Madison County

Community Health Assessment & Improvement Plan

2022-2024



December 2022

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Executive Summary

The Madison County Department of Health (MCDOH) partnered with Community Memorial Hospital, Oneida Health, and the Madison County Rural Health Council, Inc. to complete the Community Health Assessment and Improvement Plan process. Representatives from the four agencies comprised the 2022-2024 Steering Committee.

The Community Health Assessment and Improvement Plan outlines the current health status of residents and identifies a comprehensive plan for addressing health challenges. The process was undertaken in alignment with the 2019-2024 New York State Prevention Agenda¹, which identifies five priority areas for health improvement:

- Prevent Chronic Diseases
- Promote Well-Being and Prevent Mental and Substance Use Disorders
- Promote a Healthy and Safe Environment
- Promote Healthy Women, Infants, and Children
- Prevent Communicable Diseases

The COVID-19 pandemic limited staff capacity and resources for participating organizations. Given these challenges, the Steering Committee elected to complete an abbreviated Community Health Assessment (CHA) process, relying, in part, on the previous 2019 assessment. The 2019 CHA utilized the Mobilizing for Action through Planning and Partnerships (MAPP) strategic planning process.² Assessments of four major areas were conducted:

- Community Themes and Strengths
- Local Public Health System

- Community Health Status
- Forces of Change

The 2022 CHA integrated results from the previous assessments with an updated Community Health Status assessment. Results of the revised CHA were presented to the Steering Committee members in April 2022 for the selection of priority areas. A facilitated discussion led to the decision to focus on the following priority areas:

- 1. Prevent Chronic Diseases
- 2. Promote Well-Being and Prevent Mental and Substance Use Disorders

To promote active collaboration with community organizations, the Steering Committee convened Priority Area Workgroups with representatives from local organizations. Workgroups selected goals, objectives, and evidence-based strategies to address priority areas. Please see Page 35 for a comprehensive description.

The Steering Committee continues to function as an advisory group, monitoring and tracking progress of the priority area strategies. Annual reports are submitted to New York State Department of Health and made publicly available on the MCDOH website.

Introduction

Community engagement is a guiding principle of the Community Health Assessment and Improvement Plan processes. As part of the current cycle, the 2022 Steering Committee elected to use elements of community input from the 2019 cycle. The Steering Committee also sought input from representatives participating in Priority Area Workgroups to capture the tremendous changes in the community landscape due the COVID-19 pandemic.

In August 2018, individuals representing various local agencies and organizations agreed to participate in a comprehensive health improvement process for Madison County. This group agreed to and followed a community health improvement planning model adapted from the National Association of County and City Health Officials (NACCHO) and the Centers for Disease Control and Prevention (CDC) called Mobilizing for Action through Planning and Partnerships (MAPP). The subsequently named MAPP Committee was established to design and complete the MAPP process, leading to the development of a health improvement plan to address identified concerns on a county level.

The Madison County MAPP Committee concluded that no single entity provides public health services in Madison County and that all entities make important contributions to the County's health systems. The MAPP Committee established guiding principles to ensure success in developing and implementing a well-coordinated plan that uses community resources efficiently and effectively.

These principles include:

- Community-driven and community-focused process, which actively involve affected populations (e.g. students/youth, older adults).
- Building on existing activities and collaborative efforts, and dovetailing needs and resources to optimize performance through shared resources and responsibilities.
- Focusing on systems thinking that promotes and appreciates the dynamic interrelationships of all components of the local public health system.
- Incorporating evidence-based and best practices (i.e., using the best available evidence to make informed public health practice decisions).

Vision of a Healthy Madison County

In September 2018, the MAPP Committee held a half-day work group facilitated by HealtheConnections to adopt the vision for a healthy Madison County. The vision statement was created to address two questions:

- 1) Where do we, as a community, see ourselves in three years?
- 2) What values will support us through the MAPP process?

The vision for a healthy Madison County is a community where:

- People of all ages, cultures, and talents are fully engaged
- The environment is clean and safe
- There are opportunities for quality employment, housing, transportation, and education
- There is access to resources supporting physical, mental, spiritual, and emotional well-being

All achieved by a dynamic collaboration of: citizens; government agencies; employers; health care providers; and faith-based, educational, community and services organizations.

See Appendix A for the graphic.

MAPP Process

After the vision was established, the MAPP Committee conducted the four assessments, including Local Public Health System, Forces of Change, Themes & Strengths, and Health Status.

The Local Public Health System assessment draws upon all of the organizations and agencies that contribute to community health. The assessment asks, "What are the components, activities, competencies, and capacities of our local public health system?" and "How are the Essential Services being provided to our community?" The Forces of Change assessment identifies trends, factors, or events occurring either now or in the future, and the opportunities and threats that these emerging issues will have on the community and local public health system. Both of these assessments were conducted during a one-day event hosted by MCDOH in collaboration with the hospitals. There were 77 participants, representing 43 community organizations (e.g. healthcare services, school districts, non-profits, colleges, and libraries). Please see Appendix B for full list of participating organizations.

The *Community Themes and Strengths* assessment provides a understanding of the issues residents feel are important by answering the questions "what is important to our community?" and "how is quality of life perceived in our community?" This assessment was conducted through a community survey and focus groups hosted throughout the county.

Lastly, the Community Health Status assessment identifies priority issues related to community health and quality of life. Questions answered during this phase include "How healthy are our residents?" and "What does the health status of our community look like?" The health indicators were selected based on New York State Prevention Agenda and MAPP Core Indicator List. In 2022, the MCDOH revised the Health Status data indicators based on the most recent, publicly available sources. The HealtheCNY platform is no longer supported by HealtheConnections and was not included in the updated assessment. Additionally, the CHA includes key findings from the Madison County Mental Health Task Force Community Survey as well as the BRIDGES Community Survey on the Legalization of Recreational Marijuana, both conducted in 2021.

Local Public Health System Assessment

The Local Public Health System (LPHS) assessment seeks to understand ways in which the organizations that encompass the public health system can improve upon the structure and services provided. During the one-day event, the participants listened to a presentation on the Ten Essential Public Health Services before breaking out into 10 groups. MCDOH staff members acted as table facilitators to guide participants through the LPHS Assessment; each group focused on one essential service.

The goal was to identify opportunities to improve the LPHS by rating the current system based on the model standards provided by the National Association of County and City Health Officials (NACCHO). The participants used a rating system to quantify how well the LPHS carries out the selected essential service (Table 1).

Optimal Activity	Greater than 75% of the activity described within the question is met
Significant Activity	Greater than 50%, but no more than 75% of activity described
Moderate Activity	Greater than 25%, but no more than 50% of activity described
Minimal Activity	Greater than 0, but no more than 25% of the activity described
No Activity	0% or absolutely no activity

Table 1. MAPP Local Public Health System Assessment Local Instrument for Model Standards.Source: NACCHO National Public Health Performance Standards

Meeting participants were assigned to groups based on their organization and involvement with each essential public health service. The groups reviewed and categorized the activity level through facilitated discussion and voting.

All services in Madison County were rated by participants as either significant activity or moderate activity (25-75%). The overall score was 52.7%. The lowest score was "Inform, Educate, and Empower People about Health Issues" with an activity level of 41.7%. The highest score was a tie between "Mobilize Community Partnerships to Identify and Solve Health Problems" and "Link People to Needed Personal Health Services and Assure the Provision of Healthcare when Otherwise Unavailable," both scoring an activity level of 62.5%. These scores were taken into account when developing specific interventions for the Community Health Improvement Plan (CHIP).

See Appendix C for full list of scores. Full report is also available on MCDOH website: https://www.madisoncounty.ny.gov/DocumentCenter/View/10713/LPHS FOC-Summary?bidId=.

Forces of Change Assessment

The Forces of Change assessment analyzes the trends, factors, events, that can affect the community and the local public health system, both negatively and positively. Participants at the full-day event were asked to identify factors through a facilitated discussion within the ten breakout groups. There were five themes that emerged from the brainstorming sessions (Table 2). Madison County's aging population was discussed in all but one group. In addition, substance abuse, science and technology advancements, marijuana legalization, and diminishing healthcare services were also hot topics among the groups.

Forc	e of Change	Number of Group Discussions
1	Increase in Aging Population	9
2	Addiction/Substance Use	6
3	Advancements in Science & Technology	6
4	Legalization of Marijuana	6
5	Diminishing Healthcare Services	5

Table 2. Top Five Themes from Forces of Change Assessment (2019). Source: MCDOH.

A comprehensive summary is available in Appendix D. Full report is also available on MCDOH website: https://www.madisoncounty.ny.gov/DocumentCenter/View/10713/LPHS FOC-Summary?bidId=.

Community Themes & Strengths Assessment

The *Themes and Strengths* assessment seeks input from community members about the perception of health issues and identifies the most significant factors that impact health. John Zogby Strategies, a professional polling agency, surveyed 556 residents to determine priority health issues, quality of life, and access to care issues. The survey consisted of multiple choice and open-ended questions. In addition, demographic information was collected to ensure a representative sample of age, gender, race/ethnicity, and income level. Cancer and mental health/suicide, followed by stroke/heart disease were identified as the top three health concerns (Fig 1). Substance abuse and unhealthy lifestyle were identified as a top risk behaviors. Finally, respondents reported that access to economic opportunities (45%) and a good school system (30%) had the most significant impact on quality of life.

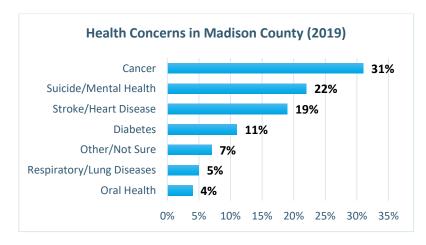


Figure 1. Community Perception of Health Concerns in Madison County
(2019). Source: John Zogby Strategies.

Location	Number of Participants
Cazenovia (Public Library)	0
Chittenango (Clear Path for Veterans)	4
DeRuyter (United Church of DeRuyter)	15
Oneida (Karing Kitchen)	9
Morrisville (Cornell Cooperative Extension)	1
Hamilton (Public Library)	3
Canastota (Office for the Aging)	8
Brookfield (First Baptist Church)	0
TOTAL	40

Table 3. Number of Attendees by Community Meeting for the Themes & Strengths Assessment (2019). Source: MCDOH.

The MCDOH group hosted an additional eight (8) community meetings in different towns across Madison County (Table 3). A total of 40 Madison County residents participated. In addition to the discussion, focus group participants were asked to complete the survey developed by John Zogby Strategies. The purpose was to identify any significant differences in answers as well as understand the demographics of the residents who participated. The focus groups identified cancer and heart disease as the top two health concerns and substance abuse as the top risk behavior.

The results of the community meetings can be found on the MCDOH website: <a href="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths?bidId="https://www.madisoncounty.ny.gov/DocumentCenter/View/10714/Themes-Strengths.gov/DocumentCenter/View/10714/Themes-Strengths.gov/DocumentCen

Community Health Status Assessment

Geographic Profile

Madison County is located in central New York State (NYS), bordering six other counties (Onondaga, Oswego, Oneida, Chenango, Cortland, and Otsego). The county has a total land area of 662 square miles; 655 square miles of land and 7 square miles of water.³

Madison County consists of fifteen (15) townships and the City of Oneida (Fig 2). The county has a population density of 104 persons per square mile compared to 239 persons per square land mile in NYS (excluding New York City). The towns are predominantly rural, especially in the southern half of the county. The northern third of the county has more suburbs.

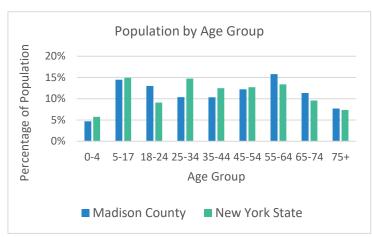


Figure 2. Map of Madison County, New York. Source: Madison County Government

Demographics

The overall population has decreased by about 7% since the 2010 Census from 73,442 down to 68,016 residents. Despite the population decline, there have been substantial changes in demographics. The proportion of older adults has increased from 12.2% in 2010 to 18.3% in 2020, and remains higher than the New York State average of 16.9% (Fig 3).³

The county remains primary homogeneous in terms of racial diversity; however, the proportion of residents who identify as White has decreased from 94% to 90% between 2010 and 2020. The remaining population identifies as Black/African American (1.6%), Asian (1.0%), American Indian/Alaska Native (0.7%), and more than one race (6.2%). Furthermore, the percentage of the population that identifies as Hispanic has increased from 1.8% to 2.5% between 2010 and 2020. Roughly 4% of residents speak a second language compared to 31% of NYS residents.³



Black/African
American

American

American

Adian

Marine
Harrise

Figure 3. The percentage of the population by age group in Madison County and New York State. Source: US Census Bureau (2019).

Figure 4. The percentage of population based on race in Madison County. Source: US Census Bureau (2020).

Social Determinants of Health

Healthy People 2030 describes the social determinants of health as the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks (Fig 5).⁴ Counties utilize these categories as a guide to gauge the well-being of their populations.

Education Access and Quality

A higher level of education is linked with better health outcomes, including longer life expectancy.⁴ Madison County encompasses 10 public school districts and 3 private schools. There are multiple Boards of Cooperative Educational Services (BOCES) programs that serve Madison County residents though none are located within county borders. Lastly, the county has three higher education



Figure 5. Healthy People 2030 graphic of the Social Determinants of Health. Source: US Department of Health and Human Services (2022).

institutions, including two private (Cazenovia College and Colgate University) and one public (SUNY Morrisville) institution.

Nearly 35% of Madison County adults (ages 25 and older) have a high school diploma or equivalent compared to only 26% of residents in New York State (NYS). In contrast, only 26.6% of Madison County adults (ages 25 and older) have a Bachelor's degree or higher compared to 37.5% of NYS adults in the same age range.³

Level of education is not equally distributed across Madison County townships. The townships of Cazenovia and Hamilton have three times the number of residents with a 4-year degree compared to Brookfield and five times higher than Georgetown (Table 4). This directly affects the employment potential of county residents, as higher education level equates to job opportunities that are likely to have higher rates of pay (see next section).⁴

Township/City	p/City Percent of Adults with Bachelor's Degree or Higher		Percent of Individuals Living Below Poverty Line	
City of Oneida	20.6%	\$44,388	19.0%	
Brookfield	16.0%	\$43,750	13.6%	
Cazenovia	48.7%	\$74,464	6.1%	
DeRuyter	18.4%	\$56,563	14.7%	
Eaton	21.2%	\$53,948	9.0%	
Fenner	26.4%	\$66,250	5.0%	
Georgetown	9.0%	\$44,500	16.0%	
Hamilton	50.9%	\$70,000	11.4%	
Lebanon	22.7%	\$61,797	6.1%	
Lenox	20.2%	\$52,313	11.0%	
Lincoln	24.7%	\$64,300	7.6%	
Madison	29.1%	\$51,486	16.0%	
Nelson	30.2%	\$67,000	6.8%	
Smithfield	13.1%	\$65,625	6.4%	
Stockbridge	12.7%	\$52,778	10.2%	
Sullivan	27.0%	\$69,503	8.8%	
Madison County	26.6%	\$61,176	8.5%	

Table 4. Education level and economic indicators in Madison County by township.

Source: Census Bureau, American Fact Finder (2019).3

Economic Stability

Generally, there is an inverse relationship between household income and health outcomes. People with lower incomes tend to have worse health indicators, including higher rates of heart disease, diabetes, and stroke.⁵

Madison County's current economy is based primarily on agriculture, including dairy and meat, processing, hops/beer, and renewable energy.³ The county has significantly more farmland than the total New York State geography (45% vs. 24% farmland).

Overall, 8.5% of Madison County residents live beneath the Federal Poverty Line (FPL). Poverty level differs by age group; more children experience poverty when compared with adults 65 years and above (9.5% versus 8.4%). The median income per household is \$61,176 in Madison County, which is lower than the NYS median of \$71,117 (Table 5, Appendix E).³

According to the 2018 ALICE Report by the United Way, 39% of Madison County households are at or below the criteria for *Asset Limited, Income Constrained, Employed*. This statistic includes both families that are below FPL in addition to families that are above the FPL income, but are below the basic cost of living. The

municipalities in Madison County with households who meet the definition of FPL or ALICE threshold range from 23% to 50% (see Appendix F for full list). In the same year, 45% of households in NYS met the definition of FPL or ALICE.⁶

	Madison County	New York State
Unemployment Rate	3.4%	5.0%
Percent Below Federal Poverty Line		
Children (Under 18)	9.5%	18.7%
Older adults (65+)	8.4%	11.5%
Total	10.8%	13.7%
Median Household Income	\$61,176	\$71,117

Table 5. Measures of Economic Stability among Madison County residents compared with New York State. Source: US Census Bureau (2020).³

As mentioned in the previous section, educational attainment and employment opportunities coincide. In Madison County, 22.2% of people who have less than a high school diploma are below the poverty level.³ Commonly utilized socioeconomic status (SES) indicators are presented in Appendix G according to census tract. Census tracts with the lowest SES indicators are consistently concentrated in the Oneida area and southern portions of the county.

