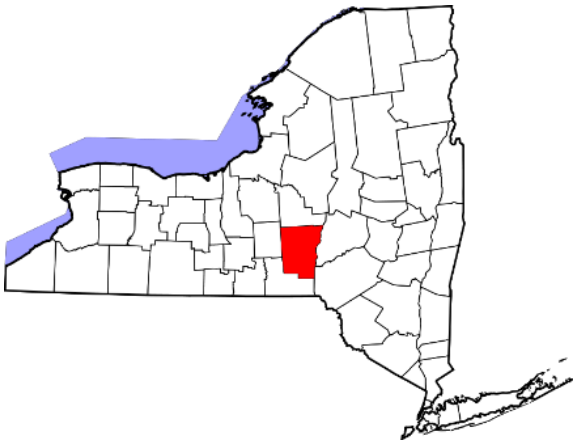
Chenango County



2022-2024
Community Health Assessment/ Community Health Needs Assessment
and
Community Health Improvement Plan/ Community Service Plan

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Table of Contents

Executive Summary

Chenango County Department of Public Health (CCPH) and UHS Chenango Memorial Hospital (CMH) collaborated to conduct the 2022-2024 Community Health Assessment (CHA) and Community Health Needs Assessment (CHNA). A Needs Assessment Committee was created and comprised of representatives from CCPH, CMH, and the Chenango Health Network (CHN). The committee provided oversight and guidance to the assessment process.

Priority Selection Process

Chenango County engaged in a process to select priorities and activities for the Community Health Improvement Plan (CHIP)/Community Service Plan (CSP). The process allowed significant input from stakeholders and integrated feedback from the community. Healthcare and social determinants of health data were collected from a variety of sources including, but not limited to, the NYS Department of Health (NYSDOH), the US Census, the NYS Department of Education (NYSED), the NYS Office of Family and Children (NYSOCFS), and the Behavioral Risk Factor Surveillance Survey (BRFSS). Additional data resources utilized included the County Health Rankings and other local needs assessment reports.

Qualitative data was gathered from 781 Chenango County residents through a community survey. Participants were asked to share their perspectives on the most pressing health issues facing the county, as well as the barriers and challenges they face in their effort to lead healthy lives. In addition, 10 key stakeholders representing a range of non-profit organizations, government agencies and providers, were interviewed to gain further insight into the county's health care strengths and barriers. Based on all qualitative data collected and stakeholder insight, the Needs Assessment Committee selected interventions with the greatest opportunity to optimize on current resources and those that would have the greatest impact on the focus areas related to the county's most significant health issues.

Selected Priorities and Interventions

Promote Healthy Women, Infants and Children

Health Disparity: Chenango County is a rural upstate community with a high poverty rate. Stakeholders regularly site access as a primary barrier to care.

Intervention:

Goal 2.1: Reduce infant mortality and morbidity

Chenango County will utilize a program called Project Safe Sleep to focus on sharing information about actions new parents and others can take to help babies sleep safely, with the goal of reducing infant's risk of Sudden Infant Death Syndrome (SIDS) and other sleep-related causes of infant death.

Chenango County Public Health will provide logistical support, training materials, trainers, and event promotion. Multiple health service organizations throughout the county will serve to host, refer, and promote events. Chenango Memorial Hospital will act as a referral partner, allowing access to providers.

Goal 2.2: Increase breastfeeding

Chenango County will partner with the local Breastfeeding Coalition to increase the number of Certified Lactation Consultants and increase local breastfeeding supports.

Goal 3.3: Reduce dental caries among children

Chenango County Public Health will create and publish dental health education materials while multiple partners in Dental Task Force will work to distribute the health information.

Promote a Healthy and Safe Environment

Health Disparity: Chenango County is an aging, low-income community. Stakeholders regularly site access as a primary barrier to care.

Intervention:

Utilizing the program Bingocize, which is an evidenced based senior movement that combines exercise and health information with the familiar game of bingo, has been shown to be a great way to get seniors moving while socializing. The goal of participation is improved and/or maintained mobility and independence as it is adaptable and beneficial for all ranges of physical and mental ability. The overall goals of the program are to help older adults improve and/or maintain mobility and independence, learn and use health information focused on falls reduction to promote wellness, socialization and connectedness. Chenango County Public Health will collaborate with Chenango County's Area Agency of the Aging to provide the certified trainer, logistics, promotion, referral, and implementation of program. Chenango Memorial Hospital will provide promotion and referral services for the program.

Promote Well-Being and Prevent Mental and Substance Use Disorders

Health Disparity: Chenango County is a low-income, rural community consistently hindered by limited access to care.

Intervention: Mental Health First Aid - While increasing the number of mental health care providers would benefit the county, a more immediate and effective community-based intervention would be to expand the number of people trained to identify mental health issues in their professional sphere and to provide appropriate support. Early detection and intervention could have a significant impact on the trajectory of young people in the county. Chenango County proposes to expand the *Mental Health First Aid* program by making hospital staff, health department staff, and providers available for training. Efforts will be made to promote the program and organize trainings for other stakeholders with a particular emphasis on training individuals who work with young people such as school staff, educators, and organizations serving youth.

Partners

Bringing partners to the table and maintaining their engagement will be vital to the success of the interventions within the chosen priority areas. The Needs Assessment Committee will create and maintain planning committees for each of the identified priority areas. These committees, and sub-committees, will bring together community stakeholders representing various constituencies including community-based organizations, governmental entities, funders, faith communities, and employers.

Impact and Process Measures

Those committees and sub-committees formed for each priority area will be charged with activity planning, measuring progress toward goals, and reporting on each priority area. The Needs Assessment Committee will provide support as needed to these committees to ensure impact and process measures are developed and that progress is made towards meeting these measures. See section on Process Measures, Time-Framed Targets, and Work Plan (page 77).

Introduction

Chenango County and UHS Chenango Memorial Hospital (CMH) collaborated to conduct the 2022-2024 Community Health Assessment (CHA) and Community Health Needs Assessment (CHNA). CCPH was tasked with providing a detailed analysis of healthcare related data, as well as gathering qualitative data from both key stakeholders and Chenango County residents. A Needs Assessment Committee, comprised of representatives of the Chenango County Department of Public Health (CCPH), CMH, and Chenango Health Network (CHN), provided oversight and guidance to the assessment process. The coordination between the local health department (CCPH) and the local hospital (CMH) to develop the CHIP/CSP is indicative of the commitment to on-going collaboration toward meeting the shared community health goals.

The CHA/CHNA report was intentionally structured to provide detailed information on both social determinants of health and all priority areas defined in the Prevention Agenda. Chenango County has limited resources and the CHA/CHNA process provided a unique avenue to conduct a comprehensive assessment. This report works to identify opportunities for local and regional organizations to obtain funding and take action related to specific health challenges and deficiencies within Chenango County.

In addition to the detailed material in the report, key challenges and resources have been summarized to provide a more succinct review of Chenango County's community health landscape (pages 10-65). These summaries are followed by the Community Health Improvement Plan (CHIP)/Community Service Plan (CSP) (pages 73-75), which describes the priorities and interventions the county will be focused on for the next three years and the process used to select them.

Description of Chenango County

Chenango County is a rural county in the south-central area of New York, frequently referred to as the Southern Tier. Contiguous counties include Madison, Otsego, Delaware, Broome, and Cortland. Norwich, the county seat, is approximately 112 miles west of Albany, 40 miles north of Binghamton, and 60 miles southeast of Syracuse. There are 21 townships, 8 villages, and 1 city in the county. The county's land area constitutes 899 square miles and is comprised mainly of rural landscapes with agricultural land (35%) and forest (60%) being the two most predominant. Approximately 112,000 acres, or 20%, of Chenango County's land is state owned.

The primary connector from Chenango County to the rest of New York State is State Route 12, which provides links to the NYS Thruway, and Interstates 81, 86, and 88. There is access to air transportation through commercial airports in Binghamton, Utica, Syracuse, and Albany. Binghamton airport is the closest airport at 42 miles from Norwich. In addition, the Lt. Warren Eaton Airport in Norwich provides access to private air travel. CMH has a heliport which allows patients in need of intensive care to be airlifted to larger care centers. The county does not have access to commuter rail transportation. Coach USA and Greyhound Lines offer bus transportation to and from the area. Chenango First Transit provides bus service via six fixed routes within the county.

The travel time to hospitals other than CMH for Chenango County residents is substantial. As noted in Table 1, the nearest large hospitals require travel of up to 45 minutes or more.

Table 1. Distance and Travel Time from Norwich to Regional Hospitals

Hospital	*City*	*Distance in Miles from Norwich*	*Travel Time*
A.O. Fox Hospital	Oneonta	32	45 minutes
M.I. Bassett Healthcare	Cooperstown	44	1 hour
Binghamton General Hospital	Binghamton	43	1 hour
Community Memorial Hospital	Hamilton	22	30 minutes
Cortland Regional Medical Center	Cortland	43	1 hour
Crouse Hospital	Syracuse	58	1 hour, 15 minutes
Our Lady of Lourdes Hospital	Johnson City	42	1 hour
Syracuse VA Medical Center	Syracuse	58	1 hour, 15 minutes
Tri Town Regional Hospital (ED Only)	Sidney	22	30 minutes
Upstate University Hospital	Syracuse	58	1 hour, 15 minutes
Wilson Medical Center	Johnson City	44	1 hour

Total Population

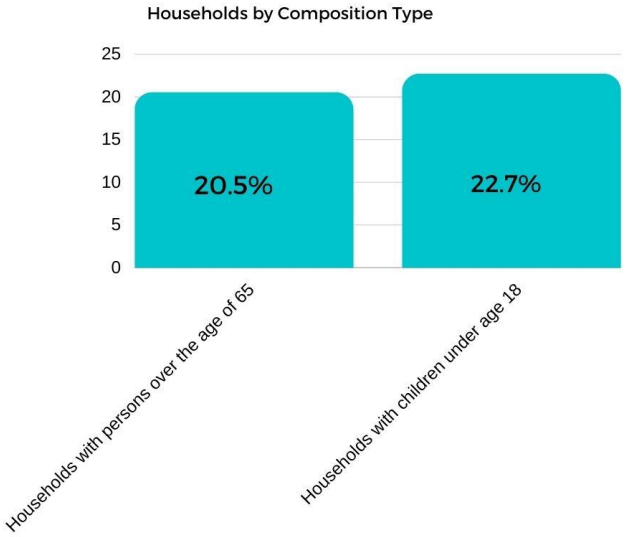
As of 2020, the most current population total for Chenango County is 47,527,[1] which has declined by 3.6% since 2016. When looking at the population by age, 22.7% of the Chenango County population is under age 18 and 20.5% is aged 65 and over. A further breakdown is demonstrated below.

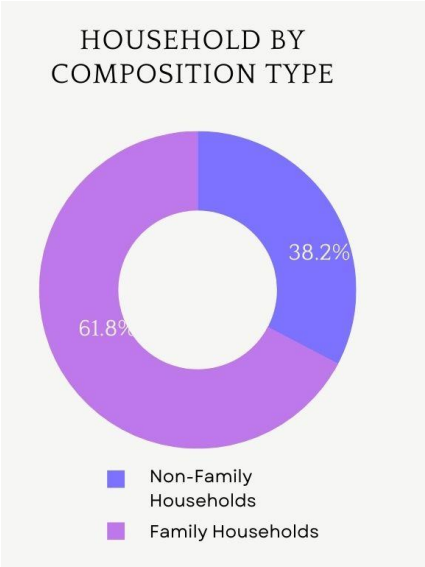
Table 2. Number and Percent of Population by Age Group and Sex

Age group	*Male*		*Female*		*Total*	
	Number	*Percent*	*Number*	*Percent*	*Number*	*Percent*
Under age 5	1,300	5.5%	1236	5.2%	2536	5.3%
5 – 19	4,266	17.9%	4026	17.1%	8292	17.4%
20 – 64	13,602	56.9%	13335	56.3%	26937	56.8%
65 – 84	5,920	17.9%	4320	18.2%	8571	18.0%
85 and older	404	1.7%	787	3.3%	1191	2.5%
Total	23,823	100.00%	23,704	100.00%	47,527	100.00%

Households and Families

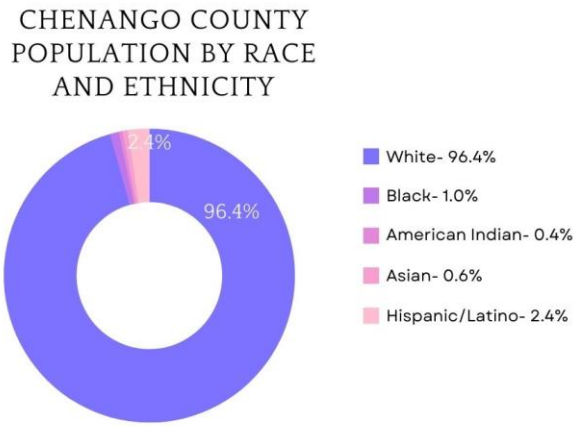
Chenango County has a total of 20,834 households, 61.8% of which are family households. Nearly half, 45.4%, of family households include married couples.[2] 20.5% of households include someone aged 65 and over, while nearly a quarter of households (22.7%) include children under the age of 18.





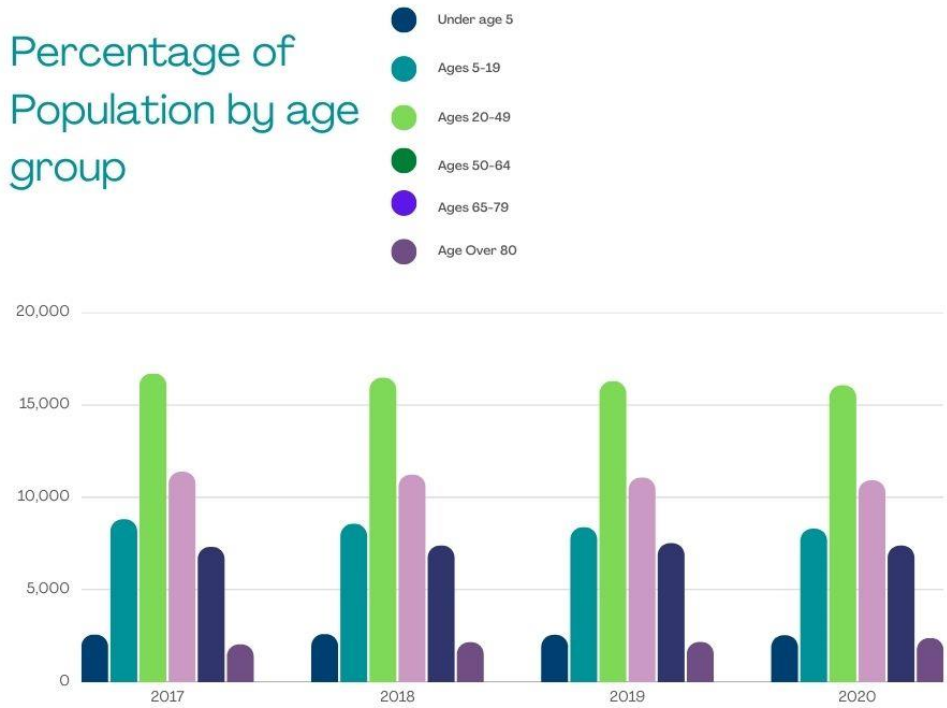
Race and Ethnicity[3]

When examining race and ethnicity, Chenango County lacks diversity. In the county, 95% of residents are white.



Age Demographics

As with the rest of the United States, the population of Chenango County is aging. The median age of the population has continued to increase over time, rising from age 43 in 2010 to age 44.9 in 2017 and has stayed relatively consistent, at 44.8% in 2020. The group that has seen the largest increase during this time is adults aged 65 to 79, with a population increase from 14.6% in 2016 to 20.2% in 2020.[4]



Social Determinants of Health Impact on Chenango County

As noted by the federal Office of Disease Prevention and Health Promotion in their Healthy People 2030 campaign, *"Health starts in our homes, schools, workplaces, neighborhoods, and communities. We know that taking care of ourselves by eating well and staying active, not smoking, getting the recommended immunizations, and screening tests, and seeing a doctor when we are sick all influence our health. Our health is also determined in part by access to social and economic opportunities; the resources and supports available in our homes, neighborhoods, and communities; the quality of our schooling; the safety of our workplaces; the cleanliness of our water, food, and air; and the nature of our social interactions and relationships. The conditions in which we live explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be…Social determinants of health are conditions in the environments in which 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."* [5]

Based on the Healthy People 2030 place-based framework, the five key social determinant areas explored for the Chenango County Community Health Assessment include:

- Economic Stability
- Education
- Social and Community Context
- Access to Health Care
- Neighborhood and Built Environment

Stakeholders and survey participants frequently noted various social determinants, such as these, as primary challenges to improving health in the community.

Economic Stability

Several stakeholders and survey participants noted that the less-than-robust economic environment of Chenango County is an important factor related to health. As one survey participant noted, *"There is little economic opportunity for people to grow families. People with college degrees barely make above minimum wage and people that work minimum wage jobs now make more than some people working in human services or community services which require degrees, and the health care coverage doesn't make up for it at all."*

Employment

A handful of survey participants noted that a lack of jobs in the area was a key driver of health problems in the county. One contributor said, *"There is no economic development opportunity because we do not have quality, high paying jobs, our only school is a community college not offering a lot of courses, and the (housing) rental prices here for good places is astronomical."*

The Chenango County unemployment rate is typically higher than that of NYS as a whole. As of 2020, the Chenango County unemployment rate (not seasonally adjusted) was 6.5% while the NYS rate was 5.7%.

Chenango County Unemployment Rate[6]

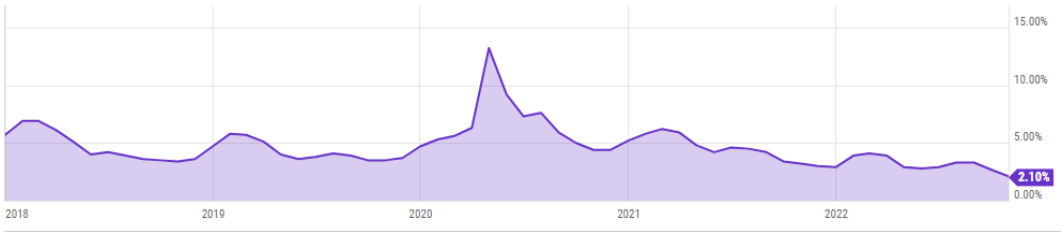


Table 3. Employment Status by Age[7]

Age range	*Labor Force Participation Rate*	*Employment/Population Ratio*	*Unemployment Rate*
16 to 19	41.8%.	31.7%	24.2%
20 to 24	81.7%	71.0%	13.0%
25 to 29	82.0%	76.2%	6.7%
30 to 34	82.9%	77.4%	6.7%
35 to 44	85.2%	80.4%	5.6%
45 to 54	76.6%	73.6%	4.0%
55 to 59	77.2%	75.7%	1.9%
60 to 64	52.5%	49.9%	5.0%
65 to 74	24.7%	23.1%	6.5%
75 years and older	6.6%	5.6%	15.5%

Of the 29,071 people aged 16-64 in the county, 76.5% (22,232) worked at least part-time for part of the year. The number of people aged 16-64 in Chenango County who did not work at all increased from 7,755 (23.8%) in 2010 to 8,548 (27.7%) in 2016 and then decreased to 6,839 (23.5%) in 2020. Of those workers who did work, nearly two-thirds or 65.2%, worked full-time, year-round, and 78.3% of workers usually worked 35 hours or more in 2020, slightly down from 78.9% in 2016. [8]

In 2020, 17.2% of the people in Chenango County aged 18 to 64 identified as having a disability, an increase from 16.4% in 2016. 57.7% of people with disabilities are not in the labor force while 33.3% are employed.[9]

Table 4. Number of Residents by Employment Status by Disability Status

Employment Status	*With a Disability*	*No disability*
Employed	1,579	18,307
Unemployed	425	910
Not in labor force	2,737	3,692
Total	4,741	22,909

Income & Poverty

Poverty was cited as a key barrier to having a healthy community by several stakeholders and survey participants. One stakeholder shared, *"When you're struggling to make ends meet and something must give, it can often be health. You must eat, you must put gas in the car to get to work, you must pay the*

electric bill. But….do you have to go to the specialist for your diabetes? Do you have to take the expensive blood pressure medicine, maybe cut the pills in half, make them last longer." Both stakeholder and survey participants noted the negative impact of poverty on people's ability to not only choose healthier options including for food and exercise, but also its impact on their ability to understand or embrace the importance of preventive care. One stakeholder noted, "I*t is important to improve broadband (for telehealth services), there are now programs for low-income families to pay for internet services and getting those services to the people who need them".*

Chenango County has a significantly lower median income than New York State as a whole, both for households and families. This suggests that the county population overall has less "buying" power.

