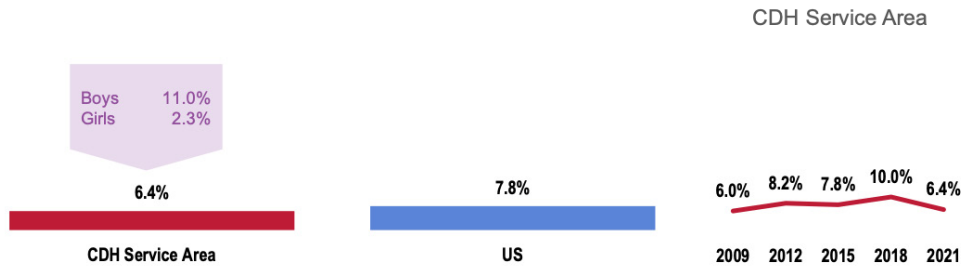
### Prevalence of Asthma



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 119]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2019 Illinois data.  
 ● 2020 PRC National Health Survey, PRC, Inc.

Notes: ● Asked of all respondents.  
 ● Includes those who have ever been diagnosed with asthma and report that they still have asthma.

### Prevalence of Asthma in Children (Parents of Children Age 0-17)



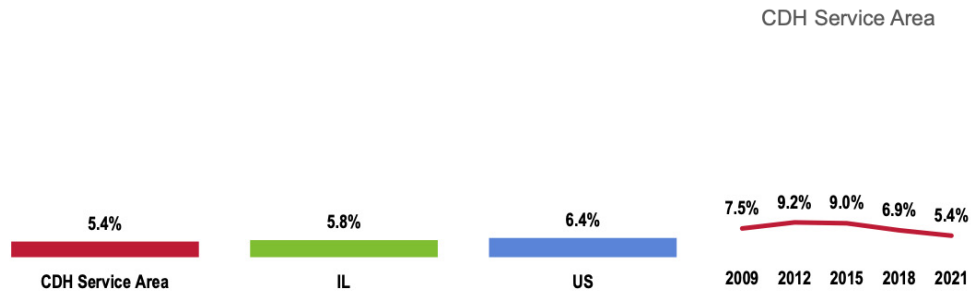
Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 120]  
 ● 2020 PRC National Health Survey, PRC, Inc.

Notes: ● Asked of all respondents with children 0 to 17 in the household.  
 ● Includes children who have ever been diagnosed with asthma and are reported to still have asthma.



COPD, which includes bronchitis and emphysema, is also lower in the NMCDH CSA than state and national rates. Additionally, 41.2% of key informants perceived respiratory disease as a moderate problem in the community.

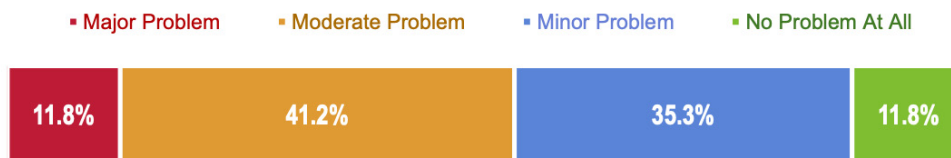
### Prevalence of Chronic Obstructive Pulmonary Disease (COPD)



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 23]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Illinois data.  
 ● 2020 PRC National Health Survey, PRC, Inc.

Notes: ● Asked of all respondents.  
 ● Includes those having ever suffered from or been diagnosed with COPD or chronic obstructive pulmonary disease, including bronchitis or emphysema.

### Perceptions of Respiratory Diseases as a Problem in the Community (Key Informants, 2021)

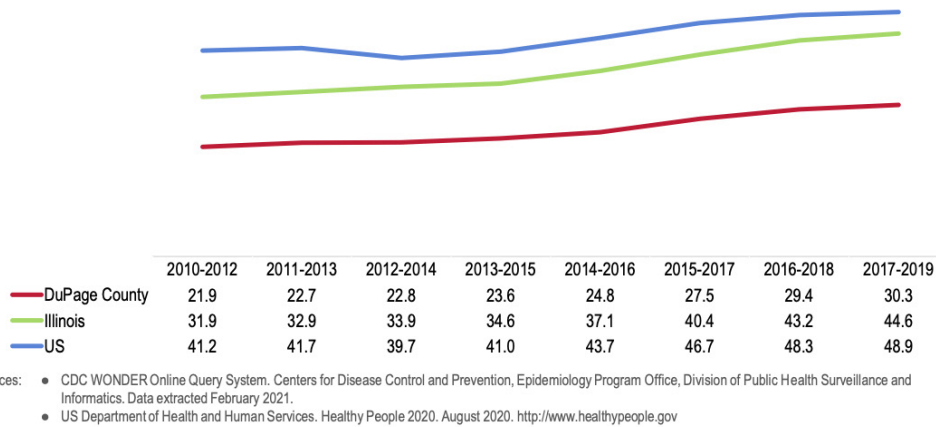


Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

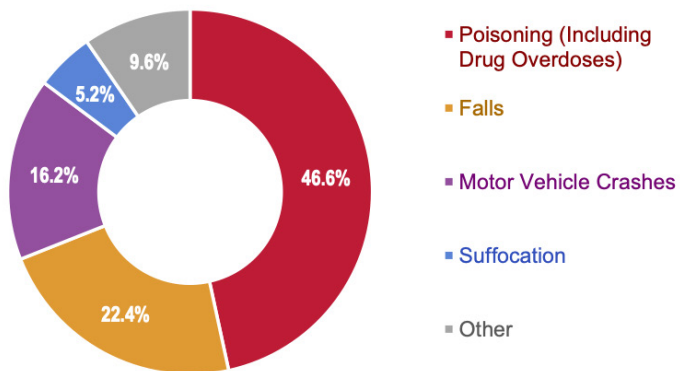
### Injury and violence

Death related to unintentional injuries was lower in DuPage County than state and national trends. Leading causes of unintentional injury deaths included poisoning/drug overdose (46.6%), falls (22.4%), motor vehicle crashes (16.2%) and other causes, including suffocation (14.8%).

**Unintentional Injuries: Age-Adjusted Mortality Trends**  
 (Annual Average Deaths per 100,000 Population)  
 Healthy People 2020 = 43.2 or Lower



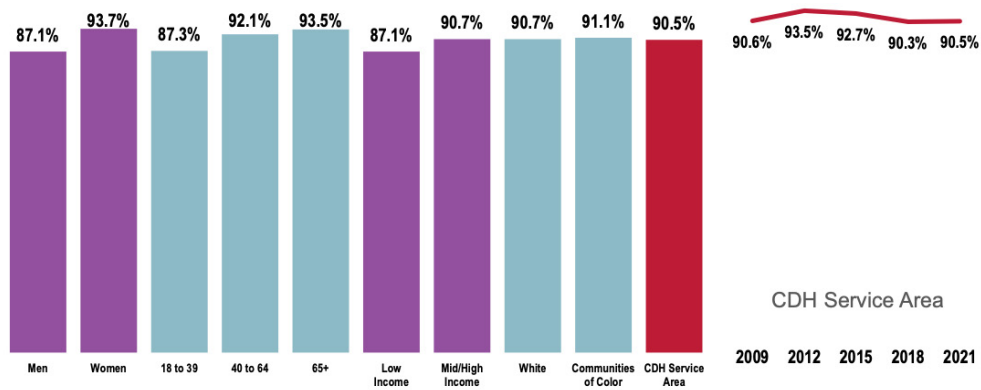
**Leading Causes of Unintentional Injury Deaths**  
 (DuPage County, 2017–2019)



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.

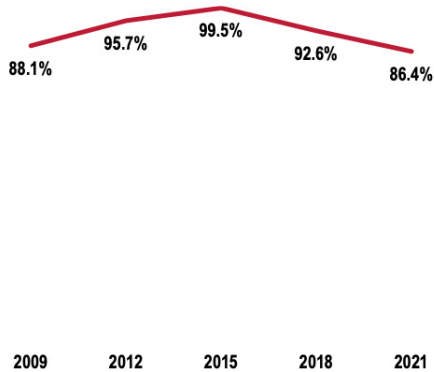
Seat belt or other appropriate restraint usage for children dropped from 95.5% in 2015 to 86.4% in 2021. Child helmet usage remained essentially unchanged at 38.7%.

### “Always” Wear a Seat Belt When Driving or Riding in a Vehicle

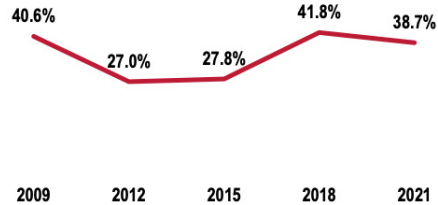


Sources: ● 2020 PRC Community Health Survey, PRC, Inc. [Item 301]  
 Notes: ● Asked of all respondents.

### Child “Always” Wears a Seat Belt or Appropriate Restraint (Parents of Children 0-17)



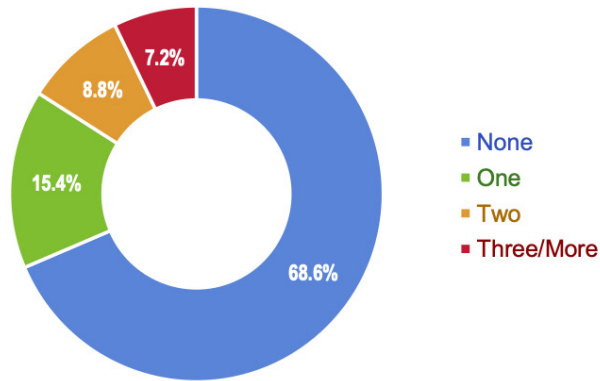
### Child “Always” Wears a Helmet When Riding a Bicycle (Parents of Children 5-17)



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Items 312-313]  
 Notes: ● Asked of all respondents with children under 18 at home.

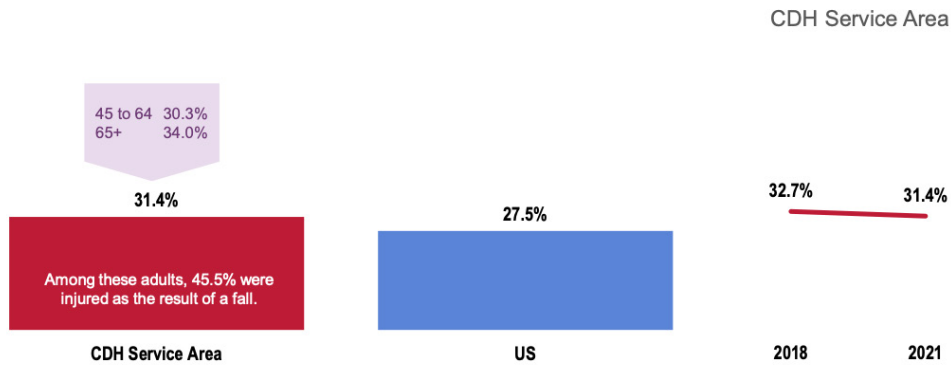
When queried, 31.4% of NMCDH CSA survey respondents age 45 and older reported experiencing a fall within the past year; 45.5% of them experienced injury as a result of the fall.

### Number of Falls in Past 12 Months (Adults Age 45 and Older; CDH Service Area, 2021)



Sources: ● 2020 PRC Community Health Survey, PRC, Inc. [Item 303]  
 Notes: ● Asked of all respondents age 45+.

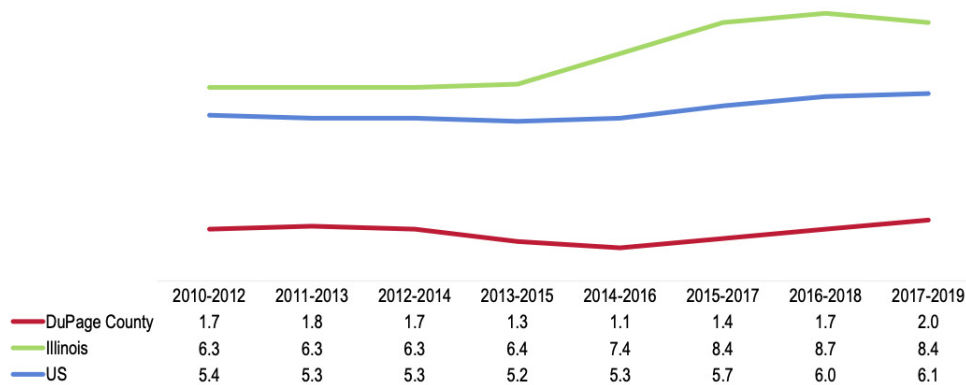
### Fell One or More Times in the Past Year (Adults Age 45 and Older)



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Items 303-304]  
 ● 2020 PRC National Health Survey, PRC, Inc.  
 Notes: ● Asked of those respondents age 45 and older.

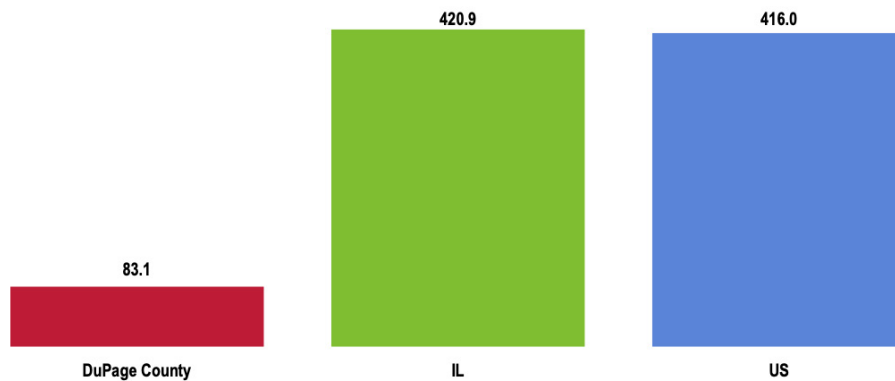
Age-adjusted mortality rates due to homicide were significantly lower in DuPage County as compared to state and national rates. Violent crime was also significantly lower in DuPage County. Additionally, 16.9% of individuals surveyed acknowledged having been hit, slapped, pushed, kicked or hurt in any way by an intimate partner. This data is trending upward and exceeds the national percentage of 13.7%.

### Homicide: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population) Healthy People 2020 = 5.5 or Lower



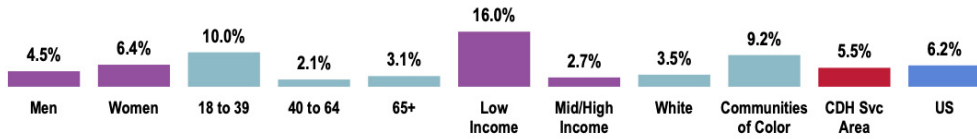
Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.  
● US Department of Health and Human Services. Healthy People 2020. August 2020. <http://www.healthypeople.gov>

### Violent Crime (Rate per 100,000 Population, 2015-2017)



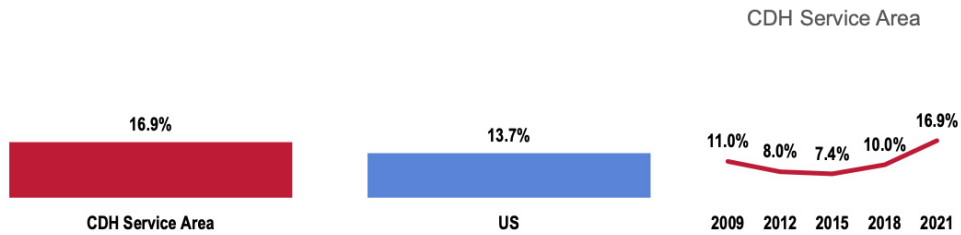
Sources: ● Federal Bureau of Investigation, FBI Uniform Crime Reports.  
● Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap ([sparkmap.org](http://sparkmap.org)).  
Notes: ● This indicator reports the rate of violent crime offenses reported by the sheriff's office or county police department per 100,000 residents. Violent crime includes homicide, rape, robbery, and aggravated assault. This indicator is relevant because it assesses community safety.  
● Participation by law enforcement agencies in the UCR program is voluntary. Sub-state data do not necessarily represent an exhaustive list of crimes due to gaps in reporting. Also, some institutions of higher education have their own police departments, which handle offenses occurring within campus grounds; these offenses are not included in the violent crime statistics but can be obtained from the Uniform Crime Reports Universities and Colleges data tables.

### Victim of a Violent Crime in the Past Five Years (CDH Service Area, 2021)



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 38]  
 ● 2020 PRC National Health Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

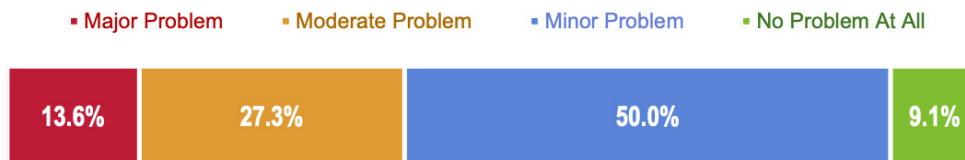
### Have Ever Been Hit, Slapped, Pushed, Kicked, or Hurt in Any Way by an Intimate Partner



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 39]  
 ● 2020 PRC National Health Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

Only 27.3% of key informants perceived injury and violence as a problem in the community.