Educational attainment also coincides with median household income. There are considerable differences for median household income between townships in Madison County. Median household income in Cazenovia town (\$74,464) and Hamilton (\$70,000) is almost two times higher than that in Brookfield (\$43,750), City of Oneida (\$44,388) and Georgetown (\$44,500) (Table 4).³ The gap in median income between men and women is smaller compared to NYS (\$0.87 versus \$0.82 to every \$1). In Madison County, men have a median income of \$50,891 versus \$41,647 for women.⁷

The COVID-19 pandemic had a significant impact on economic stability worldwide. Nationally, over 22 million jobs were eliminated or temporarily laid off between January 2020 and April 2020 with the prominent loss in the leisure and hospitality sectors (data excludes the agricultural industry). Madison County reached a record high rate of 16.2% unemployment in April of 2020. By November 2021, the unemployment rate in Madison County was 3.4%, lower than NYS (5.0%) (Table 5).

Social and Community Context

Community and relationships play an important role in both physical and mental well-being. Social capital built by these factors allows sharing of resources, provides support that is protective against stress, and reduces barriers to healthcare access. Social isolation, in contrast, can negatively impact health. Within Madison County, nearly one-third of households have only one occupant. Among those, 13.7% are older adults (65 years and older). Living alone may contribute to social isolation, placing some Madison County residents at higher risk of negative effects.

Civic participation describes an individual's involvement in their community through voting in elections, volunteering or joining group activities. Civic participation can increase social capital, provide a sense of purpose, and promote physical activity (e.g. neighborhood cleanups, tree planting, etc.).⁴ Nearly 80% of Madison County residents over the age of 18 years are registered to vote. Among those registered, 96% are considered active.⁹

On an individual level, two out of three adults in the US adult population have been affected by at least 1

Adverse Childhood Experience (ACE) (Fig 6).¹⁰ ACEs include a broad range of stressful events during childhood development, including abuse, neglect, and household dysfunction. Without adequate support and the development of coping skills, ACEs can lead to poor mental and physical health, engagement in risky behaviors, and excess healthcare expenditures. Exposure is cumulative, with risk of negative outcomes increasing as the number of ACEs experienced



Figure 6. Prevalence of ACEs in US Adult Population. Source: Madison County (2022).

increases. In Madison County, 40.4% of adults report having experienced 2 or more ACEs during their lifetime compared to 35.6% of NYS adults. ACEs present substantial short and long term risks to both individuals and the community.¹⁰

Policy and law making also influence community context. Since the previous Community Health Assessment and Improvement Plan cycle (2019-2021), new laws related to tobacco and marijuana use have been adopted in NYS with significant influence on public health. New laws associated with tobacco use include:

- Raise the minimum age of purchase of tobacco products to 21 years (July 2019)
- End the sale of tobacco and vaping products in pharmacies (May 2020)
- Ban of flavored vapor products (May 2020)
- Increase retailer penalties for tobacco sale violations (July 2020)
- Ban the exterior display of tobacco and vapor product ads near schools (July 2020)
- End price discounts on tobacco and vapor products (July 2020)¹¹

In March of 2021, NYS legalized the use of recreational marijuana for adults 21 years of age and older by signing into law the Marijuana Regulation and Taxation Act (MRTA).¹² Seven townships and three villages in Madison County have opted in to allow dispensaries. Among those communities, five townships and one village permits consumption sites (Appendix H).¹³

Neighborhood and Built Environment

Living conditions, including the quality of an individual's home and the physical environment in which the home is located, affects health outcomes.⁴ The term *housing vulnerability* refers in part to these factors, including dwelling type, rental status, and vacancy or year built.

According the 2020 United States Census, nearly 13% of housing units are vacant in Madison County compared to 9.1% across NYS. Among occupied housing units, 21.5% of residents in Madison County rent compared to 46.5% of NYS residents. Property owners are responsible for maintaining a safe environment and implementing mitigation efforts as needed. As such, residents who rent their homes must rely on the landlords to ensure safe housing.

The majority of housing in Madison County (65%) were built before 1979, with over a third built before 1940.³ Homes built prior to 1979 are more likely to contain hazardous lead paint and in general, older homes require more maintenance.¹⁴ The financial burden of mitigation may cause some residents to live in unsafe or poor housing conditions as a result.

Given the rural nature of Madison County, cars are the main source of transportation. According to the New York State Behavioral Risk Factor Surveillance System (BRFSS), less than one percent of residents used public transportation for their work commute. About 80% of the work population drove alone to work in a car, truck or van. 15

There are 18 state-run recreation land areas, including 13 state forests, 9 boat launch stations on 7 bodies of water, 1 state park, 2 historic sites, and 2 wildlife management areas (Fig 7). There are also 3 county parks which total 230 acres, including Nichols Pond, Oxbow Falls and Delphi Falls. Collectively, there are over 500 miles of trails in the county. Approximately 74% of residents live within reasonable distance to a location where physical activity can be performed,

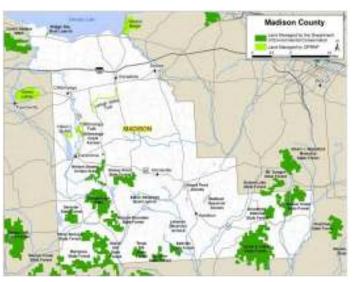


Figure 7. Map of State-Affiliated Recreation Lands and Facilities in Madison County. Source: New York State Department of Environmental Conservation (2022).

including parks and recreational facilities. Individuals with greater access to physical activity are more likely to engage in it and benefit from its positive physical and mental health effects.⁷

Madison County is significantly safer in terms of crimes committed when compared to NYS as a whole. In 2019, the county had a rate of 150.3 per 100,000 for violent crimes such as murder, rape, robbery, and aggravated assault. NYS had a rate of 197.7 per 100,000 in the same year, nearly 30% higher.¹⁵

Healthy neighborhoods and communities incorporate reliable access to sources of food and nutrition. In 2019, a lower proportion of Madison County residents reported that they did not have a reliable source of food than NYS as a whole (9.9% vs. 10.7%). There are 11 full-service grocery stores in Madison County (1.9 per 10,000 residents compared to a rate of 5.2 for NYS). In addition, there are 12 farm and specialty foods stores along with 30 convenience stores in the county. Only 10 locations in Madison County, including grocery and convenience stores, accept WIC (Special Supplemental Nutrition Program for Women, Infants, and Children).

Healthcare Access and Quality

Access to healthcare, health insurance coverage, availability of screening and prevention services, appropriate timeliness of care, and competency of the healthcare workforce ensure the best possible health outcomes for individuals and populations. Barriers to healthcare access contribute not only to poor health outcomes on an individual level, but create health disparities between groups of people.⁴

In the most recent NYS BRFSS, 88.8% of our residents have a regular healthcare provider (11.2% without).¹⁹ In the same report, about 59% of residents indicated going to the dentist within the past year, down from 77% in the previous BRFSS. Among children covered by Medicaid or Child Health Plus insurance, 71% had the recommended number of well-child visits, slightly lower than the state percentage of 74.1%. The proportion of Madison County residents with health insurance has increased in the past 10 years from 86% in 2008 to 95% in 2019.²⁰ Those lacking health insurance or without adequate coverage experience one of the largest barriers to healthcare access (Appendix E).¹⁹

Financial means outside of insurance coverage act as a barrier to receiving health services in Madison County. In 2018, 9.5% of Madison County residents reported that they did not seek care due to financial barriers. Although this percent is slightly less than all state residents (11.3%), it equates to approximately 6,462 individuals not receiving needed healthcare in a given year.¹⁹

There are 28 healthcare facilities in Madison County, including diagnostic and treatment centers, residential health, school-based centers, and hospitals (Table 6). The two hospitals, Oneida Health and Community Memorial, have 101 and 25 beds respectively (Table 7).²¹

Type of Facility	Count
Adult Day Health Care Program (Offsite)	2
Diagnostic and Treatment Center	4
Hospital	2
Hospital Extension Clinic	7
Licensed Home Care Services Agency	1
Primary Care Hospital Extension Clinic	7
Residential Health Care Facility	4
School Based Diagnostic and Treatment Center	1
Federally Qualified Health Center	0
Total	28

Type of Bed	Oneida Health	Community Memorial
Intensive Care Beds	6	0
Maternity Beds	12	0
Medical / Surgical Beds	71	25
Pediatric Beds	12	0
Psychiatric Beds	0	0
Total Beds	101	25

Table 6. The number of healthcare facilities by type in Madison County. Source: NYSDOH Hospital Profiles

Table 7. The number of beds by type available by hospital in Madison County. Source: NYSDOH Hospital Profiles (2022).

The ratio of healthcare providers employed by these facilities to County residents has improved; however, the ratio for NYS remains better. In Madison County, there is one primary care provider for every 1,650 residents. There is one dental care provider for every 2,840 individuals. The ratio is stronger for mental health care providers, at one provider for every 480 residents (Table 8).²² See Table 9 for medical provider count.²²

	Madison County	New York State	#1 NYS County
Primary Care Physicians	1,650:1	1,190:1	700:1 (Nassau)
Dentists	2,840:1	1,170:1	539:1 (New York)
Mental Health Providers	480:1	330:1	111:1 (New York)

Table 8. The ratio of patients to healthcare providers in Madison County, New York State, and county with the most optimal ratio, categorized by primary care, dentistry, and mental health specialties. Source: County Health Rankings & Roadmaps, Robert Wood Johnson Foundation (2022).⁷

Healthcare Providers in Madison County							
Family Me	edicine	Internal M	mal Medicine Pediatrics		Obstetrics and Gynecolo		
MD/DO	NP/PA	MD/DO	NP/PA	MD/DO	NP/PA	MD/DO	NP/PA
57	17	19	4	8	3	9	9
Dentis	stry	Denti	stry	General	Surgery	Endo	ocrinology
General	Specialty	MD/DO	NP/PA	MD/DO	NP/PA	MD/DO	NP/PA
17	1	19	7	21	4	1	0
Psychia	atry	Psycho	logy	Social	Work	Co	unseling
11	11		19		8	14	
Occupation	onal Therapy	r	Physical 1	Therapy		Speech	Therapy
	6		31		3		

Table 9. The number of medical providers in Madison County categorized by type of care. MD=medical doctor, DO=doctor of osteopathy, NP= nurse practitioner, PA=physician assistant. Source: DSRIP Managed Care Provider Network Database (2016).²²

The Social Determinants of Health have a more significant impact on the health and wellness of communities than healthcare services alone.⁴ The following section will review health outcomes by category among Madison County residents.

Distribution of Disease and Illness

According to the 2021 County Health Rankings & Roadmaps, Madison County ranked among the 10 healthiest counties in New York State (NYS) for both length and quality of life. The county falls in the 50th-75th percentile (17th overall) for health factors, which take into account important health behaviors, clinical care use and availability, social and economic factors, and characteristics of the physical environment that impact health.

Most residents report that they are in good, very good or excellent health. Poor/fair health was reported by 16%, equivalent with New York State. Residents report about 3.9 physically unhealthy days per month and 4.8 days of mental health days per month, both slightly higher than New York State estimates.⁷

Life Expectancy & Leading Causes of Death

The life expectancy for Madison County residents is 80.8 years, 9th highest among NYS counties.

In 2019, Madison County had an age-adjusted mortality rate of 857.1 per 100,000, exceeding the New York State rate of 804.0 per 100,000.²³

The leading causes of death in Madison County in 2019 were heart disease, cancer, chronic lower respiratory disease (CLRD), unintentional injury, and cerebrovascular disease (i.e. stroke). Although NYS has the same leading causes of death, death rates per 100,000 population in Madison

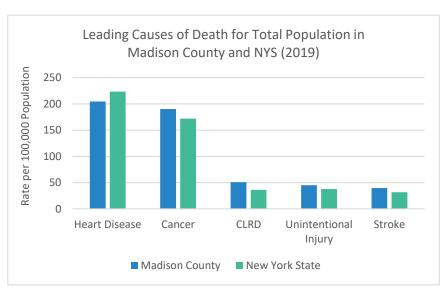


Figure 8. Leading Causes of Death in Madison County and New York State in 2019 (Rate per 100,000 Population). Source: NYSDOH Vital Statistics

County is higher with the exception of heart disease (Fig 8).²³

Premature deaths occurring before 75 years of age account for 5,300 years of potential life lost (YPLL) in Madison County and have fallen below the overall NYS rate for the first time since 2012 (Fig 9).⁷ Cancer and heart disease are consistently the top two causes of premature death among County residents. The remaining top causes vary and differ based on biological sex (Table 10).²⁴ Nearly 41% of deaths in the County occur among individuals under the age of 75.¹⁵

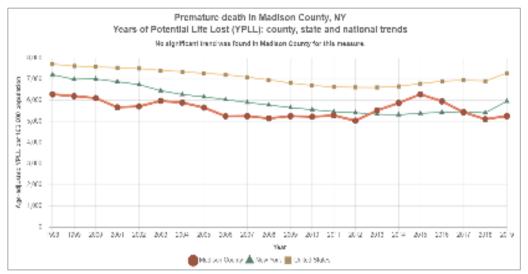


Figure 9. Premature Death in Years of Potential Life Lost (YPLL) for Madison County, New York State, and the United States. Source: County Health Rankings & Roadmaps from the Robert Wood Johnson Foundation.

		Cause #1	Cause #2	Cause #3	Cause #4	Cause #5
2019	Men	Cancer	Heart Disease	Unintentional Injury	CeVD	CLRD
	Women	Cancer	Heart Disease	Unintentional Injury	CLRD	Pneumonia/Influenza
2018	Men	Cancer	Heart Disease	Unintentional Injury	CLRD	Suicide
	Women	Cancer	Heart Disease	Unintentional Injury	CLRD	CeVD
2017	Men	Cancer	Heart Disease	Unintentional Injury	CLRD	Liver Disease
	Women	Cancer	Heart Disease	CLRD	Unintentional Injury	Septicemia
2016	Men	Cancer	Heart Disease	Unintentional Injury	CLRD	Pneumonia/Influenza
	Women	Cancer	Heart Disease	CLRD	Unintentional Injury	CeVD
2015	Men	Cancer	Heart Disease	CLRD	Unintentional Injury	Suicide
	Women	Cancer	Heart Disease	CLRD	Unintentional Injury	Liver Disease

Table 10. Leading Causes of Premature Death (<75 years) in Madison County by Biological Sex (2015-2019).

CLRD: Chronic Lower Respiratory Diseases; CeVD: Cerebrovascular Disease

Source: Table Adapted from NYSDOH Vital Statistics Report²⁴

Burden of Chronic Disease

Chronic diseases typically emerge in middle age after prolonged exposure to unhealthy lifestyle factors, including tobacco use, lack of regular physical activity, excessive alcohol consumption, and poor nutrition. In addition to healthy behaviors, regular health screenings are important to prevent chronic diseases.²⁵

Chronic diseases (cancer, heart disease, chronic lower respiratory disease (CLRD), and cerebrovascular disease) account for four of the five leading causes of death among all Madison County residents. These same conditions also account for the leading causes of premature death before the age of 75.²⁶ As of 2019, 9.6% of Madison County adults had been diagnosed with cardiovascular diseases (heart attack, coronary heart disease, or stroke). Resulting complications accounted for 97.5 hospitalizations per 10,000 population. Cerebrovascular diseases accounted for 18.2 hospitalizations per 10,000 population and a mortality rate of 28.3 deaths per 100,000 residents.¹⁵

Cancer Incidence and Mortality

The incidence of new cancer cases is greater in Madison County than NYS as a whole (480.7 vs. 472.2 per 100,000). The New York State Prevention Agenda tracks incidence and mortality of lung, prostate and breast

cancer specifically; in Madison County, incidence rates are greater than the remainder of New York State.

Mortality rates are greater as well, with the exception of breast cancer.