Table 5. Income by Region[10]

	Chenango County	*NYS*
Median Household Income 2020	$51,756	$71,117
Median Family Income 2020	$65,537	$87,270

There are many different indices and measures that describe income in a community. The most persistent and prevalent indicator used is the poverty rate. The initial federal poverty thresholds were based on a number derived from multiplying the cheapest of four USDA-developed food plans by three. Since their initial development in the 1960s, these poverty threshold bases have not changed substantially.

As noted in Table 6, Chenango County has slightly lower percentages of families and individuals with incomes below the poverty level than New York State.[11] The percentage of people in Chenango County aged 65 and over with incomes below the poverty level is less than NYS and has remained the same since 2016. Census data indicate that approximately 15.8% of children in Chenango County live in households with incomes below the poverty line, a rate which is slightly lower when compared to New York State as a whole. The rate of children living in a household with a single mother in Chenango County is comparable to the New York State rate.

Table 6. Percent of Individuals and Households with Incomes Below Poverty by Region and Year

Percent with Incomes Below Poverty	*Chenango*		*NYS*	
	2016	*2020*	*2016*	*2020*
All families	10.2%	8.4%	11.7%	10.0%
All individuals	15.4%	12.9%	15.5%	13.6%
Individuals aged 65 and over	8.4%	8.4%	11.4%	11.5%
Children under 18 living in households	18.9%	15.8%	21.9%	18.7%
Families with female head of householder, no husband present with related children under 18 years	44.2%	33.6%	37.9%	33.7%

Despite the prevalence of the use of poverty rates as a descriptor for geographies, there is ongoing concern that the poverty thresholds do not adequately capture the number of people and households that have insufficient income to meet their basic needs. Many federal assistance programs acknowledge this by offering assistance to individuals and families with incomes above the poverty threshold. For example, eligibility for SNAP (formerly referred to as Food Stamps) allows for incomes up to 130% of the poverty level and WIC allows for incomes up to 185% of the poverty level. While 15.8% of children in Chenango County live in households with incomes below poverty, 26% live in households that receive SSI, Cash Public Assistance Income, or SNAP. Of these children, 41% live in a family with both parents present.[12]

Table 7. Number and Percent of Households in Chenango County with SSI, Cash Assistance or SNAP by Household Type

	Number	*Percent*
Married couple family	1,070	41.4%
Male householder, no wife present	446	17.3%
Female householder, no husband present	1026	39.7%

Anti-poverty groups have argued that the federal poverty thresholds do not adequately account for the entirety of the population of those who are unable to provide for their basic needs. A commonly used rule of thumb to determine the number of households that have incomes below those that allow for basic needs to be met is to calculate the number of households with incomes at or below 200% of the poverty threshold. 27% of households in Chenango County meet this standard. [13]

The geographic distribution of households by ratio of income to poverty is significant. The Sherburne (40.0%%) and City of Norwich (38.68%) Townships have significantly higher percentages of households falling in this 200% or below income range while the Greene Township has the greatest percent of households with incomes above 200% of the poverty threshold.

Seniors & Income Insecurity

The Elder Economic Security Index is a measure specifically designed to address the cost of living for older adults.[13] The Elder Index examines the costs of the essentials of daily life such as housing, transportation, food, and health care, and determines the annual income required to meet those needs. The cost of living for all household types in the Elder Index for Chenango County is significantly higher than the poverty line, suggesting that more seniors are economically insecure than indicated in Census poverty data.

Table 8. Elder Economic Security Index for Chenango County & Ratio to Poverty

	Elder Person, aged 65+			*Elder Couple, both age 65+*		
	Owner without mortgage	*Renter*	*Owner with mortgage*	*Owner without mortgage*	*Renter*	*Owner with mortgage*
Index per month	$2,726	$2,837	$ 3,444	$ 4,617	$ 4,728	$ 5,335
Index per year	$ 32,712	$ 34,044	$ 41,328	$ 55,404	$ 56,736	$ 64,020
Ratio to poverty	132%	116%	113%	143%	131%	127%

The Census does not cross-tabulate data by housing, income and age by county which prevents a more accurate analysis of the number of older adults considered economically insecure based on the Elder Index from being obtained. However, Census data does provide the number of seniors with incomes at specific ratios to poverty. These data suggest that almost a third of people aged 65 and over (31.4%) in Chenango County have incomes below 200% of poverty and would be considered economically insecure. One survey participant noted, *"Having cared for elderly parents with disabilities and dementia I found the Office of the Aging very helpful, however medical expenses and ambulance services cost thousands of dollars not covered by health care. Out of pocket expenses mean deciding between groceries medications and health care bills."*

Table 9. Number and Percent of People aged 65 and older in Chenango County by Ratio of Income to Poverty Threshold14

Ratio to Poverty	*Number*	*Percent*
Under 1.00 of poverty	800	8.4%
1.00 to 1.37 of poverty	745	7.9
1.38 to 1.99 of poverty	1433	15,1%
2.00 to 3.99 of poverty	3503	36.9%
4.00 or over	3011	31.7%
Total	9,492	100.0%

ALICE Threshold

The United Way has developed a concept called ALICE (Asset Limited, Income Constrained, Employed) to describe a population that has traditionally been called the "working poor" along with an income threshold to define this population. The threshold is designed by looking at local costs for housing, childcare, food, transportation, health care, technology, and taxes to determine a baseline "household survival budget." It does not include savings or any other non-essentials. The ALICE population is generally expected to be employed. The threshold, however, has been used to define the number and percentage of all households that would fall into those income ranges, whether traditionally employed or not.

The 2020 ALICE report for Chenango County found that a single adult living in the county would need an annual income of $27,432 and a family of four requiring childcare would need an income of $72,960 in order to be considered within the ALICE threshold guidelines.

The report estimates that 40% (N=8,246) of households in the county have incomes below the ALICE threshold compared with 45% of households in NYS as a whole. According to the Chenango County and NYS ALICE reports, the breakdown of income is similar between Chenango County and NYS for families with children. Fewer single person households and households with people aged 65 and over in Chenango County have incomes above the ALICE threshold than in NYS as a whole. The most significant difference between county and state data is the percentage of seniors in Chenango County with incomes in the ALICE range (43%) which is much higher than the NYS rate (36%).[15]

Overall, the ALICE threshold suggests that more Chenango County residents, with the exception of children, are income insecure. An interview with a key stakeholder introduced that trends seem to be indicating an increased need for those falling below the ALICE threshold.

	100% of Poverty (Individuals)	*200% of Poverty (Individuals)*	*ALICE (households)*
All	12.9%	35.49%	48%
Children	16.0%	45.8%	45%
Seniors	8%	27.9%	53%

Housing Instability

Several key stakeholders and survey participants noted that housing can be a social determinant affecting health conditions in the county, one survey participant stated, *"Affordable Housing is a real issue for Chenango County".* A prominent stakeholder had this to say *"Housing instability has a direct impact on health determinants in several ways. Most obvious is the immediate risk of living in sub-standard housing, such as poorly maintained or polluting heating systems (carbon monoxide, air quality, mold, and other irritants), lack of appropriate insulation (both a health and financial issue), and due to the age of much of the housing stock in Chenango, risks such as lead, asbestos, and other hazards. Landlords that lease sub-standard apartments are often less than responsive dealing with these issues, and when there is more competition for affordable rental units, are even less motivated to readily address them. Additionally, lower-income renters may hesitate to request repairs or hazard mitigation efforts for fear of retribution or eviction (regardless of fair housing laws and codes requirements) and may put their health at risk by remaining silent. Lastly, households that spend a preponderance of their income on housing are less able to afford preventive health care, purchase healthier foods, and are less apt or able to spend money on existing health issues before they become chronic, debilitating, or even life-threatening"*

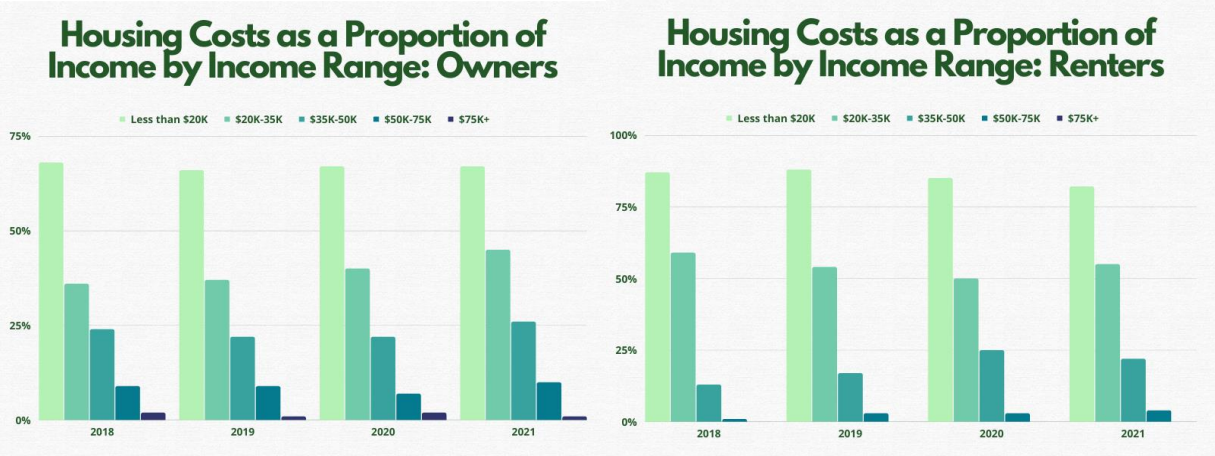
Housing instability such as falling behind on rent, moving frequently, or experiencing periods of homelessness, has been linked to negative health consequences such as more frequent hospitalizations and emergency room visits.[16] Slightly more Chenango County residents (7.9%.) moved more than once within the county per year compared to those in New York State as a whole (5.8%).[17] People who have incomes below poverty or who are renters are much more likely to move within the county. Nearly one in five renters in Chenango County had moved within the county in the previous year.

Table 10. Percent of Population that Moved within the Same County in Past Year

	Chenango	*NYS*
Percent below 100% of poverty	14.5%	8.5%
100 to 149% of poverty	14.3%	7.0%
At or above 150% of poverty	5.7%	5.0%
Owner-occupied	5.9%	3.3%
Renter-occupied	14.5%	8.6%

Owners have much longer tenure within their homes in Chenango County. The median year owners moved into their homes was 2003 while renters moved into their homes in 2015.[18]

An important factor in housing instability is the cost of housing as compared to income. Unsurprisingly, households with lower incomes are more likely to have housing costs which exceed a third of their income.[19] In 2021, Over 80% of renters in Chenango County making less than $20,000 per year pay more than 30% of their income in housing costs. Middle and higher income owners are more likely to pay excessive housing costs relative to their income than are renters in the same income category. 45% of owners making between $20,000-$35,000 per year pay 30% or more of their income for housing costs while less than 10% of owners making between $50,000-$75,000 per year pay the same percentage.



By far, the City of Norwich has the highest percentage of households with monthly costs greater than 30% of household income. However, several other townships have high percentages of renters facing similar housing costs versus their income, including the towns of Bainbridge, German, Plymouth, and Norwich (town).[20]

Table 11. Percent of Households with Monthly Housing Costs Greater than 30% of Household Income

Town	*All*	*Owners*	*Renters*
Afton	22.7%	18.4%	35.8%
Bainbridge	31.8%	22.2%	66.9%
Columbus	17.4%	16.8%	20.8%
Coventry	23.1%	25.4%	11.2%
German	33.4%	28.9%	58.8%
Greene	22.7%	18.1%	37.7%
Guilford	22.4%	18.7%	45.3%
Lincklaen	13.9%	16.0%	0%
McDonough	20.4%	21.3%	13.7%
New Berlin	15.2%	12.0%	27.8%
North Norwich	15.6%	14.1%	40.0%
Norwich (city)	34.2%	13.8%	47.8%
Norwich (town)	14.7%	9.5%	59.5%
Otselic	12.9%	10.2%	22.1%
Oxford	28.1%	23.1%	41.2%
Pharsalia	33.4%	34.2%	14.2%
Pitcher	19.7%	19.5%	20.4%
Plymouth	23.6%	19.0%	50.0%
Preston	15.3%	14.9%	18.9%
Sherburne	25.0%	17.4%	46.8%
Smithville	25.0%	25.0%	25.8%
Smyrna	15.2%	9.7%	48.4%

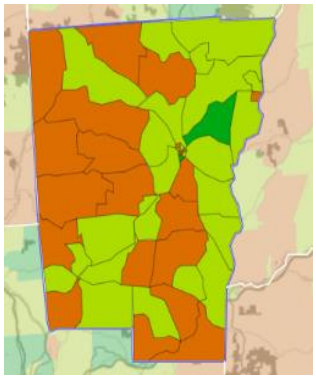
Education

A handful of stakeholders and survey participants said that education is a factor effecting the health of Chenango County residents. One key informant said, *"We have a huge population of people who just do not care. I think that's probably education and not knowing how important (health care) is. A lot of them work all day and trying to get to the doctor is a problem. They cannot be bothered and don't see it as an urgency or as important."*

Literacy

The National Center for Education Statistics (NCES) estimated in 2003 that 12% of Chenango County residents lacked basic prose literacy skills.[21] The University of North Carolina at Chapel Hill has used NCES data to develop a "health literacy" scale to identify communities which may have residents with problems reading and understanding basic health information.[22] The scale suggests that 30% or more of the population in Chenango County has basic or below basic health literacy scores. The average health literacy score of 247.2 in Chenango is somewhat higher than the average health literacy score of 241.7 for New York State as a whole, but both fall within the second quartile (first quartile = lowest, fourth quartile = highest).

- Adults with Below Basic health literacy skills may be able to locate information in simple text (e.g., the time of their next clinic visit from an appointment slip) but would struggle with information in more complex documents.
- Adults with Basic health literacy skills are able to locate multiple pieces of information in a document but may have difficulty interpreting or applying this information (e.g., determining whether their body mass index is in a healthy range).



A number of stakeholders noted that the lack of education in the county impacts the health literacy of the population. One stakeholder said, *"Navigating the healthcare system is complicated, I have been a health insurance navigator for 7 years and NYS of Health still throws me a curve ball once in a while. I've done this for so long that I know how things were supposed to be and when something isn't right, I couldn't imagine someone trying to navigate for themselves. The world of health insurance and healthcare is ever changing and keeping up with it at any level of health literacy is a challenge. It's so important for there to be accessible resources and advocates to help with these challenges. I think much of the problem is that the individuals that need the assistance, don't know where to get it. An annual county (phone book) of resources that could be mailed to all county residents might be an option."*

Educational Attainment

Chenango County has seen an overall increase in the educational enrichment of its citizens with higher percentages of residents attaining some level of college education.[23] There is a positive trend among young people reaching greater levels of education, but Chenango County continues to lag behind New York State in higher education. Only 18.6% of Chenango County residents have at least a 4-year degree as compared with 35.3% of NYS residents.

Table 12. Percent of Population 25 and Over by Educational Attainment by Region and Year

	Chenango County		*NYS*	
	2016	*2019*	*2016*	*2019*
Less than 9th Grade	3.5%	3.0%	6.5%	6.1%
9th-12th Grade/No diploma	9.6%	9.0%	7.5%	7.0%
HS graduate	38.7%	39.0%	26.4%	26.0%
Some college, no degree	19.0%	18.5%	16.1%	15.5%
Associates degree	11.8%	12.0%	8.6%	8.7%
Bachelor's degree	9.3%	10.5%	19.7%	20.5%
Graduate or professional degree	8.2%	8.2%	15.1%	16.0%

Table 13. Percent of Population by Specific Educational Attainment by Age Group, Region, and Year

	Chenango County		*NYS*	
	2016	*2019*	*NYS – 2016*	*NYS-2019*
Population 25-34 years				
HS or higher	90.0%	88.7	89.7%	90.9
Bachelor's or higher	21.2%	21.4	43.6%	45.6
Population 35-44 years				
HS or higher	90.0%	93.1	87.7%	88.5
Bachelor's or higher	19.4%	22.5	39.4%	42.1

Other Education Indicators

Achieving proficiency in English Language Arts (ELA) by grade three is considered critical for future educational success. While the percentage of Chenango County third graders achieving proficiency in ELA has increased since the 2013-2014 school year, fewer students achieve proficiency as compared to NYS as a whole.[24] In particular, students with disabilities, African American students, male students, and economically disadvantaged students are less likely to be proficient. The school dropout rate in Chenango County (7%) is higher than the NYS rate (6%), but the percentage of students achieving a Regents diploma is lower in Chenango County than in NYS as a whole.

Table 14. K-12 Educational Indicators by School Year and Region

Indicator	*Chenango County*		*NYS*	
	2017	*2019*	*NYS 2017*	*NYS 2019*
Dropout rate	3%	7%	3%	6%
Regents Diploma	88%	39%	93%	44%
Regents with Advanced Designation	36%	36%	38%	34%
Grade 3 ELA Percent Proficient				
All students	27%	39%	43%	45%
Students with disabilities	2%	10%	13%	14%
Hispanic or Latino	19%	44%	33%	35%
Female	36%	42%	49%	51%
Male	18%	35%	38%	40%
Economically disadvantaged	19%	26%	32%	36%

Early Childhood Education

Early childhood education provides an important base for lifelong learning and cognitive and social development. According to data provided by the *2019 OFC Needs Assessment*, NYSED, and the Kids Count Data Center, only 43% of 3- and 4-year-old children in Chenango County are enrolled in an early education program. While there is clearly an opportunity to increase the number of children receiving

early childhood education, Chenango County is currently surpassing New York State which has just a 37% enrollment rate in either Universal Pre-K or Head Start.[25]

Table 15. Early Childhood Education Enrollment

	Chenango County	*New York State*
Universal Pre-K (half day)	142	27,313
Universal Pre-K (full day)	173	112,653
Head Start Enrollment	138	52,380

Social and Community Context

The social and community context within which a person lives can have a significant impact on their health. This can include social relationships and how involved a person is within social, religious, or cultural institutions, as well as incarceration rates and the prevalence of discrimination in the community.