### Perceptions of Injury and Violence as a Problem in the Community (Key Informants, 2021)

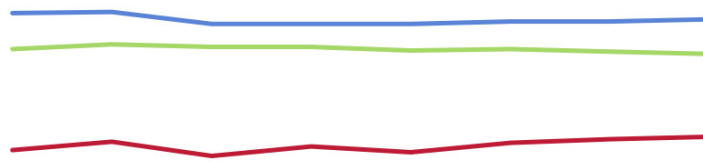


Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

### Diabetes

Diabetes is the seventh-leading cause of death in the U.S., affecting more than 30 million people. Due to the impact of social determinants such as finance, education and access to health care, and their resultant disparities among underserved populations and communities of color, those from some racial and ethnic minorities are more likely to experience the disease. Additionally, many people are unaware they have the disease. Because of the systemic complications of diabetes, morbidity is high and can affect multiple organs. Age-adjusted mortality trends are shown in the following chart. DuPage County residents experience a lower rate of mortality from diabetes than seen at the state or national level.

### Diabetes: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)

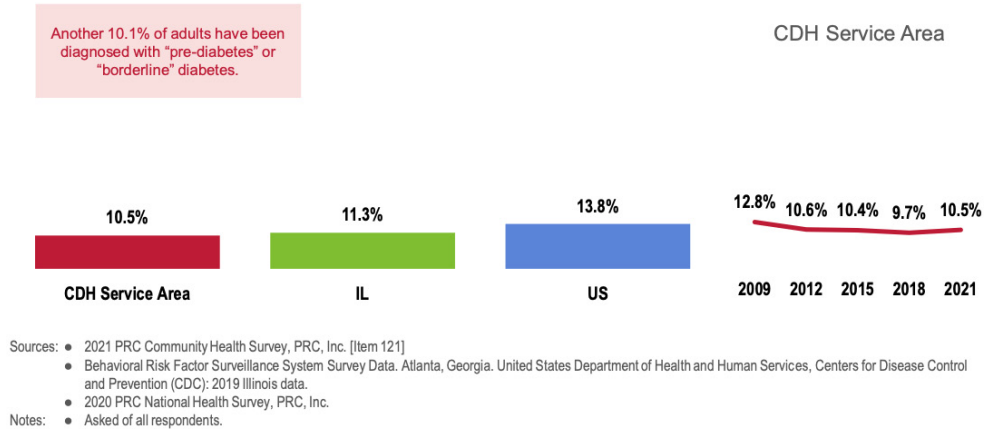


	2010-2012	2011-2013	2012-2014	2013-2015	2014-2016	2015-2017	2016-2018	2017-2019
DuPage County	10.6	11.3	10.1	10.9	10.4	11.2	11.5	11.7
Illinois	19.0	19.4	19.2	19.2	18.9	19.0	18.8	18.6
US	22	22.1	21.1	21.1	21.1	21.3	21.3	21.5

Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.  
 ● US Department of Health and Human Services. Healthy People 2020. August 2020. <http://www.healthypeople.gov>  
 Notes: ● The Healthy People 2020 target for Diabetes is adjusted to account for only diabetes mellitus coded deaths.

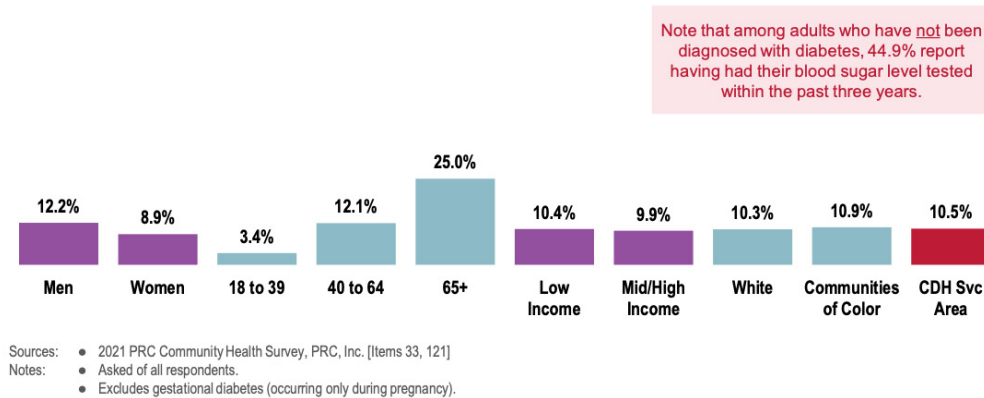
The prevalence rate of diabetes is lower in the NMCDH CSA than in state or national data.

### Prevalence of Diabetes



Among residents of the NMCDH CSA, individuals 65 years and older experience a 25% prevalence rate.

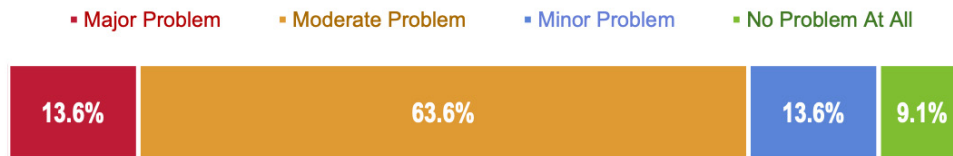
### Prevalence of Diabetes (CDH Service Area, 2021)





Of the key informants surveyed, 63.6% rated diabetes as a moderate problem.

### Perceptions of Diabetes as a Problem in the Community (Key Informants, 2021)

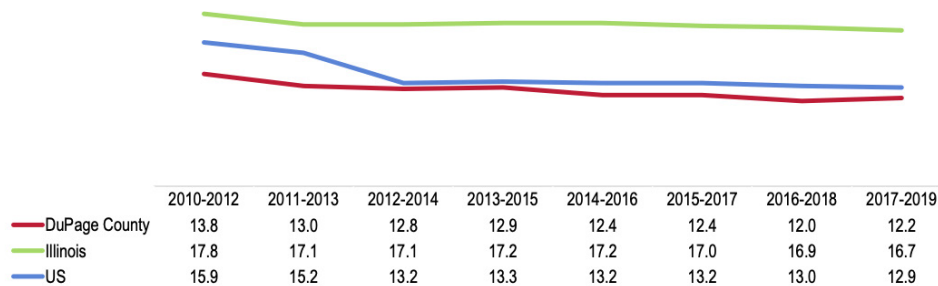


Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

### Kidney disease

Healthy People 2030 estimates that more than one in seven adults in the United States have kidney disease. Similar to diabetes, kidney disease is more prevalent in those from minority and underserved populations due to the effects of social determinants and health disparities. People with chronic kidney disease (CKD) are more likely to experience heart disease and stroke.

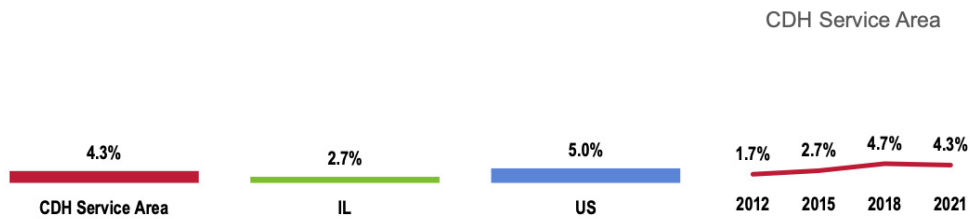
### Kidney Disease: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.

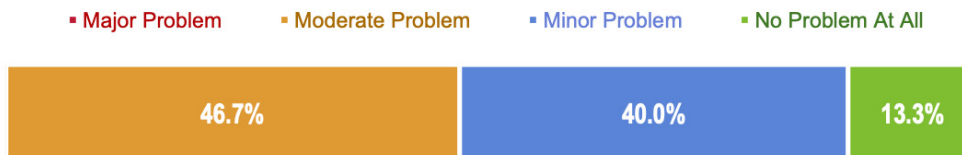
When queried, 4.3% of survey respondents reported having kidney disease, with a slightly upward trend since 2012. Also, 46.7% of key informants identified CKD as a moderate problem.

### Prevalence of Kidney Disease



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 24]  
 ● Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC): 2019 Illinois data.  
 ● 2020 PRC National Health Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

### Perceptions of Kidney Disease as a Problem in the Community (Key Informants, 2021)

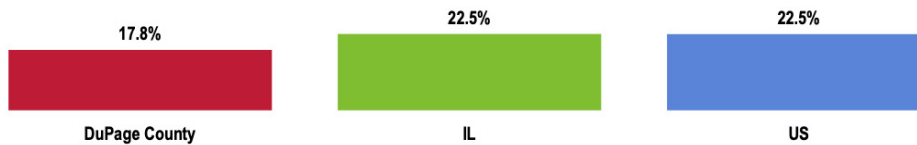


Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

## Maternal infant health

Healthy People 2030 recognizes that keeping infants healthy starts with the provision of high-quality care during pregnancy. Factors such as lack of insurance, food insecurity, unsafe living environments, violence, and substance abuse put both mothers and babies at high risk for perinatal complications. Lack of insurance prevents or delays the onset of prenatal care at a critical time during fetal development. Early and continuous prenatal care is the best assurance of infant health. When surveyed, 17.8% of DuPage County residents reported a lack of prenatal care during the first trimester.

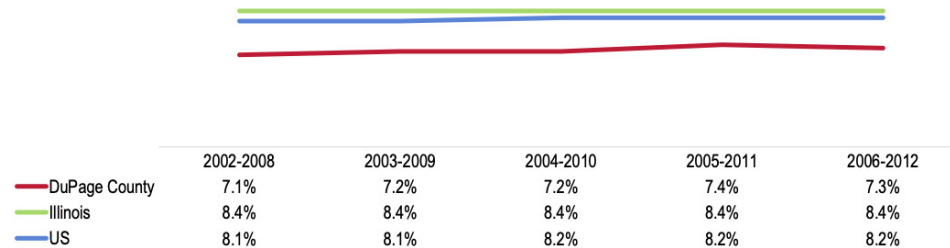
### Lack of Prenatal Care in the First Trimester (Percentage of Live Births, 2017-2019)



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted February 2021.  
 Note: ● This indicator reports the percentage of women who do not obtain prenatal care during their first trimester of pregnancy. This indicator is relevant because engaging in prenatal care decreases the likelihood of maternal and infant health risks. This indicator can also highlight a lack of access to preventive care, a lack of health, knowledge insufficient provider outreach, and/or social barriers preventing utilization of services.

Frequently as a result of receiving poor or inadequate prenatal care, many babies are born prematurely or experience low birth weight, a term used to describe inadequate weight gain during the pregnancy. Low birth weight is defined as infants weighing less than 5 pounds, 8 ounces at birth.

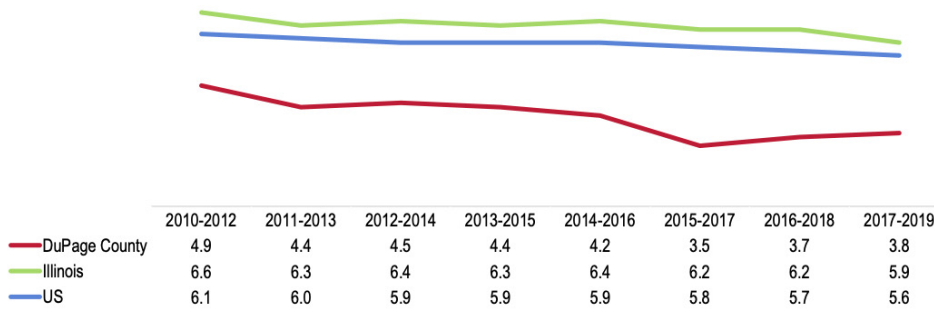
### Low-Weight Births (Percent of Live Births)



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted February 2021.  
 Note: ● This indicator reports the percentage of total births that are low birth weight (Under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

Infant mortality rates reflect deaths of children less than one year of age per 1,000 live births.

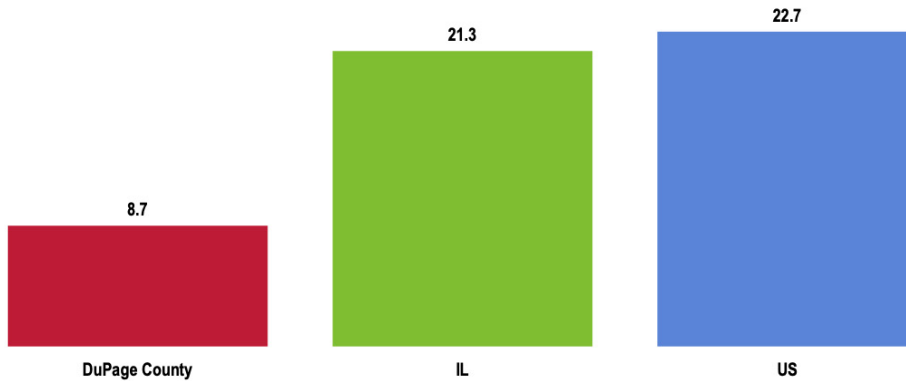
### Infant Mortality Trends (Annual Average Infant Deaths per 1,000 Live Births) Healthy People 2020 = 5.0 or Lower



Sources: ● CDC WONDER Online Query System. Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Vital Statistics. Data extracted February 2021.  
 ● Centers for Disease Control and Prevention, National Center for Health Statistics.  
 ● US Department of Health and Human Services. Healthy People 2020. August 2020. <http://www.healthypeople.gov>  
 Notes: ● Rates are three-year averages of deaths of children under 1 year old per 1,000 live births.

Healthy People 2030 estimates that nearly half of all pregnancies in the United States are unintended. Unintended pregnancies are linked to poor outcomes such as preterm birth and postpartum depression. Adolescents are at especially high risk for unintended pregnancies. Linking adolescents to youth-friendly healthcare services is paramount for preventing unplanned pregnancies and sexually transmitted infections in this age group. The teen birth rate in DuPage County is notably lower than state and national rates.

### Teen Birth Rate (Births to Adolescents Age 15-19 per 1,000 Females Age 15-19, 2012–2018) Healthy People 2030 = 31.4 or Lower



Sources: ● Centers for Disease Control and Prevention, National Vital Statistics System.  
 ● Retrieved from Community Commons at <http://www.chna.org>.  
 ● US Department of Health and Human Services. Healthy People 2030. August 2020. <http://www.healthypeople.gov>  
 Notes: ● This indicator reports the rate of total births to women under the age of 15–19 per 1,000 female population age 15–19. This indicator is relevant because in many cases, teen parents have unique social, economic, and health support services. Additionally, high rates of teen pregnancy may indicate the prevalence of unsafe sex practices.

### Modifiable health risk factors

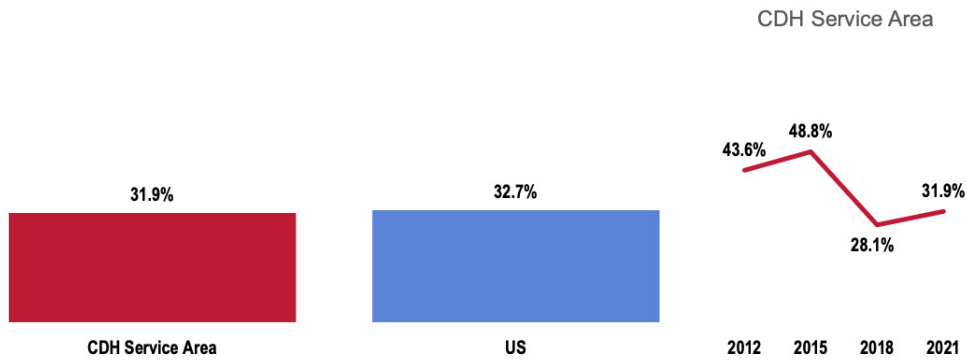
Risk factors are behaviors or activities that increase a person’s chances of developing disease or a poor health outcome. While some risk factors are hereditary and unmodifiable, many risk factors can be changed or modified to promote healthy behaviors and positive outcomes.

### Nutrition

An unhealthy diet, such as eating foods high in fats and sugars, puts individuals at risk for poor outcomes such as obesity, diabetes, heart disease and other health problems. Often, an unhealthy diet is related to more than just client choice; it involves factors such as lack of education, lack of money to purchase healthy foods, residency in food deserts and food insecurity. A healthy diet includes a minimum of five servings of fruits/vegetables per day.

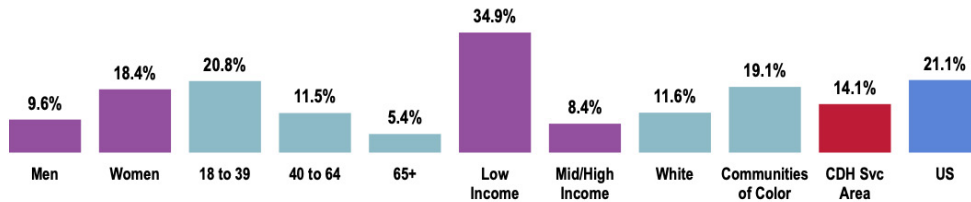
When surveyed, 31.9% of respondents in the NMCDH CSA reported consuming five or more servings of fruits/vegetables daily. However, 34.9% of low-income residents found it “very” or “somewhat” difficult to purchase affordable fresh produce.

## Consume Five or More Servings of Fruits/Vegetables Per Day



Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 125]  
● 2020 PRC National Health Survey, PRC, Inc.  
Notes: ● Asked of all respondents.  
● For this issue, respondents were asked to recall their food intake on the previous day.