At both the county and state level, men have a significantly higher incidence rate for all cancers than their female counterparts. Female breast cancer (135.2 per 100,000) has the highest incidence rate of cancers in Madison County, followed by prostate cancer in men (131.3 per 100,000) (Fig 10).²⁷

All-type cancer mortality is also greater in Madison County than NYS as a whole (156.7 vs. 139.6 per 100,000). Lung cancer deaths in Madison County are significantly higher than New York State for both men and women. However, the mortality rate for men in Madison County is greater than their female counterparts (52.0 vs 40.2 per 100,000).²⁷

Hypertension, High Cholesterol & Diabetes

Hypertension, high cholesterol, and diabetes represent and contribute to the development of chronic diseases.^{28,29}

Over 30% of adults in Madison County have been diagnosed with hypertension (high blood pressure) by a medical professional. Proper management and prevention of hypertension plays a key role in diminishing risk of impactful cardiovascular and renal diseases, as well as stroke and heart attack; nearly 81% of those who have been diagnosed report using appropriate

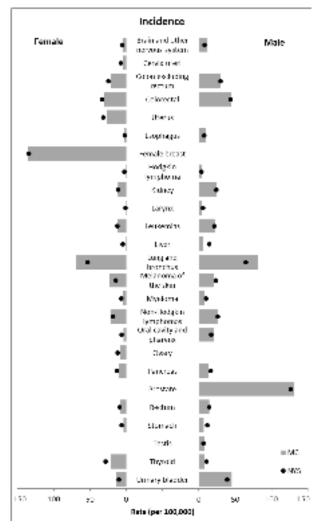


Figure 10. Cancer Incidence for Madison County by Biological Sex, 2014-2018.

Source: New York State DOH Cancer Data (2020).

medications to manage their diagnosis. ^{19,30} This is above the proportion of state adults and the NYS Prevention Agenda 2024 goal. ²⁰

About 32.6% of adults in NYS have high cholesterol levels.¹⁹ Madison County's percentage is slightly higher than this, with an estimated 24,403 individuals (34.4%) exhibiting elevated cholesterol levels. The prevalence of high cholesterol varies by township and census tract, with the lowest rates estimated in Cazenovia (27.5%) and Hamilton (19.8%).²⁹

The prevalence of adults diagnosed with diabetes is similar in Madison County to New York State as a whole (11% vs. 10%, respectively).⁷ New York State Community Health Indicators Reports indicate that the age adjusted percentage of adults with physician diagnosed diabetes may be as low as 8.6%.¹⁵ The 2018 BRFSS estimates that over one-half of county residents have received testing in the past 3 years to determine if they are diabetic or prediabetic.¹⁹ The number who were tested for high blood sugar in the past 3 years is even greater at 67.8%.²⁰

Asthma

Asthma is a chronic condition that affects lung function by causing repeated episodes of wheezing, coughing, chest tightness, and shortness of breath.³¹ Nearly 16% of Madison County adults have asthma, higher than the NYS prevalence of 10.1%. Among Medicaid and Child Health Plus recipients, 71.8% use medication to manage asthma symptoms appropriately compared to only 64.4% of their NYS counterparts.²⁰ In addition, the rates of hospitalizations for asthma are significantly lower for Madison County residents of all age groups than NYS (Appendix I).³²

Education is an important component in the management of chronic disease conditions. Compared to 10.2% of NYS, only 2.6% of adults in Madison County with a chronic condition or disease (e.g. diabetes, arthritis, asthma, cancer, cardiovascular disease, chronic kidney disease) have taken a class to learn how to manage their condition.²⁰

Obesity

The percentage of adults who meet criteria for obesity (body mass index ≥ 30 kg/m²) in Madison County jumped from 28% in 2016 to 37.2% in 2018, and remains higher than NYS (27.6% excluding New York City). A greater proportion of low income adults are obese (38.1%).

Among youth aged 0-17 years, 20.3% meet the body mass index for obesity. The percentage has fluctuated over the years with significant reductions between 2011-2013 and 2014-2016 (Fig 11).^{20,7} Those who are receive assistance from the WIC program have lower levels of obesity than the general population (13.9%).

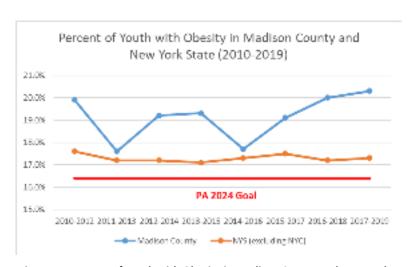


Figure 11. Percent of Youth with Obesity in Madison County and New York State compared to the NYSODH Prevention Agenda 2024 Goal, 2010-2019 Source: NYSDOH Prevention Agenda Dashboard

Oral Health

Poor oral health has been associated with the development of chronic conditions such as cardiovascular disease and diabetes.³³ Post- preventative oral health indicators are significantly worse in Madison County compared with the Central New York region and NYS overall.

In 2012, nearly 75% of third graders were reported to have a history of tooth decay, including dental cavities.¹⁵ This is the highest proportion in New York State. The county also demonstrates a high rate of outpatient visits among youth related to tooth decay, at 209.6 per 10,000 children between the age of 3 and 5 years.¹⁵

Data on oral health outcomes are significantly more limited for the adult population. Age-adjusted rates of oral and pharyngeal cancer are greater within Madison County compared to New York State (13.2 vs. 11.4 per 100,000) (Appendix I). Despite this, the age-adjusted mortality rate is only slightly greater than NYS (2.3 per 100,000 vs. 2.2 per 100,000).¹⁵

Protective & Risk Factors for Chronic Disease

Healthy Eating and Physical Activity

Good nutrition and adequate physical activity have been demonstrated to decrease the likelihood of developing chronic diseases.²⁵

A healthy diet supports good physical health by incorporating fruits, vegetables, whole grains, fat-free or low-fat milk and milk products, and a variety of protein sources. They should be low in added sugars, sodium, saturated fats, trans fats, and cholesterol.³⁴ The consumption of one or more sugary drinks per day is considered an indicator of unhealthy diet; a slightly higher percent of low-income Madison County residents consume at least one sugary beverage per day compared to New York State (33.5% vs. 31.0%).²⁰ In opposition to this, a greater proportion of Madison County adults consume at least one fruit or vegetable daily (76.1%) compared to NYS (71.9%).¹⁵ Access to affordable, sufficient, and nutritious food that meets dietary needs and preferences, or food security, is another important aspect of healthy eating behaviors.³⁵ Among low-income adults, 67.3% indicate perceived food security compared with 55.8% of New York State.¹⁵

Adequate levels of physical activity also improve health, reduce the burden of chronic diseases, and prevent early death.³⁶ Madison County residents perform better than NYS and the Prevention Agenda Goal on physical activity indicators for both youth and adults. Nearly half (45%) of the 2018 Madison TAP Survey respondents (grades 7-12) "exercise for fun and fitness" at least two hours per week, which is more than twice the NYS proportion (19.2%).³⁷ Greater than 80% of adults also participate in leisure-time physical activity. This extends to adults with disabilities residing in Madison County (80.3% vs. 76.2%). Lastly, the percentage of older adults who engage in leisure-time physical activity is higher than NYS (73.5% vs 68.9%), but slightly lower than the NYS Prevention Agenda goal of 75.9% (Appendix I).²⁰

Tobacco Use and Vaping

Tobacco use is recognized as the leading cause of preventable death in the United States.²⁵ The prevalence of smoking in Madison County remains significantly higher than NYS with 21.0% of adults identified as current smokers compared to only 12.8% of NYS adults (Fig 12). More specifically, the prevalence among adults with

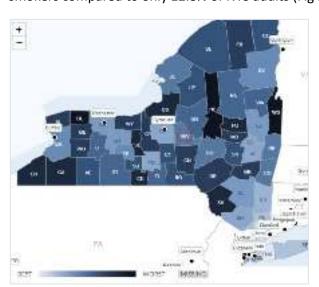


Figure 12. Smoking prevalence for adults in New York State by county. Source: County Health Rankings (2021).

income less than \$25,000 annually increased from 23.7% to 34.7% and remains higher than the NYS counterparts (20.4%). According to the 2018 Madison County Teen Assessment Project (TAP) conducted by the Madison County Youth Bureau in partnership with Colgate University, only 10.9% of students had ever tried a cigarette, down from 15.7% in the previous assessment. In comparison, 4.2% of high school students nationwide reported smoking a cigarette on at least one day during the past month when responding to the 2019 Youth Risk Behavior Surveillance System (YRBSS) Questionnaire.

E-cigarettes are the most commonly used tobacco product among youth. They come in a variety of shapes and sizes and are sometimes called "e-cigs," "vapes," "e-hookahs," "vape pens," and "electronic nicotine delivery systems." The 2018 TAP Report revealed 43.3% of high

school students in Madison County have tried e-cigarettes, slightly higher than the state average (42.7%).^{37,38} The sometimes flavored aerosol produced by heating a liquid containing nicotine or cannabis is inhaled and may cause serious health effects. These products are also used by adults. A survey conducted by Joel LaLone

Consulting on behalf of the Madison County Council on Alcoholism & Substance Abuse, Inc. (BRiDGES) demonstrated an increase in e-cigarette use among Madison County adults from 5% in 2018 to 12% in 2021.³⁹

There are several health concerns around the use of vaping products. As of 2020, there were 254 reported cases in NYS and 2,807 nationwide hospitalized for e-cigarette, or vaping, product use-associated lung injury (EVALI). Although still under investigation, there has been a strong link between usage of vaping devices containing tetrahydrocannabinol (THC) – cannabis that contains Vitamin E acetate – and EVALI. In addition, most vaping devices contain nicotine, which is addictive and can damage brain development in youth. 41

Preventive Care

Access to routine health care and adequate insurance coverage are strong predictors of health status and health outcomes.⁴ Please see the *Healthcare Access and Quality* section above (pages 13-14) or Appendix E for more information and County statistics.

Cancer Screening

Cancer screening rates in Madison County generally exceed that of New York State. 84.3% of adults aged 50-64 years received a colorectal cancer screening, surpassing NYS measures and the NYS Prevention Agenda Goal of 66.3%. This represents an increase from 2016 measurements (76.8%). A greater proportion of females also received breast and cervical cancer screenings than across NYS. Over 90% of women recommended to receive breast cancer screenings do so. Contributing to this, between October 1, 2017 and December 31, 2019, 71.4% of women aged 50-74 had a mammogram. Nearly 90% of women between the ages of 21-65 years received recommended cervical cancer screenings, as well (Appendix I). ^{15,20}

Dental Visits and Fluoridation

Regular dental visits are important for prevention of oral conditions (tooth decay or cavities, tooth loss, gum disease) and early detection of cancers of the mouth.⁴² Among adults in Madison County, 59% reported visiting the dentist within the past year.¹⁵ This is lower than the NYS average of nearly 70% and the CNY average of 70.5%.

Among county residents with Medicaid insurance, only 24.1% had a preventative dentist visit between 2018 and 2020, similar to both the state and region (26.9% and 24.6%). In the same years, only 36% of Madison County youth (ages 2-20 years) with Medicaid insurance saw the dentist for a preventative visit. Preventative oral care is further augmented through the use of fluoridated water supplies. Significantly fewer Madison County residents are serviced by fluoridated water systems than the general New York State population (in 22.4% vs. 71.1%), leaving county residents more vulnerable to the softening of tooth enamel and development of dental caries (cavities).⁴³

Mental Health, Well-Being, and Substance Use Disorders

Mental and physical health are interconnected. Positive mental health encompasses physical, emotional, social, and psychological wellbeing, enabling individuals to be productive, care for themselves, engage in health seeking behaviors, adapt to changes and adversity, and maintain fulfilling relationships with others. Poor mental health may include struggles with stress, depression, and emotions.

History of trauma (including Adverse Childhood Experiences), chronic medical conditions, biological factors, and substance use can contribute to poor mental health. There is also evidence that certain social determinants of health impact mental health. For example, individuals with lower education and income are disproportionately affected by mental health disorders, specifically depression.⁴⁴

In 2018, Madison County adults reported an average of 4.6 bad mental health days in a month; an increase from the previous year and higher than the state average of 3.1 days. Nearly 17% of County residents reported that they experienced frequent mental distress, occurring on 14 or more days in a given month. Among high school- aged youth, 42.0% reported having felt sad or hopeless in the past month, which is greater than the 35.0% statewide.

Mental Illness

Poor mental health does not equate to having a mental illness. Mental illness refers to a broad group of mental health disorders characterized by alterations in thinking, mood, and behavior. More than half of adults will be

diagnosed with a mental illness or disorder during their lifetime- the most common include anxiety, depression, and posttraumatic stress disorder (PTSD).⁴⁵

The estimated age-adjusted prevalence of depression among Madison County adults is 20.5%, slightly higher than the average New York State age-adjusted prevalence of 20.0%.²⁹ The New York State Prevention Agenda reports that 6.6% of New York State residents have experienced major depressive episodes during the past year.²⁰

Between 2019 and 2021, the Madison County Mental Health Department

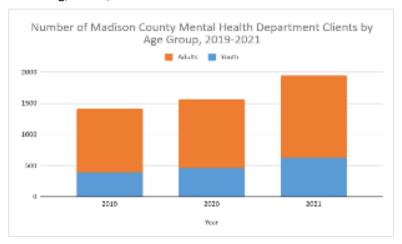


Figure 13. Unique Clients of Madison County Mental Health by Age Group (2019-2021). Source: Madison County Mental Health.

experienced a 38% increase in the number of unique clients. There were 60% more youth alone served than in previous years (Fig 13). In 2021, the Department saw a 46% increase in the number of visits conducted, for a total of over 23,000. The Department of Mental Health expanded to meet additional need through hiring of additional staff and in part through emergency approval for telehealth services.

Self-Inflicted Injury and Suicide

Individual, relational, community, and societal factors, including poor mental and physical health, can increase the likelihood of self-inflicted injury and suicide.⁴⁶

Self-inflicted injury, or self-harm, refers to intentional harm of a person's own body without suicidal intent and for purposes not culturally sanctioned.⁴⁷ ED visits for self-harm in NYS increased by 42% from 2001 to 2016. In 2018, the rate of ED visits for self-harm was higher among Madison County residents (87.5 per 100,000) compared to NYS residents (65.7 per 100,000).

Although the ED visit rate was higher in Madison County, the hospitalization rate for self-harm was similar to that of all NYS residents (46.5 versus 49.5 per 100,000 respectively).⁴⁸ Please see Appendix J for information by age group.

Hospitals in NYS (excluding those affiliated with Veteran Affairs) enter data into the Electronic Syndromic Surveillance System (ESSS), providing insight into trends in hospital care for self-harm and suicide-related complaints and conditions. Following a decrease from 2019-2020, hospitalizations related to self-harm and suicide increased in Madison County, the Central New York Region, and across New York State during 2021.

These rates are the highest levels of hospitalizations in the past four years (Table 11).

	Madison County Hospitals	CNY Hospitals	NYS Hospitals
2018	54.5	323.7	313.7
2019	95.3	457.0	395.3
2020	84.4	425.3	326.6
2021	100.8	492.3	333.9

Table 11. The rate of hospitalizations for self-harm and suicide per 100,000 population by location of hospitals (2018-2021). Source: Health Commerce System Electronic Syndromic Surveillance System Data Export (2018-2021).

Specific risk factors for suicide include age, biological sex, sexual and gender identity, employment type, history of trauma. Historically, women have had a higher rate of self-harm and attempted suicide, while men have higher rate of death by suicide. Individuals living in rural communities also have heightened risk, as a result of increase social isolation and fewer resources.

The suicide mortality rate (deaths due to suicide per 100,000 population) has fluctuated in Madison County. 2017-2019 measures indicate an increase from previous years (2016-2018) to 9.6 per 100,000 population (Fig 14).²⁰ Suicide deaths in Madison County are greatest among those aged 20-34 years (Appendix J).⁴⁸ Initial studies indicate that the rate of depression and suicidal ideation, particularly among youth, increased during the COVID-19 pandemic, foreshadowing a rise in suicide deaths in the coming years.^{52,53}

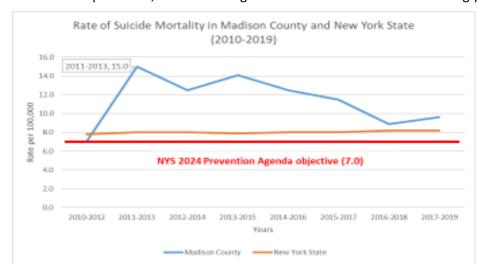


Figure 14. The rate of deaths by suicide per 100,000 residents in Madison County and New York State compared to NYS 2024 Prevention Agenda (2010 -2019).