Civic Participation

A handful of key Chenango County stakeholders noted the community's general lack of engagement with or interest in their community environment. A stakeholder working with substance use disorders said, *"I personally believe that our community has a few things going on that contribute to the lack of civic engagement surrounding substance use disorder. The biggest contribution is the shame and stigma around the issue. I know our community cares about people, I see it with how people treat each other at the grocery store. The dynamic shifts with substance use due to how shameful the topic is. You don't want to tell anyone what is happening, does it make you a bad person or a bad parent? In a time of stress, it's easier to remain quiet. The interesting dynamic is when people talk about their struggles, you find other people who are struggling too."*

While the majority of potentially eligible residents (aged 18 and over) are registered to vote (78.6%), 79.4%% of those registered residents voted in the most recent presidential election.[26] In particular, voter turnout in local elections is very low in the county. In the most recent Board of Supervisor's elections, just over a third or 31.1% of registered voters cast ballots and only 24.7% of potentially eligible voters participated. Part of the lack of engagement may be due to the lack of choices available. In 2021, of the 22 seats on the Board that were up for election, only 4 were contested.

Table 16. Voter Participation by Region

	Chenango County	*New York State*
Active Voter Registration	28,262	11,676,265
Inactive Voter Registration	1,352	1,019,497
Total Voter Registration	29,614	12,695,612
Number of Potentially Eligible Voters (age 18 and over)	37,672	15,443,707
Percent Registered	78.6%	82.2%
Number voted in 2020 Presidential Election	22,445	8,496,883
Percent Participation by Registered Voters	79.4%	72.8%
Percent Participation by Potentially Eligible Voters	59.6%	55.02%

Table 17. Voter Participation by Town and Competitiveness of Election

Town	*Registered Voters*	*Votes Cast*	*Percent of registered voters participating*	*Competitiveness*
Afton	1760	535	30.4%	Unopposed
Bainbridge	1959	571	29.1%	Unopposed
City of Norwich	2137	877	41.0%	
City of Norwich	4411696	523	30.8%	Unopposed
Columbus	588	201	34.2%	Unopposed
Coventry	968	340	35.1%	
German	228	81	35.5%	Unopposed
Greene	3631	950	26.2%	Unopposed
Guilford	1794	586	32.7%	Unopposed
Lincklaen	236	85	36.0%	Unopposed* (2015)
McDonough	566	193	34.1%	Unopposed
New Berlin	1475	355	24.1%	Unopposed
North Norwich	1054	269	25.5%	Unopposed
Norwich	2319	741	40.0%	Unopposed
Oxford	2362	728	30.8%	Unopposed
Otselic	550	204	37.1%	
Pharsalia	339	94	27.7%	Unopposed
Pitcher	433	162	37.4%	Unopposed
Plymouth	1056	329	31.2%	Unopposed
Preston	650	272	41.9%	
Sherburne	2498	649	26.0%	Unopposed
Smithville	851	334	39.2%	Unopposed
Smyrna	768	238	31.0%	Unopposed

According to 2022 County Health Rankings by the University of Wisconsin Population of Health Institute, Chenango County has an "social association rate" of 11.2%.[27] The association rate is the number of associations, such as civic organizations, golf clubs, sports organizations, religious organizations, and professional associations, per 10,000 people. The association rate is a measure to reflect social isolation and social capital. New York State's association rate is 8.1% suggesting that Chenango County has a higher-than-average number of opportunities for residents to engage with community groups.

Social Cohesion

Because Chenango County is primarily rural, there are challenges to maintaining social cohesion, particularly among groups that have limited transportation options. Seniors have the highest risk of becoming isolated. Of the households with a person aged 65 and older, 42.1%% of these seniors live alone. While this is slightly lower than NYS as a whole (46.0%), the percentage is high enough to be notable and of concern.[28] One county employee commented in regard to the aging population, "*Transportation is a serious void in our rural community. One of the issues I feel is a challenge, doctors. We need a gerontologist in our area. There is not enough care for mental illness, and loneliness is what many seniors who live in this rural community live with every day."*

Young adults are also at risk for isolation in rural counties. According to Measure of America, 16.6% of Chenango County youth are considered "disconnected": young people between the ages of 16 and 24 who are not in school and not working.[29] This rate is significantly higher than the New York State rate of 13.6.%. When youth are disconnected, "they are more likely to struggle with mental illness or substance use, encounter violence, and become teen parents."[30] In the county, juvenile arrests have varied year to

year in both total numbers as well as type of crime. Looking at the juvenile arrest rate as a proportion of the total number of children aged 12-17 reveals a higher percentage of Chenango County youth being arrested between the years 2013-2018 than in NYS as a whole.

Table 18. Chenango County Juvenile Arrest Rates by Type of Crime and Year

	2013		*2014*		*2015*		*2016*		*2017*		*2018*	
	#	*% Of Total*	*#*	*% Of Total*	*#*	*% Of Total*	*#*	*% Of Total*	*#*	*% Of Total*	*#*	*% Of Total*
Total Arrests	70	100%	53	100%	55	100%	81	100%	44	100%	27	100
Simple Assault	10	14%	5	9%	8	15%	10	12%	6	15%	12	19%
Aggravated Assault	1	1%	0	0%	6	11%	6	7%	1	3%	5	0%
Robbery	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
Forcible Rape and Other Sex Offenses	4	6%	6	11%	7	13%	4	5%	3	8%	0	26%
Other Personal	0	0%	0	0%	1	2%	0	0%	0	0%	7	0%
Burglary	5	7%	7	13%	4	7%	4	5%	3	8%	0	0%
Criminal Mischief	12	17%	15	28%	8	15%	26	32%	12	30%	14	7%
Larceny	15	21%	11	21%	12	22%	16	20%	10	25%	0	44%
Stolen Property	0	0%	0	0%	0	0%	0	0%	0	0%	2	0%
Other Property	2	3%	4	8%	0	0%	0	0%	0	0%	12	0%
Weapons	2	3%	2	4%	1	2%	1	1%	0	0%	0	0%
Drug	10	14%	2	4%	3	5%	7	9%	4	10%	0	4%
Other	9	13%	1	2%	5	9%	7	9%	1	3%	0	0%
Demographics												
Male	54	77%	39	74%	35	64%	58	72%	24	60%	16	59%
Female	16	23%	14	26%	20	36%	23	28%	16	40%	11	41%
Age at Arrest												
12 Years and Under	9	13%	10	19%	10	18%	17	21%	12	30%	6	22%
13 Years	12	17%	11	21%	11	20%	6	7%	13	33%	3	11%
14 Years or Older	49	70%	32	60%	34	62%	58	72%	15	38%	18	67%

Access to Communication Options

Several survey participants and key stakeholders noted that the county is challenged by a lack of consistent, robust cellular and internet service. Overall, Chenango County has relatively limited access to broadband internet service (75.8% of population has access) compared to New York State as a whole (98% with access). The bulk of those with access to broadband are limited to ADSL or satellite internet options.[31] As of December 2016, the FCC estimated that 94.4% of the Chenango County population had access to mobile LTE with a minimum of 5 megabits per second (mbps) download speeds.[32]

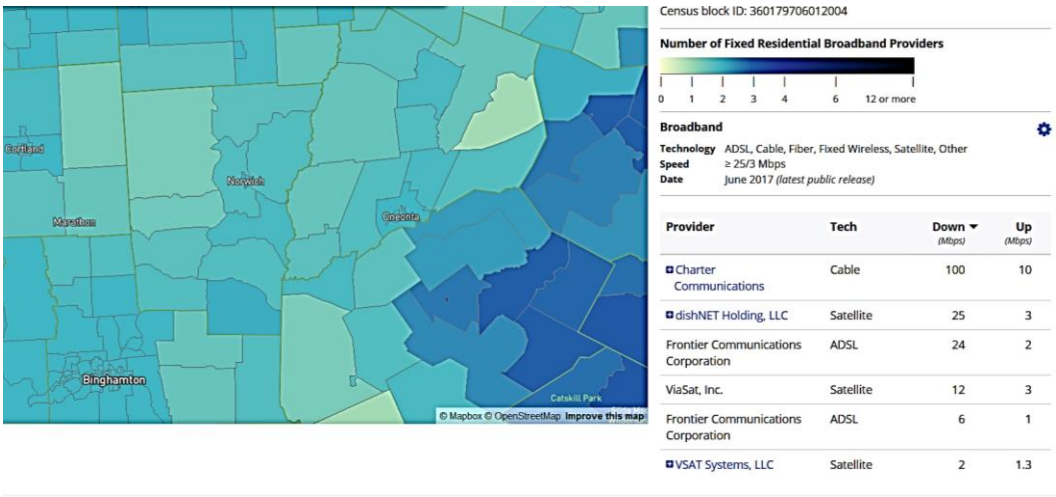


Table 19. Percent of Chenango County Residents with Access to Internet by Type

% of Pop. with Fixed 25 Mbps/3 Mbps	*% of Pop. with Mobile 5 Mbps /1 Mbps*	*% of Pop. with Fixed & Mobile*
75.80%	94.40%	73.90%

Data from the Census suggests much lower connectivity among some specific demographic groups in the county.[33] According to this data, 17.3% of all households in Chenango County lack internet service. In addition, 38.3% of all households with incomes below $20,000 per year lack internet access.[34]

Table 20. Percent of Individuals by Internet and Computer Access

	No internet	*No computer*
By Age		
Under 18	6.0%	2.8%
18 to 64	5.6%	4.0%
65 and over	6.9%	19.8%
By Educational Attainment		
Less than HS	8.4%	20.6%
HS or some college	6.6%	8.5%
Bachelor's or higher	2.9%	2.5%
By Employment Status		
Employed	4.9%	2.1%
Unemployed	10.9%	5.1%
Not in labor force	6.7%	16.5%

Table 21. Percent of Households by Computing Devices and Internet Subscription

	Percent of Households
Has one or more computing devices	88.9%
Has desktop or laptop	72.3%
Has smartphone	69.7%
Has tablet or other portable wireless computer	56.1%
Other computer	1.5%
No computer	11.1%
Has internet subscription	82.7%
Dial-up	0.7%

Cellular data plan	61.0%
Broadband including cable, fiber optic, or DSL	68.7%
Satellite internet service	8.9%
Without internet service	17.3%
No internet subscription by Income	
Less than $20K/year	38.3%
$20K-$74,999/year	18.8%
$75K/year	4.4%

In 2022, to help study and illustrate the availability, reliability, and cost of high-speed broadband, the Broadband Assessment Program (BAP) was initiated with the goal of ensuring that all New Yorkers have necessary and affordable internet access. While the BAP found that 97.4% of New York State's primary address points are served by high-speed broadband service, it more importantly reveals where the gaps in high-speed broadband service exist. Chenango County specifically has over 12% of the address points in the county as unserved, which is significantly higher than New York States average rate of 2.5%. The BAP also identifies average cost and average speed for internet access. Chenango County's average cost is $56.98/month for an average speed of 160mbps.[35]

	Served Address Points	%	Underserved Address Points	%	Unserved Address Points	%
Chenango	22,971	87.243%	152	0.577%	3,207	12.180%
New York State	-	97.4%	-	0.1%	-	2.5%

Chenango County Planning Department was awarded a $1.9 million grant to expand Fixed Wireless broadband in the City of Norwich and Town of New Berlin. This system is expected to be operational by June 23, 2023. Community Partners are actively working to increase connectivity across the county.

Incarceration

As of March 31, 2020, 121 people who had been indicted in Chenango County were currently incarcerated.[36] The number of incarcerated Chenango County residents compared to the overall population (0.25%) is similar to that of NYS (0.3%). The number of incarcerated individuals from Chenango County has increased steadily over the past 10 years, while the number of incarcerated individuals in NYS has steadily declined. The vast majority (N=110) of incarcerated county residents were male and 40%(N=48) were under age 35. 15% (N=18) were imprisoned for a crime related to drugs.

Table 22. Number of Chenango County Residents Sentenced to Probation by Year and Rate of Recidivism[37]

		2007	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*	*2015*	*2016*	*2017*	*2018*
Number sentenced to probation during year		146	133	160	147	139	171	155	125	132	118	70	88
Total percent arrested for felony in:	1 year	9.6%	8.3 %	9.4%	10.2 %	4.3%	11.1 %	4.5%	8.0%	6.8%	2.5 %	8.6%	14.8 %
	2 years	16.4 %	16.5 %	15.0 %	15.0 %	12.2 %	17.0 %	9.0%	15.2 %	12.9 %	7.4 %	14.3 %	-
	3 years	21.9 %	21.1 %	20.6 %	19.0 %	15.1 %	23.4 %	12.9 %	20.0 %	17.8 %	10.6 %	-	-

Access to Health Care

Health Insurance Coverage

A number of key stakeholders identified that the high number of Medicaid enrollees as one of the challenges facing the county. Data from the New York State Medicaid Enrollment Databook indicates that as of October of 2022, 35.8% of the Chenango County population (17,038 members) was enrolled in Medicaid.[38] This is slightly below the NYS ratio of 44.1% for the same time period.[39]

The increase in the number of Medicaid enrollees is reflected in the trend toward lower uninsured rates. According to Census data, the percentage of the county population without insurance declined from 14% in 2010 to the current low of 3.4% in 2020.[40] This data shows that as the percentage of people who are insured has increased, the distribution of people covered by different insurance entities has also changed.[41] In 2020, a higher percentage of Chenango County residents were covered by insurance that they purchased directly (such as through the state exchange) and through Medicaid only, than were in 2017. Fewer Chenango County residents were enrolled in more than one insurance plan in 2020, than compared to 2017 Fewer Chenango County residents in 2020 were also not covered by employer-based insurance plans than in 2017.

Table 23. Distribution of Chenango County Residents by Insurance Type and Year

	2017	*2020*	*Number Change*	*Percent Change*
Direct Purchase	2,455	2,816	+361	+14.7%
Employer-Based	21,156	20,077	-1,079	- 5.1%
Medicaid/Means-Tested	8,245	8,641	+396	+4.8%
Medicare Only	2,480	2,692	+212	+8.5%
TRICARE/Military	217	114	-103	-47.5%%
VA	133	124	-9	-6.8%
Medicare & Medicaid (Dual Eligible)	1,576	1,517	-59	-3.7%
Two or more (Not Medicare/Medicaid)	10,959	9,363	-1596	-14.6%
Not insured	2,532	1,596	-936	-37.0%

According to SPARCS data, CMH has experienced a decline in both the number of discharges and the dollars generated from those discharges, with the exception of 2021, where both discharges and net revenue increased. Between 2018 and 2020, the number of inpatient discharges declined by 19% and the total gross revenue declined by 19%. In 2021, there was a 21% increase in discharges and a 1% increase in net revenue. Stakeholders suggested that the increase of Medicaid enrollees as a proportion of patients accessing CMH has created a financial burden for the hospital. However, the percentage of total discharges for people enrolled in Medicaid has not significantly increased between 2018 and 2021. The shift in the mix of payers is most significant in the decline in Blue Cross/Blue Shield enrollees and the increase in Medicare enrollees (an insurance type that has a lower reimbursement rate). There has also been an increase in self-pay patients, which can result in increased usage of the CMH financial assistance program or unpaid debt.

Primary Payer	*2011*	*2016*
Blue Cross/Blue Shield	15.6%	13.1%
Federal/State/Local/VA	0.7%	0.6%
Medicaid	26.8%	27.0%
Medicare	46.4%	45.9%
Miscellaneous/Other	0.5%	0.4%
Private Health Insurance	6.2%	6.2%
Self-Pay	3.8%	6.8%

A handful of stakeholders noted that the prevalence of high deductible plans was a barrier for some county residents. One stakeholder stated, *"In my opinion, the deductibles that clients have to meet before their insurance actually "works" for them is outrageous. I realize that they most likely have a higher deductible so they can afford the premium. However, if they don't have serious issues and only go to the Doctor once or twice a year, it's almost as if they're paying that premium and not getting anything out of it because their deductible never gets met*".

Access to Primary Care

Chenango County is designated a Health Professional Shortage Area (HPSA) when it comes to primary care (for the Medicaid-eligible population), dental health (for the low-income population), and mental health (for the Medicaid-eligible population). According to the County Health Rankings provided by the University of Wisconsin Population Health Institute, Chenango County had 16 primary care physicians in 2019. Chenango County's population-to-physician ratio of 2,950 to 1 is substantially higher than the New York State ratio of 1,18000 to 1.

A number of stakeholders and survey participants noted that the county's lack of primary care physicians is a challenge that is exacerbated by the high rate of physician turnover. A stakeholder said, *"The turnover at the mental health clinic in Norwich makes it hard to make progress as a patient."* One survey participant noted, *"Every time I get a primary care, they leave the area. Another reason we travel to Hamilton they seem to keep their physicians."* A Key stakeholder noted, "*Lack of primary care providers may be a false perspective. Current wait times to get into a provider as a new patient are not unreasonable and comparable to those of other counties. When there is an excess of providers in a county the cost of healthcare may be required to rise based on overhead and cost of operations. Provider turnover has always been and will continue to be an issue in rural areas. The lifestyle in Chenango County offers a challenge when looking for younger providers interested in more urban surroundings. The number of providers currently in Chenango County may be an reasonable number based on the rural area's lifestyle, population trends, collegial support, and professional development."*

Access to Specialty Care

Of great concern to both survey participants and key stakeholders is the lack of specialized providers in the county, particularly for mental health and dental care. While the county mental health clinic has open access and no wait list, stakeholders noted that there is a need for additional providers.

When asked about the lack of dental providers in the county, one stakeholder maintains "*There is a lack of specialized dental providers in the county. Many local providers have closed their doors, or they do not accept Medicaid, which is the situation for a large percentage of patients. People often travel to other counties for specialized dental care. I believe a lot of people in our community ignore their dental health and do not visit the dentist regularly. Children lack basic dental care, and many have a hard time finding a dentist. There needs to be more of a focus on good oral health care, such as daily brushing and flossing, to keep bacteria under control. Without proper oral hygiene, bacteria can reach levels that might lead to oral infections, such as tooth decay and gum disease."*

Data support the concerns of stakeholders and survey participants about the lack of mental health providers and dental providers. The County Health Rankings show that Chenango County's mental health provider ratio of 510:1 and dentist ratio of 2,920:1 is far below NYS's respective ratios of 310:1 and 1,190:1.

Priority

Dental health is a priority for Chenango County given the lack of providers, educating the public on the importance of dental hygiene is preventative care for tooth decay and gum disease. This is vital as bacteria in gum disease can travel to other parts of the body such as the heart and cause major issues such as heart disease and stroke.