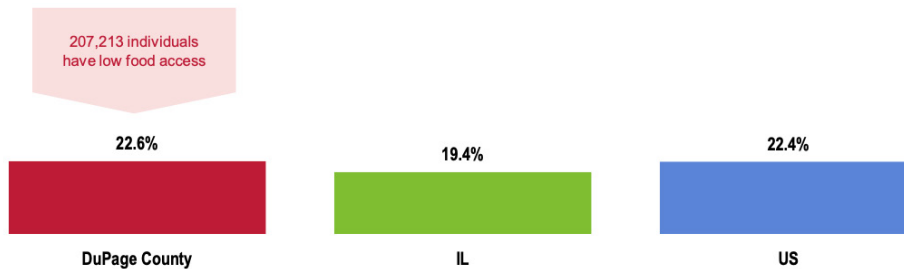
### Find It “Very” or “Somewhat” Difficult to Buy Affordable Fresh Produce (CDH Service Area, 2021)



Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Item 79]  
 • 2020 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

Additionally, 22.6% of respondents surveyed identified low food access. Low food access is characterized as “far” distance from a supermarket or large grocery store. This percentage was noted as higher than both state and national data.

### Population With Low Food Access (Percent of Population That Is Far From a Supermarket or Large Grocery Store, 2015)



Sources: • US Department of Agriculture, Economic Research Service, USDA - Food Access Research Atlas (FARA).  
 • Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap (sparkmap.org).  
 Notes: • This indicator reports the percentage of the population with low food access. Low food access is defined as living more than ½ mile from the nearest supermarket, supercenter, or large grocery store. This indicator is relevant because it highlights populations and geographies facing food insecurity.

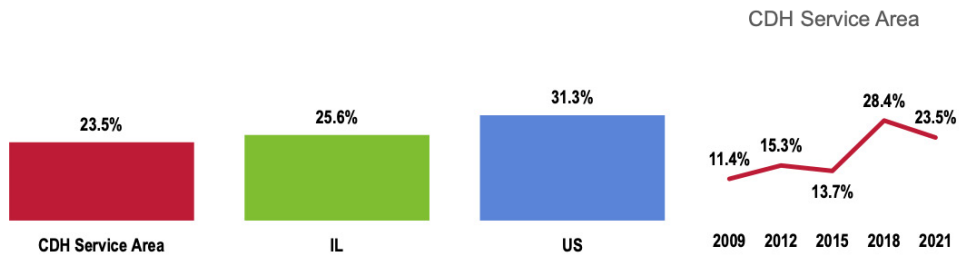
### Physical activity

Physical activity is essential for good health. It prevents disease, disability, injury and in some cases premature death. Healthy communities place a high emphasis on parks, bike paths, walkways and other infrastructure that promotes recreation.

When queried regarding leisure-time physical activity in the past month, 23.5% of NMCDH CSA respondents identified no leisure-time activity in the past month. This reflected a doubling of no leisure-time activity since 2009.

### No Leisure-Time Physical Activity in the Past Month

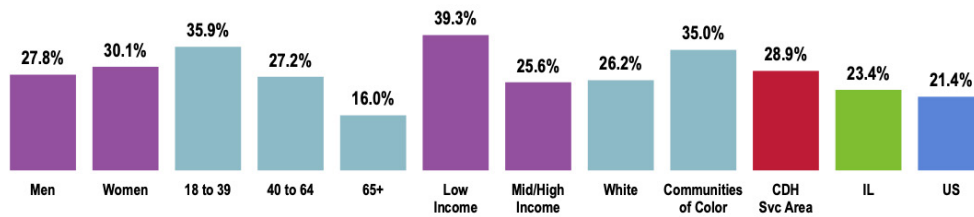
Healthy People 2020 = 21.2% or Lower



- Sources:
- 2021 PRC Community Health Survey, PRC, Inc. [Item 82]
  - Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2019 Illinois data.
  - 2020 PRC National Health Survey, PRC, Inc.
  - US Department of Health and Human Services. Healthy People 2020. August 2020. <http://www.healthypeople.gov>
- Notes:
- Asked of all respondents.
  - Note that seasonal differences likely influenced the disparity in results between the 2015 (summer) and 2018 (winter) survey administrations.

The United States Department of Health and Human Services recommends that adults complete 150 minutes of moderate-intensity (such as walking) or 75 minutes of vigorous activity each week.

### Meets Physical Activity Recommendations (CDH Service Area, 2021) Healthy People 2020 = 28.4% or Higher



Sources: 

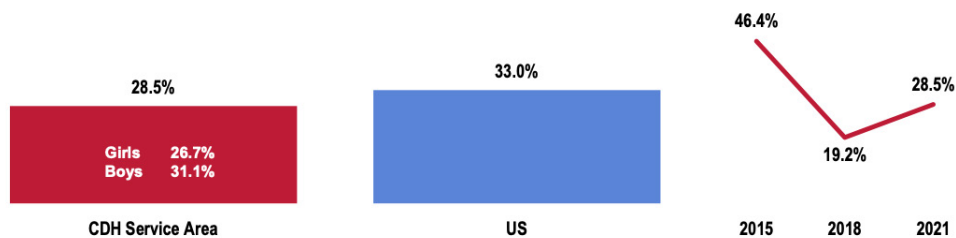
- 2021 PRC Community Health Survey, PRC, Inc. [Item 126]
- Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2019 Illinois data.
- US Department of Health and Human Services. Healthy People 2020. August 2020. <http://www.healthypeople.gov>

Notes: 

- Asked of all respondents.
- Meeting both guidelines is defined as the number of persons age 18+ who report light or moderate aerobic activity for at least 150 minutes per week or who report vigorous physical activity 75 minutes per week or an equivalent combination of moderate and vigorous-intensity activity and report doing physical activities specifically designed to strengthen muscles at least twice per week.

Children and adolescents should plan and execute 60 minutes or more of physical activity daily.

### Child Is Physically Active for One or More Hours per Day (Parents of Children Age 2-17)



Sources: 

- 2021 PRC Community Health Survey, PRC, Inc. [Item 109]
- 2020 PRC National Health Survey, PRC, Inc.

Notes: 

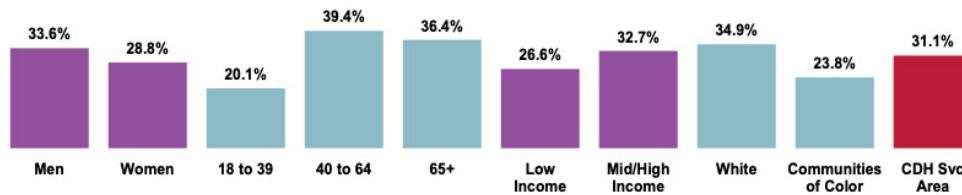
- Asked of all respondents with children age 2-17 at home.
- Includes children reported to have one or more hours of physical activity on each of the seven days preceding the survey.
- Note that seasonal differences likely influenced the disparity in results between the 2015 (summer) and 2018 (winter) survey administrations.



### Overweight and obesity

Obesity has been linked to several chronic health conditions including heart disease, diabetes, cancer and stroke. Several racial/ethnic groups are more likely to experience obesity. Social determinants such as finances, access to healthy foods, education, the presence of food deserts, and access to safe recreational activities can negatively impact obesity rates. When surveyed, 31.1% of individuals in the NMCDH CSA reported being obese. Individuals are considered obese when presenting with a body mass index (BMI) of greater than or equal to 30 kg/m.

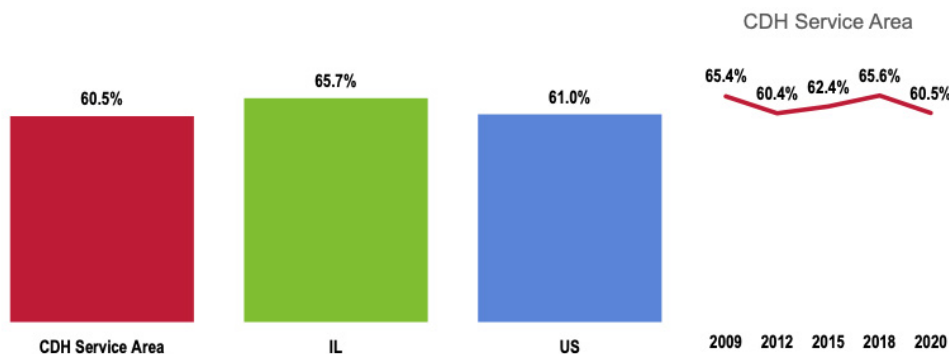
**Prevalence of Obesity  
(CDH Service Area, 2021)**  
Healthy People 2020 = 36.0% or Lower



Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Item 130]  
 • US Department of Health and Human Services. Healthy People 2020. August 2020. <http://www.healthypeople.gov>  
 Notes: • Based on reported heights and weights, asked of all respondents.  
 • The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.

Individuals are considered overweight when presenting with a BMI of 25.0 to 29.9 kg/m. Of NMCDH CSA survey respondents, 60.5% identified themselves as overweight.

### Prevalence of Total Overweight (Overweight and Obese)



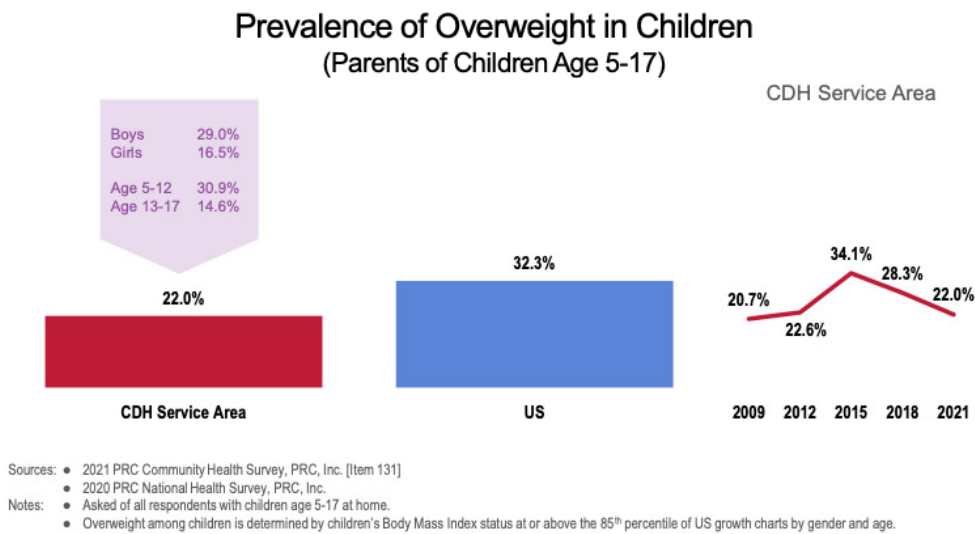
Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Item 128]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2019 Illinois data.  
 • 2020 PRC National Health Survey, PRC, Inc.  
 Notes: • Based on reported heights and weights, asked of all respondents.  
 • The definition of overweight is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 25.0, regardless of gender. The definition for obesity is a BMI greater than or equal to 30.0.

### Childhood obesity

The Centers for Disease Control and Prevention notes that childhood obesity continues to be a serious problem in the United States, with childhood obesity now affecting one in five children and adolescents. The causes of excess weight gain in young people are similar to those in adults, including behavior and genetics. Obesity is also influenced by a person’s community, as it can affect the ability to make healthy choices. Behaviors that influence excess weight gain include eating high-calorie, low-nutrient foods and beverages, medication use and sleep routines. Not getting enough physical activity and spending too much time on sedentary activities such as watching television or other screen devices can lead to weight gain.

In contrast, consuming healthy foods and being physically active can help children grow and maintain a healthy weight. Balancing energy or calories consumed from foods and beverages with the calories burned through activity plays a role in preventing excess weight gain. In addition, eating healthy foods and being physically active helps to prevent chronic diseases such as Type 2 diabetes, some cancers and heart disease. (Source: [cdc.gov/obesity/childhood/causes.html](https://www.cdc.gov/obesity/childhood/causes.html))

CHNA data reveals that 22.0% of children ages 5 to 17 in the NMCDH CSA are overweight.



Nutrition, physical activity and weight were identified as a moderate problem by 54.5% of key informants.



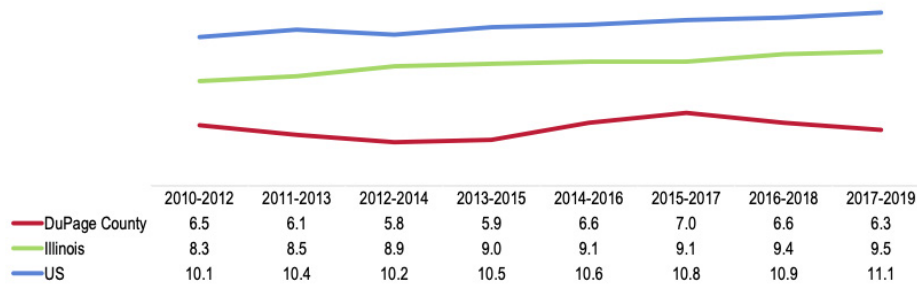
## Substance use disorders

### Alcohol consumption

More than 20 million adults and adolescents in the United States have had a substance use disorder in the past year. Substance use disorders can involve illicit drugs, prescription drugs or alcohol. Opioid use disorders have become especially problematic in recent years. Substance use disorders are linked to many health problems, and overdoses can lead to emergency department visits and deaths. Effective treatments for substance use disorders are available, but very few people get the treatment they need. Strategies to prevent substance use—especially in adolescents—and help people get treatment can reduce drug and alcohol misuse, related health problems and deaths. (Source: [health.gov/healthypeople](http://health.gov/healthypeople))

Data regarding age-adjusted cirrhosis and liver disease death indicated that DuPage County falls below mortality rates noted in state and national data.

**Cirrhosis/Liver Disease: Age-Adjusted Mortality Trends**  
 (Annual Average Deaths per 100,000 Population)  
 Healthy People 2020 = 10.9 or Lower



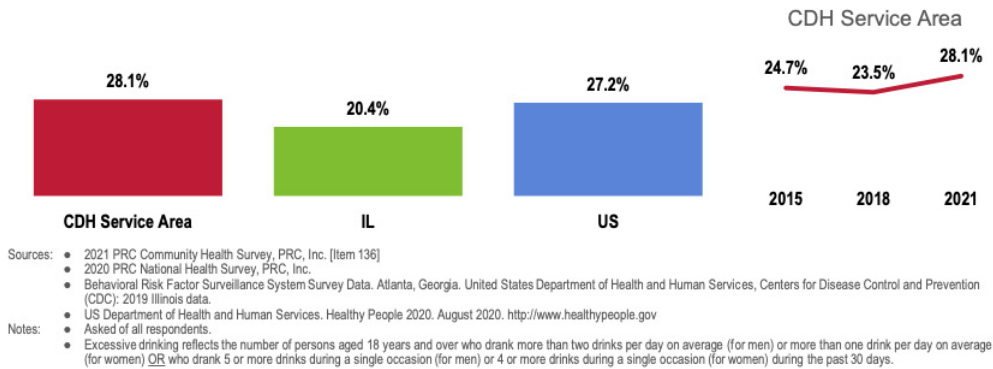
Sources: • CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.  
 • US Department of Health and Human Services. Healthy People 2020. August 2020. <http://www.healthypeople.gov>

Excessive drinking is defined as heavy and/or binge drinking. Survey respondents were asked about the amount of alcohol they consumed in the month preceding the interview.

- Heavy drinking is defined as more than two alcoholic drinks per day for a man or more than one alcoholic drink per day for a woman.
- Binge drinking is defined as five or more alcoholic drinks for a man or four or more alcoholic drinks for a woman on any single occasion.

A total of 28.1% of NMC DH CSA survey respondents reported heavy drinking.

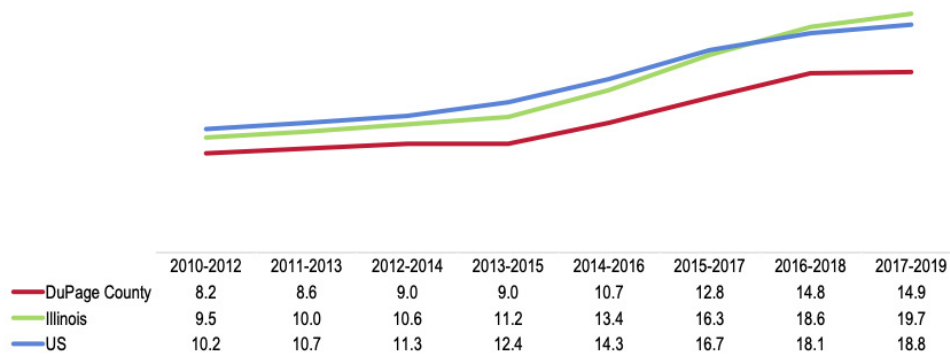
## Excessive Drinkers



## Drug use

Unintentional drug-related deaths include all deaths, other than suicide, for which drugs are the underlying cause. A “drug” includes illicit or street drugs, such as heroin and cocaine, as well as legal prescription and over-the-counter drugs; alcohol is not included. The following chart outlines local age-adjusted mortality for unintentional drug-related deaths.

### Unintentional Drug-Related Deaths: Age-Adjusted Mortality Trends (Annual Average Deaths per 100,000 Population)



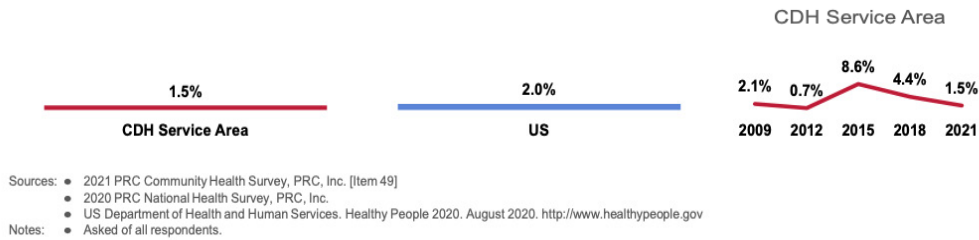
**Sources:**

- CDC WONDER Online Query System. Centers for Disease Control and Prevention, Epidemiology Program Office, Division of Public Health Surveillance and Informatics. Data extracted February 2021.
- US Department of Health and Human Services. Healthy People 2020. August 2020. <http://www.healthypeople.gov>

The following data reflects respondents' use of illicit drugs. Because this type of drug use is illegal, this data might be underreported on surveys.