Source: NYSDOH Prevention Agenda Dashboard.

Madison County Mental Health 2021 Assessment

In response to the COVID-19 pandemic, Madison County Chairman John M. Becker organized the Madison County Mental Health Task Force to assess COVID-19's impact on the mental wellbeing of County residents.⁵⁴

The COVID-19 pandemic created many conditions that significantly impacted the mental health of community members. Social isolation, job loss, school closures, family loss or illness, economic downturn, and reduced access to



Source: Madison County (2021).

healthcare are predicted to contribute to negative outcomes.⁵⁵ The pandemic has also created new barriers for people with previously diagnosed mental and substance use disorders. Major themes identified in the Mental Health Task Force Assessment are presented in Figure 15.

For more information, please visit the website: https://www.madisoncounty.ny.gov/2783/Mental-Health-Task-Force.

- Students, parents, and teachers all report a significant increase in stress experienced by students, and a need for additional mental health/wellbeing supports.
- ❖ Populations with limited access to services (seniors with mobility challenges, people in rural regions with limited transportation options, etc.) reported a desire for enhanced ways to access supports.
- Social determinants of health (social connection, income) have a significant impact on mental health.

Figure 15. Major themes identified by the Madison County Mental Health Task Force Assessment (2021). Source: Madison County.

Substance Use & Substance Use Disorders

It is estimated that 12.0% of New York State residents over the age of 12 experience substance abuse or addiction each year. This equates to approximately 1.77 million adults and 156,000 youth aged 12-17 years who have a substance abuse problem. Substance use has the potential to cause significant mental, physical, and social effects, including decreased quality of life and early death.

The most frequently used substance in the United States is alcohol. Other substances such as marijuana and opioids also carry risk for misuse and addiction.⁵⁸ In addition to short term dangers and effects of using substances, long term use can cause individuals to be unable to maintain their health or function in their normal daily activities and roles.⁵⁹ Substance use disorder (SUD) can also develop and is distinct from substance misuse. SUD emerges when an individual compulsively uses a substance despite negative impacts on their physical, mental, and social functioning. Those with SUD exhibit physical dependence on the substance and show signs of withdrawal when use is stopped.⁶⁰

Alcohol

Alcohol misuse is a pattern of drinking that negatively impacts a person's health, interpersonal relationships, and/or ability to work.⁶¹ Excessive alcohol use describes behaviors including binge drinking, heavy drinking, and any alcohol use by people under 21 years or who are pregnant.

The New York State Prevention Agenda tracks the age-adjusted percentage of adults who engage in binge drinking, which is the most common pattern of excessive alcohol use.^a About one in four adults (24.2%) in Madison County report binge drinking compared to 15.7% of NYS adults (Fig 16).²⁰ Nationally, binge drinking is most common among those between the ages of 18-34, and significantly increases an individual's risk of developing alcohol use disorder.⁶²



Figure 16. Prevalence of binge drinking among Madison County adults.

Source: Madison County.

Alcohol misuse also affects youth population. Among survey respondents (7th-12th grade students) to the Madison County TAP survey 42% report having consumed alcohol, up from 36% in 2014. In addition, 10%

^a Adult binge drinking is defined as the consumption of 5 or more drinks on a single occasion for males and 4 or more drinks for females.

reported binge drinking in the 30 days prior to the survey. ^{b,36} Consistent with national averages, Madison County youth typically have their first drinks of alcohol between 13 and 16 years of age. Most youth reported that they were aware of the harm potentially caused by alcohol consumption, but nearly 20% felt that no help was offered by their school or community for alcohol and drug abuse concerns.³⁷

Excessive drinking can have a significant impact on individuals and communities overall. Alcohol-related deaths are most often causes by chronic conditions, such as alcoholic liver disease or liver cirrhosis, alcohol-induced pancreatitis, cancer, heart disease and stroke, and hypertension. In addition, alcohol-related deaths may be caused by acute reasons like poisonings, suicide, homicide, and motor vehicle crashes. In 2020, 14% of motor vehicle and driving deaths in Madison County were considered to have alcohol involved, lower than the 20% estimated for New York State. However, the rate of alcohol-related motor vehicle injuries and deaths increased to 72.9 per 100,000 in 2021, remaining higher than the state (Fig 17). 15,63

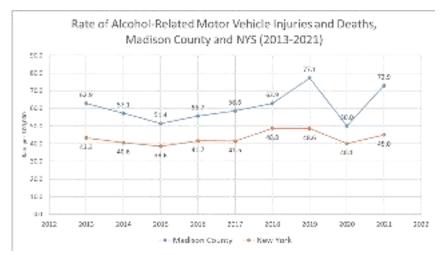


Figure 17. Rate of alcohol-related motor vehicle injuries and deaths in Madison County and NYS (2013-2021). Source: New York State Department of Motor Vehicles Crash Data.

Marijuana

Marijuana is a mixture of dried plant materials from the *Cannabis sativa* plant. Cannabis contains more than 100 compounds; the most commonly known are psychoactive tetrahydrocannabinol (THC), known for its mindaltering effects, and cannabidiol (CBD), which is associated with medical use and does not cause impairment. While there are known benefits to medicinal marijuana, recent studies have shown that recreational use of marijuana containing THC may have a negative impact on brain development, lung function, and mental health. There are also risks related to poisoning and driving under the influence.⁶⁴

New York State legalized the medicinal use of cannabis in July 2014. Recreational use was legalized in early 2021. PRIDGES contracted Joel LaLone Consulting to conduct a study on marijuana use and perceptions among adults in Madison County in 2021. Of survey respondents, 13.9% indicated that they use marijuana recreationally, while 12.0% said they use marijuana for recreational and medicinal purposes. Among youth, the 2018 TAP Report captured that approximately 32% of students in grades 7-12 have tried marijuana. This is consistent with 2014 estimates. Approximately 17% of TAP respondents reported using marijuana in the past 30 days. Approximately 17% of TAP respondents reported using marijuana in the past 30 days.

Given the recent legalization of recreational marijuana, it is expected that upcoming surveys and data will reflect changes in use and availability. This is concerning in light of existing data that demonstrate marijuana's impact. The Upstate Poison Control Center has reported a four-fold increase in poison calls related to child

^b Youth binge drinking is defined as the consumption of five or more drinks on a single occasion

consumption of marijuana edibles since 2019.⁶⁶ Hospitalizations related to marijuana have also increased in Madison County, Central New York, and across NYS. Rates have nearly doubled year-over-year in Madison County since data collection began (Table 12).

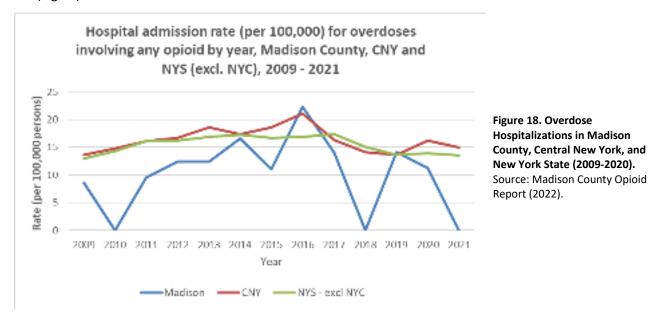
	Madison County Hospitals	CNY Hospitals	NYS Hospitals
2018*	N/A	N/A	N/A
2019	111	2,391	18,745
2020	264	2,643	19,244
2021	479	5,696	26,613

Table 12. The number of hospitalizations related to cannabis in Madison County, Central New York, and New York State hospitals (2018-2021). Source: Health Commerce System Electronic Syndromic Surveillance System Data Export (2018-2021).
*Data collection began in 2019

Opioids

Beginning in the late 1990s, the United States has seen a rise in overdose deaths from opioids, including prescription pain medications (oxycodone, hydrocodone), illicit heroin, and the increasingly common synthetic opioid fentanyl.⁶⁷

In Madison County, emergency department visits due to opioid-related overdoses are lower than the general New York State population and the New York State Prevention Agenda Goal. Hospital admissions appear to have stabilized between 2019 and 2020, and are also below the measures for the Central New York region and NYS (Fig 18).



The rate of overdose deaths involving any opioids is 18.4 per 100,000 population (Fig 19).⁶⁷ It is expected that these rates will continue to increase as the COVID-19 pandemic continues to affect access to prevention services and treatment resources.

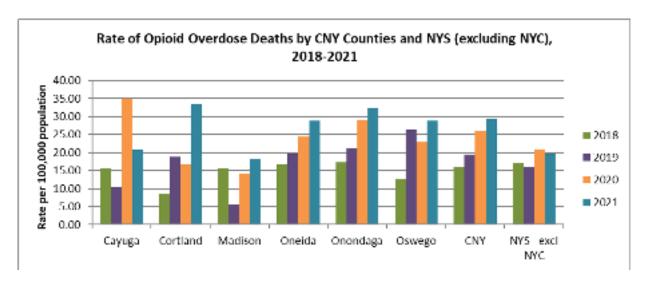


Figure 19. Rate of Opioid overdose deaths by Central New York County and NYS (excluding NYC) (2018-2021). Source: New York State County Opioid Quarterly Report for New York State Counties (2022)

The administration of naloxone (Narcan®) is a key component of reducing opioid overdose deaths. The number of reported naloxone administrations has increased each year since 2019, with the greatest expansion among doses administered by registered community opioid overdose programs (COOPs) (Fig 20). COOPs allow local organizations to train community members, other para professionals, professionals, clients or their family members on how to recognize, respond, and give naloxone in an event of an overdose. Emergency medical services (EMS) are consistently responsible for the largest proportion of naloxone administered.

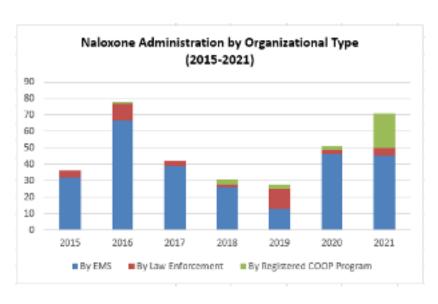


Figure 20. Naloxone administrations by group type (2015-2021). Source: Madison County Opioids Report (2022).

Despite these encouraging statistics, opioid prescriptions are written at a much higher rate in Madison County than in NYS as a whole (433.9 vs. 270.7 per 100,000).²⁰ There has also been a downward trend in admissions to OASAS-certified substance use disorder treatment programs among Madison County residents, remaining below NYS (excluding NYC) in 2020 (433.0 versus 541.5 per 100,000).⁶⁸

Healthy and Safe Environments

Vector, Waterborne and Foodborne Illness

Vector-borne, waterborne and foodborne illness have the potential to cause significant negative health effects within a population.

In 2018, Madison County reported lower or roughly equivalent rates of foodborne illnesses compared to NYS. In terms of waterborne diseases, there was a substantial increase in the rate of new Giardiasis cases, from 5.6 to 13.2 per 100,000 (Appendix K).

The average rate of vector-borne Lyme disease is higher in Madison County than New York State (excluding NYC) (46.1 vs 34.9 per 100,000 respectively) (Appendix K).⁶⁹ Lyme disease is the most common vector-borne disease in the United States and does not currently have a vaccine to prevent illness.⁷⁰



Source: Shutterstock (2022).

Mosquitos are a common vector for illnesses including Eastern Equine

Encephalitis (EEE), West Nile Virus (WNV), and malaria. Other mosquito-borne diseases are transmitted less commonly in the Northern hemisphere, such as Zika virus, Chikungunya virus, and dengue fever. The MCDOH mosquito surveillance program collects mosquitos for testing during summer months and provides outreach and education to minimize exposure. No human cases of EEE or WNV were reported during the 2021 season; however, 3 mosquito pools tested positive for EEE and there was a confirmed case among animals. One animal case of WNV was reported in 2020.

Outdoor Air Quality

Air quality also contributes to health outcomes among residents. Between 2001 and 2011, Madison County averaged 5.8 days per year above National Ambient Air Quality Standard (NAAQS).³² NYSDOH no longer collects data of NAAQS in Madison County.

Healthy Homes

As described in the **Neighborhood and Built Environment** section, healthy homes play an important role in one's health. Mitigation measures can significantly reduce the negative health impacts of an unhealthy home environment when properly implemented.

The age of many housing units in Madison County places residents at greater risk for lead exposure compared to those who live in areas where most housing was constructed after 1979. The rate of children with newly identified elevated blood lead levels (EBLL) was greater in Madison County (5.1 per 1,000 children tested) than in New York State (3.8 per 1,000 children tested). In the past decade, the majority (37.5%) of high BLL cases live in the 13421 (City of Oneida) zip code, followed by 13032 (Canastota, 11.3%) and 13409 (Munnsville, 7.5%).

Madison County homes also fall within a naturally-occurring radon belt. Radon is the leading cause of lung cancer among non-smokers and lung cancers caused by radon gas cause an estimated 15,000 to 22,000 deaths per year nationwide. Risk of health effects from radon increase with the level and length of exposure. Each year, approximately 50 homes are tested for radon in Madison County (2015-2019). The results had an average of 5.6 pCi/L with a maximum value of 58.9 pCi/L. Among homes tested, nearly 38% demonstrated high levels of

radon (>= 4 pCi/L). This is significantly higher than the percent of NYS homes tested with high radon levels (28%).³²

Healthy Workplace

Individuals who maintain full time employment invest a significant amount of time, energy, and mental resources into their jobs. They spend more than one-third of each day, on average five days per week, in the workplace environment. Workplaces therefore become a vital contributor to individual and population wellness. Implementation of workplace health programs can directly and indirectly lower costs, including insurance premiums and lost productivity due to absenteeism.⁷²

There is an increasing trend in work-related hospitalizations among employees (16 years and higher) in both NYS and Madison County. The average rate of workplace-related hospitalizations in Madison County 2019-2021 was 206.2 per 100,000 residents. This is greater than the rate for both the CNY region (186.6 per 100,000) and NYS (145.8 per 100,000).

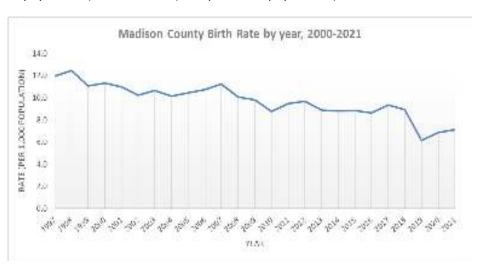
The National Institute for Occupational Safety and Health (NIOSH) and NYS Health Department also collect information on elevated blood lead levels among employed adults over the age of 16 years. This is used to estimate recent external exposures to lead, including within the workplace.⁷³ The rate of elevated blood lead levels among employees in Madison County has decreased in the past few years. Compared to NYS, Madison County also had lower elevated blood levels per 100,000 employed persons 16 years or older (16.8 vs 11.8 per 100,000 respectively) (Appendix K).

Notably, the COVID-19 pandemic triggered many changes in workplace environments, including increased flexibility of work schedules and locations and improved employee benefits. A large number of individuals also reconsidered their employment and career paths, changing overall characteristics of the workforce. Further research and information is required to understand the impact of these changes on the overall health of the workforce.⁷⁴

Health of Women, Infants, and Children

Over the past twenty years, the birth rate in Madison County has decreased. There have been brief periods of rebound, including a 14.5% increase from 2019 to 2021 (Fig 21). Despite this, the rate remains lower than the most recent state (11.5 per 1,000 population) and national (11.4 per 1,000 population) birth rates.

Figure 21. The number of infants born per 1,000 population in Madison County by year (2000-2021). Source: Madison County Birth Records. Source: Madison County Department of Health Internal Data (2022).



Several maternal and child health indicators can be used to evaluate health outcomes in this population. Madison County had significantly better rates for in-hospital exclusive breast feeding (65.6% vs. 47.1%) and adolescent pregnancy (6.0 vs. 11.4 per 1,000 live births), compared to New York State (excluding NYC). Although in-hospital breastfeeding rates are greater than across NYS, the percentage of WIC enrollees who are breastfed at six months of age was significantly lower in Madison County (21.5% vs 41.0%). The proportion of births considered to be preterm (9.8% in 2021) has historically been higher than NYS and the NYS Prevention Agenda Goal of 8.3% (Fig 22). See appendix L for more information.