Some survey participants noted that the lack of other types of specialists locally and regionally affected the wait times for accessing appointments. One survey participant said, *"Too few specialists available such as skincare, arthritis care, counseling, and other specialties".*

Hospital Care

Stakeholders and survey participants noted that one of the key strengths within the county's health care system is the presence of the hospital. One stakeholder said, *"The local hospital (UHS Chenango Memorial Hospital) is a point of strength and stability for local business and the residents. The quick access to 24/7 emergency care and medical support is something that many residents require in the area to feel safe. Businesses can recruit more desirable employees and partners because the county offers healthcare services. The hospital is a large economic engine for the community offering some of the better paying jobs in the area. An area can only grow to a certain size without a hospital, CMH offers expansion of business and population growth."*

Emergency Care

Data show that the potentially preventable emergency room visit rate for Medicaid recipients is much higher in Chenango County than the rate of visits for the NYS Medicaid population as a whole. The county Medicaid rate of usage is also higher than the county's all payer rates suggesting that the Medicaid population in Chenango County is over-using the emergency department. The all-payer rate in Chenango County is also higher than the state rate, suggesting that other populations in the county are also potentially misusing the emergency department.[42]

Table 24. Potentially Preventable Emergency Room Visits – Medicaid Only

Year	Chenango County				NYS
	Observed rate per 100 people	Expected rate per 100 people	Risk adjusted rate per 100 people	Difference Observed/Expected	Observed rate per 100 people
2011	47.48	27.31	51.32	20.17	29.52
2012	49.51	29.96	51.42	19.55	31.12
2013	42.43	28.17	46.08	14.26	30.59
2014	50.79	28.69	54.47	26.12	30.77

Table 25. Potentially Preventable Emergency Room Visits – All Payers

Year	Chenango County				NYS
	Observed rate per 100 people	Expected rate per 100 people	Risk adjusted rate per 100 people	Difference Observed/Expected	Observed rate per 100 people
2011	37.74	17.27	51.29	20.47	23.47
2012	37.63	17.4	50.9	20.23	23.53
2013	33.04	17.18	44.48	15.86	23.13
2014	39.85	19.52	49.53	20.33	24.26
2015	41.07	20.28	50.52	20.78	24.95
2016	43.61	34.9	18.93	15.97	-

The number of people served by CMH's emergency department remained relatively flat over time until 2014 when the hospital discontinued the walk-in center. Th walk-In center was re-opened in 2022.

Table 26. Total People Served in CMH Emergency Department by Year and Type of Service[43]

	Emergency Room	*Walk-In Center*
2007	14,177	9,447
2010	16,211	9,849
2011	16,855	9,509
2012	16,183	10,342
2013	15,059	8,755
2014	18,183	-
2015	18,495	-
2016	17,955	-
2017	18,439	-
2018	18,218	-
2019	18,393	-
2020	13,345	-
2021	15,142	-
2022 (to date)	13,261	5,601 (to date)

A stakeholder said, *"I would say hours are tough because if it's 8pm, a walk-in center might not be open, [so] then you have to go to the ER. It may not be an emergency, but it's still something that needs to be looked at whether it's a significant ear infection for a child. They can't get through the night and next day until the walk-in center re-opens. But it isn't on [the] same level of ER."* Another stakeholder stated, *"What's frustrating is you see a billboard that says same-day appointments, but when you call, you can't get same-day. Even people who work at the hospital have difficulty getting in. It's a huge deterrent. It may not be streamlined enough to help."* A participant added, *"I just found out the ENT works 1.5 days week and is booked [three months out.] I asked where would urgent care be for ENT and was told Binghamton, Utica, and Oneonta."*

Walk-In Clinic

Chenango Memorial Hospital reopened the walk-in clinic in January of 2022 after it being closed for over 8 years. The clinic has 5 rooms with, at most times, two providers. It operates Monday-Saturday each week. A number of key stakeholders noted that limited access to an urgent care facility, primary care and specialist care resulted in inappropriate use of the emergency department. A nurse states that "t*he Urgent Care is great. Definitely cut down on the volume to the ER but it needs to be open longer."* Another stake holder mentions, *"The re-introduction of the walk-in center in January 2022 has offered the community a different option when it comes to urgent care. Monday through Saturday patients can choose the walk-in center instead of the Emergency Department as their first choice. The walk-in offers care for those issues that may not be appropriate for the Emergency Department, but still need treatment, and a primary care appointment is not a timely option. Many patients are not established with a primary care provider and use the walk-in or Emergency Department as their main source of care. The walk-in does help relieve some pressure from the Emergency Department by treating an average of fifty patients a day that would otherwise present to the ED. The close proximity to the Emergency Department offers additional patient safety should someone present with an issue that needs immediate emergency care. The partnership between these two departments offers positive options for residents of Chenango County and beyond. The Walk-in center is an important part of the overall health care system currently present in Chenango County."*

Access to Home Care Providers

Survey participants and key stakeholders noted a lack of home care providers in the county. One stakeholder said this is of particular concern if the county wishes to help people age in place. She said, *"there is a lack of homecare providers in our county-both private providers and public providers. Some care is being outsourced to other counties to serve client needs in Chenango. This can increase cost, and delays care in the start and has a negative impact on continuation of care"*

A key stakeholder working in the home care industry agreed that there are challenges in staffing home care positions. She said that *"Changes will need to eventually be made with a more home care influence, as our population is living longer, and wanting to live alone, at home, more. This is always more difficult in our rural area-finding assist at home, transportation difficulties for workers, and often low wages for home care workers has impact as well. One needs to rely on any family and/or friends for home care, very often. But many are totally alone with no one, so they may be living alone not necessarily in the safest place for them. This is not only a Chenango problem, but the home care crisis is also a national health problem.*

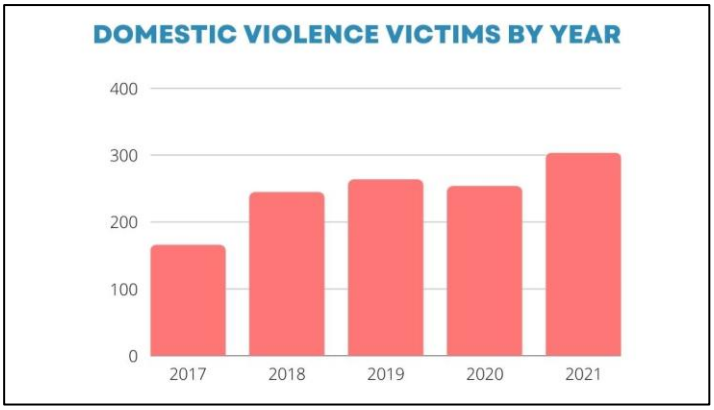
School Based Health Clinics

Chenango County is home to two school-based health clinics. Survey participants and stakeholders agreed that these clinics are particularly useful and expressed a desire for more of them. One stakeholder commented on accessing mental health services for their children, saying, "*There have been some improvements in accessing care for children and adolescents in Chenango County with the expansion of the School Based programming. Currently CCBHS operates School Based clinics within seven different districts within the county, including DCMO BOCES. This has been an improvement in terms of access of care as well as reducing stigma as children and their families can be seen for outpatient mental health services right within the school during the day. The school-based programming is very busy and there are at times waitlists for children and adolescents to be seen due to the level of demand."*
Stakeholders and Survey participants noted that the loss of some school-based health centers was a detriment to the county.

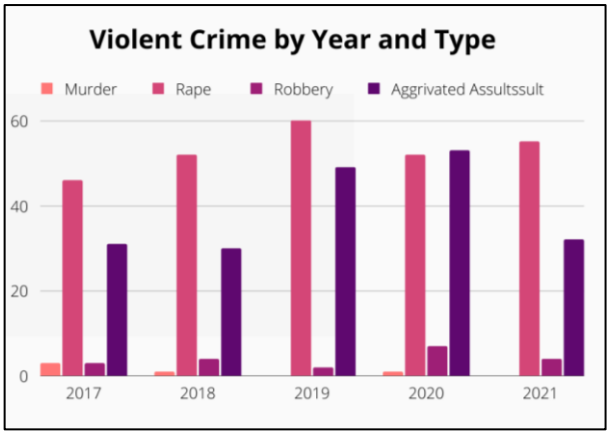
Neighborhood and Built Environment

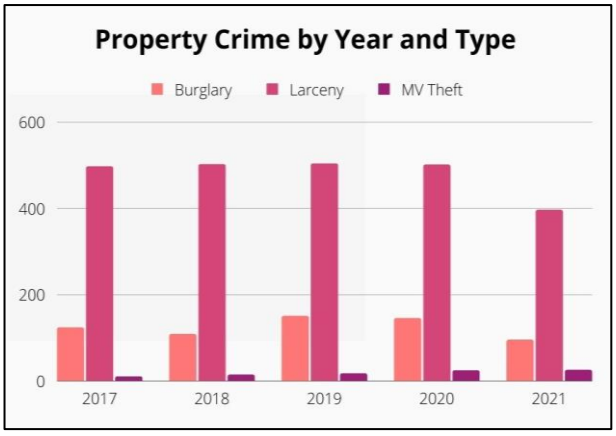
Crime

Stakeholders and survey participants said the lack of a domestic violence shelter in the county had led to an increase in incidents in recent years. Chenango County's 8-bed domestic violence shelter was closed in 2015 despite persistent usage. In 2021, a total of 253 people in Chenango County were reported as victims of domestic violence through the criminal justice system,[44] an increase from previous years.



Chenango County experienced a total of 91 violent crimes in 2021, a decrease from the prior year.[45] Declines in arrests were seen between 2020 and 2021, in areas of robbery, aggravated assault, property crime, as well as burglary and larceny.





While total arrests have declined minimally in Chenango County, there has been a dramatic increase in misdemeanor drug arrests with a significant decrease in felony arrests.[46] Many stakeholders and survey participants shared their concerns over the challenges illegal substance use poses to the community, including the link between substance use with respect to crime and how it affects the community environment. One survey participant stated with their experience, "*I live in the center of Norwich and have been here for almost 20 years. The level of crime and violence has increased. Unfortunately, I think the great services offered through the county attract people to come here and they stay to abuse the services. There is a serious problem with a drug addiction, homelessness, and mental health issues. The library has turned in to a crisis center with police there often due to a population of people that seem to need serious assistance." Another explains "I used to be able to walk around town after the sun went down but now, I don't dare leave my house – just doesn't feel safe enough."* The stakeholders also cited the health of the individual and the impact on the family as a concern.

Table 27. Arrests in Chenango County by Type and Year

	2017	*2021*	*Percent change*
Total Arrests	782	762	-2.6%
Felony Total	240	244	+1.7%
Drug	65	45	-30.8%
Violent	44	51	+15.9%
DWI	14	9	-47.1%
Other	117	139	+18.8%
Misdemeanor Total	542	518	-4.4%
Drug	59	118	+100%
DWI	83	70	-15.7%
Property	190	129	-32.1%
Other	210	201	-4.3%

Housing

A handful of stakeholders and survey participants noted that health is also affected by sub-standard housing in Chenango County. One stakeholder said, *"Housing instability is not only an issue in Chenango, but also increasing in severity. Housing costs and income levels are important determinants of individual and family stability, and a significant portion of Chenango residents pay well in excess of 30% of their monthly income on housing, whether it be a homeowner or a renter. Unexpected changes in income when there is little margin for financial safety can quickly lead to disrupted housing, which places an individual or family at a much higher risk of a range of complications. Home ownership is far beyond the financial reach of many lower income residents in Chenango who, when faced with costly down-payment levels, limited federal or state funds to assist buyers, and credit issues are relegated to the renter market. This, in turn, puts increased pressure on available rental stock, drives rental costs upwards for even poorly maintained housing, and often leads to families moving several times in a span of years. This, in turn, effectively creates an ever-changing social landscape which promotes anonymity rather than community identity and connectedness and erodes the many benefits of social-cohesion and community supports. Even when families seek public assistance funds to shore up their monthly needs, state shelter allowance levels are woefully out of touch with current housing costs."* A survey participant said, *"Some of these houses, you can't insulate them. From the inside you can't blow insulation in because it's that plank between the clapboard and foundation."*

Housing quality issues may be exacerbated by the lack of available housing in the county. Of the vacant housing units in Chenango County, 43% are for seasonal or recreational use 8.7% of housing units are available for rent or for purchase.[47] Individuals hoping to purchase a home in Chenango County face a significant challenge with a homeowner vacancy rate of only 4.6%. Renters have a similar challenge with a 4.1% vacancy rate.[48]

Table 28. Vacant Housing Stock by Status

	Estimate
Total:	4,984
For rent	205
Rented, not occupied	72
For sale only	231
Sold, not occupied	581
For seasonal, recreational, or occasional use	2,158
For migrant workers	0
Other vacant	1,737

One local partner shared that supportive housing for high needs individuals remains a challenge in many instances. The process for approval includes many steps often having to interact with multiple agencies. This alone can be beyond the capacity of many individuals. Those who are able to secure a housing voucher or similar program then face a significant shortage of available housing options. Working in the field it appears that many landlords are reluctant to work with high needs individuals especially those whose rental record is not spotless.

Homelessness

County specific data on the homeless population is unavailable. In 2021, Chenango County Social Services facilitated 2,758 shelter nights for homeless individuals. One way to consider that number is to frame it in this manner: for every night of the year, almost a week's worth of homeless nights occurred at the same time. It is important to note that the Department of Social Services statistics do not

represent the total number of homeless people in the county, but a subset of the whole. Homeless clients served by Chenango County Social Services increased almost 23% from 2020 to 2021. 2022 numbers are projecting to exceed the total for last year.[49]

While the number of Chenango County residents who are homeless is unknown, a handful of stakeholders and Survey participants suggested that the lack of a homeless shelter or homeless services in the county was a pressing issue. A stakeholder said, *"Homelessness is absolutely an issue in the county, and unfortunately this is the case in almost every county in the state. Several years ago, homelessness in Chenango mainly took the form of people moving from one temporary arrangement to another due to being unemployed or underemployed, or those in immediate crisis from being evicted, displaced due to buildings being condemned, or those that cycled through housing every few months and required emergency assistance. However, as with many counties, there has been a stark increase in "street homeless" with people living out-of-doors for drastically longer lengths of time and in areas unsuited for habitation. The problem in these situations is obvious: not only are chronically homeless people subject to risks such as weather, structural hazards, and environmental risks such as traffic or water, such conditions can bring on or exacerbate health concerns rapidly. The most prominent issue in Chenango with regards to housing as a health determinant is the intersection of substance abuse and homelessness. Risk assessments of homeless individuals are showing substance abuse as either a primary or existing factor in 50-70% of cases, and when one considers that percent is for the individuals that interface with social programs, one can imagine that for those individuals unable or unwilling to seek formal support the rate is even higher. Untreated or undiagnosed mental health issues are also prevalent, often co-occurring with substance abuse which exacerbates the effects of both. Lastly, climate itself plays a huge role as a health determinant for unsheltered individuals. Weather severity and climate change are becoming more accepted as fact rather than hypothetical, and as more and more local homeless are living out-of-doors for extended periods, they are more subjected to the increased risks of heat, cold, and storms. There are no formal homeless shelters in the county at this time, and in an emergency, there are very few places where homeless people can seek safety during periods of dangerous weather. If such weather incidents and conditions worsen, and the amount of people exposed to them increases, it is easy to see the amplification of health risks for the homeless population. There are several major obstacles that impede progress in addressing the growing homeless needs of NY communities. First and foremost is the lack of adequate state funding and commitment to build affordable housing across the state. At present, more and more families that are low-income are finding themselves in substandard housing because those in higher economic quintiles are consuming housing resources that normally would be occupied by lower-wage earners. This means that even basic rental options are now out of reach for families affected by chronic poverty. Governmental supports have not kept pace with need and wait lists are increasingly longer for available public housing stock. NYS has emaciated in-patient and chronic needs programs and residential programs have fallen out of favor, opting instead for what they term "community resources" (which they also underfund if not completely set up as unfunded mandates), which really eliminates any mystery in figuring out why issues like substance abuse, mental health, and unsupported disabilities are getting worse by the year. Local Departments of Social Services are the front-line of support for individuals and families in crisis, but when NYS continues to eliminate state fund shares and is out of touch with needs, the pressure on limited local funds becomes amplified and local Social Services agencies are constrained in their abilities to respond to need. The "Not in My Back Yard" push-back with regards to homeless programs and low-income housing is a formidable obstacle, as highlighted by the recent discussions about warming centers and safety for homeless in inclement weather periods. Areas and programs that promote a "Housing First" model have shown to be both productive and safe in many places around the country, even in some areas in NY, however they are often found at odds with community and political pressures and oft criticized as being*

too "lenient". If the prevailing local outcry maintains a proclivity for equating suffering and risk of harm in the homeless population with personal responsibility for their situations (even if these situations have direct ties to a lack of other formal social supports and responses), there is less political support for such programs, and they are less apt to be pursued" One survey participant *said, "Something needs to be done about the serious drug addiction population as well as the homeless groups that are known to live in areas within the town of Norwich"*

Transportation

Transportation was, by far, the most mentioned social determinant of health by both survey participants and key stakeholders. Feedback suggests that transportation restrictions prevent residents from accessing primary care, specialty care, ancillary support services, and resources for basic needs.

Census data indicate that 9.5% of households in Chenango County do not have access to a vehicle.[50] 28% of renters do not have a vehicle compared to only 3% of homeowners. When examining this further by age, 22.7% of people under age 35 do not have access to a vehicle and 11.9% of people aged 65 and over do not. Given the rural nature of the county, the significant portion of households without access to a vehicle suggests a need for transportation support to access both health care, as well as other needs.

There are some transportation options for households without vehicles, but stakeholders and survey participants noted that these options have limitations that can create additional challenges. Survey participants shared that they had experienced several problems with transportation offered. One survey participant stated, *"My life is extremely difficult due to poor transportation for elderly non-drivers, no effective senior center, everything centered around family, and I have none, impossible to get to medical specialists, many of whom are not available at my nearby hospital."*

Accessing services in other counties can also be problematic for people in need of transportation. One survey taker said, "*Some services require travel to Binghamton, Syracuse, or Cooperstown and this creates a transportation and/or financial problem."*

Survey participants noted that the public bus system's limited routes and time frames prevent people from accessing services as well as other resources, such as the grocery store or food pantries. One participant said, *"(It's) hard to get to stores with no transportation and if there is transportation it is not widely known or made public."* Other participants said that the bus system often cancels routes without notification.

Chronic Disease

Chenango County continues to rank in the lowest quartile for several cardiovascular disease mortality indicators including cardiovascular disease in general, diseases of the heart, coronary heart disease, and heart attack. The rate of premature deaths in Chenango County from cardiac related chronic diseases is substantially higher than in NYS (excluding NYC).