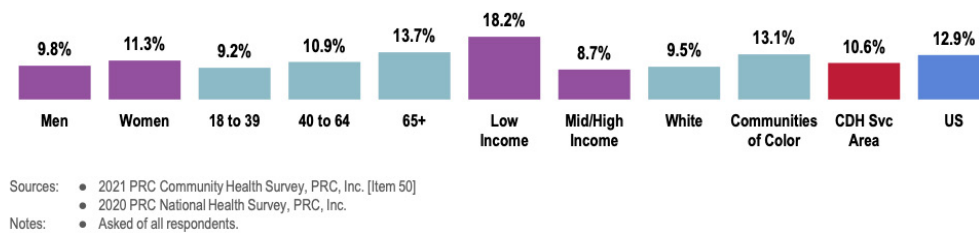
### Illicit Drug Use in the Past Month

Healthy People 2020 = 12.0% or Lower



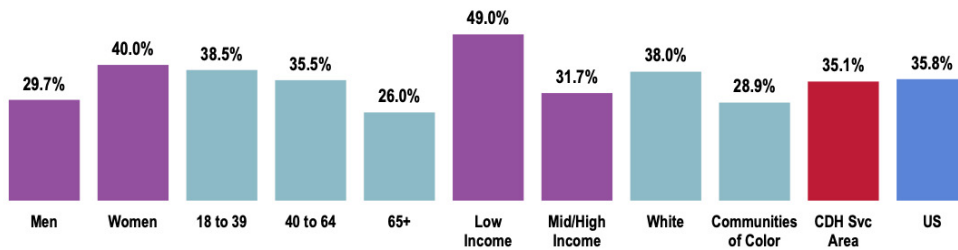
Survey respondents were asked about use of prescription opioids such as morphine, codeine, hydrocodone, oxycodone, methadone and fentanyl. Responses indicated that 10.6% of NMCDH CSA residents used a prescription opioid in the past year. Additionally, 18.2% of low-income respondents surveyed indicated use of a prescription opioid within the last year.

### Used a Prescription Opioid in the Past Year (CDH Service Area, 2021)



Survey respondents were asked, "To what degree has your life been negatively affected by your own or someone else's substance abuse issues, including alcohol, prescription, and other drugs? Would you say: a great deal, somewhat, a little, or not at all?" Responses are noted in the following table.

### Life Has Been Negatively Affected by Substance Abuse (by Self or Someone Else) (CDH Service Area, 2021)



Sources: 

- 2021 PRC Community Health Survey, PRC, Inc. [Item 52]
- 2020 PRC National Health Survey, PRC, Inc.

 Notes: 

- Asked of all respondents.
- Includes response of "a great deal," "somewhat," and "a little."

Substance abuse in the community was noted by 33.3% of key stakeholders as a major problem; 52.4% said it is a moderate problem.

### Perceptions of Substance Abuse as a Problem in the Community (Key Informants, 2021)

■ Major Problem   ■ Moderate Problem   ■ Minor Problem   ■ No Problem At All



Sources: 

- PRC Online Key Informant Survey, PRC, Inc.

 Notes: 

- Asked of all respondents.

### Tobacco use

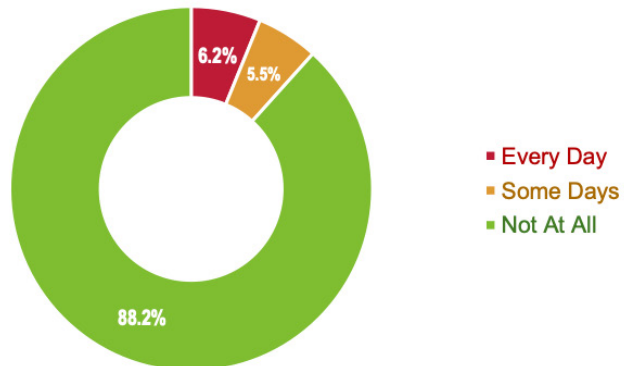
More than 16 million adults in the United States have a disease caused by smoking cigarettes, and smoking-related illnesses lead to half a million deaths each year. Most deaths and diseases from tobacco use in the United States are caused by cigarettes. Smoking harms nearly every organ in the body and increases the risk of heart disease, stroke, lung diseases and many types of cancer.

Although smoking is widespread, it's more common in certain groups, including men, American Indians/Alaska Natives, people with behavioral health conditions, people who are LGBTQ, and people with lower incomes and education levels.

Several evidence-based strategies can help prevent and reduce tobacco use and exposure to secondhand smoke. These include smoke-free policies, price increases, and health education campaigns that target large audiences. Methods like counseling and medication can also help people stop using tobacco. (Source: [health.gov/healthypeople](https://www.health.gov/healthypeople))

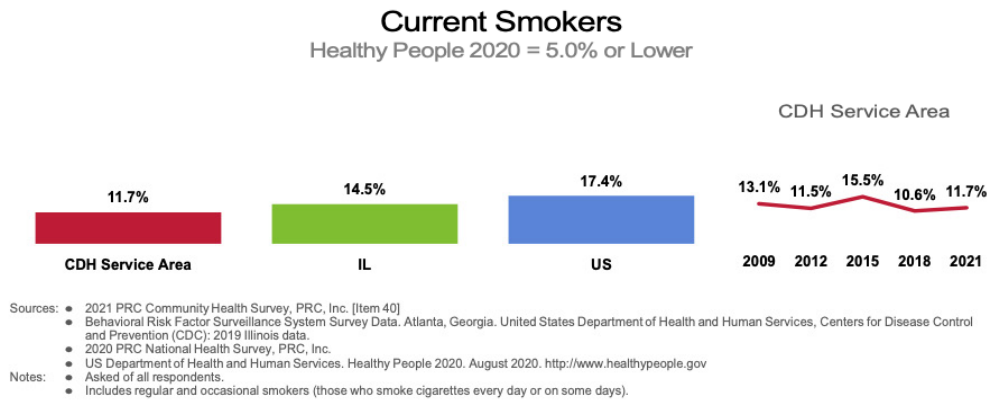
When queried regarding cigarette smoking, 88.2% of survey respondents denied smoking.

**Cigarette Smoking Prevalence**  
(CDH Service Area, 2021)

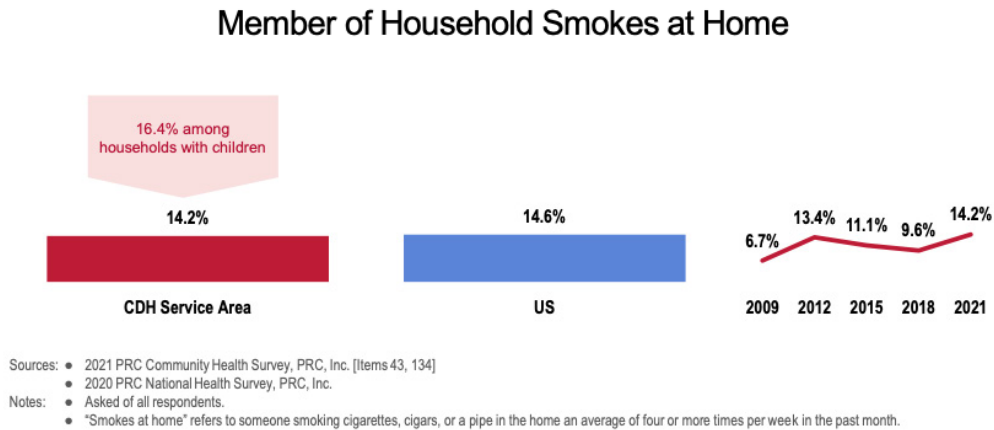


Sources: ● 2021 PRC Community Health Survey, PRC, Inc. [Item 40]  
Notes: ● Asked of all respondents.

When queried regarding smoking, 11.7% of respondents within the NMCDH CSA identified themselves as someone who smokes.



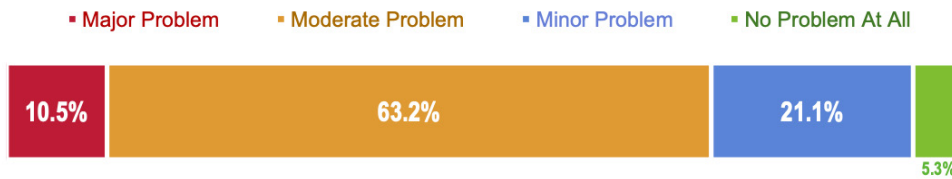
Within the NMCDH CSA, 14.2% of individuals surveyed stated that they resided in a home where a member of the household smokes. Within that group, 16.4% were among households with children.





Tobacco use was identified as a moderate problem by 63.2% of key informants.

### Perceptions of Tobacco Use as a Problem in the Community (Key Informants, 2021)



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

### Sexual health

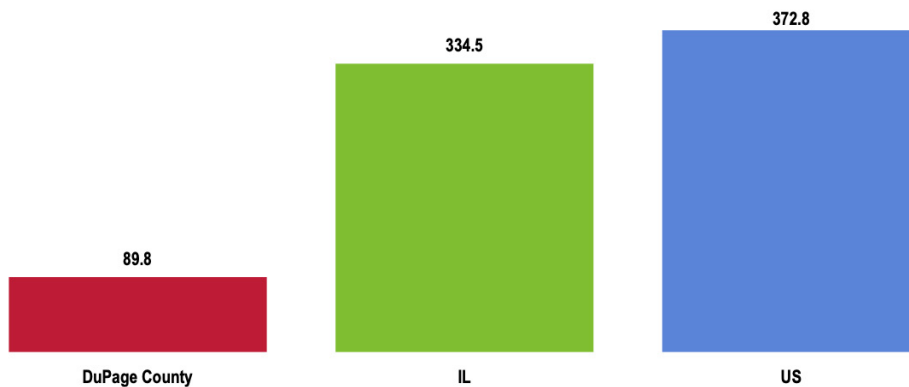
Although many sexually transmitted infections (STIs) are preventable, there are more than 20 million estimated new cases in the United States each year – and rates are increasing. In addition, more than 1.2 million people in the United States are living with HIV (human immunodeficiency virus).

Adolescents, young adults and men who have sex with men are at higher risk of getting STIs. Additionally, people who have an STI may be at higher risk of getting HIV. Promoting behaviors like condom use can help prevent STIs.

Strategies to increase screening and testing for STIs can identify people’s risk of getting an STI and help people with STIs get treatment, thereby improving their health and making it less likely that STIs will spread to others. Getting treated for an STI other than HIV can help prevent complications from an STI, but it doesn’t prevent HIV from spreading. (Source: [health.gov/healthypeople](https://www.health.gov/healthypeople))

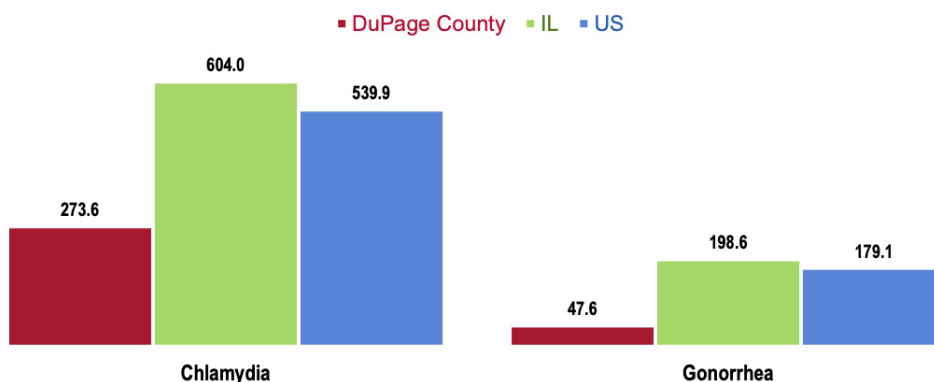
The following charts outline the incidence of STIs and the prevalence of HIV per 100,000 population in the county.

### HIV Prevalence (Prevalence Rate of HIV per 100,000 Population, 2018)



Sources: ● Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
 ● Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap ([sparkmap.org](https://sparkmap.org)).  
 Notes: ● This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

### Chlamydia & Gonorrhea Incidence (Incidence Rate per 100,000 Population, 2018)



Sources: ● Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.  
 ● Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap (sparkmap.org).  
 Notes: ● This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

Sexual health issues were perceived by 35.7% of key informants as a moderate problem and by 50.0% as a minor problem.

### Perceptions of Sexual Health as a Problem in the Community (Key Informants, 2021)



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

#### Access to health care

Access to health care means having “the timely use of personal health services to achieve the best health outcomes” (IOM, 1993). Healthy People 2020 identifies four components related to achieving access to health care:

- The availability of healthcare coverage

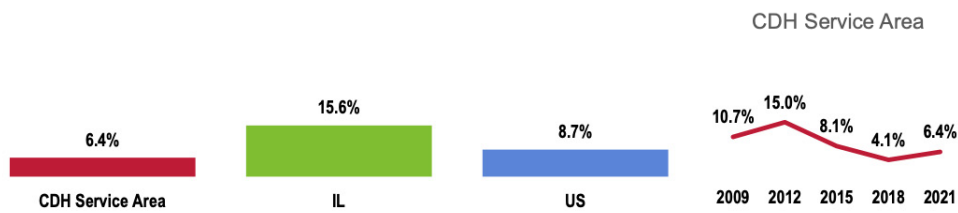
- An available service delivery model

- Timeliness—the ability to receive health care when the need is recognized

- Capable, qualified and culturally competent workforce

Survey respondents ages 18 to 64 were asked a series of questions to determine whether they had healthcare insurance coverage. Of the NMCDH CSA survey respondents, 6.4% lacked healthcare coverage, which is lower than both state and national data. However, trend data showed a slight rise in individuals without coverage since 2018.

### Lack of Health Care Insurance Coverage (Adults Age 18-64) Healthy People 2020 = 7.9% or Lower



Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Item 137]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2019 Illinois data.  
 • 2020 PRC National Health Survey, PRC, Inc.  
 • US Department of Health and Human Services. Healthy People 2020. August 2020. <http://www.healthypeople.gov>  
 Notes: • Asked of all respondents under the age of 65.

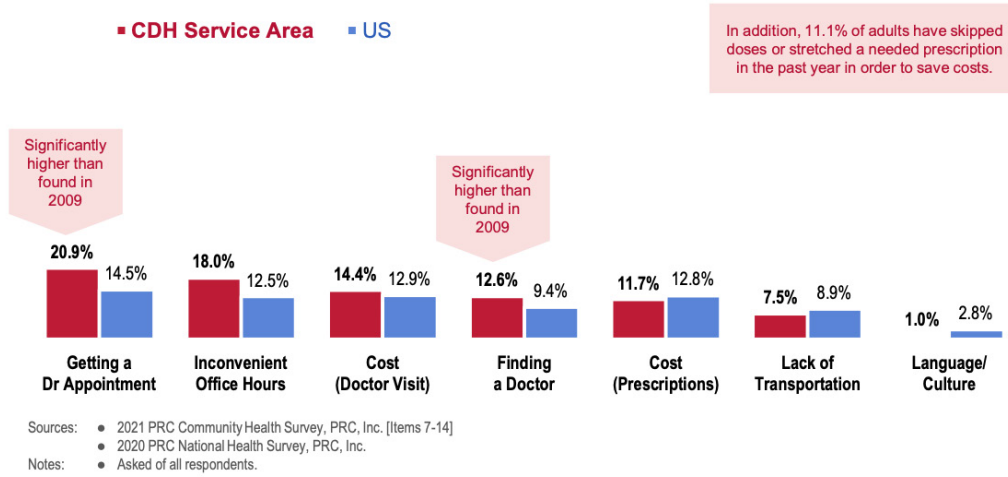
### Lack of Health Care Insurance Coverage (Adults Age 18-64; CDH Service Area, 2021) Healthy People 2020 = 0.0% (Universal Coverage)



Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Item 137]  
 • US Department of Health and Human Services. Healthy People 2020. August 2020. <http://www.healthypeople.gov> [Objective AHS-1]  
 Notes: • Asked of all respondents under the age of 65.

Barriers to obtaining health care were then subsequently assessed. The two most notable barriers were (1) finding a doctor and (2) scheduling an appointment. Both barriers were greater than the 2009 CHNA assessment.