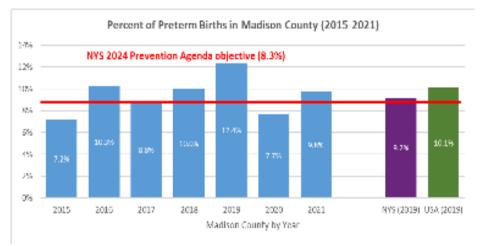


Figure 22. Percent of preterm births (<37 gestational weeks) by year in Madison County, New York State and the United States (2015-2021).
Source: Madison County Annual Birth Report (2022).

The maternal mortality also remains low in Madison County at 0.0 deaths per 100,000 population (18.1 per 100,000 population in NYS). The infant mortality rate in Madison County is 1.6 per 1,000 live births, substantially lower than the NYS rate of 4.3.

Substance Use in Pregnancy

Substance use during pregnancy has a number of negative maternal and neonatal outcomes including miscarriage, still birth, preterm birth, emergence of developmental delays, and poor newborn and infant health.⁷⁵ Substances causing these impacts may include tobacco, cannabis, alcohol, and other illicit drugs. Substance use during pregnancy is also associated with other health indicators including frequent mental distress and not having a regular healthcare provider.⁷⁶

In 2018, 15.2% of pregnant women in Madison County reported smoking during their pregnancy. This is greater than the 7.9% that reported across NYS as a whole. ¹⁹ Although local data are not currently available, 4.2% of pregnant women in NYS used cannabis during pregnancy (Fig 23).

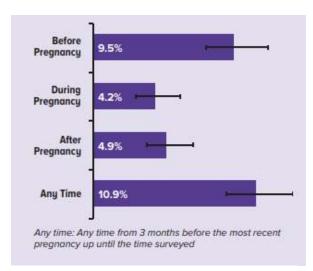


Figure 23. Prevalence of cannabis use around the time of pregnancy in New York State. Source: PRAMS.

Neonatal Withdrawal Syndrome

Neonatal abstinence syndrome, more commonly referred to as neonatal withdrawal syndrome, is a group of clinical symptoms that are caused by infant withdrawal from intrauterine drug and substance exposures. Rates of NAS have decreased in Madison County, although they remain greater than measures for NYS (Fig 24).²⁰

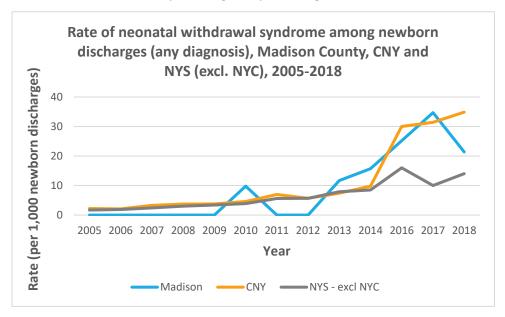


Figure 24. Rate of infants born with neonatal withdrawal symptom and/or affected by maternal use of drugs of addiction in Madison County, CNY region and New York State, rate per 1,000 newborn discharges (2005-2018). Source: New York State Prevention Agenda Dashboard²⁵

Communicable Disease

The Madison County Department of Health (MCDOH) conducts surveillance of communicable diseases, including those mandated under the New York State Sanitary Code (10NYCRR 2.10). The most common of these reported in Madison County include Hepatitis, Campylobacter, Lyme, and Salmonella (see Appendix M for a full list).

Chronic Hepatitis C and Lyme disease made up the largest proportion of non-gastrointestinal communicable diseases reported in 2021 (Fig 25). Hepatitis C rates in the County were greater than NYS rates (3.8 vs 3.0 per 100,000). Vector-, water-, and foodborne illnesses such as campylobacter, salmonella, cryptosporidiosis and Giardiasis were addressed in the *Healthy and Safe Environments* section above (see Appendix K).

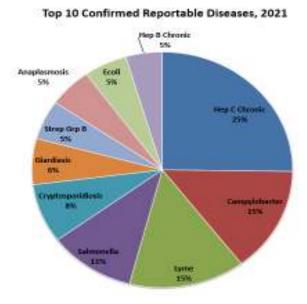


Figure 25. Top 10 Confirmed Reportable Diseases (2021). Source: MCDOH Surveillance.

Sexually Transmitted Infections (STIs)

Sexually transmitted infections (STIs) are a subset of communicable diseases that spread from person to person through sexual contact. Untreated STIs can cause infertility, pregnancy complications, and some cancers.⁷⁶

Nationally, Chlamydia is the most commonly reported bacterial sexually transmitted disease and is often used as an indicator of STI transmission. Madison County's Chlamydia rate has declined since 2019, reaching 169.5 per 100,000 (half the NYS rate) in 2021 (Fig 26) (Appendix N).⁶⁹ The decrease in new cases may be attributed to global and local causes. Nationally, there was a decline in health seeking behavior, including STI screening, during the global COVID-19 pandemic.⁷⁷ Additionally, the Planned Parenthood site located in the City of Oneida permanently closed in the spring of 2020. While a rise in cases is expected along with the return to normal activity, the impact of losing a free test site has yet to be determined.

In 2021, Chlamydia represented 72% of STI cases reported to MCDOH. Gonorrhea (20%) and Syphilis (8%) comprised the remaining reports. Most STI cases were among females, and were concentrated in the townships of Canastota (14.4%), Chittenango (13.7%), Morrisville (11.8%), and Oneida (15.7%). The median age of diagnosed individuals was 26 years of age. Most cases occurred within the 15-34 age group.

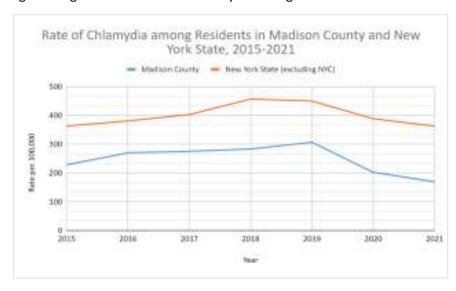


Figure 26. Rate of Chlamydia per 100,000 residents among Madison County Residents by year (2015-2021). Source: New York State Communicable Disease Electronic Surveillance System.

COVID-19

The first case of COVID-19 was identified in Madison County in March 2020. Throughout the remainder of the year, there were 2,337 lab-confirmed and 55 presumptive cases among Madison County residents. 6.6% of

cases were hospitalized and there were 77 deaths. Long-term care facilities (LTCF) and group homes were disproportionately affected due to their residential setting and service of high-risk individuals.

In 2021, there were 6,954 lab-confirmed and 34 presumptive cases among Madison County residents (Table 13). Of all cases, 3.6% were hospitalized, with 37 deaths (less

	2020	2021
0-4	2.0%	4.4%
5-17	12.7%	17,8%
18-24	15.1%	12.7%
25-34	13.8%	14.9%
35-44	22.5%	14.0%
45-59	7.7%	20.4%
60-74	16.8%	12.1%
75+	9.3%	3.7%

Table 13. Percent of New Cases (Lab-Confirmed and Presumptive) by Age Group in 2020 and 2021. Source: MCDOH Internal Tracking. z

than 1% of new cases). The Omicron variant emerged in late 2021, causing a significant increase in illness during the winter months.

COVID-19 vaccines were authorized for emergency use at the end of 2020. Vaccination significantly reduced hospitalizations and deaths, particularly among high-risk groups (i.e. older adults, people with immunocompromised conditions, pregnant women). Administration was prioritized based on risk level; all individuals age 16 and up became eligible on April 6, 2021. By May 5, 2021, 62.2% of the eligible population (ages 16+) in Madison County had received at least one dose of the COVID-19 vaccine. As of October 2022, 72.1% of the Madison County has completed a primary vaccination series. Booster vaccinations became widely available in November of 2021. As of October 2022, 60.5% of the eligible population in Madison County had received a booster dose (43.1% of the total population).

Immunization Rates

Immunizations are a safe, effective way to reduce the risk of disease transmission and development of severe illness among children as well as adults.

In 2020, 72.6% of children between 24 and 35 months had received all age-appropriate immunizations. In addition, 99.7% of school-aged children have completed the age-appropriate immunizations. The percent of 13-year-olds in Madison County with a completed series of the human papillomavirus (HPV) vaccine has increased (31.8%), but lags NYS (39.8%) and the NYS Prevention Agenda goal (37.4%) (Table 14).²⁰

Vaccination of older adults (ages 65 and over) can help to prevent negative health effects related to complications of pneumococcal infections and influenza (flu).^{80,81} In Madison County, 85.9% of older adults received the recommended pneumococcal vaccination in 2018 – second highest county in New York State (Table 14).

	Madison County	New York State	NYS Prevention Agenda Goal
Age-Appropriate Vaccines			
Percent of Children (24-35 months)	72.6%	66.1%	70.5%
Percent of Children (grades K-12)	99.7%	94.4%	23
Human Papillomavirus [HPV] Vaccine Series	5-10/04/14		
Percent of 13 Year Olds	21.8%	39.8%	37.4%
Pneumococcal Vaccination			
Percent of Adults (65) years)	85.9%	64,0%	-
Influenza Vaccination	1 - 20 0 0 0 0 0		
Percent of Adults (65+ years)	48.0%	44.8%	2
COVID-19 Vaccination	2000		
Percent of Population with Completed Series	71.0%	76.3%	2
Percent of Population with Booster	42.0%	38.6%	=

Table 14. Immunization rates in Madison County by vaccination type and age group.

Source: NYS Prevention Agenda Dashboard (2018); NYS Health Foundation (2021), New York State Department of Health Open Data (2020-2021 School Year), NYSDOH COVID-19 Vaccination Dashboard (as of April 5, 2022)^{20,79,82,83}

Community Assets and Resources

Madison County has a variety of resources that support the health and wellbeing of community members. The most prominent asset continues to be its dedicated and knowledgeable workforce, who work together to provide quality services to Madison County residents. Figure 27 represents the different sectors that contribute to the wellbeing of Madison County residents. This graphic was adapted by Riley County Health

Department from the NACCHO Local Public Health Systems diagram. List of organizations and respective websites can be found in Appendix O.

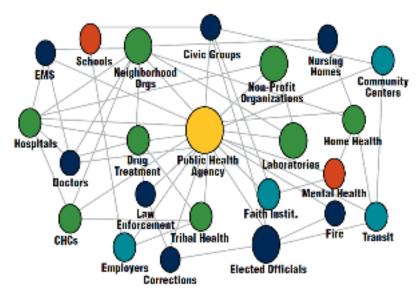


Figure 27. Different Sectors that Contribute to the Local Public Health System in Madison County. Source: Graphic from Riley County Health Department

Key Community Partnerships

Madison County Coalitions, Task Forces, and Workgroups			
Name	Lead Agency	Participation	
Community Services Board (Mental Health)	МСМН	OASAS/OMH/OPWDD Providers, BRIDGES, MCDOH, RHC	
Community Organizations Active in Disasters (COAD)	YMCA	MCDOH, MCOEM, MCPIO, CBOs	
Continuum of Care: Housing	CAP	MCDSS, Law Enforcement, MCMH, CBOs	
Healthy Beginnings Provider Network Early Head Start Health Advisory Committee, Healthy Start Partnership	MCDOH	Healthcare Providers, CBOs, MOBOCES, RHC, Health Insurance Providers, MCDSS	
LGBTQIA Network of Madison County	BRIDGES	CBOs, Families, School Districts, Providers	
Mohawk Valley Immunization Alliance	MCDOH*	Healthcare Providers, Higher Education, NYSDOH, OPWDD, Pharmaceutical Companies, CBOs	
NEW! Community Coalition on Alcohol & Marijuana	BRIDGES	Madison County Departments, OASAS/OMH/OPWDD Providers, CBOs, Faith Community, OH	
Oneida Not for Profit Consortium	YMCA	CBOs, MCDOH	
Orion Behavioral Health Consortium	ОН	MCMH, OASAS/OMH Providers, BRIDGES	
Suicide Prevention Coalition	BRIDGES	MCDOH, MCMH, CBOs, OASAS/OMH/OPWDD Providers	

Table 15. Key Community Partnerships that convene around public health topics, by lead agency and participating organizations. *Co-lead by Herkimer and Oneida Health Departments.

Table Acronyms: CAP = Community Action Partnership for Madison County, CBO = Community-Based Organizations, MCDOH = Madison County Department of Health, MCMH = Madison County Mental Health, MOBOCES = Madison-Oneida Boards of Cooperative Educational Services, NYSDOH = New York State Department of Health, OASAS = NYS Office of Addiction Services and Supports, OH = Oneida Health, OMH = NYS Office of Mental Health, OPWDD = NYS Office for People With Developmental Disabilities, RHC = Rural Health Council

Community Health Improvement Plan 2022-2024

Overview

The Madison County 2022-2024 Community Health Improvement Plan involved active collaboration among the local health department, hospital systems, and community organizations.

In April 2022, MCDOH presented results from the MAPP assessments, including the updated Community Health Status assessment, to the Steering Committee members. The Steering Committee decided to continue working on the same priority areas from the 2019 CHA cycle: *Prevent Chronic Disease* and *Promote Well-Being and Prevent Mental Health and Substance Use Disorders*.

The rationale for this selection was twofold: 1) the 2019-2021 CHIP work plan was not carried out in entirety; and 2) priority areas selected were exacerbated by the pandemic. For instance, the delay or absence of health seeking behaviors impacted the diagnosis and treatment of chronic diseases.⁸⁴ Additionally, national and local trends demonstrate worsening mental health among all age groups as well as an increase in substance misuse.⁵⁵

In order to build a Community Health Improvement Plan, the Steering Committee invited community organizations to participate on one of the Priority Area Workgroups. Priority Area Workgroups were assembled with representatives from a variety of sectors with expertise in the selected topic areas. All of the organizations represented serve Madison County residents. Workgroup meetings were facilitated by the Madison County Department of Health during the summer of 2022. Workgroup members reviewed CHA data and provided insight on how topics areas impact community members. Participants were encouraged to share organizational data and advocate for the needs of their clients. The specific goals and objectives were selected in collaboration with workgroup members. Collectively, the workgroup members selected evidence-based practices to meet the goals and objectives selected (outlined below).

Madison County is committed to maintaining engagement with local partners for the implementation phase of the 2022-2024 Community Health Improvement Plan.

Understanding Context of Priority Areas

Thematic Analysis

Priority Area Workgroup members were asked to provide insight on how the community context has changed regarding focus areas within the broader umbrella topics of Mental Health & Substance Use and Chronic Disease. The workgroups were convened in July 2022 at Cornell Cooperative Extension. There were 11 attendees at both workgroup meetings, including two presenters and 1 note taker.

The Mental Health & Substance Use focus areas included: alcohol use, opioid use, marijuana use, mental health, suicide, and adverse childhood experiences (ACEs). The Chronic Disease focus areas included: healthy eating, physical activity, obesity, tobacco use, chronic disease management, and cancer. Focus areas were adapted from the New York State Prevention Agenda's Action Plan.

Participants were asked to reflect on their perception of focus areas with the instructions, "please describe in your own words how these topics affect residents of Madison County." Worksheets were collected at the conclusion of the meeting and scanned to electronic format for analysis. A thematic analysis, a qualitative research method, was conducted using Atlas.ti Web. Key themes are outlined in Table 16.

Priority Area: Mental He	alth and Substance Use
Theme	Description
Escalation	Increased prevalence or severity of conditions over time, including due to
	changes from the COVID 19 pandemic.
Interconnectedness	Discussion about the link(s) between focus areas and the inability to isolate one
	focus area from others.
Youth*	Explicit mentions of impact or concerns among young individuals (<18 years of
	age).
Culture of Acceptance	Responses discussing social norms, perceptions of safety, increased awareness,
	and acceptance of risk behaviors in day-to-day life.
Priority Area: Chronic Di	sease
Theme	Description
Cost	Affordability of resources in the community, healthcare costs resulting from
	chronic conditions, and the cost of engaging in health-related behaviors.
Downstream Effects*	Impact of chronic conditions on health status, outcomes, life expectancy, and
	the healthcare system.
Access & Accessibility	Ease of obtaining and ability to connect to needed education and medical care,
	as well as the availability of support and resources in the community.
Behavioral Health*	The effect of health behaviors on chronic conditions and the role/impact of

Table 16. Codes identified in each category of participant descriptions of focus areas within Mental Health & Substance Use and Chronic Disease. Source: MCDOH (2022).

Major themes were presented to the Steering Committee as well as workgroup members at the subsequent meetings held in August 2022. These themes were used to inform the Community Health Improvement Plan goals, objectives, and strategies.

Ongoing Initiatives to Address Priority Areas

The Steering Committee gathered information on current initiatives taking place to address the Priority Areas.