Table 29. Cardiovascular Disease Indicators[51]

Indicator	*County Rate*	*NYS Rate excl. NYC*	*Indicator performance*
Cardiovascular disease mortality rate			
Age-adjusted	298.1	210.8	No Significant Change
Premature death (aged 35-64 years)	130.4	104.2	No Significant Change
Pretransport mortality	280.7	163.6	Improved
Disease of the heart mortality rate			
Age-adjusted	241.9	169.4	No Significant Change
Premature death (aged 35-64 years)	102.6	83.9	No Significant Change
Pretransport mortality	228.9	138.7	Improved
Coronary heart disease mortality rate			
Age-adjusted	182.8	131.0	No Significant Change
Premature death (aged 35-64 years)	71.3	66.4	No Significant Change
Pretransport mortality	180.6	112.4	Improved
Coronary heart disease hospitalization rate			
Age-adjusted (2012-2014)	29.9	25.2	-
Heart attack mortality rate			
Age-adjusted (2012-2014)	75.2	22.8	-
Heart attack hospitalization rate			
Age-adjusted	21.1	13.4	-
Hypertension hospitalization rate per 10,000 (any diagnosis) (aged 18 years and older) (2012-2014)	538.9	478.9	-
Hypertension emergency department visit rate per 10,000 (any diagnosis) (aged 18 years and older) (2012-2014)	1,265.8	1040.6	-

Healthy Eating

Many survey participants noted several challenges related to healthy eating and food security. Participants said that healthy food was expensive and presented a barrier to healthy eating. One stated, *"Food prices have significantly increased (like everything else)."* Other participants said that their community lacked a grocery store which created a challenge in accessing fresh produce. One participant said, *"I would love to see a farmers' market open in the area, somewhere that can be accessed all year long to support locals."* Participants also noted that transportation at the stores posed a significant barrier in accessing food. One participant stated, *"The elderly need to shop for value (like Aldi's) but no power wheel chairs at the store & Walmart often not working-difficult for elderly to shop economically vital today-need working electric chairs & number can call store and have cart brought to car for the elderly shopper."*

Data from the NYS eBRFSS for 2018 estimates that 24.9%, of Chenango County residents consume less than one fruit and one vegetable per day. This rate is lower than both the NYS rate of 27.7% and the Prevention Agenda goal of 29.6%. Community members suggested that outside of the main population centers, access to healthy food is a challenge for many residents, especially for older adults and people with low incomes. One survey participant said "*Greene's only grocery store is priced at the level of a convenience store. Elderly has no food service delivery options in Chenango County."*

Chenango County has seen an increase in rural retail food outlets while access to fresh food options has remained constrained by the rural nature of the county

Across the eight public school districts in Chenango County, the average daily student participation in school breakfast was 41%[52] and 65.5% for school lunch.[53] The county's participation in school meals far exceeds the average daily participation for NYS, which has an average participation rate of 21.3% for breakfast and 64.6% for lunch. Nine Chenango County school districts have taken advantage of the Community Eligibility Provision (CEP) through the National School Lunch Program (NSLP) which allows districts and schools to provide universal breakfast and lunch. The universal meals offer a unique opportunity to reach a large and potentially vulnerable population with healthy, nutritious meals.

Data from the 2018 eBRFSS shows that 23.9% of Chenango County adults consume one or more sugary drinks daily. This is down from 32.9% in 2014 but is still higher than the NYS rate of 22.6% and the Prevention Agenda goal of 22.0%.

Cornell Cooperative Extension of Chenango County supports several community gardens and offers gardening and food preservation classes. In addition, they manage the Eat Smart New York outreach program and classes. A key component of the Eat Smart New York classes for children is that they focus on understanding and reducing sugary drink consumption.

Food Security

The food security rate in Chenango County, 82.3%, is higher than both the NYS rate of 76.4% and the Prevention Agenda goal of 80.2%.[54] Despite the higher rate of food security, both stakeholders and survey participants noted that food insecurity in the county is a barrier to health for some residents. A key to food security for low-income households is participation in the Supplemental Nutrition Assistance Program (SNAP). The USDA estimates that 82% of all eligible individuals in the nation received SNAP benefits in 2019. Participation rates for the elderly and for individuals with incomes above the poverty threshold, yet still eligible, remain low at 48% and 42% respectively.[55] In Chenango County, 14.0% of residents and 18.1% of households receive SNAP benefits. According to Census data, of the 2,933 households with incomes below poverty in 2020, only 1,515, or 52% of households, received SNAP benefits.[56] This is higher than the NYS rate of 49.5%. Despite higher-than-average participation in the county, some stakeholders and participants noted that SNAP benefits are insufficient to provide adequate and healthy foods. One stakeholder said, "*SNAP benefits are intended to supplement an individual's food expense, not fully pay for one's monthly food bill. Because SNAP individuals have lower income, transportation and availability to affordable food may be an issue. Without transportation an individual cannot always shop where prices are lower. Nutritious foods, such as fruits and vegetables are more expensive. Individuals on SNAP also feel they are being judged by others, even though they may be working themselves or living on Social Security income."*

Table 30. Percent of Households Receiving SNAP Benefits by Type of Household[57]

Percent receiving SNAP Benefits	*Chenango County*	*New York State*
All households	16.7%	15.0%
Households with children under 18	35.0%	41.6%
Households with children under 18 with female head of household	17.0%	32.8%
Households with one or more persons aged 60 and over	36.7%	43.0%
Households with one or more persons with a disability	58.7%	46.7%
Households with one or more workers in the past 12 months	46.2%	44%

Feeding America estimates that 21% (N=1,138) of the food insecure households in Chenango County are ineligible for federal nutrition assistance programs such as SNAP, WIC, and NSLP.[58] Many of these households rely on charitable food options such as food pantries and soup kitchens. The Food Bank of Central New York (FBCNY) supports 18 food pantries and two soup kitchens throughout Chenango County. From January 1, 2022 to October 31, 2022, the food pantries in Chenango County served approximately 22,100 people.[59]

Food Insecurity and Children

In 2020, Feeding America estimated that nearly 15.1% (N=1,490) of children in Chenango County are food insecure.[60] The bulk of those children (98%) are income-eligible for nutrition programs such as the free and reduced lunch program.

Table 31. Percent of Children Receiving Food Support by Type and Region

	Chenango County	*New York State*
Percentage of households receiving Food Stamp/SNAP benefits in the past 12 months	16.8.%	14.7%
Percent of children K-12 eligible for free and reduced price lunch[61]	53.2%	55.2%

Food Pantries Total meals served per Year	Total # of Children Served	Total # of Adults Served	Total # of Seniors Served	Note:
2022	6075	12837	3221	Jan-Oct
2021	6002	10747	3137	
2020	7555	14496	3936	

Food Insecurity and Seniors

A relatively small number of seniors are served by food pantries (N=361) compared with the estimated number of seniors who are at risk for food insecurity (N~3,274).[62] In addition to food pantries, food insecure seniors also have access to two soup kitchens and seven congregate meal sites. During 2020, congregate meal sites in the county served a total of 1,213 meals.[63]

Home delivered meals are also available for seniors and people with disabilities under age 60. This service is restricted to people who are physically or cognitively unable to prepare their own food. In 2021, the home delivered meals program provided 75,104 meals to Chenango County residents.

Physical Activity

Several survey participants noted that a lack of access to exercise opportunities was a significant barrier to having a healthy community. Participants said there should be more options, including less intimidating options, lower cost programs, and more accessible transportation. One participant shared, *"There is a need for "general" recreational opportunities, bowling, roller skating, indoor pool option with less cost."* Participants noted that they had challenges with transportation to gyms as well as to outside exercise options. One stakeholder noted, *"Recent advancements in outdoor spaces such as the Chenango Greenway and Stone Quarry Project may prove to be catalysts for increased outdoor recreation."*

In the 2022 County Health Rankings and Roadmaps data, 48% of county residents have adequate access to locations where they can engage in physical activity compared to 88% for New York State residents overall.[64] Community members noted that while there were multiple parks and places to walk in nature in the county, many also suggested that they were limited by both transportation and winter weather conditions to engage in activity year-round.

In 2018, 74% of Chenango County residents reported that they had participated in leisure-time physical activity in the past 30 days. This was slightly down from 74.3% in 2016 and higher than the NYS rate of 73.7%. There is opportunity for improvement to meet the 2024 Prevention Agenda goal of 77.4%.

In addition to outdoor physical activity opportunities, Chenango County is home to a YMCA with robust programming as well as several other fitness centers, yoga studios, and martial arts schools. Community members noted challenges in getting to and from these locations, as well as the prohibitive cost of some of the programs for some residents.

Tobacco Use

Chenango County has a higher-than-average percentage of smokers and a higher mortality and hospitalization rate for chronic lower respiratory disease. However, very few stakeholders suggested that tobacco use was an important health issue facing the county.

The instance of self-reported smoking has increased in Chenango County to 15.9%, and continues to substantially exceed both the NYS rate of 14.2%, as well as the Prevention Agenda goal of 11.0%. The 2018 tobacco use data for low-income individuals shows that 28.6% report currently smoking. The 2018 data for self-reported smoking with poor mental health is 29%. This indicates that Chenango County faces significant challenges in meeting the Prevention Agenda goals of 15.3% for low-income individuals and 20.1% for those reporting poor mental health.

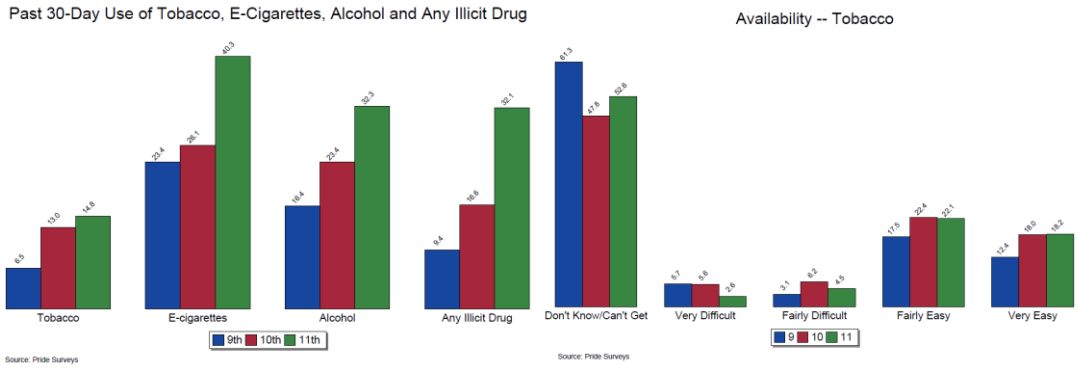
Table 32. Tobacco Related Cancer and Respiratory Disease Indicators 2016-2018[65]

Indicator	*County Rate*	*NYS Rate exc NYC*	*Indicator performance*
Lip, Oral Cavity, and Pharynx Cancer			
Age adjusted incidence rate per 100,000	17.0	11.4	No Significant Change
Lung and Bronchus Cancer			
Age adjusted incidence rate per 100,000	77.9	57.6	No Significant Change
Age adjusted mortality rate per 100,000	47.9	31.3	No Significant Change
Chronic Lower Respiratory Disease			
Adjust adjusted mortality rate per 100,000	55.6	28.3	No Significant Change
Age adjusted hospitalization rate per 100,000	24.4	25.8	Data not comparable
Asthma hospitalization rate per 10,000			
Age adjusted	2.3	10.3	Data not comparable

Youth Tobacco Use

According to the 2018 PRIDE survey, 5.5% of Chenango County students in grades 9-12 reported using cigarettes monthly. Over 8.8% of 11th graders reported tobacco use in the past 30 days. These rates are lower than the NYS rate of 25.4%, but above the Prevention Agenda goal of 19.7%. None of the key stakeholders or Survey participants noted that tobacco use by youth was a problem in Chenango County.

The 2018 PRIDE survey showed that tobacco use among Chenango County youth increases with age.[66] The percent of students reporting tobacco use more than doubles between 9th and 12th grade respondents. Students report using tobacco most frequently in their own homes, friends' homes, and in cars, and that they also smoke most frequently on the weekends and after school. Generally, students also report that tobacco is easily obtainable. Over one-third of 11th graders said that tobacco was very easy or fairly easy to obtain. There are currently 52 retailers in Chenango County that sell tobacco products, the majority of which are convenience stores/gas stations. Between 2017 and 2020, seven Retail Tobacco Enforcement Compliance visits indicated sales to minors.[67]



Tobacco Use – High Risk Populations

In 2018, smoking rates among low-income populations and those with poor mental health were much higher than the rates among the general population. Qualitative information from service providers working with Chenango County residents with mental health disabilities suggest that eliminating tobacco use while trying to manage mental health issues and financial challenges is difficult. One provider said, *"There is a significant lack of cessation assistance locally. If there were increased access to quitting services, I feel people would take advantage and attend classes to quit or accept programs that have incentives to quit. It is important to educate that smoking cessation has been linked with improved mental health—including reduced depression, anxiety, and stress, and enhanced mood and quality of life. Smokers who receive a combination of behavioral treatment and medications quit at higher rates than those who receive minimal intervention. Interventions such as brief advice from a health care worker, telephone helplines, automated text messaging, and assistance from a dental hygienist can also facilitate smoking cessation. Health care providers play a major role because they often see smokers multiple times a year."*

Table 33. Smoking Indicators by Year and Region[68]

	2016		*2018*	
	Chenango County	*New York State*	*Chenango County*	*New York State*
Current Smoking	20.1%	14.2%	15.9%	14.2%
Current Smoking (low-income)	NA	NA	28.6%	NA
Current Smoking (poor mental health)	NA	NA	29%	NA
e-Cigarettes	3.6%	4.3%	4.4%	4.3%

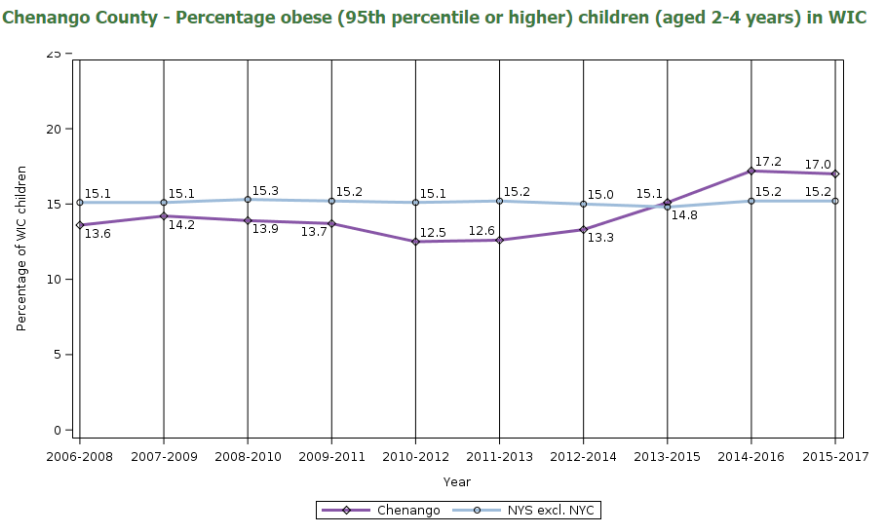
The only cessation service available in Chenango County is the NYS Smokers' Quitline. In addition to referrals to the NYS Smokers' Quitline, Chenango County utilizes Tobacco Free Chenango, which is part of the Tobacco Free Zone of Cortland, Tompkins, and Chenango Counties. Through community engagement and youth action (Reality Check), they promote local changes that reduce the impact of tobacco and nicotine addiction.

County level data is not currently available to assess the level of exposure to secondhand smoke and secondhand emissions from electronic vapor products.

Adult and Childhood Obesity

Obesity and weight problems were identified by both key stakeholders and Survey participants as a pressing health issue facing the county. One Survey participant said, *"to help prevent obesity having accessible bike trails would be nice."* Some stakeholders linked nutrition related conditions such as obesity to poor mental health and high chronic disease rates in the county. One stakeholder said, *"Rural counties often struggle with obesity and chronic disease for various reasons-spending more time in vehicle to and from work, less safe walkable opportunities, many work two jobs, children without ability to play independently outdoors as years ago, need supervision. Education goes a long way for prevention. Many of our families are multi-generational living together now, children often learn the good and bad eating habits of their family members. I believe depression may be often undiagnosed or not even realized in many families, effecting diet and exercise. With diabetes occurring more in obese children, now is the time especially post-pandemic, to encourage more moving as anyone is capable, to prevent disabling diseases and encourage longevity."*

Despite a small decrease in obesity between 2014 and 2016,[69] Chenango County's continues to increase, and the adult obesity rate remains very high. Over a third, 38.4%, of county residents are considered obese, higher than the NYS rate of 27.9%. The county's rate is well above the 2024 Prevention Agenda goal of 24.2%. The percentage of children in WIC aged 2-4 who are obese declined in 2017 to 15.9%, however, this exceeds the NYS rate of 13.9% and the Prevention Agenda goal of 13.0%. The percentage of students in Chenango County, who are obese, 23.0%, also exceeds the 17.3% rate for NYS (exclusive of NYC) and the Prevention Agenda goal of 16.4%.



Preventive Care and Management

A handful of key stakeholders mentioned that a lack of preventive care is a pressing issue facing Chenango County. One survey participant said that a central issue in the county is *"We are a rural county with limited resources, and it can be difficult to get citizens to buy into preventative medicine."* One stakeholder noted, *"There are so many issues with lack of preventative care-more cavities, people will not get health screenings done to prevent/detect cancer because of the high cost even with insurance, or they may be uninsured-this may mean between jobs, maybe three months without coverage. Worse yet, many give up on their own health care eventually giving up on testing, meds, getting to appointments, taking the time off from work, all may be hardships for many in our rural area. Many parents are not taking their children for important well child checks now, which is so sad. Children need important screenings done at certain ages, for optimal growth and development. For example, lead poisoning screenings and risk assessments, developmental screenings, adults may have undiagnosed hypertension. This issue of preventative health challenges affects all of us."*

Cancer Screening

Chenango County's incidence and mortality rates for breast cancer and cervical cancer are not significantly different than NYS rates. The incidence of colorectal cancer is higher in Chenango County than in NYS, but mortality rates are the same. Of particular note, but not addressed in the Prevention Agenda objectives, are prostate cancer rates. In Chenango County, the prostate cancer incidence rate is significantly lower than in New York State, but mortality rates are comparable.

The incidence of breast-cancer screening overall has increased in Chenango County from 76.9% in 2016 to 82.8 in 2018.[70] Data from 2018 shows that a similar percentage of women aged 40 and over in Chenango County (67.3%) had a mammography screening as in NYS overall (71.0%). The new Prevention Agenda goals are focused on increasing breast cancer screening for low-income women, but county-level data by income is currently not available.

2018 data shows that 80.5% of Chenango County women received cervical cancer screening compared to 84.7% for NYS overall.[71] Income-based cervical screening data is not currently available on a county level.

Colorectal screening has increased somewhat from 64.7% to 68.7% in 2016 and is comparable to the NYS rate of 68.5%. It is, however, substantially lower than the 2024 Prevention Agenda goal of 80%.[72]

Table 34. Cancer Indicators[73]

Indicator	*County Rate*	*NYS Rate exc NYC*	*Indicator Performance*
All cancers			
Age adjusted incidence rate per 100,000	535.7	480.7	No Significant change
Age adjusted mortality rate per 100,000	159.3	139.6	No Significant change
Colon and Rectum Cancer			
Age adjusted incidence rate per 100,000	42.6	37.6	No Significant change
Age adjusted mortality rate per 100,000	13.7	12.1	No Significant change
Female Breast Cancer			
Age adjusted incidence rate per 100,000	130	133.8	No Significant change
Age adjusted mortality rate per 100,000	11.1	18.7	No Significant change
Age adjusted late stage incidence rate per 100,000	41.0	41.4	No Significant change
Cervix uteri cancer			

Age adjusted incidence rate per 100,000	14.5	7.6	No Significant change
Ovarian Cancer			
Age adjusted incidence rate per 100,000	16.8	11.4	No Significant change
Prostate Cancer			
Age adjusted incidence rate per 100,000	110.4	129.4	No Significant change
Age adjusted mortality rate per 100,000	16.9	17.5	No Significant change
Age adjusted late stage incidence rate per 100,000	52.9	30.5	No Significant change

Diabetes Screening

The rate for premature death from diabetes is significantly higher in Chenango County (130.4 per 100,000) than for NYS (104.2 per 100,000).[74] The percentage of Chenango County adults that have been diagnosed by a physician with diabetes has stayed essentially stable between 2016 (12.3%) and 2018 (13%). However, it remains higher than the NYS rate of 10% (2018).[75]

In 2018, 45.4% of Chenango County adults (age-adjusted rate) were screened for diabetes/pre-diabetes. Data on diabetes control at the county level is limited. In 2010, 85% of diabetic Medicare enrollees aged 65 to 75 received HbA1c monitoring, equal to the NYS rate overall.[76] However, people in Chenango County with diabetes are more likely to be hospitalized suggesting that there may be opportunities for better self-management.