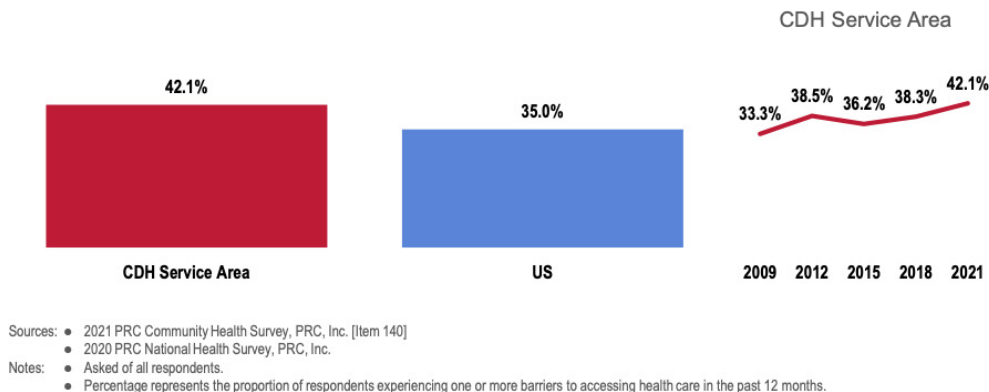
### Barriers to Access Have Prevented Medical Care in the Past Year



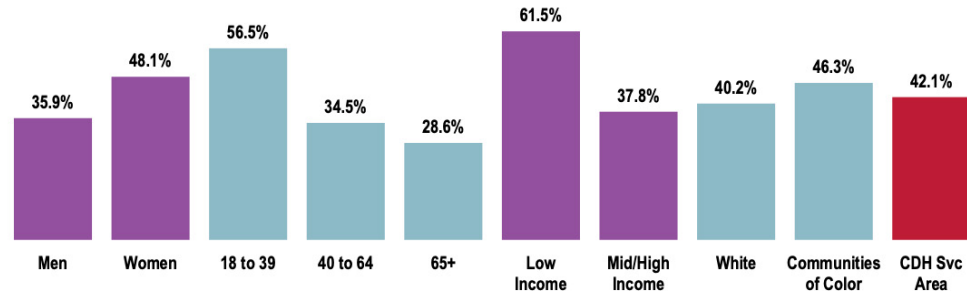
Additionally, 11.1% of adults verbalized having skipped doses or stretched a needed prescription in the past year to save costs.

The following charts reflect the composite percentage of the total population experiencing problems accessing health care in the past year (indicating one or more of the aforementioned barriers or any other problem not specifically asked), again regardless of whether they needed or sought care. A notable 42.1% of individuals surveyed experienced difficulties or delays in receiving some kind of health care in the past year, exceeding national rates and trending upward since the previous NMCDH CHNA.

### Experienced Difficulties or Delays of Some Kind in Receiving Needed Health Care in the Past Year



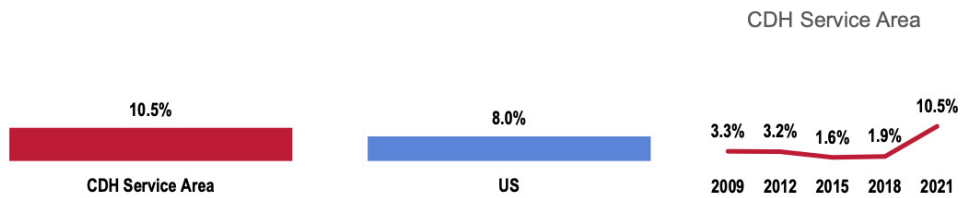
### Experienced Difficulties or Delays of Some Kind in Receiving Needed Health Care in the Past Year (CDH Service Area, 2021)



Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Item 140]  
 Notes: • Asked of all respondents.  
 • Percentage represents the proportion of respondents experiencing one or more barriers to accessing health care in the past 12 months.

Surveyed parents were also asked if, within the past year, they experienced any trouble receiving medical care for a randomly selected child in their household.

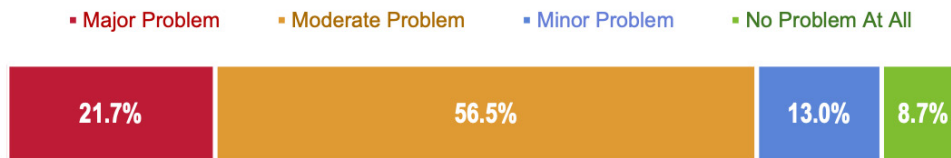
### Had Trouble Obtaining Medical Care for Child in the Past Year (Parents of Children 0-17)



Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Items 104]  
 • 2020 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents with children 0 to 17 in the household.

The following chart outlines key informants’ perceptions of the severity of Access to Healthcare Services as a problem in the community:

### Perceptions of Access to Health Care Services as a Problem in the Community (Key Informants, 2021)



Sources: ● PRC Online Key Informant Survey, PRC, Inc.  
 Notes: ● Asked of all respondents.

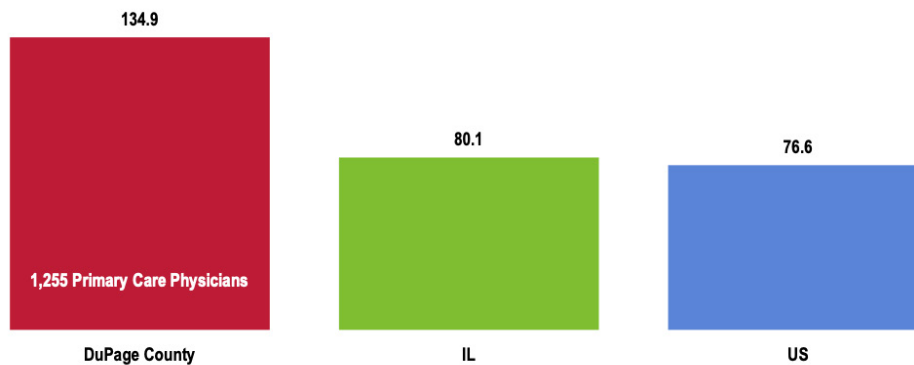
#### Access to primary care services

Getting preventive care reduces the risk for diseases, disabilities, and death—yet millions of people in the United States don’t get recommended preventive healthcare services. Children need regular well-child and dental visits to track their development and find health problems early, when they’re usually easier to treat.

Services like screenings, dental checkups and vaccinations are key to keeping people of all ages healthy. But for a variety of reasons, many people don’t get the preventive care they need. Barriers include cost, not having a primary care provider, living too far from providers and lack of awareness about recommended preventive services. Teaching people about the importance of preventive care is key to making sure more people get recommended services. Law and policy changes can also help more people access these critical services. (Source: Healthy People 2030)

The following chart assesses the availability and compares the number of primary care physicians. The number of primary care physicians in DuPage County far exceeds state and national numbers.

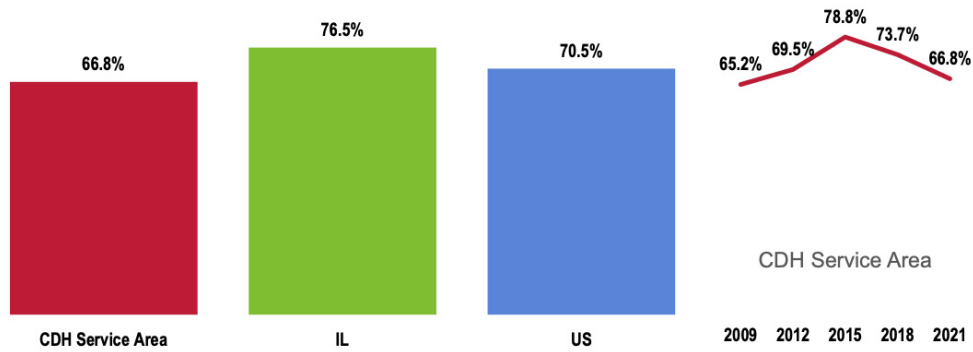
### Access to Primary Care (Number of Primary Care Physicians per 100,000 Population, 2017)



Sources: ● US Department of Health & Human Services, Health Resources and Services Administration, Area Health Resource File.  
 ● Center for Applied Research and Engagement Systems (CARES), University of Missouri Extension. Retrieved February 2021 via SparkMap (sparkmap.org).  
 Notes: ● Doctors classified as “primary care physicians” by the AMA include: General Family Medicine MDs and DOs, General Practice MDs and DOs, General Internal Medicine MDs, and General Pediatrics MDs. Physicians age 75 and over and physicians practicing sub-specialties within the listed specialties are excluded. This indicator is relevant because a shortage of health professionals contributes to access and health status issues.

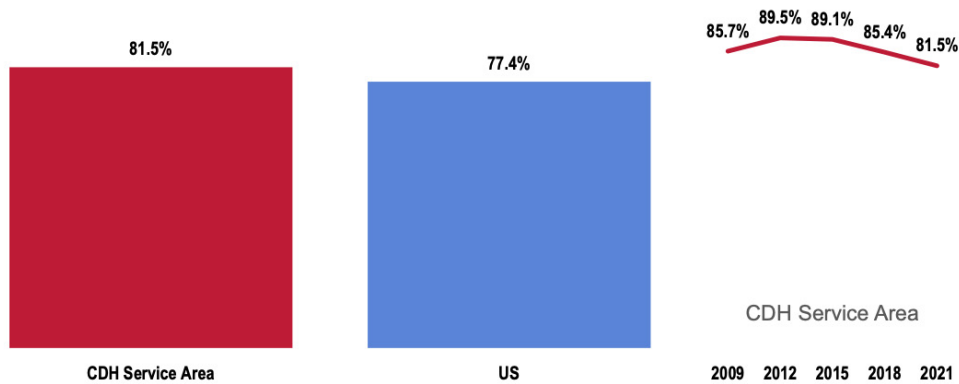
The following chart assessed utilization of primary care services. The COVID-19 pandemic likely impacted this data.

### Have Visited a Physician for a Checkup in the Past Year



Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Item 18]  
 • Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia. United States Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2019 Illinois data.  
 • 2020 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents.

### Child Has Visited a Physician for a Routine Checkup in the Past Year (Parents of Children 0-17)



Sources: • 2021 PRC Community Health Survey, PRC, Inc. [Item 105]  
 • 2020 PRC National Health Survey, PRC, Inc.  
 Notes: • Asked of all respondents with children 0 to 17 in the household.

# The Community Health Needs Assessment: Primary and secondary data synthesis and analysis of significant health needs

Findings from the primary and secondary data were analyzed and synthesized to identify the significant community health needs in the NMCDH CSA.

## **Criteria for determining significant health needs**

This assessment used three separate sources of data to help identify community health needs: secondary data, key informant interviews and a community survey. Health needs were determined to be significant if they met certain criteria in at least one of the three data sources.

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Additionally, the significant health needs were determined after consideration of various criteria, including:

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Standing in comparison with benchmark data (particularly national data)

Identified trends

The preponderance of significant findings within topic areas

The magnitude of the issue in terms of the number of persons affected

The potential health impact of a given issue

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These health needs also take into account those issues of greatest concern to the community stakeholders (key informants) giving input during this process.



### Significant Health Needs Identified Through This Assessment

- Access to Healthcare Services**
- Barriers to access
  - Inconvenient office hours
  - Appointment availability
  - Finding a physician
  - Difficulty accessing children’s health care
  - Eye exams
  - Key informants: Access to health care ranked as a top concern

- Cancer**
- Leading cause of death
  - Cervical cancer screening (age 21 to 65)

**Coronavirus/COVID-19** Key informants: Coronavirus disease/COVID-19 ranked as a top concern

- Diabetes**
- Blood sugar testing (for those without a diabetes diagnosis)
  - Kidney disease prevalence

**Heart Disease and Stroke** Leading cause of death

- Injury and Violence**
- Unintentional injury deaths
  - Violent crime experience
  - Intimate partner violence

- Mental Health**
- “Fair/poor” mental health
  - Stress
  - Key informants: Mental health ranked as a top concern

- Nutrition, Physical Activity and Weight**
- Fruit/vegetable consumption
  - Overweight and obesity (adults)
  - Overweight and obesity (children)
  - Leisure-time physical activity
  - Children’s physical activity
  - Key informants: Nutrition, physical activity and weight ranked as a top concern

**Potentially Disabling Conditions** • Difficulty concentrating

- Substance Use Disorders**
- Excessive drinking
  - Unintentional drug-related deaths
  - Sought help for alcohol/drug issues
  - Key informants: Substance use disorders ranked as a top concern

- Tobacco Use**
- Environmental tobacco smoke exposure at home
  - Including among households with children
  - Use of vaping products

## Prioritization of Community Need - Process and Methodology

Following the assessment period, NMCDH conducted a systematic, data-driven evaluation and prioritization process of the identified significant health needs. The prioritization process involved the establishment of an Internal and External Community Health Council (CHC). The External CHC was comprised of community stakeholders (including representatives from public health, medically underserved, low-income and minority populations).

### Internal Community Health Council

Following completion of the CHNA, NMCDH leadership convened the Internal CHC to review the findings. This multidisciplinary committee was made up of key internal stakeholders who were selected based on strong administrative/clinical expertise along with an organizational commitment to improve the health of the community, including medically underserved, minority and low-income populations. The varied backgrounds of the committee members provided diverse insight into the process of prioritizing identified health needs. Departments represented and rationale for inclusion are outlined in the following table.

### Internal Community Health Council

Department	Rationale	Member	Position
External Affairs	Community relationships, knowledge, data and hospital resources	Ann Hall	Vice President
		Karin Podolski	Director
		Sandy Alvarado	Lead Outreach Specialist
Analytics	Patient data, IS systems and analytics	Dijana Icitovic	Manager
Case Management	Social determinants of health, patient barriers and communities	Pam Nass	Director
Hospital Operations	Hospital and staff operations	Kate Matousek	Vice President
Human Resources	Diversity and inclusion strategies	Alison Bodor	Director
Medical Staff	Medical staff operations and knowledge	Kevin Most, MD	Senior Vice President, Chief Medical Officer
NM Regional Medical Group Clinical Operations	Physician operations	Jennifer Andersson	Vice President

<b>Nursing</b>	Patients, barriers and community nursing	Sue McCoy, DNP, RN	Senior Vice President, Chief Nursing Executive
<b>Philanthropy</b>	Community outreach programming and fundraising opportunities	Catherine Wierz	Director
<b>Process Improvement</b>	Process improvement strategies	Amy Leonard	Manager
<b>Quality</b>	Hospital quality data and resources	Jeannine Majer	Clinical Quality Leader
<b>Strategy</b>	Business development and strategies	Pam Roman	Director

#### External Community Health Council

The following community organizations—which are representative of the assessed community area and include those that serve medically underserved, low-income and minority populations – were formally engaged to participate in the NMCDH identified community health needs prioritization process. These key stakeholders were selected based on strong collaborative efforts to improve the health of the community and their varied backgrounds in providing diverse insight into prioritizing the identified health needs.

### External Community Health Council/Community Stakeholders

External Stakeholders	Populations Served/Social Determinants Addressed
Batavia Park District	General recreation; health and fitness
Family Shelter Services	Family support
Common Threads Organization	Healthy food and nutrition education
DuPage County Health Department	Community health; underserved; mental health; environmental health
NAMI DuPage	Suicide prevention
VNA Health Care	Health care; underserved; FQHC
DuPage Community Foundation	Community
West Chicago Library	Education; reading
Senior Services Association	Seniors

<b>External Stakeholders</b> (continued)	<b>Populations Served/Social Determinants Addressed</b> (continued)
<b>Secretary of State</b>	Driving programs; transportation
<b>DuPage PADs, Inc.</b>	Homelessness
<b>Carol Stream Police Department</b>	Public safety
<b>St. Charles Park District</b>	General recreation; health and fitness
<b>Association for Individual Development</b>	Disabilities
<b>B.R. Ryall YMCA of Northwestern DuPage County</b>	General recreation; health and fitness
<b>Winfield in Action</b>	Community
<b>Winfield Township</b>	Community
<b>Benedictine University</b>	Education; public health expertise
<b>Edward Hines VA Hospital</b>	Veterans' health care and support services
<b>Humanitarian Service Projects</b>	Service projects
<b>West Chicago Park District</b>	General recreation; health and fitness
<b>Access DuPage</b>	Access to care for underserved
<b>Catholic Charities</b>	Low income; underserved
<b>West Chicago Schools</b>	Education
<b>Northern Illinois Food Bank</b>	Food insecurity
<b>Wheaton Park District</b>	General recreation; health and fitness
<b>Glen Ellyn Park District</b>	General recreation; health and fitness
<b>Western DuPage Special Recreation Association</b>	Outdoor recreation; health and fitness
<b>Donka, Inc.</b>	Physical, visual and learning disabilities
<b>World Relief</b>	Immigrants, refugees

External Stakeholders (continued)	Populations Served/Social Determinants Addressed (continued)
CASA of DuPage County	Child abuse and neglect; foster care
DuPage Senior Citizens Council	Seniors
Winfield Park District	General recreation; health and fitness
West Chicago YMCA	General recreation; health and fitness
Mutual Ground	Domestic violence
Meier Clinics	Mental health
Kensington International	Children; education; development
ProActive Kids	Children's health and education
Warrenville Park District	General recreation; health and fitness
SPR Consulting	Community leader
Almost Home Kids	Children; ventilator support
Bartlett Police Department	Public safety
DuPage Easter Seal	Disabilities
People's Resource Center	Social services
DuPage Health Coalition	Health; underserved
Samara Care	Counseling

### Prioritization process and methodology

A structured process was used to inform both councils regarding the NMCDH prioritization process of the identified health needs.

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The NMCDH Internal CHC was engaged to:

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Review guiding principles

Examine CHNA findings

Apply the prioritization factors when completing the Pairwise Survey Tool

Participate in robust conversations regarding potential priority health needs for the NMCDH CSA

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The External CHC also received the 11 significant health needs and were asked to offer feedback regarding the topic priorities via use of the Pairwise Survey Tool.

It should be noted that communication with both councils was done via online methodologies due to the COVID-19 pandemic, and the Pairwise Survey Tool was selected for its quality, design and ease of use.

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The prioritization process was also reviewed by the Internal CHC with regards to alignment with Northwestern Medicine's guiding principles in response to community need, including:

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Importance of the problem to the community:

- Is there a demonstrated community need?
- Will action impact disproportionately affected populations?
- Does the identified health need impact other community issues?