Priority Area: Promote Well-Being & Prevent Mental Health & Substance Use Disorders

BRiDGES, https://bridgescouncil.org/

- Workplace Trainings
 - o Resiliency and Thriving: The Secret Power of Stress
 - TEAM Awareness Workplace Wellness
 - o Empowered Health Consciousness
 - The Ripple Effect of Wellbeing
- Employee Assistance Program (EAP)
- Central Region Addiction Resource Center
- Naloxone & Opioid Overdose Prevention Program
- Suicide Prevention Coalition
- Grief Support After Death by Suicide
- STEPtember Suicide Awareness Walk
- LGBTQIA Network & Youth Group
- TiPS Training

^{*}Code mentioned across all focus areas

- Safe Medication Disposal
- Information & Referral Services
- Prevention Programs for Individuals & Families
 - o Teen Intervene
 - Choices & Consequences
 - Marijuana Today
 - Underage Gambling Prevention Presentation
 - Active Parenting
 - o A Parent Handbook for Talking with College Students About Alcohol
 - o LQBTQIA Caregivers Support
- Prevention Programs for Youth Groups & Schools
 - o Botvin Life Skills
 - o SPORT, Prevention Plus Wellness
 - All Stars Core
 - The Stanford Cannabis Toolkit
 - Support for Students Exposed to Trauma (SSET)
 - o Girls Circle

Madison County Department of Health

- Education, Health Issue Profiles & Evidence-Based Practice Recommendations
 - Suicide
 - o Adverse Childhood Experiences
 - o Annual Opioid Report

Madison County Mental Health Department – Community Services Board 2023 Work Plan

- School-Based Services
- Crisis Supports
- Employee Wellness
- Housing Resources
- Primary Care
- Broadband Access
- Distribution of Opioid Settlement Funding

Madison County Sheriff's Department

• Awarded the Comprehensive Opioid, Stimulant, and Substance Abuse Site-based Program to carry out a medication assisted treatment (MAT) program at the county jail for all inmates.

Rural Health Council, https://mcruralhealthcouncil.org/

- Youth Mental Health First Aid
- Walk with a Doc Mental Health Series

Priority Area: Prevent Chronic Disease

Bassett Healthcare Network, https://www.bassett.org/

- Living Well Series
- Cancer Services Program

BRiDGES, https://bridgescouncil.org/

- Advancing Tobacco Free Communities: Community Engagement & Reality Check
- Employee Assistance Program (EAP)
- TEAM Awareness Workplace Wellness
- Prevention Programs for Individuals & Families
- Prevention Programs for Schools Botvin Life Skills, SPORT Prevention, All Stars Core
- Smoking Cessation Services

Community Action Partnership for Madison County, https://capmadco.org/

- Early Head Start Healthy Habits
- WIC Services Breastfeeding & Nutrition Education
- Healthy Families

Madison County Cornell Cooperative Extension, https://madison.cce.cornell.edu/

- Southern Tier SNAP-Ed NY
- Food Assistance Programs
- Educational Resources on Healthy Eating & Other Topics

Madison County Department of Health, https://www.madisoncounty.ny.gov/207/Programs-Services

- Healthy Homes Program
- Tobacco Enforcement Program
- Education, Health Issue Profiles & Recommendations
- Affiliated with NIOSH Total Worker Health® program
- Breastfeeding Support

Office for the Aging, https://www.ofamadco.org/

- Snack Programs Congregate & Home Delivered Meals, Nutrition Counseling & Education
- RSVP Program Bone Builders
- NY Connects
- Senior Farmers' Market Nutrition Program (SFMNP)

Oneida Family YMCA, http://ymcatrivalley.org/

- Adult & Youth Fitness (virtual options)
- Before & After School Programs

Rural Health Council, https://mcruralhealthcouncil.org/

- Walk with a Doc
- Monday Mile
- Prevent T2 Lifestyle Change Program (formerly National Diabetes Prevention Program)
- Mobility Management
- Living Well Series in Partnership with Bassett Health & Self-Management Resource Center

CHIP Work Plan 2023-2024

Intervention #1: Establish Community Coalition on Harm Reduction for Alcohol & Marijuana

Description	Enhance collaboration through the establishment of a diverse group of community organizations to reduce harm related to underage/excessive alcohol use by adults.
Priority Area	Mental Health & Substance Use
Lead Agency	Madison County Council on Alcoholism & Substance Abuse (BRiDGES)
Partner Role(s) and Resources	BRIDGES will facilitate a community coalition on alcohol, contributing staff capacity and grant funding. Coalition will collectively identify evidence-based strategies to address issue. Coalition members will include MCDOH, hospitals, direct service providers, other county agencies, law enforcement, emergency services, and other community organizations.
Goals	 Prevent underage drinking and excessive alcohol consumption by adults. Prevent harm related to marijuana use among adults.
Objectives	Objectives will be determined by coalition.
Disparities Addressed	Youth

Intervention #2: Publish a Health Issue Profile on Alcohol Use in Madison County

Description	The publication will include comprehensive data analysis of national, state, and local trends of alcohol use, and a summary of evidence-based practices to address gaps in prevention/harm reduction/treatment and recovery.
Priority Area	Mental Health & Substance Use
Lead Agency	Madison County Department of Health
Partner Role(s) and Resources	MCDOH will provide staff capacity and access to county-level data to publish an in-depth analysis of alcohol-related data as well as existing resources. Community agencies will assist with gathering data and sharing results.
Goals	Prevent underage drinking and excessive alcohol consumption by adults.
Objectives	 Decrease the percent of youth who report alcohol use from 20.4% to 15.4%. Decrease the percent of adult binge drinking from 24.2% to 19.2%. Reduce the rate of alcohol-related motor vehicle injuries and deaths from 31.9 to 26.1 per 100,000.
Disparities Addressed	None

Intervention #3: Implement Wastewater Surveillance Program for Cannabis and Opioids

Description	Establish a collection and sampling process for detecting cannabis and opioids in wastewater. Data will establish a baseline level of each substance in the event of increasing trend. Results will inform messaging with general public and key stakeholders on substance use trends in the community. Messaging will also target medical providers and pharmacies responsible for prescription opioids for pain.
Priority Area	Mental Health & Substance Use
Lead Agency	Madison County Department of Health
Partner Role(s) and Resources	MCDOH will provide staff capacity and funding for testing of wastewater samples.
Goals	 Prevent harm related to marijuana use among adults. Prevent opioid and other substance misuse and deaths.
Objectives	 Decrease the percent of high school students who report trying marijuana from 32.0% to 27.0%. Reduce the rate of hospitalizations related to marijuana use from 676.6 to 671.6 per 100,000. Reduce the age-adjusted rate of overdose deaths involving any opioid from 14.0 to 9.0 per 100,000. Reduce the rate of opioid prescriptions for pain from 433.9 to 350.0 per 100,000. Reduce the rate of emergency departments visits related to any opioid overdose from 47.7 to 42.7 per 100,000.
Disparities Addressed	None

Intervention #4: Establish Collaborative Care Model in Primary Care Settings

Description	Oneida Health is establishing behavioral health care services in primary care and women's health settings through the implementation of the evidenced-based cognitive behavioral approach of the Collaborative Care Model (CoCM).
Priority Area	Mental Health & Substance Use
Lead Agency	Oneida Health
Partner Role(s) and Resources	Oneida Health (Oneida Medical Practice, PC, Oneida Medical Services, PLLC) and partner agencies received a HRSA Rural Health Care Services Outreach Program (HRSA-21-027) grant with the goal of developing and implementing a network of local healthcare providers, public health entities, and community nonprofit organizations to enhance and sustain the delivery of community-based, behavioral health care services to rural and underserved populations in Central New York. Partner agencies: Madison County Mental Health Department, Family Counseling Services of Cortland County and the Madison County Council on Alcoholism and Substance Abuse, Inc. (BRIDGES).
Goals	Reduce the prevalence of major depressive disorders.
Objectives	1. Reduce the past year prevalence of major depression among adults aged 18 or older by 5%, from 20.0% to 15.0%.
Disparities Addressed	None

Intervention #5: Expand Community Access to Naloxone

Description	Distribution of wall-mounted Naloxone Emergency Boxes to community locations, including Madison County Complex.
Priority Area Lead Agency	Mental Health & Substance Use Madison County Department of Health (MCDOH) & Madison County Council on Alcoholism & Substance Abuse (BRiDGES)
Partner Role(s) and Resources Goals	MCDOH & BRiDGES jointly sought funding from CNY Community Foundation to purchase wall-mounted naloxone emergency boxes. Both organizations with support from external agencies will conduct outreach to community organizations and businesses for the distribution. 1. Prevent opioid and other substance misuse and deaths.
Objectives	 Reduce the age-adjusted rate of overdose deaths involving any opioid from 14.0 to 9.0 per 100,000. Reduce the rate of opioid prescriptions for pain from 433.9 to 350.0 per 100,000. Reduce the rate of emergency departments visits related to any opioid overdose from 47.7 to 42.7 per 100,000.
Disparities Addressed	None

Intervention #6: Youth Mental Health First Aid Training

Description	Implement Mental Health First Aid training within school districts for youth and school staff. Mental Health First Aid is an evidence-based public education program that teaches people how to identify, understand, and respond to individuals who are demonstrating signs of mental health and substance use challenges.
Priority Area	Mental Health & Substance Use
Lead Agency	Madison County Rural Health Council
Partner Role(s) and Resources	Madison County Rural Health Council has dedicated staff capacity towards becoming instructors for the National Council for Mental Wellbeing's Mental Health First Aid program and coordinating with school districts for implementation. Funding was provided by the Madison County Mental Health Department, Central New York Community Foundation, and Madison County United Way.
Goals	1. Facilitate supportive environments that promote respect and dignity for people of all ages.
Objectives	 Reduce the percentage of adults who experience frequent mental distress from 16.8% to 11.8%. Lower the percentage of high school students who report feeling sad or hopeless from 42.0% to 37.0%.
Disparities Addressed	Youth

Intervention #7: Establish County-Wide Program Using the 3-4-50 Framework

Description	Create a county-wide program to address healthy eating, physical activity, and tobacco use using the 3-4-50 framework. The approach will target schools, workplaces, healthcare settings, and communities. Organizations will commit to implementing at least 1 evidence-based practice in each health behavior and in turn, be provided educational materials and technical assistance.
Priority Area	Chronic Disease
Lead Agency	Madison County Department of Health
Partner Role(s) and Resources	MCDOH will contribute staff capacity to identify funding opportunities and development of materials. Community organizations and hospitals will contribute staff resources to the development, implementation, and recruitment of participating organizations.
Goals	 Reduce obesity and the risk of chronic diseases Increase access to healthy and affordable foods and beverages Increase skills and knowledge to support healthy food and beverage choices Promote school, child care and worksite environments that increase physical activity Increase access, for people of all ages and abilities, to indoor and/or outdoor places for physical activity Prevent initiation of tobacco use Promote tobacco cessation Eliminate exposure to secondhand smoke
Objectives	 Decrease the percent of adults with obesity from 37.2% to 32.2%. Decrease the percent of youth with obesity from 20.3% to 15.3%. Decrease the percent of low-income adults who consume 1 or more sugary drinks per day from 33.5% to 28.5%. Increase local accessibility to healthy food options (baseline TBD). Increase local accessibility that supports physical activity (baseline TBD). Increase the percent of youth who engage in physical activity 2+ hours/week from 45.0% to 50.0%. Decrease the percent of adults who smoke from 21.0% to 16.0%. Decrease the percent of low-income adults who smoke from 34.7% to 29.7%. Decrease the percent of adults exposed to secondhand smoke in multi-unit housing from 21.8% to 16.8%. Lower the percent of high school students who have tried vaping products from 33.3% to 23.3%.
Disparities Addressed	Low-Income Adults, All Youth Regardless of Socioeconomic Status

Intervention #8: Healthy Workforce Initiative

Description	In 2017, Madison County Department of Health (MCDOH) launched the Healthy Workforce Initiative targeted at improving employee health, reduce work-related deaths and injuries, and increase worker productivity. The initiative modeled the NIOSH Total Worker Health program, which seeks to improve the health of workers and workforce safety. MCDOH will provide technical assistance and host an annual event for employers in the county.
Priority Area	Chronic Disease
Lead Agency	Madison County Department of Health
Partner Role(s) and Resources	MCDOH will relaunch the initiative and seek participation from partner organizations as well as large employers in the county.
Goals	 Reduce obesity and the risk of chronic diseases Promote school, child care and worksite environments that increase physical activity Increase access to healthy and affordable foods and beverages Promote tobacco cessation
Objectives	 Decrease the percent of adults with obesity from 37.2% to 32.2%. Increase local accessibility that supports physical activity (baseline TBD). Decrease the percent of adults who smoke from 21.0% to 16.0%.
Disparities Addressed	None

Intervention #9: Healthy Homes

Description	Implement a Healthy Homes program for Madison County residents. The program provides free inhome assessments, education, supplies, and referrals to address Fire Prevention and Safety, Managing Asthma Attacks, Preventing Lead Poisoning, Cigarette Smoking Education and Cessation, Indoor Air Quality (i.e. radon), and Injury Prevention. Home visits are conducted by trained Public Health Staff specializing in education of Healthy Homes topics.
Priority Area	Chronic Disease
Lead Agency	Madison County Department of Health
Partner Role(s) and Resources	Healthy Homes is funded by the NYSDOH Healthy Neighborhoods Grant. MCDOH has committed staff resources towards this program. MCDOH is working with community organizations for internal and external referrals for program participants. Hospitals will make referrals from their primary care and pediatric care offices, specifically targeting patients with asthma or current tobacco use.
Goals	 Improve self-management skills for individuals with chronic diseases, including asthma. Promote tobacco cessation Eliminate exposure to secondhand smoke
Objectives	 Increase the percentage of children (0-17) and adults (18+) with asthma who were ever given an asthma action plan by a doctor or health professional by 10%. Decrease the rate of emergency department visits for asthma among youth from 28.0 to 23.0 per 10,000. Decrease the percent of adults who smoke from 21.0% to 16.0%. Decrease the percent of low-income adults who smoke from 34.7% to 29.7%. Decrease the percent of adults exposed to secondhand smoke in multi-unit housing from 21.8% to 16.8%.
Disparities Addressed	Low-Income Adults, All Youth Regardless of Socioeconomic Status

Intervention #10: Expand Walk with a Doc Program

Description	The Madison County Rural Health Council (MCRHC) hosts the Walk with a Doc series. This program provides physical activity, health education on various topics including chronic disease and mental health, social connection, and spending time outdoors for both mental health and physical benefits.
Priority Area	Mental Health and Substance Use; Chronic Disease
Lead Agency	Madison County Rural Health Council
Partner Role(s) and Resources	MCRHC seeks to expand their Walk with a Doc program in the coming years beyond their current sites in Morrisville and Cazenovia. Partner organizations provide topic experts and outreach to community residents.
Goals	 Increase access, for people of all ages and abilities, to indoor and/or outdoor places for physical activity Strengthen opportunities to build well-being and resilience across the lifespan
Objectives	 Increase percent of adults who participate in leisure-time physical activity from 80.3% to 85.3%. Increase percent of older adults who participate in leisure-time physical activity from 73.5% to 78.5%. Increase the percent of youth who engage in physical activity 2+ hours/week from 45.0% to 50.0%. Reduce the percentage of adults who experience frequent mental distress from 16.8% to 11.8%. Lower the percentage of high school students who report feeling sad or hopeless from 42.0%
Disparities Addressed	to 37.0%. None

Intervention #11: Expand Monday Mile Program

Description	The Madison County Rural Health Council (MCRHC) partnered with Syracuse University's Healthy Monday program to establish the Monday Mile program in Madison County. Healthy Monday encourages people to use Mondays as a day to start or sustain healthy behaviors. The Monday Mile is a fun way to achieve fitness goals by getting out to walk a mile. There are currently 14 outdoor and 3 indoor routes throughout the county.
Priority Area	Chronic Disease
Lead Agency	Madison County Rural Health Council
Partner Role(s) and Resources	MCRHC seeks to expand the number of Monday Mile routes in Madison County by continued partnership with Syracuse University and other community organizations.
Goals	 Increase access, for people of all ages and abilities, to indoor and/or outdoor places for physical activity
Objectives	 Increase percent of adults who participate in leisure-time physical activity from 80.3% to 85.3%. Increase percent of older adults who participate in leisure-time physical activity from 73.5% to 78.5%. Increase the percent of youth who engage in physical activity 2+ hours/week from 45.0% to 50.0%.
Disparities Addressed	None

Intervention #12: Expand Mobility Management Program

Description	The Madison County Rural Health Council (MCRHC) seeks to expand the Mobility Management Program. This program aims to address transportation needs by utilizing current resources and creating new services when needed; thereby, increasing residents' access to the available programs and service in the community.
Priority Area	Mental Health and Substance Use; Chronic Disease
Lead Agency	Madison County Rural Health Council
Partner Role(s) and Resources	With support from external agencies, MCRHC is requesting grant funding from the Health Foundation for Western and Central New York to expand transportation services in Madison County for older adults. The goal being to improve quality of life by connecting older adults to social support and healthcare services.
Goals	 Strengthen opportunities to build well-being and resilience across the lifespan Increase access to chronic disease preventive care and management
Objectives	 Reduce the percentage of adults who experience frequent mental distress from 16.8% to 11.8%. Increase the number of adults using transportation services in Madison County.
Disparities Addressed	Adults with low socioeconomic status; all older adults

Intervention #13: Host Annual Breast Cancer Awareness & Screening Event

Description	The Madison County Rural Health Council (MCRHC) plans to host the first annual Breast Cancer Awareness and Screening event in 2023.
Priority Area	Chronic Disease
Lead Agency	Madison County Rural Health Council
Partner Role(s) and Resources	MCRHC will partner with community organizations to host an event on breast cancer to raise awareness and offer onsite breast cancer screenings to community members.
Goals	Increase cancer screening rates
Objectives	1. Increase percent of women who receive recommended breast cancer screenings by 5%.
Disparities Addressed	Low socioeconomic status

Additional Information

Significant Health Needs Not Addressed in the Community Health Improvement Plan

There were many significant health needs that emerged from the 2019 Community Health Assessment process as well as the data updated during the 2022 cycle. The Steering Committee selected issues that could be addressed effectively and were deemed most pressing, under-addressed, and within our immediate ability to influence. The following health needs are not included in the Madison County Community Health Improvement Plan the importance of these health issues, however, should not be minimized and are being addressed independently by the Madison County Department of Health, Community Memorial Hospital, and Oneida Health: Oral Health, Immunizations and Infectious Disease.