In 2018, fewer adults in the county (77.9%) reported a recent checkup than in NYS as a whole (70.9%). In 2016, similar rates of Chenango County residents (84.2%) and New York State residents (84.9%) said they had a health care provider.[77]

County-level data detailing the percentage of children who received an assessment for weight status is not available. However, the percentage of children in Chenango County enrolled in government sponsored insurance programs who had received the recommended number of well visits (55.4%) was significantly lower than children in NYS (excluding NYC) overall (62.2%).

Table 35. Diabetes[78]

Indicator	*County Rate*	*NYS excl NYC*	*Indicator Performance*
Diabetes (per 10,000 population)			
Age-adjusted mortality rate (2017-2019)	25.8	17.6	No Significant change
Age-adjusted hospitalization rate (primary diagnosis) (2017-2019)	19.1	18.9	Data not comparable
Age-adjusted hospitalization rate (any diagnosis) (2017-2019)	208.3	214.2	No Significant change
Diabetes short-term complication rate (18 and older) (2017-2019)	7.1	6.2	No Significant change

Table 36. Child and Adolescent Health Indicators[79]

Indicator	*County Rate*	*NYS excl NYC*	*Indicator Performance*
% of children with recommended number of well child visits in government sponsored insurance programs (2019)	58.7%	75.2%	No Significant change
children aged 0-15 months	86.8%	83.4%	No Significant change
children aged 3-6 years	74.9%	85.9%	No Significant change
children aged 12-21 years	46.6%	69.3%	No Significant change

Hypertension

The rate of adults reporting hypertension diagnoses has remained steady in Chenango County at 38% in 2016 and is higher than the NYS rate of 31.7%. In 2016, 81.3% of Chenango County adults reported they were taking blood pressure medication, slightly higher than the 76.9% in NYS overall for the same time frame.[80]

Asthma

Adult asthma rates (11.5%) for Chenango County are comparable to NYS rates (10.1%). Asthma hospitalizations and emergency department visits in Chenango County are well below both NYS and the Prevention Agenda goals for the target age groups.

Table 37. Respiratory Disease Indicators[81]

Indicator	*County Rate*	*NYS excl NYC*	*Indicator Performance*
Hypertension (per 10,000 population)			
Hospitalization rate 18 and older	3.2	7.3	-
Hospitalization rate (any diagnosis) 18 and older	538.9	478.9	-
Emergency department visit rate 18 and older	52.3	31.5	-
Emergency department visit rate (any diagnosis) 18 and older	1,265.8	1040.6	-
Asthma (per 10,000 population)			
Age-adjusted hospitalization rate (2017-2019)	2.3	10.3	-
Age 0-4 hospitalization rate (2017-2019)	-	35.6	-
Age 0-17 hospitalization rate (2017-2019)	-	16.6	-
Age-adjusted emergency department rate (2016) (NYS)	52.0	77.1	-
Age 0-4 emergency department rate (2016) (NYS)	103.1	186.4	-
Age 0-17 emergency department rate (2016) (NYS)	59.9	137.1	-

More people in Chenango County with a chronic disease reported participating in a course or class to learn how to manage their disease in 2016 (9.5%) than in 2013-2014 (7.2%). The Chenango County 2016 rate is slightly below the NYS[1] rate of 10.1% and the 2024 Prevention Agenda rate of 10.6%.

1

Environmental Safety

Injuries, Violence and Occupational Health

Key informants and survey participants did not remark on injuries as a particular area of concern in Chenango County. The 2024 Prevention Agenda does not articulate goals related to any of these indicators, but they may be an area where other entities can focus efforts. Since

Table 38. Injury Indicators[82]

Indicator	*County Rate*	*NYS Rate exc NYC*	*Indicator Performance*
Age-adjusted unintentional injury mortality rate	37.8	34.4	No Significant change
Age-adjusted non-motor vehicle mortality rate	25.5	29.3	No Significant change

Falls

Overall, the rate of falls hospitalizations among Chenango County residents is better than that of New York State as a whole. The rate of falls among residents aged 65 and over is considerably lower than the NYS rate and well below the Prevention Agenda goal of 170.1. Chenango County has a high percentage of its population that are aged 65 and older. Prioritizing projects aimed at increasing physical fitness in this population is imperative to reduce hospitalizations from falls for the elderly.

Priority

Having the aging population that Chenango County has, it is a priority to understand why senior falls are happening, how to prevent them, and how to implement measures to limit the number of occurrences in the future.

Table 39. Injury Indicators (cont.)

Indicator	*County Rate*	*NYS Rate exc NYC*	*Indicator Performance*
Falls hospitalization rate per 10,000			
Age-adjusted (2017-2019)	30.6	34.2	Data not comparable
Aged less than 10 years (2017-2019)	6.4	6.8	Data not comparable
Aged 10-14 years (2017-2019)	s	4.0	Data not comparable
Aged 15-24 years (2017-2019)	3.7	4.4	Data not comparable
Aged 25-64 years (2017-2019)	19.3	18.8	Data not comparable
Aged 65-74 years (2017-2019)	73.5	80.3	Data not comparable
Aged 75-84 years (2017-2019)	220.9	215.9	Data not comparable
Aged 85 years and older (2017-2019)	383.5	553.5	Data not comparable

Violence

The age-adjusted homicide mortality rate in Chenango County is less than the NYS rate but due to the small numerator in Chenango County, these rates cannot be considered stable. The Chenango County assault hospitalization rate is lower than that of both NYS and the Prevention Agenda. One survey contributor stated in regard to violence, *"There has been a recent decline in safety. I no longer feel safe walking around town alone after dark. I understand this is an issue with no easy solution, but I hope our community can make a turn for the better before it gets worse."*

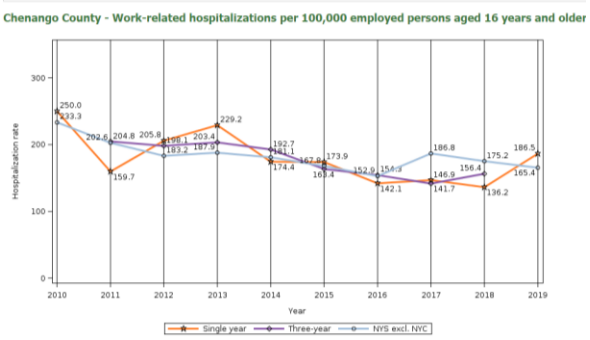
Table 40. Injury Indicators (cont.)

Indicator	*County Rate*	*NYS Rate exc NYC*	*Indicator performance*
Homicide mortality rate per 100,000			
Age-adjusted	0.9	3.1	Improved
Assault hospitalization rate per 10,000			
Age-adjusted (2017-2019)	1.5	3.1	Data not comparable

Stakeholders noted that the elimination of the domestic violence shelter in Chenango County has put county women and children at risk for violence. One stakeholder stated, *"There are domestic violence shelters in neighboring counties that are appropriate for some domestic violence survivors but not all, for some individuals the lack of shelter in Chenango County makes it difficult for them to leave which puts them and their children at risk. When individuals are fleeing domestic violence and they have to leave Chenango County, they are often confronted with issues and barriers such as their work (transportation to and from), the support of close family, local medical providers, day care, social services, etc. If an individual is fleeing with their children, they must disrupt their school routine, sports, after school activities and spending time with their friends. Dealing with domestic violence is difficult enough having to leave the local supports that individuals can count on makes everything that much more difficult."*

Occupational Injuries

Chenango County's rate for fatal work-related injuries per 100,000 employed persons aged 16 years and older, which is 4.7%, is higher than the NYS rate of 3.1%. In addition, Chenango County's work-related hospitalizations per 100,000 employed persons aged 16 years and older was 156.4, which is slightly higher than NYS's rate of 145.9. Rates of occupational injuries by race and ethnicity are unavailable on a county level.



Traffic Accidents

Between 2014 and 2016, only 1.2% of traffic related accidents in Chenango County involved pedestrians and bicyclists. While pedestrian and bicyclist injuries are the focus of the Prevention Agenda goals, Chenango County's mortality and injury rate related to motor vehicles is of more concern locally. The motor vehicle mortality rate in the county (11.7 per 100,000) is significantly higher than the NYS (excluding NYC) rate (7.1 per 100,000).[83] Traffic injuries also accounted for 316 emergency department visits and 44 hospitalizations in the county.

Table 41. Motor Vehicle Crashes by Crash Type, 2021

	Number	*Percent*
Fatal accident	3	0.2%
Injury accident	158	13.0%
Property damage accident	1,047	86.6%
Total	1,208	100.0%

Outdoor Air Quality

County level information on outdoor air pollutants is not available for Chenango County. However, the rural nature of the county limits the types of pollutants that would normally impair air quality. None of the public input indicated that outdoor air pollutants are of concern in Chenango County.

Built and Indoor Environments

Over three quarters (76.9%) of Chenango County workers travel to work alone in a motor vehicle as compared to about half of workers in NYS as a whole (53.0%). Only 23.1% of Chenango County workers use alternative forms of transportation or work from home, a rate well below the NYS rate of 45.5% and the Prevention Agenda rate of 47.8%. There is extremely limited access to public transportation in the county.

Table 42. Mode of Transportation to Work[84]

	Number	Percent
Car, truck or van alone	16,951	80.0%
Car, truck or van carpooled	2,075	9.8%
Public transportation	26	0.1%
Walked	931	4.4%
Taxi, motorcycle, or bicycle	226	1.1%
Worked at home	978	4.6%

In 2019 Chenango County was designated a Clean Energy Smart Community and continues to work towards a "Climate Smart Community" designation. However, since 2000, 150 new solar electric applications were received by NYSERDA for either residential or commercial properties in Chenango County.[85] To date, 137 of those applications have been completed with 13 still in the pipeline. The bulk of these projects, 87%, were for residential properties. The number of applications hit a high in 2015 but has declined in recent years.

A handful of survey participants noted that Chenango County has some options with respect to outdoor recreational opportunities to stay healthy. One in particular states *"There is a lot of beauty and places where you can go on nature walks, swimming in local lakes, ponds (cleaner ones of course), and much more, and it's free ... there's also many beautiful places to visit & camp, whether it's in a camper or old school with tents (the most fun), are great times to spend with your family".* Participants remarked on the two-mile walking loop in Greene as a positive option for exercise. Other participants said they used their local school's track for the same benefits. However, several survey participants suggested that a lack of transportation to and from these options was a barrier. The geography and economy in Chenango County have presented challenges for improving the built environment with respect to transportation.

Home and School Environments

As noted in the Social Determinants of Health section, some stakeholders and survey participants mentioned housing as an important health issue facing the county. A couple of stakeholders indicated that some housing in the area was sub-standard. One stakeholder said, *"The housing that we do have is overpriced for the amount of housing they are getting. A lot of the times the properties are not well-maintained."*

Indicator data show a potential area of concern with Chenango County's low rate of lead screening. Only 70.6% of children born in 2016 and aged 9-17 months were screened for lead and only 68.6% of children aged 18-35 months had been screened.[86] These rates are well below the 2024 Prevention Agenda target of 95% of children screened at ages one and two. The lack of lead screening in the county may be of considerable concern because over a third (34.5%) of occupied housing units in Chenango County were built before 1940,[87] and over two thirds (66.7%) of homes were built before 1980. Lead paint was not banned from residential paint until 1978 suggesting that Chenango County might have a higher number of homes containing lead paint than is represented by number of children being screened. Of particular note is that renters in Chenango County are more likely to reside in older homes since 72.7% of rental units in the county were built before 1960. Children living in low-income homes are more likely to live in rental properties and thus may be at higher risk for high blood lead levels. The Chenango County Department of Health has successfully been working with providers to encourage on-site testing.

Table 43. Child and Adolescent Health Indicators

Indicator	*County Rate*	*NYS Rate (exc NYC)*	*Indicator performance*
% of children born in 2016 with a lead screening (2016-2019)			
aged 0-8 months	0.0	1.7	No Trend Data
aged 9-17 months	70.6	75.6	Improved
aged 18-35 months	68.6	76.1	Improved
% of children born in 2016 with at least two lead screenings by 36 months (2016-2019)	50.9	63.3	Improved
Incidence of confirmed high blood lead level (10 micrograms or higher per deciliter) - rate per 1,000 tested children aged <72 months	12.9	3.8	No Trend Data

According to the NYS Department of Health Radon Program, 1,217 homes have been tested for radon out of 19,837 occupied housing units. Data from the NYSDOH Wadsworth Center estimates that 55% of basements in homes in Chenango County have radon levels higher than 4 pCi/L and that 23% of the living areas of homes have radon levels higher than 4 pCi/L.[88] This data indicate that there is an opportunity to increase radon testing and radon mitigation in the county.

Water Quality

Stakeholders did not indicate any particular concern with respect to drinking water in the county. The 2016 Chenango County Comprehensive Plan explains that public and private water sources in Chenango County are reliant on adjacent primary aquifers. The majority of municipalities are supplied by wells with a municipally owned/operated public water system. The aquifers in Chenango County provide abundant ground water for these public systems. However, the Comprehensive Plan also noted that "Rural residential water systems are typically supplied by natural springs and drilled/dug water wells. Too often residential properties, especially in small hamlets, have small lots, poor soil and improperly developed water wells easily contaminated by private wastewater systems and/or inadequate drainage."[89]

Stakeholders also did not suggest that there are any current or potential public health risks with recreational water in the county. According to the Toxic Release Inventory (TRI) from the Environmental Protection Agency (EPA), Chenango County is home to five facilities that must report what chemicals they release into the environment.

Table 44. Toxic Release Indicators[90]

	Chenango County
Number of TRI Facilities:	5
Total Production-Related Waste Managed:	106,125 lbs
Total On-site and Off-site Disposal or Other Releases:	78,890 lbs
Total On-site:	77,840 lbs
• Air:	34,379 lbs
• Water:	43,456 lbs
• Land:	5 lbs.
Total Off-Site:	647 lbs.

Food and Consumer Products

The Chenango River has been found to be polluted with mercury and fish taken from the river are under an advisory for limited consumption. Women under 50 and children under 15 are cautioned not to eat any fish taken from the Chenango River, while men over 15 and women over 50 are restricted to 4 meals per month due to mercury concerns. County-specific data on the number of people who have high mercury levels is not available, but there is not any particular concern with respect to the number of residents eating excessive amounts of fish from the river.

Chenango County has not experienced any significant foodborne illness outbreaks and while all county staff have been trained on how to manage outbreaks, additional training could offer more comprehensive response options.

Women, Children and Infants

Maternal and Women's Health

Key stakeholders and Survey participants did not specifically mention a need for more preventive care for women as a pressing issue in the county. In addition, women's health indicators do not show any area of particular concern. In 2018, 90.1% of women aged 18-44 in Chenango County had a recent check-up. This is above the 2018 NYS rate of 79.6% and the Prevention Agenda 2024 goal of 80.6%. Of potential concern is Chenango County's higher-than-state average for unintended pregnancies and birth rates for teens aged 15-19 (2013-2015).

Table 45. Pregnancy and Birth Indicators

Indicator	*County Rate*	*NYS*	*Indicator Performance*
Unintended pregnancy[91] (2017)	32%	N/A	-
Percentage of births to teens aged 15-17[92]	1.5	0.7	No Significant Change
Percentage of births to teens aged 15-19	6.1	3.1	No Significant Change

Maternal mortality and morbidity were not mentioned by any stakeholder or survey participant as an issue facing Chenango County. The rates for maternal mortality in Chenango County are too small for meaningful analysis. SPARCS data from 2018 indicate very little evidence of severe maternal morbidity issues in Chenango County.

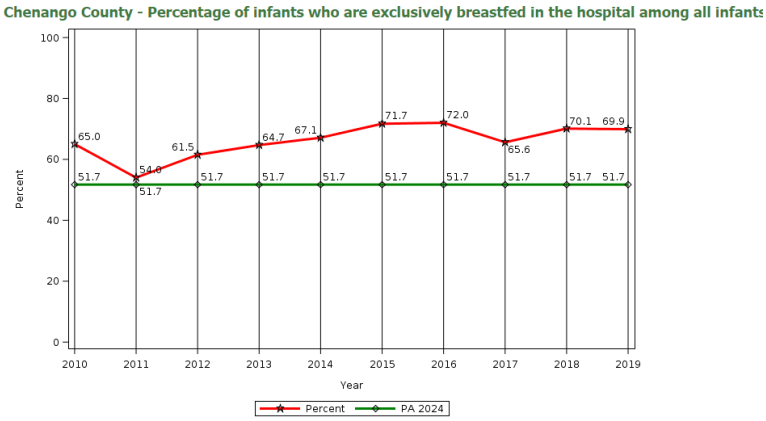
Perinatal and Infant Health

Information from stakeholders and survey participants did not touch on infant mortality or morbidity as a critical issue facing the county. Chenango County's rate of infant mortality (per 1,000 births) is 9.1%, which is higher than the 2024 Prevention Agenda rate at 4.0 per 1,000 births. The percentage of babies born with low birthweight and very low birthweight are comparable to NYS as a whole.[93]

Other concerns not specifically related to Prevention Agenda goals, but that could have a significant impact on infant mortality and morbidity, include Chenango County's higher-than-region incidence of drug use during pregnancy (11%)[94] and extremely high rate of tobacco use during pregnancy (30.3%).[95]

Table 46. Infant Health Indicators[96]

Indicator	*County Rate*	*NYS Rate exc NYC*	*Indicator performance*
Mortality rate per 1,000 live births			
Infant (less than 1 year)	9.1	4.4	No Significant Change
Neonatal (less than 28 days)	6.3	2.9	No Significant Change
Post-neonatal (1 month to 1 year)	2.8	1.5%	No Significant Change
Fetal death (20 weeks gestation or more)	2.1%	6.4%	No Significant Change
Perinatal (20 weeks gestation to less than 28 days of life)	8.4%	9.3%	No Significant Change
Perinatal (28 weeks gestation to less than 7 days of life)	5.6%	5.1%	No Significant Change



Breastfeeding

Chenango County selected "Promote exclusive breastfeeding" as a priority area in the 2016-2018 Community Health Assessment. The efforts focused on in this priority area were successful. 68.4% of Chenango County infants exclusively breastfed in the hospital in 2018, far surpassing the 2024 Prevention Agenda goal of 51.7%. As a result of the pandemic, coordinated breastfeeding supports have declined, including the number of certified lactation consultants.

Priority

Breastfeeding has been shown to contribute to the health and well-being of infants. Breast milk contains important antibodies, contains ideal nutrients, and reduces risks.