Availability of tested approaches or existing resources to address the issues:

- Can actionable goals be defined to address the health need?
- Does the defined solution have specific and measurable goals that are achievable in a reasonable time frame?

Opportunity for collective impact:

- Can the need be addressed in collaboration with community or campus partners to achieve significant, long-term outcomes?
- Are organizations already addressing the health issue?

Applicability of NMCDH as a change agent (partner, researcher, educator, or the role of knowledge-sharing providing direct funding, etc.):

- Does NMCDH have the expertise or resources to address the identified health need?

Estimated resources, time frame, and size of impacted population

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A data book was developed to detail findings of each area of opportunity, including prevalence, morbidity and mortality of the condition, for easy comparison across needs. This data book was distributed to the Internal CHC outlining the following prioritization factors for objective analysis:

**Magnitude:** How many people in the community are/will be impacted?

**Seriousness and impact:** How does the identified need impact health and quality of life?

**Feasibility:** What capacity/assets currently exist to address the need?

**Consequences of inaction:** What impact would inaction have on the population health of the community?

**Trend:** How has the need changed over time?

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### Pairwise Prioritization Ranking Survey Tool

The Pairwise Prioritization Ranking Survey Tool utilizes a machine-optimized process to display items two at a time. Respondents are asked to pick one of the two items. Using a dynamic lookup model, the Pairwise ranking process then optimizes for orthogonality first. This means that all the items are randomly divided into groups of two and presented to the respondent. After that, the items that are selected are again recursively grouped two at a time; pairs are again randomized until the final item is reached.

This process deterministically defines the best option, and a tree is created. Once the tree is created, the system can then rank order all the items based on the respondents' input. This mobile-friendly model, which allows users to swipe left and right to make selections, is a simple and effective way to determine the efficacy of an item, and can rank-order respondents' preferences without resorting to a complex cognitive load.

### Prioritization Timeline

First meeting with Internal CHC to review findings . . . . . April 26, 2021  
First prioritization survey sent to Internal CHC . . . . . April 26, 2021  
Second round prioritization survey sent to Internal CHC . . . . . May 13, 2021  
First prioritization survey sent to External CHC . . . . . May 13, 2021  
Results compiled . . . . . May 20, 2021  
Second meeting with Internal CHC to present data . . . . . May 24, 2021  
Prioritization voting complete and priorities finalized. . . . . June 1, 2021

### Prioritized significant health needs identified

NMCDH has prioritized four significant health needs that will enable us, in partnership with the community, to maximize the health outcomes generated by our collective resources over the next few years.

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When selecting these priorities, we considered the:

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Degree of the community need

Capacity and available resources to meet the need

Suitability of our own expertise to address the need

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In particular, we identified health needs that would be best addressed through a coordinated response from a range of healthcare and community resources. We believe these health needs will be impacted through the integrated efforts of our organization and our community partners. Key themes were also included and integrated into the determination of our priority needs, as many times they served as contributing factors and/or root causes of the priority need.

A deeper dive into the primary data findings and secondary data indicators for each of these topics as presented previously in this report was utilized in the consideration and determination of the 2021 prioritized health needs. This information highlights in detail how each issue became a high-priority health need for NMCDH. Through this process, the 2021 NMCDH priority significant health needs were identified as shown in the following table.

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#### NMCDH Priority Health Needs

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Access to Care

Mental Health and Substance Use Disorders

Chronic Disease

Social Determinants of Health

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### Non-prioritized health needs

As discussed previously, NMCDH has identified four priority health needs that we believe we are best positioned to impact based on our expertise and resources. However, NMCDH also commits staff, expertise and financial resources to work collaboratively within the community to impact the remaining health needs. The table below lists areas in which NMCDH serves and interacts with outside community organizations in support of the non-prioritized health needs.

## Activities in Support of Non-prioritized Health Needs

<b>Cancer</b>	Various locations	Host/offer evidence-based community health and wellness programming in the areas of cancer, including but not limited to the topics of breast and colon cancer, brain tumors, proton therapy, yoga for patients with cancer, palliative care and hospice.
<b>Coronavirus/COVID-19</b>	Various locations	COVID-19 clinics on-site.
<b>Injury and Violence</b>	Various locations	Support and offer the nationally recognized ThinkFirst Injury Prevention Program.
	Various locations	Host/offer evidence-based community health and wellness programming in various other areas related to chronic disease including but not limited to obesity, injury prevention, arthritis, maternal and child health, joint replacement, fall prevention, chronic lung disease, epilepsy and Parkinson's disease.
<b>Nutrition, Physical Activity and Weight</b>	Various locations	Support local schools to implement the Coordinated Approach to Child Health (CATCH) program. Emphasis is on parents and children attending the program for 4-year-olds and all preschool program teachers.
	Various locations	Provide "Kits for Kids," an educational program that may be utilized by parents, teachers, Scouts leaders and other individuals to assist children in learning about hand-washing, bicycle safety and nutrition.
<b>Potentially Disabling Conditions</b>	Various locations	Host/offer evidence-based community health and wellness programming.
	Various locations	Offer a community-focused stroke education program.
<b>Tobacco Use</b>	Various locations	Promote referral patterns of physicians and ancillary staff to smoking cessation resources.

# Summary of Progress Since Prior NMCDH Community Health Needs Assessment

Northwestern Medicine Central DuPage Hospital completes its CHNA every three years. An important piece of this three-year cycle includes the ongoing review of progress made on priority health topics set forth in the preceding CHNA and Implementation Strategy. By reviewing the actions taken to address priority health issues and evaluating the impact those actions have made in the community, it is possible to better target resources and efforts during the next assessment.

## The CHNA Cycle



## Priority health needs from the preceding NMCDH CHNA

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In response to a comprehensive CHNA, NMCDH identified three priority health areas for years 2018-2020:

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Access to Health Care Services

Chronic Disease

Mental Health and Substance Abuse

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## Highlights of priority health needs progress

The following sections include notable highlights from a few of the initiatives implemented since the last CHNA to address the priority health needs. A more detailed and comprehensive delineation of NMCDH's initiatives, responses and outcomes is included in the 2020 Community Health Improvement Plan Report (CHIP-R) and is available upon request.

### CHIP Summary 2018

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In response to a comprehensive community health needs assessment, NMCDH identified three priority health needs:

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1. Access to Health Care Services
  2. Chronic Disease
  3. Mental Health and Substance Abuse
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#### I. Access to Healthcare Services

In conjunction with national and local benchmarks, the following goals were established in response to the problem of limited access to care:

NMCDH will continue to support efforts to increase access to care by providing leadership, investing resources and working collaboratively with other community organizations throughout the county.

NMCDH will support the maintenance and expansion of an efficient and effective continuum of care offering medical homes (including primary and specialty care); pharmaceuticals; and inpatient, outpatient and emergent care to uninsured adult residents of DuPage County.

Additionally, NMCDH will offer a comprehensive financial assistance program to patients who are unable to afford the cost of necessary medical care.

NMCDH will also seek to engage and maintain a multicultural workforce of primary care practitioners, specialists, midlevel practitioners, registered professional nurses and other medical professionals committed to working in an evidence-based practice setting.

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NMCDH strategies to address access to health care included:

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NMCDH will ensure financial assistance policies are easily accessible, respectful and in compliance with all regulatory requirements.

NMCDH will continue to provide medically necessary inpatient and outpatient hospital services to uninsured and underinsured patients.

NMCDH will provide assistance with application for government-sponsored healthcare programs.

NMCDH will collaborate with community partners to enhance the county's Health Safety Net Plan to ensure a comprehensive continuum of care.

NMCDH will provide operational grants to community partners in support of the Health Safety Net.

NMCDH will provide supportive funding to allow county residents within the ACA marketplace to increase the scope of their healthcare coverage.

NMCDH will provide timely, coordinated and efficient care to Access DuPage clients who have been determined presumptively eligible through the Access DuPage Program.

NMCDH will provide breast cancer screening and subsequent care to individuals without health insurance or who cannot afford breast cancer screening.

NMCDH will provide supportive funding to the Engage DuPage Program for the hiring of community access specialists to identify potentially eligible clients.

NMCDH will serve as a training center for nursing and allied health professionals to ensure the continuation of a diverse, culturally sensitive and highly skilled workforce.

NMCDH will utilize trained, professional healthcare interpreters to reduce barriers to care, promote access and ensure high-quality, culturally competent care.

NMCDH will provide continued support to the local free clinic, Tri City Health Partnership, by assuming costs related to laboratory and other hospital services to presumptively eligible patients.

NMCDH will provide office space and support to the Senior Health Insurance Program, which provides Medicare counseling and support to seniors.

NMCDH will offer community benefit grants targeted to enhance/promote safe access to care.

- Winfield Fire Department Disaster Planning Project (Grant amount: \$60,000)

NMCDH will work collaboratively with local federally qualified healthcare centers (FQHCs) to promote a seamless continuum of care to underserved individuals.

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#### Key outcomes/metrics:

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All financial assistance policies were reviewed annually.

More than 18,500 individuals received financial assistance at NMCDH and Northwestern Medicine Delnor Hospital (NMDH).

\$77,754,019.06 was rendered in financial assistance to uninsured and underinsured individuals who received care at NMCDH and NMDH.

2,134 Medicaid applications were processed through Engage DuPage services.

NMCDH leadership and staff participated in various community task forces to further the development of the health and human services safety net.

The DuPage County Health Safety Net System enrolled 5,364 individuals, resulting in: links to 229 primary care providers; 3,961 links to local FQHCs; 10,306 primary care visits; and 2,424 specialty referrals. In addition, 19,471 prescriptions were filled.

The Silver Access Premium program assisted 564 individuals in calendar years 2017 and 2018.

\$6,202,953 was rendered to Access DuPage clients for outpatient and other specialty care services.

\$1,913,760 was rendered to Access DuPage clients for inpatient care.

Funding was provided to Engage DuPage for the provision of community access specialists in the NMCDH Emergency Department.

1,063 individuals received breast cancer screenings at no cost to the individual.

148,057 hours were committed to nursing and allied health professions training at NMCDH and NMDH.

Trained, professional healthcare interpreters were utilized in 40,326 encounters at NMCDH and NMDH.

The Senior Health Insurance Program provided support and assistance to 450 seniors at NMCDH and NMDH.

A comprehensive tabletop exercise that included a workshop element involving an active shooter response within NMCDH was conducted.

A formal agreement was executed in December 2016 with VNA Health Care. Workgroups developed a process for referring patients, and 61 of these patients received care from NM Regional Medical Group and NM hospitals.

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## II. Chronic Disease

In conjunction with national and local benchmarks, the following goals were established in response to the growing incidence and prevalence of chronic disease by addressing chronic disease across its life span:

NMCDH will continue to provide community education related to chronic disease in the areas of evidence-based **primary interventions** (disease prevention, health promotion).

NMCDH will offer evidence-based **secondary interventions** (screenings).

NMCDH will offer evidence-based **tertiary interventions** (programs targeting individuals affected with a chronic disease to promote an optimum state of wellness).

NMCDH will also continue to bring leading-edge, acute chronic disease care and chronic disease management to all individuals, regardless of ability to pay.

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NMCDH strategies to impact chronic disease across its life span included:

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NMCDH will host/offer evidence-based community health and wellness programming in the areas of cardiovascular disease, peripheral vascular disease and diabetes.

NMCDH will host/offer evidence-based community health and wellness programming in the areas of cancer including but not limited to the topics of breast and colon cancer, brain tumors, proton therapy, yoga for patients with cancer, palliative care and hospice.

NMCDH will host/offer evidence-based community health and wellness programming in various other areas related to chronic disease including but not limited to obesity, injury prevention, arthritis, maternal and child health, joint replacement, fall prevention, chronic lung disease, epilepsy and Parkinson's disease.

NMCDH will offer a community-based heart failure (HF) program to all patients with an active diagnosis of HF who have not been referred for or are not receiving other nursing services.

NM will offer small community benefit grants targeted to enhance/promote health and minimize chronic disease and obesity.

- DuPage Pads: Medical Respite Program (Grant amount: \$10,000)
- Common Threads: Healthy Cooking and Nutrition Education Program (Grant amount: \$10,000)
- Winfield Fire Department (Grant amount: \$80,000)
- Almost Home Kids (Grant amount: \$5,000)
- B.R. Ryall YMCA of Northwestern DuPage (Grant amount: \$15,000)
- VNA Health Care Wellness Kitchen (Grant amount: \$15,000)

NMCDH will provide in-kind leadership and financial support to the Forward Project.

NMCDH will work with local schools to implement the Coordinated Approach to Child Health (CATCH) program. Emphasis will be on parents and children enrolled in the program for 4-year-olds and all preschool program teachers.

NMCDH and NMDH will provide "Stroke Education," a community-focused education program.

NMCDH will provide "Kits for Kids," an educational program that may be utilized by parents, teachers, Scouts leaders and other individuals to assist children in learning about hand-washing, bicycle safety and nutrition.

NMCDH staff will continue efforts to promote referral patterns of physicians and ancillary staff to smoking cessation resources.

NMCDH will offer the nationally recognized ThinkFirst Injury Prevention Program.

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Key outcomes/metrics—NMCDH provided:

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An educational seminar with 170 individual attendees.

Meeting space for 20 support groups.

Two cancer educational seminars. A total of 102 individuals attended these seminars.

Twelve additional educational seminars. A total of 1,343 individuals attended.

Eighteen Rehabilitation Services community programs. A total of 282 individuals attended.

Nine Diabetes Education community programs. A total of 78 individuals attended.

A Community-Based Heart Failure program with 382 individuals (NMCDH/NMDH):

- 30-day readmission rate for heart failure diagnosis was 1% (markedly below the national rate)
- 85% demonstrated the ability to identify appropriate action in the event of a worsening of their condition
- 97% utilized an effective medication management system
- 86% demonstrated compliance with symptom tracking

DuPage Medical Respite Program:

- 83% received information about importance of regular physicals
- 75% exited the program with medical insurance
- 83% exited with a primary care physician
- 83% had a follow-up care appointment scheduled to address their conditions

Common Threads: Healthy Cooking and Nutrition Education Program. A total of 200 students and parents participated, and 85% of students verbalized confidence in their ability to execute cooking skills.

The Almost Home Kids program had 100% success in the following areas:

- All referred children had a physical therapy evaluation and speech therapy evaluation
- All referred families and caregivers received education on positioning, handling, therapeutic play, functional communication, and speech and swallowing strategies
- All children improved strength, endurance to activity and balance
- All children received an assessment and recommendation for assistive or medical devices, and child care before transitioning home

The B.R. Ryall YMCA American Heart Association Blood Pressure Self-Monitoring program. A total of 17 people participated, and 75% indicated they had developed an increase in healthier eating habits.

The construction of VNA Health Care's Wellness Kitchen, which has enabled the VNA to offer chronic disease self-management programming. Construction was completed at the end of October 2018, and programs began the following month.

The Winfield Fire Department trained 113 healthcare professionals and community members in Cardiopulmonary Resuscitation.

The Winfield Fire Department installed 203 car seats.

FORWARD initiatives for FY18, which resulted in:

- Action plans for school wellness policies implemented for five child care centers
- Forty hours of nutrition and physical activity support that impacted 599 children
- Discussions among eight hospitals, encouraging changes in food and beverage offerings

The CATCH Program at NMCDH and NMDH reached 778 students and teachers:

- 89% of the children were able to name six out of eight healthy (GO) foods
- 84% of the children recognized the importance of consuming GO foods daily
- 95% of schools/programs adjusted their snack lists to include GO foods
- All teachers organized 20 minutes of moderate physical activity
- 96% of teachers continued to reinforce the GO-WHOA healthy food message in the classroom

Ten community programs and 679 individuals participated in Community Stroke Education presentations through NMCDH and NMDH.

NMCDH and NMDH disseminated 308 Kits for Kids in the areas of hand-washing, bicycle safety and healthy nutrition.

A total of 184 individuals participated in smoking cessation programs through NMCDH and NMDH, and 91% self-reported smoking cessation by the end of week three.

Access to the ThinkFirst Curriculum for 24,240 children from kindergarten through high school and 32,733 individuals participated in ThinkFirst community events through NMCDH and NMDH:

- 6,549 children were fitted for and received bike helmets
  - 77 couples attended child safety classes
  - 1,066 car seats were checked and/or distributed
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### III. Mental Health/Substance Use Disorders

In conjunction with national and local benchmarks, the following goals were established in response to the priority need Mental Health/Substance Use Disorders:

NMCDH will provide leadership, invest resources and work collaboratively with community partners in a countywide mental health/substance use disorders coalition.

The purpose of the coalition will be to study the issues and needs, and develop planned responses that will ultimately improve the quantity, quality and continuity of mental health services available in the county.

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NMCDH strategies to impact mental health/substance use disorders:

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NMCDH will work collaboratively with the DuPage Behavioral Health Collaborative to identify key community partners and best practices in the areas of mental health crisis intervention.

NMCDH will provide in-kind leadership and support to the implementation of the Behavioral Health Treatment Action Plan that has been developed by the DuPage County Behavioral Health Collaborative.

NMCDH will provide in-kind leadership and support for the implementation of the Substance Abuse Action Plan developed by the DuPage Behavioral Health Collaborative.

NMCDH will offer evidence-based wellness programs in the areas of mental health and substance use disorders via programmatic venues including but not limited to Dinner with the Doc series, clinician-led educational offerings, self-help groups, rehabilitation services programs, support groups and professional development.