Communications Strategy

Strategies for disseminating and educating the community, professional organizations, governmental agencies, and stakeholders on the Madison County 2022-2024 Community Health Improvement Plan include:

- A press release announcing publication of the Madison County 2022-2024 Community Health Improvement Plan will be provided to local media;
- The Madison County 2022-2024 Community Health Improvement Plan will be posted to the Madison County Health Department website: https://www.madisoncounty.ny.gov/206/Health-Department
- The Madison County 2022-2024 Community Health Improvement Plan hard copies will be distributed to Community Partners and other interested parties.
- County, town, and village governments will be provided with electronic copies of the Madison County 2022-2024 Community Health Improvement Plan.
- Community Partners will be encouraged to share any social media posts, videos, newsletters, or articles that highlight the Madison County 2022-2024 Community Health Improvement Plan.

Tracking & Evaluation

The Steering Committee will continue to function as an advisory group to monitor and track progress of the priority area strategies. Given the Priority Area of Mental Health and Substance Use Disorders, the Director of Madison County Mental Health Department will be a member of the Steering Committee moving forward along with the Executive Director of BRIDGES.

Evaluation of the interventions will consist of both progress and performance measures. Annual reports will be submitted to NYSDOH. Reports will outline evaluation metrics of the activities for each goal/objective. Furthermore, the report card indicators will be made publicly available on the MCDOH website.

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Appendix

Appendix A: Vision of a Healthy Madison County

2019 VISION OF A HEALTHY MADISON COUNTY

The vision for a healthy Madison County is a community where:

- People of all ages, cultures, and talents are fully engaged
- The environment is clean and safe.
- There are opportunities for quality employment, housing, transportation and education
- There is access to resources supporting physical, mental, spiritual, and emotional well-being

All achieved by a dynamic collaboration of: citizens; government agencies; employers; health care providers; and faith-based, educational, community and service organizations.















Appendix B: Participating Organizations

Bassett Healthcare Network Madison County Department of Social Services

Berean Calvary Chapel Madison County Health Department

BRIDGES Madison County Office of Emergency Management

Canastota Public Library Madison County Planning

Cancer Services Program of the Central Region Madison County Rural Health Council, Inc.

Care Net of CNY Madison County Sheriff

Cazenovia College Health and Counseling Center Madison County Youth Bureau

Cazenovia FHC of CMH Madison Oneida BOCES

Cornell Cooperative Extension Mary Rose Clinic

Chenango Nursery School Mohawk Valley Health System

City of Oneida Morrisville Lions Club

City of Oneida Police Department MVCAA, Inc.

CNY Community Foundation New Woodstock Library

Colgate University Oneida City School District

Community Action Oneida Family YMCA

Community Memorial Hospital Oneida Health

CrossRoads Community Church Oneida Public Library

Great Swamp Conservancy Seniors Helping Seniors(R)

Hamilton Public Library St. Joseph's Health

HCR Home Care Stockbridge Valley CSD

HealtheConnections SUNY Morrisville

Helio Health The Arc of Madison Cortland

Hospice and Palliative Care Services The Children's Center at Morrisville State College,

Inc.

Independent Living

Liberty Resources

United Way of the Valley and Greater Utica Area

Madison County OFA

University Police at SUNY Morrisville

Madison County Administration Willard Prior Elementary School

Appendix C: Local Public Health Assessment Results

	Ten Essential Public Health Services	Performance Scores
1	Monitor Health Status to Identify Community Health Problems	58.3
2	Diagnose and Investigate Health Problems and Health Hazards	50.0
3	Inform, Educate, and Empower People about Health Issues	41.7
4	Mobilize Community Partnerships to Identify and Solve Health Problems	62.5
5	Develop Policies and Plans that Support Individual and Community Health Efforts	43.8
6	Enforce Laws and Regulations that Protect Health and Ensure Safety	58,3
Į.	Link People to Needed Personal Health Services and Assure the Provision of Healthcare when Otherwise Unavailable	62.5
8	Assure a Competent Public and Personal Healthcare Workforce	50.0
9	Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-based Health Services	50.0
10	Research for New Insights and Innovative Solutions to Health Problems	50.0
	Average Overall Score	52.7

Appendix D: Forces of Change Assessment Results

	ota ord		- C-
	Events	raciois	Shire
Economic	Opening of casino	Generation Z entering workforce	Decrease in monetary resources in public health
		Rising taxes	Decreasing number of farms
		Increase in poverty	Increase in farmers markets
			Increasing use of urgent care & ER
			Lower unemployment rate
			Decrease in housing values
			Decrease in number of jobs
			Increase in healthcare costs & insurance
Environmental	Flood 2013	Food desert	Climate change
	Potential natural disasters	Limited access to stores	
		Weather	
		Transportation Issues	
Legal/Political	Marijuana legalization	Poltical climate	
	Acts of terrorism	State & federal regulations	
	Increase minimum wage		
	Immigration policies		
	Prison reform		
	Healthcare reform		
	Universal healthcare		
Social	Opioid epidemic	Lack of assisted living facilities	Increase in aging population
	School shooting events	High prevalence of substance abuse	Decrease in vaccine use
	Possible hospital closures	Uneven distribution of health care providers	Vaping (particularly among young people)
	Emergency services merge	Intergenerational issues	Fewer young volunteers (i.e. EMS, police)
	Possible closure of Planned Parenthood	Parenthood Decrease in providers who accept Medicaid	Desire for instant access to medical providers
		NYS - 2nd most moved out of state	Rise in homelessness
		Lack of diversity	Rise in sex trafficking
		Limited access to dental health providers	Increase in mid-level healthcare providers
			Increase in specialty doctors rather than general practice
			Younger generation's impact on healthcare
			Decrease school population
			Increase in anxiety and depression in youth
			Increase in awareness and acceptance of mental health issues
			Growing awareness of LGBTQ+ population & needs
Technological/	Regional healthcare systems	Limited access to internet	Focus from general to specialty health care
Scientific		Advances in science & technology	Increase in local access to specialists through satellite offices
		Advances in medical care	Implementing EMRs
		Advances in social media	Decrease in knowledge of services

Appendix E: Social Determinants of Health Indicators

	2018		2020-2021	
	Madison	NYS	Madison	NYS
	County		County	
Unemployment Rate	7.8%	8.3%	3.4%	5.0%
Percent Below Federal Poverty Level				
Children	14.4%	19.9%	14.3%	18.8%
Older Adults (65+)	8.2%	13.5%	8.6%	12.0%
Total				
Median Household Income	\$58,365	\$62,765	\$59,678	\$67,844
Education Level among Adults				
No High School	6.9%	13.4%	7.4%	12.8%
High School/GED	37.2%	26.3%	34.7%	25.5%
Associate's/Some College	28.4%	24.3%	31.3%	24.4%
Bachelor's Degree or Higher	27.5%	36.0%	26.6%	37.5%
Insurance				
Percent Uninsured	7.0%	12.4%	5.0%	7.5%
Percent of Children Uninsured (0-	3.0%	3.4%	2.3%	2.3%
19)				
Second Language Speakers	4.3%	31.0%	4.4%	30.3%
Homeownership	78.0%	53.8%	78.5%	53.5%

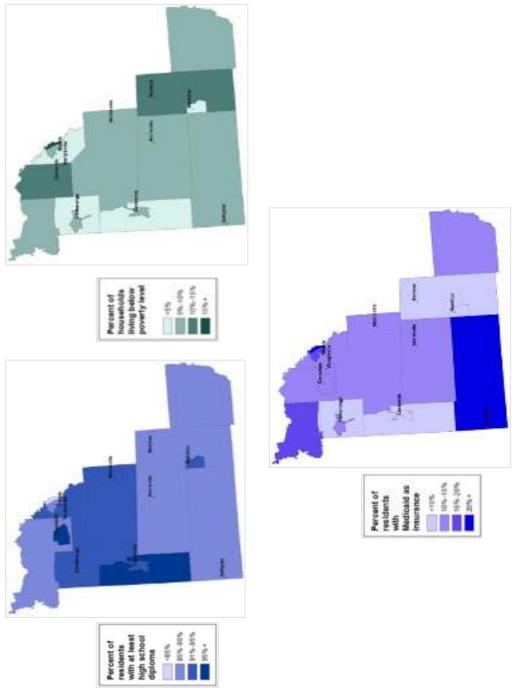
Source: American Community Survey (2018), US Census Bureau (2020) 85

Appendix F: Percent of Households below ALICE Threshold by Municipality

Municipality	Number of Households	Percent Below ALICE Threshold
City of Oneida	4,436	50%
Brookfield	907	47%
Cazenovia	2,483	35%
DeRuyter	514	44%
Eaton	1,230	42%
Fenner	594	35%
Georgetown	228	49%
Hamilton	1,792	39%
Lebanon	535	40%
Lenox	3,432	44%
Lincoln	720	33%
Madison	1,365	36%
Nelson	775	27%
Smithfield	469	23%
Stockbridge	815	45%
Sullivan	5,731	31%
Madison County	26,127	39%

Source: United Way, 2018 ALICE Report on New York State⁶

Appendix G: Proportion of individuals with less than a high school diploma, families living below poverty, and individuals enrolled in Medicaid by census tract*.



Source: US Census Bureau, Maps Prepared by Madison County Planning Department

^{*}Census tracts are geographic areas determined by the United States Census Bureau; boundaries are drawn to include between 1,200 and 8,000 people and represent a sub-county community. This data is collected through the American Community Survey, to document how these communities may be changing and to better understand their demographics.

Appendix H: Recreational Marijuana Opt-In Tracker for Dispensary and Consumption Sites by Municipality in Madison County (as of May 2022)

Municipality	Allow Dispensaries	Allow Consumption Sites
Brookfield (Town)	No	No
Canastota (Village)	No	No
Cazenovia (Town)	No	No
Cazenovia (Village)	No	No
Chittenango (Village)	No	No
DeRuyter (Town)	No	No
DeRuyter (Village)	No	No
Eaton (Town)	Yes	No
Fenner (Town)	No	No
Georgetown (Town)	No	No
Hamilton (Town)	Yes	Yes
Hamilton (Village)	Yes	No
Lebanon (Town)	Yes	Yes
Lenox (Town)	No	No
Lincoln (Town)	Yes	Yes
Madison (Town)	Yes	Yes
Madison (Village)	Yes	Yes
Morrisville (Village)	No	No
Munnsville (Village)	No	No
Nelson (Town)	No	No
Oneida (City)	No	No
Smithfield (Town)	Yes	No
Stockbridge (Town)	Yes	Yes
Sullivan (Town)	No	No
Wampsville (Village)	No	No

Source: Rockefeller Institute of Government¹³

Appendix I: Chronic Disease Risk & Protective Factors

	2014	-2018	2	018-2020	
	Madison County	NYS	Madison County	NVS	2024 PA Goal
Obesity					
Youth	17.7%	15.4%	20.3%	17.3%	16.4%
Adults	28%	25.5%	37.2%	27.6% (excl. NYC)	24.2%
Physical Activity for Leisure		- CONT		alternation areas and	300000000
Youth	43.3%*	23.2%	45.0%*	19.2%	24.4%
Adults	79.3%	2007	80.3%	76.2%	77.4%
Older Adults	1-1-1-1	- 2	73.5%	68.9%	75.9%
Smoking			- Carolia	001374	300370
Youth	15.7%**	(3420	10.9%××	2.4%	3.3%
Adults	22,5%	14.5%	21.0%	12.8%	11.0%
CONTRACTOR OF THE PROPERTY OF	22.576	24,370	21.0%	12.6%	11.0%
Vaping Youth		27.4%	33.3%***	22.5%	15.9%
10777574	-	27.476	33.376	22.5%	13.9%
Cancer Screening	70.070	24 407	DO WAY	99.40/	
Mammogram, 50-74 Years (2017-2019)	76.9%	71.4%	90.2%	82.1%	774
Cervical cancer, 21-65 Years	89.1%	74.2%	89.7%	84.7%	, -
Colorectal cancer, 50-64	76.6%	68.5%	84.3%	65.4%	66.3%
Years					
Chronic Disease Managemer	nt:				
Adult Diabetes	Unavailable	Unavailable	11.0%	10.0%	-
Test for High Blood	-	-	67.8%	63.8%	71.7%
Sugar/Diabetes, 45+ Years					
Asthma Management in	-	-			
Medicaid & Child Health			71.8%	64.4%	
Plus Recipients			0.0000	0.700.000	
Hypertension Management	127	127	80.8%	76,9%	80.7%
among Adults			00.070	35000	0.000
Hypertension	27.8%	28.9%	4	(*	
Asthma		197777			
Adult Asthma	15.9%	10.1%	15.9%	10.1%	-
Age-Adjusted Rate of	2.7 per	6.6 per	2.7 per	10.3 per 10,000	1-0
Asthma Hospitalizations	10,000	10,000	10,000	20.0 pt. 20,000	
Oral Health	500000	201000	501/6-5	At .	
Preventative Visits					
All Adults	77.1%		59.0%	69.6%	
Medicaid Adults	77.170	100	24.1%	26.9%	55
				1/m 2010/100000	
Medicald Youth		100	36.0%	42.6%	
Outpatient Visits for Dental		15.77	209.6 per	146.4 per 10,000	-
Carles, Ages 3-5 Years			10,000	4.00.000.000.000	
Oral Cancers Mortality,	1.00		7.2 per	4.6 per 100,000	
Ages 45-74 years			100,000	42	

Sources: NYS Prevention Agenda Dashboard, 2018 TAP Survey Report, NYSDOH Environmental Health Tracker, CDC PLACES15,20,29,32,37

^{*}Percent of TAP Survey Respondents who "exercise for fun and fitness" at least two hours per week; **Percent of TAP Survey Respondents who have ever tried a cigarette; ***Percent of 2018 TAP Survey Respondents who have ever used an electronic vapor product