Child and Adolescent Health

Statistics on the number of children struggling with mental and emotional challenges is not readily available on the county level with the exception of suicide and self-injury rates. The suicide mortality rate for children 15-19 years of age in Chenango County was 0.0 per 100,000 population. In addition, the self-inflicted injury rate for this same group was 7.1 per 10,000 persons which is less than the NYS rate of 9.0.[97]

Stakeholders and survey participants also noted a significant lack of providers for child mental health care. One stakeholder said, "*Young people are experiencing anxiety and depression in ways that are new and definitely more social…with knowledge easily accessible, children are facing this expectation to be savvier about the world, to grow up quickly and engage in the stresses and strains of adult life".*

Chenango County Behavioral Health Services provides mental health outpatient treatment services to the community. Many of these youth have a Serious Emotional Disturbance, are high risk and high utilizers of systems such as the Emergency Department and CPEP.

Year	Number of children and youth served in Chenango County Behavioral Health outpatient clinic
2019	797
2020	683
2021	703

In addition to Chenango County Behavioral Health Services, the county utilizes MCAT, which provides 24/7 services to persons with psychiatric emergencies or emotional crises. MCAT's mental health staff provide help during crises to children and adults in Oneida, Herkimer, Schoharie, Otsego, Delaware, and Chenango counties. MCAT has the ability to respond to crises where they occur, and work with the individual, family, and community-based agencies to assist with needs.

Crises include:

- Threats to harm self or others
- Behavioral issues
- Severe depression or anxiety
- Mental health symptoms
- Erratic behavior
- Behaviors that may lead to police intervention
- Any problem that is causing a serious problem in functioning

Stakeholders noted that early intervention with Chenango County children could potentially ameliorate problems faced in adulthood. One stakeholder said, *"The crucial point of early intervention is to help families identify if their child has any kind of developmental delay from age birth up to 2 and half and we serve children until the year they are 3. Children age out of early intervention and if they still have therapy needs, they can receive them through the preschool program. The early intervention program hopes to serve families in identifying developmental delays or needs of their children by connecting them to evaluations to determine if a baby/toddler has a delay and needs some kind of therapy (speech, OT, PT, or a teacher). The therapist is then fitted with the family to work with them and their child. "Early" is the significant part because the hope is that by identifying needs early on, a child can start therapy services and be caught up developmentally to where their typically developed peers are by the time, they begin kindergarten (or sooner!). In some cases, this does happen. Often times, a child shows continued developmental needs past their 3rd birthday but if they started with some early intervention services, this benefits parents and guardians with tools on how to best assist their child as he or she grows. This can provide the child and their caregivers with the foundational skills they need in order to meet their expected developmental skills later on in school and hopefully adulthood. By then the parent has learned ways to assist their child in learning skills and also it has connected the family with providers-teachers or counselors that will be nice support along the way. We do know that the more support and connections a child has growing up, the better chances they have later on in succeeding on being a healthy and socially apt adult."*

A key protective factor in children's emotional and social well-being is engagement in activities and with the community. Information from the 2018 PRIDE survey indicates that a significant portion of students in Chenango County do not engage in activities that would support their emotional development and relationships.

Table 47. Protective Factors - Results from 2018 PRIDE Survey

Grade	*Never take part in community activities*	*Never take part in school activities*
9th	41.8%	32.2%
10th	45.2%	34.9%
11th	45.3%	37.9%

Children with Special Health Care Needs

17% of all Chenango County students are part of their district's special education program. The percentage of children in the special education program has been increasing in most districts over the past few years.[98]

A handful of parents indicated a positive experience with the services their children receive in school. One parent said, *"(The) Service coordinator has been amazing since day one! Always kept me informed every step of the way and made sure all my questions were answered."*

According to the Early Intervention Performance Data, children in their program improved their social emotional skills, increased their acquisition skills and use of knowledge (including that which was related to language and literacy), and were engaging in appropriate behaviors, doing so at a much higher rate than in NYS as a whole. However, the data also show that a much lower percentage of families in Chenango County report that services have helped their families know their rights, effectively communicate their children's needs, and helped the family help their children develop and learn. A handful of Survey participants noted that challenges exist in obtaining services for children with disabilities. One parent shared, *"We had to wait a few months for an available provider due to the therapist's schedule being too full. It seems there are not enough therapy providers to meet the amount of need in the county".*

Table 48. Early Intervention Municipality Performance Data[99]

	Chenango County	*NYS*
Percent of children who entered or exited the program below age expectations in:		
positive social-emotional skills (including social relationships) who substantially increased their rate of growth by the time they exited the program	70.3%	66.0%
positive social-emotional skills (including social relationships) who were functioning within age expectations by the time they exited the program	55.8%	40.3%
acquisition and use of knowledge and skills (including early language/communication and early literacy) who substantially increased their rate of growth by the time they exited the program	87.2%	74.5%
acquisition and use of knowledge and skills (including early language/communication and early literacy) who were functioning within age expectations by the time they exited the program	53.5%	39.0%
use of appropriate behaviors to meet their needs who substantially increased their rate of growth by the time they exited the program	90.0%	75.5%
use of appropriate behaviors to meet their needs who were functioning within age expectations by the time they exited the program	39.5%	37.0%
Percent of families participating in Part C who report that early intervention services have helped the family know their rights	100.0%	93.1%
Percent of families participating in Part C who report that early intervention services have helped the family effectively communicate their children's needs	100.0%	91.1%
Percent of families participating in Part C who report that early intervention services have helped the family help their children develop and learn	100.0%	93.05%

Dental Care

Both stakeholders and Survey participants identified dental care as a concern in the county. the percentage of 3rd graders in Chenango County with dental care experience was 57.0%. In addition, only 76.5% of Chenango County children had at least one dental visit in the last year. Over half of 3rd graders from 2009 to 2011 had caries experiences. In addition, only 41.0% of children aged 2-20 enrolled in Medicaid had a dental visit in the past year. The rate for caries outpatient visits per 10,000 children in Chenango County, 113.8, is less than the New York State rate of 146.4.[100]

Table 49. Oral Health Indicators101

Indicator	*County Rate*	*NYS Rate exc NYC*	*Indicator Performance*
Percent of 3rd grade children with: (2009-2011)			
Caries experience	57.0%	45.4%	No Trend Data
Untreated caries	30.6%	24.0%	No Trend Data
Dental sealants	41.7%	41.9%	No Trend Data
Dental insurance	80.8%	81.8%	No Trend Data
With at least one dental visit in last year	76.5%	83.4%	No Trend Data
Taking fluoride tablets regularly	73.4%	41.9%	No Trend Data

Information from stakeholders indicates that dental care for children in the county has continued to be challenging and is currently being made worse by the lack of dental care available for Medicaid patients specifically.

One Survey participant said, *"Dental services are a major concern, families have a hard time finding places that accept the insurance and families with lower income are not able to pay up front first."* Many key informants agreed that the lack of dental care for Medicaid eligible residents was a pressing issue in Chenango County. One stakeholder said, *"The lack of Medicaid accepting dental providers is a real need in Chenango County. Local residents must travel outside of our area to find such dental providers. Many residents do not have access to transportation and therefore dental care is not maintained. The Emergency Department sees approximately 350 patients a year that present with dental pain. Many of these patients may have reported to a dental provider if a local option was available."*

In addition to the lack of dental providers, a significant portion of county residents do not have fluoridated water. About half of Chenango County residents are on private water supplies and the City and Town of Norwich are the only municipalities in Chenango County with fluoridated water systems. These cover only 9,000 residents or approximately 18.9% of the population, which is significantly less than the 2024 Prevention Agenda goal of 77.5%.[102]

Health Disparities

Economic class is the primary distinction by which to compare maternal and child health outcomes in Chenango County. For the most part, indicators suggest that there are not significant differences in health outcomes between women and children enrolled in Medicaid and those who are not.

For the most part, Medicaid pediatric inpatient discharges indicate that fewer children in Chenango County are hospitalized for potentially preventable conditions than would be expected for nearly all indicators. The one exception being in 2014, when Chenango County's rate for diabetes short-term complications was higher than expected and higher than the NYS rate.

Childcare

The Office of Children and Family Services (OCFS) has record of 47 registered daycare facilities within Chenango County.[103] According to OCFS, a "High childcare need area" is defined here as being both high poverty and low relative availability of licensed or registered childcare. Sub-county areas* are identified as "high childcare need areas" if 25% or more of families have incomes below 200% of the Federal Poverty Level and there is a ratio of 3 children or more children under 5 years of age per regulated childcare slot. Chenango County has 13 towns out of a total of 21 towns that are identified as a high childcare need area, indicating that regulated childcare is difficult to obtain.[104] Survey participants noted obstacles in daycare options within the county, with one stating their experience of "*repeatedly trying to find daycare for an infant is extremely difficult."* One community member states "*Finding providers that work with your schedule is a hurdle, most people get out of work at 5pm, some providers want your child to be picked up by 3pm. Another difficulty is living in such a rural climate, it is difficult to find a provider in the town that you either live or work in that has availability, the correct age range, or scheduling. Not even to mention the expense, childcare is extremely expensive."*

Vaccine Preventable Diseases

Overall, Chenango County students have a history of consistent, complete immunization. Nearly all students were completely immunized in all districts in the county during the 2017-2018 school year.[105]

Table 50. Percent of Students with Complete Immunization by District and School Year

School District	*2012-2013*	*2013-2014*	*2014-2015*	*2015-2016*	*2016-2017*	*2017-2018*	*2021-2022*
Afton Central School District	99.5%	99.0%	91.0%	99.6%	98.6%	98.6%	99.8%
Bainbridge Guilford Central School District	99.9%	99.5%	99.6%	98.6%	99.6%	99.5%	99.9%
Greene Central School District	98.9%	99.0%	99.0%	99.0%	98.9%	98.6%	99.8%
Norwich City School District	98.8%	98.5%	98.3%	97.9%	99.1%	98.6%	99.2%
Otselic Valley Central School District	96.2%	99.1%	98.2%	99.1%	99.7%	98.1%	99.3%
Oxford Academy & Central School	98.8%	98.5%	97.5%	99.5%	98.3%	99.5%	99.6%
Sherburne Earlville Central School District	99.3%	98.8%	99.3%	98.7%	99.2%	99.3%	98.8%
Unadilla Valley Central Schools	98.2%	98.6%	96.5%	98.3%	98.4%	98.7%	98.7%

Chenango County has steadily increased the percentage of children with 4:3:1:3:3:1:4 immunizations from a low of 49.5% in 2011 to 66.9% in 2020. The percentage of females aged 13-17 in Chenango County who had received the recommended 3 doses of HPV vaccine has also increased from 31.3% in 2011 to 33.5 in 2020. However, the county rate still lags behind the NYS rate of 39.8%.[106] There is room for improvement with influenza vaccination rates in Chenango County.

According to the 2018 eBRFSS, only 31.1%% of Chenango County adults had received a flu shot. This rate is down from the 2016 rate of 37.8%. In addition, the percentage of people aged 65 and over in Chenango County who received a flu shot declined from 54.5% in 2016 to 40.8% in 2018, which is far below the 2024 Prevention Agenda goal of 80%.

In 2018, 76.5% of people aged 65 and older in Chenango County had ever had a pneumonia shot. However, both pneumonia and flu hospitalization rates of people aged 65 and over in Chenango County have been consistently higher than state rates, even despite higher pneumonia vaccination rates.

Table 51. Chenango County Pneumonia/Flu Hospitalization rate (age 65 years and older) per 10,000[107]

Year	*Chenango County*	*NYS exc. NYC*
2005	197.4	196.1
2006	196.2	173.1
2007	178.7	161.0
2008	182.7	153.0
2009	159.3	139.5
2010	184.4	128.8
2011	149.1	131.0

2012	166.0	120.2
2013	192.5	116.8
2014	131.7	100.2
2015	-	-
2016	124.5	94.4
2017	112.0	83.6
2018	160.3	106.6
2019	152.0	95.3

Data on immunization disparities between low-income households and their counterparts is not available on the county level nor is data on gender-specific rates of receipt of the HVP vaccine.

Human Immunodeficiency Virus (HIV)

The incidence of HIV cases in Chenango County is extremely low and well below the Prevention Agenda goal of 5.2.

Table 52. HIV Indicators[108]

Indicator	*County Rate*	*NYS Rate exc NYC*	*Indicator Performance*
HIV case rate per 100,000			
Age-adjusted	Data suppressed	13.2	Data Suppressed
AIDS mortality rate per 100,000			
Age-adjusted	0.7	1.9	Improved

Sexually Transmitted Infections

Overall, the incidences of HIV and AIDS infections in Chenango County are too small for a meaningful analysis of trend or comparison, but are well below both NYS rates and Prevention Agenda goals. Syphilis and gonorrhea rates are also low in Chenango County and significantly less than NYS and the Prevention Agenda goals.

Chlamydia diagnosis rates in Chenango County remain below NYS rates and Prevention Agenda goals. The chlamydia diagnosis rate of women aged 15-44 in Chenango County increased by 14% between 2017 and 2018 and declined by 4.6% between 2018 and 2019, but the percentage of sexually active women aged 16-24 covered by Medicaid who had at least one chlamydia test is significantly lower than the NYS (excluding NYC) rate. This discrepancy between rates of testing and rates of diagnosis may indicate that with proper screening, a greater number of cases may be diagnosed.

Table 53. Sexually Transmitted Infection Indicators[109]

Indicator	*County Rate*	*NYS Rate exc NYC*	*Indicator Performance*
Chlamydia case rate per 100,000 males			
Aged 15-19	349.4	581.0	No Significant Change
Aged 20-24	947.2	1,149.5	No Significant Change
Chlamydia case rate per 100,000 females			
Aged 15-19	1739.8	3535.7	No Significant Change
Aged 20-24	2,064.6	3912.5	No Significant Change
% of sexually active women aged 16-24 with at least one chlamydia test in Medicaid program (2015)	50.3%	75.8%	No Significant Change

Table 54. Chenango County Percentage of sexually active young women aged 16-24 enrolled in Medicaid with at Least One Chlamydia Test[110]

Year	*Chenango*	*NYS exc. NYC*
2011	43.4%	63.8%
2012	54.6%	64.7%
2013	48.0%	65.2%
2014	44.9%	65.1%
2015	50.4%	66.4%
2016	47.5%	67.7%
2017	48.8%	67.9%
2018	47.8%	69.8%
2019	50.3%	68.6%

Hepatitis C Virus (HCV)

The number of people being treated for HCV has declined in Chenango County but remains higher than the NYS rate. These data are not available by Medicaid status on the county level.

Table 55. Hepatitis C Rates per 100,000 Population by Type and Region

	Chenango		*NYS excl. NYC*	
	2017	*2019*	*2017*	*2019*
Chronic	*84.4*	*79.1*	*64.0*	*55.0*

Data detailing the number of HCV cases by drug status are not available.

Antibiotic Resistance and Healthcare-Associated Infections

Overall, CMH has had lower than expected rates of hospital-acquired infections between 2008 and 2017.[111] But Chenango County's antibiotic prescribing rate for acute respiratory infections in adults with Medicaid has consistently exceeded the NYS rates and is higher than the Prevention Agenda goal of 30%.[112]

Table 56. Potentially Avoidable Antibiotic Prescribing Rates for Acute Respiratory Infections, Adults 18-64, Medicaid by Year and Region

Year	*Chenango*	*NYS*
2010	41.0%	46.52%
2011	46.1%	46.88%
2012	51.7%	48.67%
2013	50.6%	44.94%
2014	41.1%	42.72%
2015	44.9%	41.92%
2016	42.0%	40.16%
2017	28.3%	41.1%

COVID – 19

COVID-19 (SARS-CoV-2), a global pandemic, has been a generational event with resounding impacts across Chenango County, New York State, and the world. Locally the pandemic had severe impact on individuals, families, and communities. The rural nature of our community did not shelter us from Illness, loss of life and socio- economic hardships. The onset of the pandemic highlighted shortcomings in our response ability including access to health care, social services, and connectivity. The pandemic also served to highlight the strength and resolve of our community including the generosity of those in the community, the commitment of local partners and the dedication of those in the health field to stay the course.

The COVID-19 pandemic tried every facet of the local healthcare system and its importance to the community as a whole. The creation of diverse partnerships, untraditional communication networks, and multi-layer interventions proved to be the key advancements that stewarded our community through the pandemic's darkest days.

COVID Pandemic Challenges

Information from survey participants highlighted several challenges that Chenango County residents faced in the early parts of the widespread pandemic such as remote work and schooling, mental health decline, and general confusion about what they were experiencing.

When having to isolate and do everyday tasks remotely, several survey participants noted concerns such as one teacher noted their challenge of "*Teaching from home with students who have limited internet accessibility. Finding daycare, trying to make sure protocols were followed in the classroom when community members were "up in arms" and did not understand that schools did not make these decisions".* Another survey participant expressed "*Access to remote work, issues with having fast enough Internet speed. The new Frontier Fiber Optic service helped immensely, but it's not available to everyone, and there are still (unnecessary) technical restrictions imposed by Frontier (which are arguably an end run around Federal and State laws designed to protect Consumers). Faster Internet access, with higher UPLOAD speeds, are critical to improving quality of life in Chenango County."*

Many survey participants expressed an exacerbation of challenges with the already scarce daycare options, noting *"Remote learning with my Pre-K child. I work daytime hours and getting the daycare provider or babysitter to engage in the remote learning was tedious and unproductive. Finding suitable and appropriate daycare at all was a challenge as well due to new pandemic related regulations.* Another states*, "Increased stress due to the non-stop onslaught of policy changes daily and lack of availability. My children both have seasonal and environmental allergies and would be sent home unnecessarily due to "COVID-like symptoms.".* Regarding the state of childcare during the pandemic another survey participant said, *"Daycares were forced to mask babies, clean for an additional 2 hours a day, and cut numbers, toys, games, activities, in half. Most closed and/or went underground."* Another participant expressed gratitude for the childcare resources there were available stating *"The YMCA was a God send for essential workers."*

A decline in mental health was distinguished as a major factor for Chenango County during the COVID-19 pandemic. One survey participant expressed "*Never had anxiety until covid. Now I never know when going to school what I am up against. Staff shortages, mask no mask, virtual learning in person, is my cough allergies or covid, can I send my kid to school with that runny nose, etc.*" Another states*, "Employment, mental and physical health decline, isolation, increased stress from money, anxiety 10x".*

Cases and Testing

In March of 2020 Chenango County recorded its first COVID-19 cases. Since that date well over 11,500 residents have tested positive. It is important to keep in mind that this number is woefully under reported as a result of testing shortages and the proliferation of at home tests. The Health Department worked tirelessly to do case investigation and contact tracing for every reported case from the onset of the pandemic through the spring of 2022. This effort generated thousands upon thousands of isolation and quarantine orders that were generated and tracked by the department. From the chart below we see that the peak of the COVID-19 infections was in early January of 2022 with 83 new cases confirmed in one day.[113]

Chenango County New Coronavirus Cases Per Day[114]

Several survey participants noted some positive outcomes to the way testing for the virus and confirmed positive cases were conducted, stating that one was that *"innovation increased through drive-thru testing, I am more confident in the hospitals ability to provide care."* With many others praising the testing ease at Bartle's Pharmacy in Oxford and Chenango Memorial *"Fantastic testing at Chenango Memorial, (the nurse) she's very good and she's gentle."* Other survey taker commented that *"Everyone came together public health, emergency management and local services through the United way. Weekly communications were established and very helpful."* And another "*Keeping the public informed of the county statistics, offering PPE early on with masks and sanitizers for organizations, keeping track of the virus transmission and the people that were infected. When I had it, it was comforting to have one nurse keep track of my case and check in on me throughout the duration. I think everyone worked as hard as possible given the unprecedented circumstances. CCPH went above and beyond and really stepped up during this crisis."*

Some suggestions for improvement were also noted, one survey participant stated that *"At first, I feel we were well informed of the expectations. If you were diagnosed you were told what to do, and what to expect, but there were not very many testing sites."* With a second stating that the wished the County worked towards *"Making it easier and cheaper to get covid testing done. Making sure there was enough people available to talk to people and help them with their concerns.".* Several survey members mention frustrations with the ever-changing information being reported and receiving stating, "*There seemed to be some gaps in the information that public health was working with; gaps from federal to state to county and back*."