NMCDH will offer community benefit grants targeted to address mental health needs in the NMCDH service area.

- NAMI DuPage: Education and Resource Services (Grant amount: \$5,000)
- Ecker Center (Grant amount: \$5,000)
- Samara Care: Mental Health Access Program (Grant amount: \$5,000 through NMCDH and NMDH)
- World Relief: Refugee Wellness Program (Grant amount: \$5,000 through NMCDH and NMDH)

NMCDH will implement the National Council for Behavioral Health's Mental Health First Aid (MHFA) program and offer programming to members of the community.

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Key outcomes/metrics:

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A Heroin Opioid Prevention and Education Task Force (HOPE) was launched. The task force mission is to determine solutions to reduce opioid-related deaths.

A Christian Counseling Professional steering committee was formed to plan activities and events that focus on professional development for mental health professionals.

An Interfaith Mental Health Council was developed to focus on providing education and awareness to faith communities regarding mental health and substance use disorders.

NM Behavioral Health Services provided an employee assistance program for the Winfield School District.

As a result of the emerging issue around the population presenting to the DuPage County Jail with acute behavioral health and substance use issues, the DuPage County Behavioral Health Collaborative implemented a plan to focus on recidivism and the jail population.

- The collaboration convened to discuss and plan effective interventions and assessing efficacy.
- 32 crisis intervention classes reached 714 officers.
- A new program, Post-Crisis Response Team, responded to 269 incidents that led to 146 referrals to mental health care.
- A pilot program including the Winfield Fire Department, NMCDH, and the Crisis Center was developed to bring clients to crisis centers versus the emergency department to provide long-term needs.
- A mental health clinician serves as a DuPage County Health Department's re-entry specialist. Sixty people have been referred to this service for post-discharge support.

NMDH hosted a Drug Takeback Day and collected 78 pounds of unused medications.

NMDH and NMCDH Behavioral Health Services hosted 10 evidence-based wellness events.

- Professional Seminar Series: Youth Depression and Professional Education
- Kane County Youth Collaborative
- Student school refusal/anxiety presentations
- Patient education presentations
- Kane County Regional Office of Education institute day presentations on compassion, fatigue and mindfulness
- Teen anxiety presentations for staff and counselors
- Lazarus House Shelter presentation for staff regarding medication-assisted therapies for those who are dependent on opiate use
- Emotional support for St. Charles high school staff and students

Office space was provided at no charge through NMCDH and NMDH for 12-step programs offered every day of the week.

- 1,530 hours of room usage was recorded.

NAMI DuPage Education and Resources Services grant resulted in:

- 85% of participants reporting a greater understanding and change in attitude towards mental illness
- 90% of participants reporting increased knowledge of resources to help themselves and family members in recovery

- 80% of individuals with mental illness reporting ability to recognize triggers and early warning signs of their illnesses

Ecker Center grant resulted in:

- Medication possession ratio of 0.92 consistently over the grant period (baseline is 0.89)
- 90% of clients reporting symptom improvement (baseline is 72%)

Impacts of funding from NMCDH and NMDH for the Samara Care: Mental Health Access Program:

- 87% of clients experienced an increase in their GAF scale score
- 90% of those who completed the client satisfaction survey indicated that they agree/strongly agree, "I feel I was able to accomplish what I set out to do" and "I am better able to handle conflict and stress"
- 95% of those who completed the client satisfaction survey indicated that they agree/strongly agree, "My counselor interventions and interactions were helpful"

Outcomes reported as the result of NMCDH and NMDH funding to the World Relief Refugee Wellness Program:

- 8% of participants identified symptoms of mental illness
- 75% were able to identify at least three helpful mainstream community resources and report stronger connectedness to members of their own community
- 68% of those receiving mental health treatment demonstrated an increased level of functioning, decreased symptoms and completed treatment goals

One NMCDH/NMDH staff member was trained to offer the nationally recognized evidence-based Mental Health First Aid (MHFA) program.

- They taught 17 classes.
  - Attendees included 318 adults and youth.
  - All participants scored a minimum of 85% on the MHFA course exam.
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## CHIP Summary 2019

### I. Access to Healthcare Services

Guided by national and local benchmarks, the following goals were established to address the problem of limited access to care:

NMCDH will continue to support efforts to increase access to care by providing leadership, investing resources and working collaboratively with other community organizations throughout the county.

NMCDH will support the maintenance and expansion of an efficient and effective continuum of care offering medical homes (including primary and specialty care); pharmaceuticals; and inpatient, outpatient and emergent care to uninsured adult residents of DuPage County.

Additionally, NMCDH will offer a comprehensive financial assistance program to patients who are unable to afford the cost of necessary medical care.

NMCDH will also seek to engage and maintain a multicultural workforce of primary care practitioners, specialists, midlevel practitioners, registered professional nurses and other medical professionals committed to working in an evidence-based practice setting.

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#### NMCDH strategies to address access to health care included:

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NMCDH and NMDH will ensure financial assistance policies are easily accessible, respectful and in compliance with all regulatory requirements.

NMCDH and NMDH will continue to provide medically necessary inpatient and outpatient hospital services to uninsured and underinsured patients.

NMCDH and NMDH will assist with applications for government-sponsored healthcare programs.

NMCDH will collaborate with community partners to enhance the county's Health Safety Net Plan to ensure a comprehensive continuum of care.

NMCDH will provide operational grants to community partners in support of the Health Safety Net.

NMCDH will provide supportive funding to allow county residents within the ACA marketplace to increase the scope of their healthcare coverage.

NMCDH will provide timely, coordinated and efficient care to Access DuPage clients who have been determined to be presumptively eligible through the Access DuPage Program.

NMCDH will provide breast cancer screening and subsequent care to individuals without health insurance or who cannot afford breast cancer screening.

NMCDH will provide supportive funding to the Engage DuPage Program for the hiring of community access specialists to identify potentially eligible clients.

NMCDH and NMDH will serve as training centers for physicians, nurses and allied health professionals to ensure the continuation of a diverse, culturally sensitive and highly skilled workforce.

NMCDH and NMDH will serve as transition-to-work facilities by providing work experience for young people with significant disabilities.

NMCDH and NMDH will provide continued support to the local free clinic, Tri City Health Partnership, by assuming costs related to laboratory and other hospital services to presumptively eligible patients.

NMCDH will offer small community benefit grants targeted to enhance/promote safe access to care.

- Winfield Fire Department Disaster Planning Project

NMCDH will work collaboratively with local Federally Qualified Health Centers (FQHCs) to promote a seamless continuum of care to underserved individuals.

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Key outcomes/metrics:

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All financial assistance policies were reviewed annually.

More than 12,376 individuals received financial assistance at NMCDH and NMDH.

Charity care from NMCDH and NMDH in the amount of \$12,688,809 was rendered to uninsured and underinsured individuals, and \$1,332,681 was rendered in government-sponsored indigent support.

Through Engage DuPage services, 2,571 Medicaid applications were processed. Through Change HealthCare financial services, 1,333 Medicaid applications were processed. These were supported by NMCDH and NMDH.

NMCDH leadership and staff participated in various community task forces to further the development of the health and human services safety net.

The DuPage County Health Safety Net System enrolled 4,873 individuals, resulting in links to 216 primary care providers; 4,657 links to local FQHCs; 1,752 specialty referrals; and 26,582 prescriptions filled.

The Silver Access Premium program assisted 799 individuals.

\$2,720,507 was rendered to Access DuPage clients for outpatient and other specialty care services.

\$6,362,495 was rendered to Access DuPage clients for inpatient care.

Funding was provided to Engage DuPage for the provision of community access specialists in the Emergency Department.

A total of 989 individuals received breast cancer screening.

A total of 117,679 hours was committed to physician, nurse and allied health professional training through NMCDH and NMDH.

Trained professional healthcare interpreters assisted with 40,326 encounters at NMCDH and NMDH.

A comprehensive tabletop exercise that included a workshop element involving an active shooter response within NMCDH was conducted.

A formal agreement was executed in December 2016 with VNA Health Care. Workgroups developed a process for referring patients, and 61 patients received care from NM Regional Medical Group and NM hospitals, including NMCDH and NMDH.

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## II. Chronic Disease

Guided by national and local benchmarks and in response to the growing incidence and prevalence of chronic disease, the following goals were established to address chronic disease across its life span:

NMCDH will continue to provide community education related to chronic disease in the areas of evidence-based **primary interventions** (disease prevention, health promotion).

NMCDH will offer evidence-based **secondary interventions** (screenings).

NMCDH will offer evidence-based **tertiary interventions** (programs targeting individuals affected with a chronic disease to promote an optimum state of wellness).

NMCDH will continue to bring leading-edge, acute chronic disease care and chronic disease management to all individuals, regardless of ability to pay.

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NMCDH strategies to impact chronic disease across its life span:

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NMCDH and NMDH will host/offer evidence-based community health and wellness programming in the areas of cardiovascular disease, peripheral vascular disease and diabetes.

NMCDH and NMDH will host/offer evidence-based community health and wellness programming in the area of cancer including but not limited to the topics of breast and colon cancer, brain tumors, proton therapy, yoga for patients with cancer, palliative care and hospice.

NMCDH and NMDH will host/offer evidence-based community health and wellness programming in various other areas related to chronic disease including but not limited to obesity, injury prevention, arthritis, maternal and child health, joint replacement, fall prevention, chronic lung disease, epilepsy and Parkinson's disease.

NMCDH and NMDH will offer a community-based heart failure (HF) program to all patients with an active diagnosis of HF who have not been referred for or are not receiving other nursing services.

NM will offer small community benefit grants targeted to enhance/promote health and minimize chronic disease and obesity.

- DuPage Pads Medical Respite (Grant amount: \$15,000 through NMCDH and NMDH)

NMCDH will provide in-kind leadership and financial support to the Forward Project.

NMCDH and NMDH will work with local schools to implement the Coordinated Approach to Child Health (CATCH) program. Emphasis will be on parents and children enrolled in the program for 4-year-olds and all preschool program teachers.

NMCDH and NMDH will provide "Stroke Education," a community-focused education program.

NMCDH and NMDH will provide Kits for Kids, an educational program that may be utilized by parents, teachers, Scouts leaders and other individuals to assist children in learning about hand-washing, bicycle safety and nutrition.

NMCDH and NMDH staff will continue efforts to promote referral patterns of physicians and ancillary staff to smoking cessation resources.

NMCDH and NMDH will offer the nationally recognized ThinkFirst Injury Prevention Program.

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Key outcomes/metrics (data combined for NMCDH and NMDH):

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Two educational seminars in the area of cardiovascular health, with 277 attendees.

Meeting space was provided for 20 support groups.

Three cancer educational seminars were held, with 210 attendees.

Nine additional educational seminars were offered, with 1,020 attendees.

Rehabilitation Services community program was held for seven attendees.

Diabetes Education Services provided 18 community programs for 229 attendees.

Community-Based Heart Failure program for 366 individuals:

- 30-day readmission rate for HF diagnosis was 1%, markedly below the national rate
- 99% demonstrated the ability to identify appropriate action in the event of a worsening of their condition
- 96% utilized an effective medication management system
- 89% demonstrated compliance with symptom tracking

Among participants in the DuPage Medical Respite Program:

- 82% received information about the importance of regular physicals

- 72% exited the program with medical insurance
- 82% exited with a primary care physician
- 66% had a follow-up appointment scheduled for their condition

FORWARD initiatives for FY19 resulted in:

- A partnership with SNAPEd, reaching 34 lower-income schools
- Establishment of a school strategy that included development of school health terms, improvement in physical activity, improvement in healthy eating and engagement with the school community

The CATCH Program through NMCDH and NMDH reached more than 2,526 students and teachers:

- 97% of children were able to name six out of eight healthy (GO) foods
- 97% of children recognized the importance of consuming GO foods daily
- 97% of children recognized the importance of daily exercise
- 95% of schools/programs adjusted their snack lists to include GO foods

106 stroke education community programs reached a total of 4,960 people.

91 Kits for Kids were downloaded through NMCDH and NMDH in the areas of hand-washing, bicycle safety and healthy nutrition.

Smoking cessation program was held for 155 individuals, with 80% self-reporting smoking cessation by the end of week six.

The ThinkFirst Curriculum was presented to 469 children from kindergarten through high school and 21,527 individuals participated in ThinkFirst community events through NMCDH and NMDH:

- 6,836 children were fitted for and received bike helmets
- 72 couples attended child safety classes
- 994 car seats were checked and/or distributed

National Diabetes Prevention Program was offered for 17 participants. As a group, 121 pounds were lost, reflecting a 3.4% decrease, and 979.5 hours of exercise were self-reported by the final class.

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### **III. Mental Health/Substance Use Disorders**

Guided by national and local benchmarks, the following goals were established in response to the priority need Mental Health/Substance Use Disorders:

NMCDH will provide leadership, invest resources and work collaboratively with community partners in a countywide mental health/substance use disorder coalition.



The purpose of the coalition will be to study the issues and needs, and develop planned responses that will ultimately improve the quantity, quality and continuity of mental health services available in the county.

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NMCDH strategies to impact mental health/substance use disorders:

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NMCDH will work collaboratively with the DuPage Behavioral Health Collaborative to identify key community partners and best practices in the area of mental health crisis intervention.

NMCDH will provide in-kind leadership and support for the implementation of the Behavioral Health Treatment Action Plan that has been developed by the DuPage County Behavioral Health Collaborative.

NMCDH will provide in-kind leadership and support for the implementation of the Substance Abuse Action Plan developed by the DuPage Behavioral Health Collaborative.

NMCDH and NMDH will offer evidence-based wellness programs in the areas of mental health and substance use disorder via programmatic venues including but not limited to Dinner with the Doc series, clinician-led educational offerings, self-help groups, rehabilitation services programs, support groups and professional development.

NMCDH will offer community benefit grants targeted to address mental health needs in the NMCDH CSA.

- Ecker Center (Grant amount: \$15,000 through NMCDH and NMDH)
- Meier Clinics (Grant amount: \$15,000)

NMCDH and NMDH will implement the National Council for Behavioral Health's Mental Health First Aid (MHFA) program and offer programming to members of the community.

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Key outcomes/metrics:

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A Heroin Opioid Prevention and Education Task Force (HOPE) was launched. The task force mission is to determine solutions to reduce opioid-related deaths.

A Christian Counseling Professional steering committee was formed to plan activities and events that focus on professional development for mental health professions.

An Interfaith Mental Health Council was developed to focus on providing education and awareness to faith communities regarding mental health and substance use disorders.

NM Behavioral Health Services provided an employee assistance program for the Winfield School District.

As a result of the emerging issue around the population presenting to the DuPage County Jail with acute behavioral health and substance use disorder issues, the DuPage County Behavioral Health Collaborative implemented a plan to focus on recidivism and the jail population.

NMCDH hosted a Drug Takeback Day and collected 106.6 pounds of unused medications.

NMCDH and NMDH Behavioral Health Services hosted 11 evidence-based wellness events:

- TriCity Family Services Advisory Committee
- DuPage County Heroin/Opioid Prevention and Education Taskforce
- Mid Valley Schools Mental Health Partnership meetings
- St. Charles Chamber of Commerce Board of Directors
- Christian Counseling Professional of Chicagoland Steering Committee
- Naperville Central High School health occupations class tours
- Batavia School District institute day presentation on cell phones and teens
- Kane County Regional Office of Education Institute presentations
- Wheaton Christian Center mental health presentations
- St. Charles Chamber of Commerce legal presentation on cannabis
- Glenbard Parent Series

Office space through NMCDH and NMDH was provided at no charge for 12-step programs offered every day of the week.

- 1,530 hours of room usage was recorded.

Outcomes of the Ecker Center grant through NMCDH and NMDH:

- Medication possession ratio of 0.92 consistently over the grant period (baseline is 0.89).
- 90% of clients reported symptom improvement (baseline is 72%).

Individuals impacted by funding from the Meier Clinics Foundation reported:

- 100% of Naomi's House residents will be able to self-identify that healing has begun in their lives.
- Utilization of Basis 24 pre- and post-clinical outcomes testing showed a 67% overall increase from baseline data.

One NMCDH/NMDH staff member was trained to offer the nationally recognized evidence-based Mental Health First Aid (MHFA) program.

- 18 classes were held
  - 271 adults and youth attended the programs
  - All participants scored a minimum of 99% on the MHFA course exam
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## CHIP Summary 2020

### I. Access to Healthcare Services

Guided by national and local benchmarks, the following goals were established in response to the problem of limited access to care:

NMCDH will continue to support efforts to increase access to care by providing leadership, investing resources and working collaboratively with other community organizations throughout the county.

NMCDH will support the maintenance and expansion of an efficient and effective continuum of care offering medical homes (including primary and specialty care); pharmaceuticals; and inpatient, outpatient and emergent care to uninsured adult residents of DuPage County.

Additionally, NMCDH will offer a comprehensive financial assistance program to patients who are unable to afford the cost of necessary medical care.

NMCDH will also seek to engage and maintain a multicultural workforce of primary care practitioners, specialists, midlevel practitioners, registered professional nurses and other medical professionals committed to working in an evidence-based practice setting.

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#### NMCDH strategies to address access to health care included:

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NMCDH and NMDH will ensure financial assistance policies are easily accessible, respectful and in compliance with all regulatory requirements.

NMCDH and NMDH will continue to provide medically necessary inpatient and outpatient hospital services to uninsured and underinsured patients.

NMCDH and NMDH will assist with applications for government-sponsored healthcare programs.

NMCDH will collaborate with community partners to enhance the county's Health Safety Net Plan to ensure a comprehensive continuum of care.