Appendix J: Suicide Mortality and Self-Harm Hospitalization Rate by Age Groups

	201	6	201	2018		
	Madison County (per 100,000)	NYS (per 100,000)	Madison County (per 100,000)	NYS (per 100,000)		
Suicide Mortality Rate	14.0	8.5	9.4	8.8		
Self-Harm Hospitalization Rate	72	22	46.5	49.5		
Self-Harm ED Visit Rate		127	87.5	65.7		
Suicide Mortality Rate by Age Group						
10-19 years	9.5	3.2	3.3	3.9		
20-24 years	16.9	8.8	17.3	9.3		
25-34 years	22.1	8.6	31.1	9.3		
35-44 years	8.8	10.1	0.0	10.7		
45-54 years	22.2	12.9	10.2	12.6		
55-64 years	15.6	12.0	9.2	12.4		
65-74 years	9.7	9.9	9.1	9.1		
75-84 years	9.6	9.7	9.0	10.2		
85+ years	23.1	9.4	0.0	9.1		
Self- Harm Hospitalization Rate by Age Group						
10-19 years	112.3	63.8	86.6	70.6		
20-24 years	66.5	87.4	30.1	91.4		
25-34 years	79.4	64.7	59.6	70.3		
35-44 years	132.0	55.7	84.9	58.1		
45-54 years	96.9	58.2	53.3	55.1		
55-64 years	37.1	37.2	55.7	41.4		
65-74 years	14.1	20.0	0.0	23.3		
75-84 years	0.0	19.8	0.0	23.1		
85+ years	0.0	21.0	65.6	21.6		
Self- Harm ED Visit Rate by Age Group	9					
10-19 years	1944		240.4	186.6		
20-24 years			135.4	136.7		
25-34 years			131.2	96.4		
35-44 years			113.1	65.4		
45-54 years			85.4	42.2		
55-64 years			27.8	24.3		
65-74 years			0.0	9.8		
75-84 years			0.0	6.6		
85+ years			0.0	8.1		

Source: NYSDOH Health Connector, Suicide and Self-Harm Dashboard⁴⁸

Appendix K: Rate of Various Environmental Factors in Madison County & New York State

	2016	-2018	2019-2021	verage Rate
	Madison County	NYS (excluding NYC)	Madison County	NYS (excluding NYC)
Foodborne Illness	The second of th			
Campylobacteriosis	15.4 per 100,000	18.5 per 100,000	20.3 per 100,000	23.5 per 100,000
E. coli	4.2 per 100,000	2.1 per 100,000	3.8 per 100,000	3.9 per 100,000
Listeriosis	0.0 per 100,000	0.4 per 100,000	0.0 per 100,000*	0.5 per 100,000*
Salmonellosis	15.4 per 100,000	11.7 per 100,000	14.1 per 100,000	12.7 per 100,000
Vector Borne Disease				
Lyme Disease	24.6 per 100,000	77.8 per 100,000	46.1 per 100,000	34.9 per 100,000
Waterborne Disease				
Giardiasas	5.6 per 100,000	7.7 per 100,000	13.2 per 100,000	11.7 per 100,000
Cholera	0.0 per 100,000	0.01 per 100,000	0.0 per 100,000*	0.0 per 100,000°
Cryptosporidiosis	15.4 per 100,000	2.5 per 100,000	8.0 per 100,000	9.0 per 100,000
Shigeliosis	1.4 per 100,000	2.6 per 100,000	0.9 per 100,000	1.7 per 100,000

Sources: NYSDOH Communicable Disease Reports 2017, Health Commerce System Communicable Disease Electronic Surveillance System Data Export (2019-2021)⁶⁹

^{*}Rate unavailable for 2019-2021; pulled from NYSDOH 2018 Communicable Disease Report

	2016	-2018	2018	2019
	Madison County	NYS	Madison County	NYS
Healthy Home Factors				
High Blood Lead Level in Children **	5.1	4.1	10.1	3.8
Percent of Total Population with Fluoridated Water	22.4%	71.4%	22.4%	71.1%
Percent of Homes Tested with High Radon (>= 4 pCl/L	35.4%	27.6%	37.9%	27.5%
Healthy Workplace Factors				
All Work Related Hospitalizations (16+ Years)	183.2 per 100,000	141.1 per 100,000	205.2 per 100,000	145.8 per 100,000
Pneumoconiosis Hospitalizations (15+ Years)	-	-	7.2 per 100,000	6.6 per 100,000
Asbestosis Hospitalizations (15+ Years)	æ	300	7.2 per 100,000	5.7 per 100,000
Elevated Blood Lead Levels among Employees (16+ Years)*	12.8 per 100,000	17.1 per 100,000	11.8 per 100,000	16.8 per 100,000

Sources: NYSDOH Environmental Public Health Tracker, New York State Community Health Indicator Reports ^{15,32,69}

€ Elevated Blood Lead Level (BLL) – incidence rate of high BLL (10+ micrograms per deciliter) per 100,000 employed persons aged 16 years and older

^{**}Blood Lead Level (BLL) – incidence rate of high BLL (10+ micrograms per deciliter) per 1,000 children tested aged <72 months

Appendix L: Maternal & Child Health Indicators

	2016-2018 Data		2018-2020 Data	
	Madison County	NYS	Madison County	NYS
Percentage of Mothers with Late or No Prenatal Care ¹	3.8%	4.1%	3.2%	5.5%
Adolescent Pregnancy ^c	8.7	13.3	6.0	11.4
Hospital Exclusive Breastfeeding	64.8%	46.3%	64.7%	47.1%
Percentage of WIC Mothers who Breastfed (6+ months)	21.5%	29.6%	23.4%	41.0%
Percentage of Preterm Births ²	10.8%	10.3%	12.4%	9.2%
Percentage of Low Birthweight ^o	7:1%	7.5%	8.8%	8.1%
Infant Mortality Rate	7.7**	5.2	1.5**	4.3
Neonatal Mortality Rate"	4.6**	3.8	1.5**	2.9
Post Neonatal Mortality Rate ^a	3.1**	1.4	0.5**	1.5
Child Mortality Rate*	15.%**	4.5	28.4**	17.5
Maternal Mortality Rate*	0.0**	18.9	0.0**	18.1
Percent of Deliveries by C-Section	27.4%	33.9%	31.0%	33.6%

Sources: NYSDOH Maternal and Child Health Dashboard,⁸⁶ CDC National Center for Health Statistics,⁵⁵ Internal Madison County Birth Records Data

Definitions: ${}^{\$}$ Birth rate (births per 1,000 population); ${}^{\pm}$ Prenatal care (percentage of pregnant women who enter prenatal care in 1st trimester); ${}^{\pm}$ Adolescent Pregnancy rate (live births per 1,000 females aged 15-19); ${}^{\Sigma}$ Preterm Births (percentage of births born less than 37 weeks); ${}^{\Omega}$ Low birthweight (percentage of infants less than 2,5000 grams); ${}^{\$}$ Infant Mortality rate (deaths within 1st year per 1,000 live births); ${}^{\infty}$ Neonatal Mortality (rate of deaths under 28 days of age per 1,000 live births); ${}^{\alpha}$ Post Neonatal Mortality (rate of deaths at age 28 days-1 year per 1,000 live births); ${}^{\times}$ Child Mortality (rate of deaths among 1-4 years per 100,000); * Maternal Mortality (deaths per 100,000 live births)

^{**}Fewer than 10 events in the numerator; therefore, the rate may be unstable

Appendix M: List of Communicable Disease Mandated to Report by New York State Sanitary Code (10NYCRR 2.10,2.14)

- Anaplasmosis
- Amebiasis
- Anthrax
- Arboviral infection
- Babesiosis
- Botulism
- Brucellosis
- Campylobacteriosis
- Chancroid
- Chlamydia trachomatis infection
- Cholera
- Coronavirus
 - 2019 Novel Coronavirus (COVID-19)
 - Severe Acute Respiratory
 Syndrome (SARS)
 - Middle East Respiratory Syndrome (MERS)
- Cryptosporidiosis
- Cyclosporiasis
- Diphtheria
- E.coli O157:H7 infection4
- Ehrlichiosis
- Encephalitis
- Foodborne Illness
- Giardiasis
- Glanders
- Gonococcal infection
- Haemophilus influenza
- Hantavirus disease
- Hemolytic uremic syndrome
- Hepatitis A
- Hepatitis B
- Hepatitis C
- Herpes infections (infants under 60 days)
- Influenza
- Legionellosis
- Listeriosis
- Lyme disease
- Lymphogranuloma venereum

- Malaria
- Measles
- Melioidosis
- Meningitis
 - o **Haemophilus**
 - Meningococcal
- MeningococcemiaMonkeypox
- Mumps
- Pertussis
- Plague
- Poliomyelitis
- Psittacosis
- Q Fever
- Rabies
- Rocky Mountain spotted fever
- Rubella
- Salmonellosis
- Shigatoxin-producing E.coli (STEC)
- Shigellosis
- Smallpox
- Staphylococcus aureus
- Staphylococcal enterotoxin B poisoning
- Streptococcal infection
 - Group A beta-hemolytic strep
 - o Group B strep
 - Streptococcus pneumonia
- Syphilis
- Tetanus
- Toxic shock syndrome
- Transmissable spongiform encephalopathies (TSE)
- Trichinosis
- Tuberculosis
- Tularemia
- Typhoid
- Vaccinia disease
- Vibriosis
- Viral hemorrhagic fever
- Yersiniosis

Source: New York State, Communicable Disease Reporting⁸⁷

Appendix N: Communicable Disease Rates per 100,000 Population in Madison County and NYS

	2017	7 Data	2019-20	21 Average
Sexually Transmitted Infections	Madison County	NYS (excluding NYC)	Madison County	NYS (excluding NYC)
Syphilis Total Early Late	7.0 0.0	 10.1 6.7	2.8 2.8 0.9	5.3 5.2 2.4
Gonorrhea	33.6	172.8	45.2	142.9
Chlamydia	274.8	591.8	226.0	400.3
HIV Diagnosis	5.1	14.7	1.3*	5.6*
Hepatitis Infections	Madison County	NYS (excluding NYC)	Madison County	NYS (excluding NYC)
Hepatitis A Incidence	1.4	1.1	4.7	5.5
Hepatitis B Incidence Acute Chronic	0.0 1.4	1.4 44.6	0.0** 2.4	0.3** 8.9
Hepatitis C Incidence Acute Chronic	0.0 65.9	0.0 61.9	3.8 30.6	3.0 58.4
Other Communicable Disease	Madison County	NYS (excluding NYC)	Madison County	NYS (excluding NYC)
Measles	0.0	0.1	0.0**	1.1**
Mumps	0.0	2.8	0.0**	0.5**
Pertussis	4.2	3.5	5.7	3.8
Tuberculosis	0.0	4.1	0.0**	1.7**
Bacterial meningitis	0.0	1.3	0.0	0.1

Sources: NYSDOH Communicable Disease Report 2018 & 2017, 2018 New York State HIV/AIDS Annual Surveillance Report, Health Commerce System Communicable Disease Electronic Surveillance System Data Export (2019-2021)^{69,88}

^{*}Rate unavailable for 2019-2021; pulled from 2018 NYSDOH HIV/AIDS Report

^{**}Rate unavailable for 2019-2021; pulled from NYSDOH 2018 Communicable Disease Report

Appendix O. Abbreviated List of Community Assets & Resources

While Madison County residents seek services outside of county boundaries, the list below recognizes organizations physically located in the county.

Madison County Departments

- 1. Emergency Management
- 2. Employment and Training
- 3. Health Department
- 4. Mental Health
 - a. Pathways Wellness Center
- 5. Planning
 - a. Madison Transit System, Birnie Bus
- 6. Public Information
- 7. Sheriff's Office
- 8. Social Services
- 9. Veterans Service Agency
- 10. Youth Bureau

Website: https://www.madisoncounty.ny.gov/

Healthcare Facilities

- 1. Bassett Health Care, https://www.bassett.org/
 - a. Primary Care (Hamilton-Madison, Oneida)
 - b. Specialty Services (Hamilton-Madison)
 - c. Women's Health (Hamilton-Madison)
- 2. Child Health Associates of Madison County, https://www.childhealthassociatesoneida.com/
- 3. Community Memorial Hospital, https://communitymemorial.org/
 - a. Primary Care (Cazenovia, Hamilton, Morrisville, Munnsville)
- 4. Mary Rose Free Clinic, https://www.maryrosecenter.org/
 - a. Primary Care (Oneida)
- 5. Oneida Health Hospital, https://www.oneidahealth.org/
 - a. Primary Care (Canastota-Lenox, TriValley Family Medicine-Canastota, Chittenango Family)
 - b. Quick Care (Oneida)
 - c. Women's Health (Oneida)
 - d. Specialty Services (Oneida)
- 6. Oneida Indian Nation Health Center, https://www.oneidaindiannation.com/
- 7. Oneida Medical Associates, https://www.oneidamedical.com/
- 8. Oneida Pediatric Group (Oneida), https://oneidapediatricgroup.com/
- 9. St. Joseph's Health, https://www.sjhsyr.org/
 - a. Primary Care (Cazenovia)
 - b. Services: Primary Care, Behavioral Health Services and Pathways Case Management
- 10. WellNow Urgent Care (Oneida), https://www.wellnow.com/

Dentistry

- 1. Bassett Health Care (Hamilton-Madison), https://www.bassett.org/
- 2. Bassin, Hession & Chmil Orthodontics (Oneida), https://www.cnyortho.com/
- 3. Camden Dental (Canastota), https://camden-dental-pc.business.site/
- 4. Cazenovia Dental (Cazenovia), https://www.cazdental.com/
- 5. Chittenango Family Dental (Chittenango), https://www.chittenangodental.com/
- 6. Creekside Dental (Cazenovia), https://cazcreeksidedental.com/
- 7. Dr. Bruce Stewart (Oneida), https://www.oneidanydentist.com/
- 8. Dr. Choi Charles (Canastota)
- 9. Dr. Gary Revercomb (Cazenovia)

- 10. Dr. Katherine Saunders (Canastota)
- 11. Dr. Robert Jackson (Earlville)
- 12. Goel Family Dentistry (DeRuyter)
- 13. Hamilton Dental (Hamilton), http://www.hamiltondentalny.com/index.html
- 14. Oneida Dental Group (Oneida), https://www.oneidadentalgroup.com/
- 15. Smile Solutions (Canastota), http://www.smilesolutionsofcny.com/
- 16. Dr. James Colocotronis (Canastota)

Long-Term Care Facilities

- 1. Crouse Community Center, https://www.crousecommunity.com/
- 2. Oneida Health Extended Care Facility, https://www.oneidahealth.org/extended-care-facility/
- 3. The Grand at Chittenango, https://thegrandhealthcare.com/chittenango/
- 4. Hamilton Manor

School Districts

- Brookfield, https://www.brookfieldcsd.org/
- 2. Canastota, https://www.canastotacsd.org/
- 3. Cazenovia, https://www.cazenoviacsd.com/
- 4. Chittenango, https://www.chittenangoschools.org/
- 5. DeRuyter, https://www.deruytercentral.org/
- 6. Hamilton, https://www.hamiltoncentral.org/
- 7. Madison, https://www.madisoncentralny.org/
- 8. Morrisville-Eaton, https://www.m-ecs.org/
- 9. Oneida, https://www.oneidacsd.org/
- Stockbridge, https://www.stockbridgevalley.org/

Institutions of Higher Education

- 1. Cazenovia College, https://www.cazenovia.edu/
- 2. Colgate University, https://www.colgate.edu/
- 3. SUNY Morrisville, https://www.morrisville.edu/

Community Agencies

- 1. American Legion (Oneida, Canastota, Munnsville), https://www.legion.org/
- 2. Clear Path for Veterans (Chittenango), https://www.clearpath4vets.com/
- 3. Consumer Services of Madison County, PROS Clinic (Oneida), https://www.proscliniconeida.com/
- 4. Community Action Partnership for Madison County (Canastota, Morrisville), https://capmadco.org/
- 5. Family Counseling Services of Cortland County, Inc. (Oneida), https://fcscortland.org/
- 6. Heritage Farm, https://www.heritagefarminc.org/home
- 7. Liberty Resources (Venture House, Maxwell House, Mobile Crisis), https://www.liberty-resources.org/
- 8. Madison County Cornell Cooperative Extension (Morrisville), https://madison.cce.cornell.edu/
- 9. Madison County Council on Alcoholism and Substance Abuse Inc. (BRiDGES), https://bridgescouncil.org/
- 10. Madison County Office for the Aging (Canastota), https://www.ofamadco.org/
- 11. Madison County Rural Health Council (Morrisville), https://mcruralhealthcouncil.org/
- 12. Mid York Library System, https://www.midyork.org/
- 13. Oneida Family YMCA Greater Tri-Valley (Oneida), http://ymcatrivalley.org/
- 14. The Arc of Madison Cortland (Oneida), https://www.arcofmc.org/

Additional Resource Guides:

- 1. Community Action Partnership, https://capmadco.org/news/community-resources/
- 2. Madison County Youth Bureau: https://www.madisoncounty.ny.gov/DocumentCenter/View/18674/MC-Directory-of-Youth-Services-92222