NMCDH will provide supportive funding to allow county residents within the ACA marketplace to increase the scope of their healthcare coverage.

NMCDH will provide timely, coordinated and efficient care to Access DuPage clients who have been determined to be presumptively eligible through the Access DuPage Program.

NMCDH will provide breast cancer screening and subsequent care to individuals without health insurance or who cannot afford breast cancer screening.

NMCDH will provide supportive funding to the Engage DuPage Program for the hiring of community access

specialists to identify potentially eligible clients.

NMCDH and NMDH will serve as training centers for physicians, nursing staff and allied health professionals to ensure the continuation of a diverse, culturally sensitive and highly skilled workforce.

NMCDH and NMDH will serve as transition-to-work facilities by providing work experience for young people with significant disabilities.

NMCDH and NMDH will provide continued support to the local free clinic, Tri City Health Partnership, by assuming costs related to laboratory and other hospital services to presumptively eligible patients.

NMCDH will offer small community benefit grants targeted to enhance/promote safe access to care.

NMCDH will work collaboratively with local Federally Qualified Health Centers (FQHCs) to promote a seamless continuum of care to underserved individuals.

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#### Key outcomes/metrics:

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All financial assistance policies were reviewed annually.

More than 23,638 individuals received financial assistance at NMCDH and NMDH.

\$72,881,880 was rendered in financial assistance through NMCDH and NMDH within the following categories:

- Presumptive charity care: \$27,976,088
- Approved financial assistance: \$60,832,071
- Alternate charity care: \$724,629

With the support of NMCDH and NMDH:

- 2,227 Medicaid applications were processed through Engage DuPage services
- 2,222 Medicaid applications were processed through Change HealthCare financial services
- 1,468 Medicaid applications were approved

NMCDH leadership and staff participated in various community task forces to further the development of the health and human services safety net.

The DuPage County Health Safety Net System enrolled 4,957 individuals, resulting in:

- Links to 229 primary care providers
- 4,728 links to local FQHCs
- 2,102 specialty referrals
- 26,464 prescriptions filled

The Silver Access Premium program assisted 842 individuals.

\$5,690,537 was rendered to Access DuPage clients for outpatient and other specialty care services.

\$2,092,690 was rendered to Access DuPage clients for inpatient care.

Funding was provided to Engage DuPage for the provision of community access specialists in the Emergency Department.

247 individuals received breast cancer screening.

117,679 hours were committed to physician, nursing and allied health professional training at NMCDH and NMDH.

Trained professional healthcare interpreters completed 58,190 encounters at NMCDH and NMDH.

A formal agreement was executed in December 2016 with VNA Health Care. Workgroups developed a process for referring patients, and 106 of those patients received care from NM Regional Medical Group and NM hospitals (NMCDH/NMDH).

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## II. Chronic Disease

Guided by national and local benchmarks, the following goals were established in response to the growing incidence and prevalence of chronic disease by addressing chronic disease across its life span:

NMCDH will continue to provide community education related to chronic disease in the areas of evidence-based **primary interventions** (disease prevention, health promotion).

NMCDH will offer evidence-based **secondary interventions** (screenings).

NMCDH will offer evidence-based **tertiary interventions** (programs targeting individuals affected by a chronic disease to promote an optimum state of wellness).

NMCDH will also continue to bring leading-edge, acute chronic disease care and chronic disease management to all individuals, regardless of ability to pay.

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NMCDH strategies to impact chronic disease across its lifespan:

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NMCDH and NMDH will host/offer evidence-based community health and wellness programming in the areas of cardiovascular disease, peripheral vascular disease and diabetes.

NMCDH and NMDH will host/offer evidence-based community health and wellness programming in the area of cancer including but not limited to the topics of breast and colon cancer, brain tumors, proton therapy, yoga for patients with cancer, palliative care and hospice.

NMCDH and NMDH will host/offer evidence-based community health and wellness programming in various other areas related to chronic disease including but not limited to obesity, injury prevention, arthritis, maternal and child health, joint replacement, fall prevention, chronic lung disease, epilepsy and Parkinson's disease.

NMCDH and NMDH will offer a community-based heart failure (HF) program to all patients with an active diagnosis of HF who have not been referred for or are not receiving other nursing services.

NM will offer small community benefit grants targeted to enhance/promote health and minimize chronic disease and obesity.

- American Cancer Society (Grant amount: \$10,000 through NMCDH and NMDH)
- DuPage Pads Medical Respite Program (Grant amount: \$15,000 through NMCDH)
- Almost Home Kids (Grant amount: \$15,000 through NMCDH and NMDH)
- Western DuPage Special Recreation Association (Grant amount: \$8,000 through NMCDH)

NMCDH offered COVID-19-specific community benefit grants targeted to support programs that needed assistance to run their community programs.

- Educare Thermometer System (Grant amount: \$12,500)
- Educare WD Uniform Program (Grant amount: \$15,000)
- Midwest Shelter for Homeless Veterans Virtual Commissary Program (Grant amount: \$2,000)
- West Chicago School District 33 Thermoscan System (Grant amount: \$40,000)

NMCDH will provide in-kind leadership and financial support to the Forward Project.

NMCDH and NMDH will work with local schools to implement the Coordinated Approach to Child Health (CATCH) program. Emphasis will be on parents and children attending the program for 4-year-olds and all preschool program teachers.

NMCDH and NMDH will provide "Stroke Education," a community-focused education program.

NMCDH and NMDH will provide Kits for Kids, an educational program that may be utilized by parents, teachers, Scouts leaders and other individuals to assist children in learning about hand-washing, bicycle safety and nutrition.

NMCDH and NMDH staff will continue efforts to promote referral patterns of physicians and ancillary staff to smoking cessation resources.

NMCDH and NMDH will offer the nationally recognized ThinkFirst Injury Prevention Program.

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Key outcomes/metrics (NMCDH/NMDH combined data unless specified):

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A cardiovascular health educational seminar with 116 attendees (NMCDH).

Meeting space for 19 support groups.

One cancer educational seminar with 93 attendees (NMCDH).

Five additional educational seminars were offered for 574 individuals.

Twelve Diabetes Education Services community programs with 90 attendees.

The Community-Based Heart Failure program enrolled 226 individuals with the following outcomes:

- 30-day readmission rate for HF diagnosis was 4%, markedly below the national rate
- 99% were seen at a home visit within seven days of discharge
- 87% were able to name two cardiac medications and describe actions to be taken in the event of a worsening of their condition

American Cancer Society assistance:

- 104 patients with cancer were provided rides
- Eight drivers completed their training program, which increased the number of drivers to 110 (an increase of 13% from the previous year)
- 1,492 rides were provided during the time that service was in operation (there was a temporary suspension of services due to COVID-19), a 5% increase in ride fulfillment rate

DuPage Pads Medical Respite Program (NMCDH):

- 128 individuals (89 adults and 39 children) in 73 households were served
- 100% of the participants obtained or maintained their benefits
- 100% of the participants received information on the importance of regular physicals relative to age and gender
- 100% of the participants exited the program with medical insurance
- 75% of the participants exited the program with an identified primary care physician
- 75% of the participants exited the program with a follow-up appointment scheduled with a primary care physician related to the condition resulting in entry to the Medical Respite Program
- 47% of the individuals served exited into stable housing

Almost Home Kids:

- 90% of children received an evaluation to determine if sleep medicine could improve health outcomes by having better sleep patterns
- 20 sleep studies (polysomnographies) conducted, based on the child's actual needs
- 1 to 2 candidates for decannulation annually

Western DuPage Special Recreation Association (NMCDH):

- Outcomes pending

COVID-19 grant outcomes (NMCDH):

- Educare purchased Victory Spray Guns and Clorox 360 machine to clean and sanitize schools. A Thermoscan system, a thermometer for each family (200 total) to monitor symptoms at home and 20 infrared thermometers to be used at school will be purchased soon. The program has reached 140 children.
- Educare purchased uniforms for 70 staff members.
- Midwest Shelter for Homeless Veterans utilized the \$2,000 grant to cover the costs of their virtual commissary.
- West Chicago School District 33 purchased 275 infrared thermometers for families to use at home to monitor symptoms, plus they purchased four Thermoscan systems for their schools.

The CATCH Program reached more than 855 students and teachers.

Three stroke education community programs reached 86 people.

465 page views of Kits for Kids were downloaded in the areas of hand-washing, bicycle safety and healthy nutrition.

128 individuals participated in smoking cessation programs, and 100% self-reported smoking cessation by the end of week six.

The ThinkFirst Curriculum offered 315 presentations to children from kindergarten through high school, and 17,301 individuals participated in ThinkFirst community events:

- 5,218 children were fitted for and received bike helmets
- 261 couples attended child safety classes
- 822 car seats were checked and/or distributed

31 individuals participated in the National Diabetes Prevention Program:

- 140 pounds were lost by the group
  - 426 hours of exercise were self-reported by the final class
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### III. Mental Health/Substance Use Disorders

In conjunction with national and local benchmarks, the following goals were established in response to the priority need Mental Health/Substance Use Disorders:

NMCDH will provide leadership, invest resources and work collaboratively with community partners in a countywide mental health/substance use disorders coalition.

The purpose of the coalition will be to study the issues and needs, and develop planned responses that will ultimately improve the quantity, quality and continuity of mental health services available in the county.

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NMCDH strategies to impact mental health/substance use disorders:

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NMCDH will work collaboratively with the DuPage Behavioral Health Collaborative to identify key community partners and best practices in the areas of mental health crisis intervention.

NMCDH will provide in-kind leadership and support for the implementation of the Behavioral Health Treatment Action Plan that has been developed by the DuPage County Behavioral Health Collaborative.

NMCDH will provide in-kind leadership and support for the implementation of the Substance Abuse Action Plan developed by the DuPage Behavioral Health Collaborative.

NMCDH and NMDH will offer evidence-based wellness programs in the areas of mental health and substance use disorders via programmatic venues including but not limited to Dinner with the Doc series, clinician-led educational offerings, self-help groups, rehabilitation services programs, support groups and professional development.

NMCDH will offer community benefit grants targeted to address mental health needs in the NMCDH CSA.

- NAMI DuPage (Grant amount: \$12,000)

NMCDH and NMDH will implement the National Council for Behavioral Health's Mental Health First Aid (MHFA) program and offer programming to members of the community.

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Key outcomes/metrics:

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A Heroin/Opioid Prevention and Education Taskforce (HOPE) was launched with a mission to determine solutions to reduce opioid-related deaths.

A Christian Counseling Professional steering committee was formed to plan activities and events that focus on professional development for mental health professionals.

An Interfaith Mental Health Council was developed to focus on providing education and awareness to faith communities regarding mental health and substance use disorders.

NM Behavioral Health Services provided an employee assistance program for the Winfield School District.

As a result of the emerging issue around the population presenting to the DuPage County Jail with acute behavioral health and substance use disorder issues, the DuPage County Behavioral Health Collaborative implemented a plan to focus on recidivism and the jail population.

NMCDH hosted a Drug Takeback Day, collecting 175 pounds of unused medications.

NMCDH and NMDH Behavioral Health Services hosted five evidence-based wellness events:

- Continuing Education programs for mental health and substance use disorder professionals
- Naperville Central High School health careers class
- Thompson Middle School student support group for mental health
- Chamber of Commerce member education topics including helping employees with COVID-19 stress, cannabis legislation, workplace stress management and general anxiety
- Education presentation on mental health and substance abuse

Office space through NMCDH and NMDH was provided at no charge for 12-step programs offered every day of the week.

- 1,530 hours of room usage was recorded.

NAMI DuPage grant outcomes (through NMCDH and NMDH):

- 1,868 individuals and family members were served (due to COVID-19, hospital presentation stopped in March 2020 and has not resumed as of June 2021)
- 102 individuals attended NAMI education classes
- 90% of clients and family members reported that they agree or strongly agree that they are now aware of NAMI and community resources that can assist them in recovery
- 95 clients were served and 651 counseling sessions held
- Beginning in March 2020, all peer counseling sessions were converted to a remote venue using Zoom
- 614 clients with 4,427 in attendance for support groups, which also moved to Zoom in March 2020
- 60% of the clients who participate in peer counseling reported feeling that they are successfully moving toward their goals
- 12 clients attended readiness classes
- 41% of the individuals who obtained employment after using NAMI's supported employment program stayed employed after three months
- Four or five programs were offered each week to NAMI clients
- Programs were virtual and included bingo, trivia and book club

Three NMCDH/NMDH staff members were trained to offer the nationally recognized evidence-based Mental Health First Aid (MHFA) program virtually.

- Seven classes were held
  - 136 adults and youth attended the programs
  - 100% of participants scored a minimum of 100% on the MHFA course exam
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## Community Feedback From Preceding CHNAs and Implementation Plans

Northwestern Medicine Central DuPage Hospital's 2016-2018 and 2018-2020 CHNAs and Implementation Plans were made available to the public and open for public comment at [nm.org/about-us/community-initiatives/community-health-needs-assessment](https://nm.org/about-us/community-initiatives/community-health-needs-assessment).

No comments were received on either document at the time this report was written.

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The public may request the report, available at no charge, in the following ways:

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**In person:** Northwestern Medicine Central DuPage Hospital

Main Entrance Welcome Desk

25 North Winfield Road

Winfield, Illinois

**Online:** [nm.org/about-us/community-initiatives/community-health-needs-assessment](https://nm.org/about-us/community-initiatives/community-health-needs-assessment)

**Call:** 312.926.2301 (TTY: 711)

**Email:** [communityhealth@nm.org](mailto:communityhealth@nm.org)

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# Appendix A

## Community Resource List

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### Acute-care hospitals/emergency rooms

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Advocate Sherman Hospital	Mercyhealth Javon Bea Hospital
Alexian Brothers Medical Center Adventist	Morris Hospital and Healthcare Centers
Community Hospital of Ottawa	Northwestern Medicine Delnor Hospital
Edward Hospital	Northwestern Medicine Kishwaukee Hospital
Edward-Elmhurst Health Center	Northwestern Medicine Valley West Hospital
GlenOaks Hospital Advocate	OSF St. Anthony Medical Center - Rockford
Good Samaritan Hospital	Presence Mercy Medical Center
Kindred Hospital - Sycamore	Rochelle Community Hospital
Linden Oaks Hospital at Edward Hospital	Rush-Copley Emergency Center - Yorkville
Marianjoy Rehabilitation Hospital, part of Northwestern Medicine	Rush-Copley Medical Center - Aurora
Mendota Community Hospital	Swedish American Hospital

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### Federally qualified health centers and other safety net providers

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Access Community Health Network	DuPage Health Coalition
Access DuPage	VNA Health Care
DuPage Federation of Health Services	

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Home healthcare

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Addus HomeCare	Family Home Health Services
Advocate Home Health Services	Home Instead Senior Care
ALC Home Health Care	Lexington Healthcare Center of Lombard
Always Best Care	LMR Home Health Care
Amedisys Home Health Care	ManorCare Health Services - Westmont
Assisting Hands Naperville	Metro Home Health Care
BrightStar Care Central DuPage - Wheaton	Pearl Health Care Services
Elite Care Management	

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Hospice care

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Compassionate Care Hospice	First Hospice Care
CovenantCare Hospice - St. Charles	Seasons Hospice & Palliative Care

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Mental health services/facilities

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Advanced Behavioral Centers of DuPage	Interfaith Mental Health Coalition
Aunt Martha's Aurora Community Health Center	Linden Oaks Outpatient Center
Crisis Intervention Unit	Meier Clinics
DuPage County Health Department	NAMI
DuPage Mental Health Services	Northwestern Medicine Behavioral Health Services
Good Samaritan Hospital Outpatient Behavioral Health	

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Nursing homes/adult care/long-term care

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Abbingdon Rehab & Nursing Center	ManorCare Health Services - Naperville
Brighton Gardens of St. Charles	Meadowbrook Manor - Naperville
Brookdale Lisle	Oak Trace
Cordia Senior Residence	Park Place of Elmhurst
DuPage County Convalescent	Presence Pine View Care Center
Franciscan Village	Rehab Care Group
Friendship Village of Schaumburg	Rosewood Care Center
Lemont Nursing and Rehabilitation Center	The Holmstad
Lombard Place Assisted Living & Memory Care	Wynscape Health and Rehabilitation

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Health and human service community programming (addressing health disparities and social determinants of health)

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Access Health	DuPage Federation on Human Services Reform
Almost Home Kids	DuPage Health Coalition
Alzheimer's Association	DuPage Medical Group
American Cancer Society	DuPage Pads
Angel Wheels Transportation	Edwards Hospital
Banyan Treatment Center	Fitness Now Center
Cancer Treatment Center of America	Gateway
NM Central DuPage Hospital Cancer Center	Haymarket Center of DuPage
College of DuPage	Illinois Breast and Cervical Cancer Program
DuPage Care Center	Kane Senior Council
DuPage County Health Department	Lifetime Pool

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Health and human service community programming (addressing health disparities and social determinants of health)  
(continued)

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Meier Clinics	Ronald McDonald House
Metropolitan Family Services	Senior Services Associates
Midwestern University Multispecialty Clinic	Serenity House
NAMI DuPage	Special Spaces
Normal Moments	Superior Ambulance Service Elmhurst
Northwestern Medicine Proton Center	Uber Health
People's Resource Center (PRC)	VNA Health Care
Ray Graham Association for People	WeGo Together for Kids
Renz Addiction Center	

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**Northwestern Medicine Central DuPage Hospital**  
25 North Winfield Road  
Winfield, Illinois 60190

630.933.1600  
TTY: 711

[nm.org](http://nm.org)