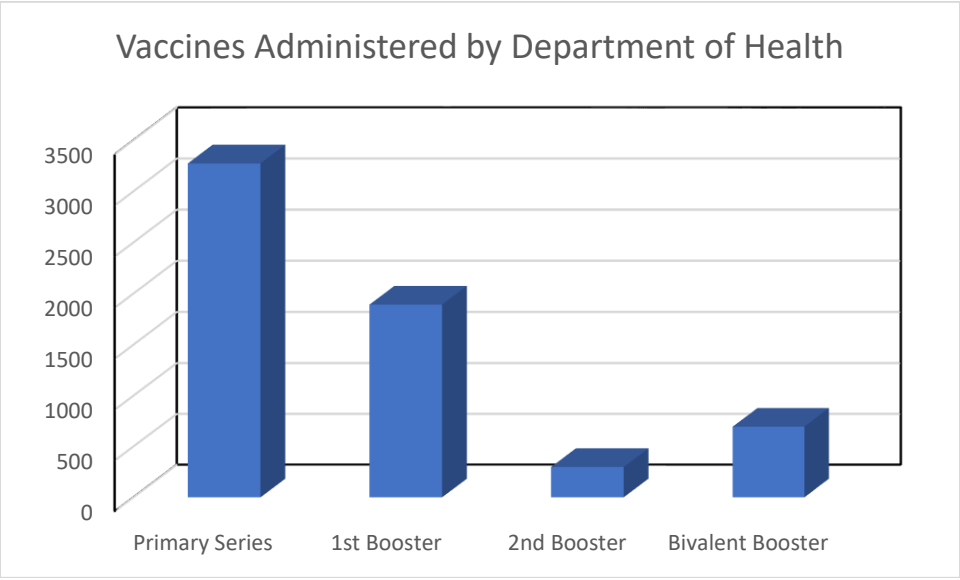
Hospitalizations and Fatalities

The goal of so many COVID-19 interventions was to "flatten the curve". Lock downs, social distancing and masking requirements were all put in place to limit the spread of disease and prevent the worst outcomes for the most vulnerable in our community. Unfortunately, so many still experienced severe disease. Often during the pandemic local hospitals were near or at capacity triaging and treating COVID-19 patients. Since the first Chenango County resident fatality contributed to COVID-19 in April of 2020 the Health Department has confirmed 124 COVID-19 attributed deaths.

Survey participants through the county expressed both positive and negative ideas regarding the mandated measures to reduce the spread of COVID-19 and attempt to quell hospitalizations and fatalities. One survey participant notes their experience stating that it was handled well by "*Keeping the public informed of the county statistics, offering PPE early on with masks and sanitizers for organizations, keeping track of the virus transmission and the people that were infected. When I had it, it was comforting to have one nurse keep track of my case and check in on me throughout the duration. I think everyone worked as hard as possible given the unprecedented circumstances. CCPH went above and beyond and really stepped up during this crisis".* It was additionally noted that the Chenango County Health Department *"Kept the public informed about infection and hospitalization rates."* with another stating *"Must've done great as we lost (and I say this with respect to those who passed) just a couple. I think they 'all' did fantastic, all of the UHS people!"* Some survey participants expressed concerns such as *"I believe that masks should have been offered to more workplaces, stores etc. I see elderly people that have worn the same mask for months because they don't have the resources to buy masks."* Also stating some difficulties being *"I would assume outreach to the rural elderly population, to ensure adequate nutrition and covid education was difficult."*

Vaccination

Chenango County Health Department reports that since January 1st, 2020, the total number of COVID-19 vaccine shots that have been administered to the public is 11,060 as of December 8th, 2022.[115] These vaccinations have been performed through 308 coordinated clinics throughout Chenango County, including the jail and homebound visits.



In regard to the clinics that were offered through the county, many survey participants stated the ease in which they were able to obtain the applicable vaccine stating "*I believe our county did good about sharing information about the vaccines. I was able to sign up on the computer. Many don't have the internet. I believe public health was really good sharing information about vaccines."* Another Survey participant expressed *"I was fortunate for the vaccination clinics and the boosters. It was amazing to see everyone come together in such a time of need. Thank you."* Speaking from a home visit, one survey participant said of their experience, "*I had wonderful assistance from Public Health for my vaccinations and boosters. They came to my house and were friendly and professional."*

Bartle's Pharmacy in Oxford and UHS pop up clinics were also designated as significant resources for vaccines and information, as noted by one survey contributor "*Bartle's was incredibly helpful in answering questions, they had paper handouts about vaccinations/infection etc…."*

Community Response

In the early stages of the pandemic, Chenango County Public Health and Chamber of Commerce partnered to organize a weekly call via Zoom that had officials from all sections of the community to keep updated on hospitalizations, vaccine pods, social determinants of health (where to get certain services with businesses being closed). During the many weeks of the pandemic the Chenango County Health department worked closely with other agencies at the state level to keep the public informed. At the county, one key employee recalls the swift response with the community stating, *''We held one-hour meetings each week to go over COVID numbers and trends, response to questions, updates on the latest recommendations to keep up with the fast changes that were occurring, mandates, and more…. On the call was BOCES, schools, organizations, non-profits, businesses, and others. At one time there may have been 100 people per call."* One survey participant stated about the daily updates, *"I can't even express how comforted I was by our county's daily covid information, as well as all information and updates that were provided*."

Of the members that were surveyed, there was a strong response of the positivity associated with the cumulative community response to the COIVD-19 pandemic, with one survey member stating *"Everyone came together public health, emergency management and local services through the United way. Weekly communications were established and very helpful."* A second member points out that *"School closures were a downer, but considering the resources we had to work with, I think they were handled well. Also, it renewed my faith inhumanity to see communities coming together to get food out for school meals and for other community members."*

A significant resource that was established during the pandemic was the collaboration of Commerce Chenango and local businesses. Meals were purchased from local business and delivered to areas to "feed the first line" of essential workers.

Healthy Women, Infants, and Children

Since the beginning of the COVID-19 pandemic, there have been declines in rates of vaccinations, child screenings, dental services, and outpatient mental health services among children. It is likely that parents may have been delaying care due to concerns about contracting illnesses or concerns regarding costs, while providers may have had limited capacity due to safely treating patients**.** Many children faced substantial access barriers, emotional strain, and financial hardship. Specifically, the pandemic's

impact on school aged children was concerning. Families scrambled to find childcare while students were attending school remotely. Grocery bills increased as more meals were being supplied in the home, rather than children receiving a school lunch. Students who attended school remotely may have faced difficulty accessing health care services that were typically provided through school-based health centers. Social distancing policies may have resulted in reduced social connections and physical activity for children as well as emotional and behavioral challenges due to disruptions to student's routines, not to mention the impact of parental stress on the household.

Promote Well-Being and Prevent Mental and Substance Use Disorders

Well-Being

The "Opportunity Index," developed jointly by Child Trends and Opportunity Nation, uses 16 indicators to measure the level of opportunity available to residents beyond simple economics.[116] Chenango County's 2019 Opportunity Score of 53.2/100 is somewhat lower than the 2019 NYS score of 56.4/100, but increased from the county's 2018 score of 51.7. Chenango County lags behind most significantly in the Community Score which includes disconnected youth, crime, access to primary health care, and availability of healthy foods.

	Opportunity Score	Economy Score	Education Score	Community Score	Health Score
Chenango County (2019)	53.2	57.9	54.0	39.8	61.3
Chenango County (2018)	51.7	55.0	52.5	37.8	61.5
NYS (2019)	57.4	51.9	58.9	58.4	60.4

Youth Disconnection

Youth behavioral risk data is not available on the local level, however, 12% of Chenango County youth aged 16-24 are considered "disconnected."[117] According to the University of Wisconsin Population Health Institute, "Disconnected youth are at an increased risk of violent behavior, smoking, alcohol consumption and marijuana use, and may have emotional deficits and less cognitive and academic skill than their peers who are working and/or in school. Studies show that both a lack of educational attainment and unemployment is linked to depression, anxiety and poor physical health."[118]

In addition, data from the PRIDE survey conducted in 2018 show that more than 80% of high school students do not participate in community activities, and almost two-thirds of students do not participate in school activities. Participation in activities is an important protective factor in mitigating or eliminating the risks of substance use and mental health disorders among youth.

Senior Disconnection

A number of survey participants commented on the social and physical isolation that affects seniors in Chenango County. They suggested that this isolation has a negative impact on overall well-being as well as physical and emotional health. One survey participant shared, *"My parents must travel to Binghamton for most of their appointments. It would be nice to have more specialists in town. It is not an easy commute for them as they no longer drive out of town."*

One Key stakeholder also noted a lack of services for the aging population regarding the resources available, such as the telehealth option and the lack of broadband for keeping in touch with loved ones. One participant shared, *"There needs to be more access to high-speed internet and help for seniors to be able to use for telehealth and family interaction."*

Mental Health

In 2018, the Chenango County the age-adjusted rate of adults reporting poor mental health in the last month was 13.3%. According to 2018 data, 19.8% of Chenango County residents have been told they have had a depressive disorder at some point in their lives.[119]

Chenango County's rates of emergency room visits due to mental health are higher than NYS rates for both adults and children under age 18, but the hospitalization rate for both adults and children is much lower.[120] This discrepancy may suggest that county residents rely heavily on the emergency department for issues that may be better addressed in another setting.

Table 57. Mental Health ER and Hospitalization Rate (Age Adjusted per 10,000 Population)121

	Chenango	*NYS*
Adult ER rate due to mental health	112.7	108.9
Pediatric ER rate due to mental health	116.0	90.6
Adult hospitalization rate due to mental health	50	60.6
Pediatric hospitalization rate due to mental health	3.6	19.3

Key stakeholders and Survey participants frequently noted mental health disorders as a pressing issue facing Chenango County. Both groups also agreed that the lack of mental health providers is a hurdle for the county. One survey participant said, *"There needs to be more mental health services & various peer support groups offered."* Another mentioned, *"Time constraints on doctors with visits is a problem. Some people need time to be listened to and treated properly. Our long-time doctors do well with managing this but not everyone is a quick easy visit."* One stakeholder said, *"Mental Health services continue to require ongoing improvement within the county. Currently there is one county operated licensed outpatient clinic within Chenango County, Chenango County Behavioral Health Services (CCBHS). They serve individuals of all ages and with a variety of presenting concerns. CCBHS primarily works with individuals who have Medicaid, because although there are private practitioners in the county that can see individuals for therapy most do not accept Medicaid or serve high risk individuals. Currently CCBHS is the only provider within the community that has a psychiatrist who can prescribe psychiatric medications. CCBHS previously utilized the Open Access model which provided individuals with the opportunity to initiate services same day, however due to the pandemic and workforce related issues this had to be discontinued and switched back to scheduled intake appointments. With the current model of scheduled appointments, on average individuals who are seeking care at the outpatient clinic wait 5-10 days for their initial appointment. However, if someone is high risk or recently hospitalized, they will be seen within three days. Due to limitations on psychiatric services, there can often be a wait of 6-8 weeks for an initial medication evaluation. "*

Chenango County, as a whole, has been federally designated as a Health Professional Shortage Area (HPSA) for mental health and the Medicaid population in the county has been designated as a Medically Underserved Population with respect to mental health. According to County Health Rankings, Chenango County's ratio of population to mental health provider was one mental health provider per 510 people. This is a significant difference when compared to NYS's rate of 310:1.[122]

Priority

Shining a light on mental health has seen an increase in priority in recent years, mostly because the extensive list of other areas in life it can effect. Poor mental health can effect social and family relationships, problems with substance or alcohol use, finances, and even mortality.

Mental Health Adverse Outcomes

While data on suicide attempts is not currently available on the county level, information on suicide mortality and self-inflicted injury is. In Chenango County the age-adjusted suicide mortality rate, 13.2% per 100,000 population, exceeds the NYS rate of 8.7% and the 2024 Prevention Agenda goal of 7.0.[123] The suicide mortality rate of people aged 15-19 years in Chenango County also exceeds the NYS (excluding NYC) rate. Looking at the crude rates across time for adolescent suicide mortality, the number of suicides in Chenango County varies dramatically year to year. The self-injury hospitalization rate of the same age group has also varied over time. The most recent data available suggests a higher number of Chenango County youth are self-injuring than in NYS overall (excluding NYC).

Table 58. Suicide Mortality rate per 100,000 population – 15-19 Years

Year	*Chenango County Single Year*	*Chenango County 3-Year Average*	*NYS exc. NYC*
2007	0.0*		4.5
2008	0.0*	0.0*	3.6
2009	0.0*	9.4*	4.9
2010	28.5*	9.4*	6.1
2011	0.0*	9.8*	7.0
2012	0.0*	0.0*	7.1
2013	0.0*	0.0*	4.6
2014	0.0*	10.8*	6.0
2015	0.0*	11.1*	5.4
2016	33.7*	11.3*	6.9
2017	0.0*	11.6*	8.0
2018	0.0*	0.0*	6.7
2019	0.0*	-	7.1

Table 59. Self-Injury Hospitalization Rate per 10,000 Population – 15-19 Years

Year	*Chenango County 3-Year Average*	*NYS exc. NYC*
2014	22.6*	8.7
2016	20.2*	8.7
2017	4.4	-
2018	4.3	-
2019	-	-

Substance Use

Survey participants noted that substance use disorders are a pressing issue facing the county. Several participants suggested that overprescribing of opiates was a key challenge as is the lack of services available to people with addictions. One participant said, *"The extent of substance use and homelessness are inclining rapidly and these individuals do not have the resources available to break the cycle and be free from this tragic and debilitating illness. They continue their means of use and sales of substances to survive... The war on drugs and criminalization of substance use needs to end! It is not effective. Substance use is an illness, and we need more opportunities for them to get better."*

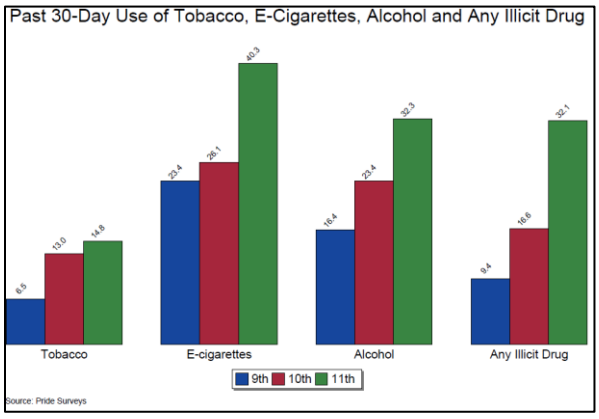
Key informants also frequently noted substance use as an important issue to address in the county. One stakeholder said in terms of the availability of in demand substances, *"Accessibility can lead to experimentation and the culture surrounding the substances as well"."* Another stakeholder noted the impact of substance use on families and children. She said*, "They [youth] see adults using substances.*

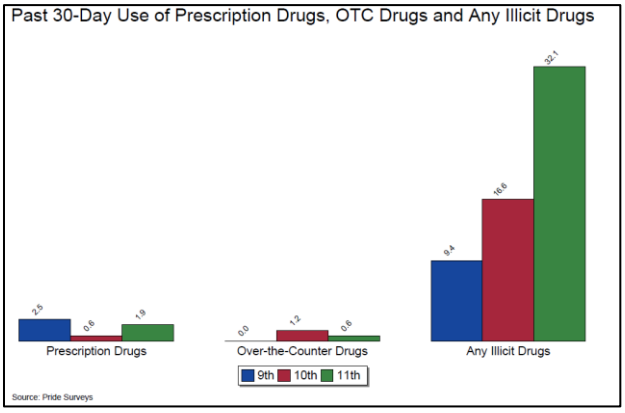
You can have a good time doing stuff like that".” One survey participant expressed concern with a possible correlation between crime and individuals with substance use disorders noting, "*You have to lock your doors and kids should not roam the streets alone. I don't feel it's safe, too many addicts".* There are two substance use disorder inpatient rehabilitation options available regionally (in Broome and Delaware counties), but none within Chenango County. In county, the substance use disorder clinic is located within the County Mental Health Clinic.

While substance use disorder prevalence data is not available on the county level, several other indicators suggest that the population experiencing challenges with substance use has been increasing.

Underage Substance Use

While none of the Survey participants or key informants suggested that underage drinking in Chenango County is a problem, data suggest it may in fact be an area of concern. 23.4% of students in grades 9-12 participating in the 2018 PRIDE survey indicated that they had used alcohol in the past month. 32.3% of 11th graders said they had used alcohol in the past month. 48.1% of 11th graders said alcohol is fairly or very easy to obtain, suggesting that access is an important aspect of preventing alcohol consumption among high school students.



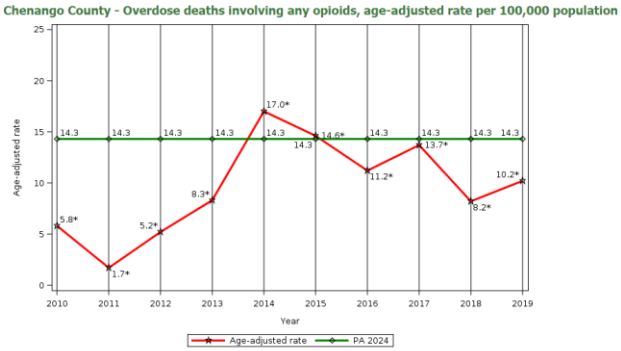


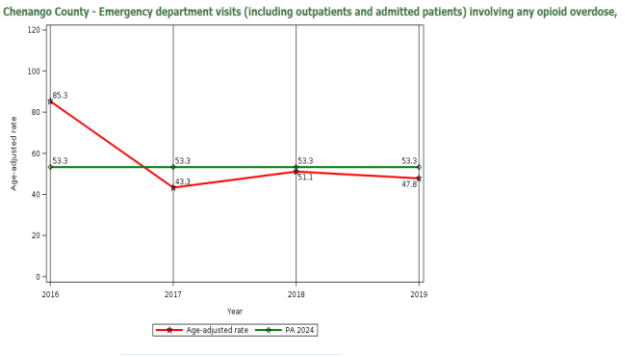
The 2018 PRIDE survey showed that a significant percentage of students in Chenango County were current users of alcohol and marijuana. A small number of students also reported using prescription drugs and heroin. Worth noting is the nearly 30.4% of 11th graders reporting using marijuana.

The percentage of adults in Chenango County reporting binge-drinking increased from 15.5% in 2016 to 16.0% in 2018.[124] The rate is below the NYS rate of 17.5% in 2018 and slightly just below the 2024 Prevention Agenda goal of 16.4%.

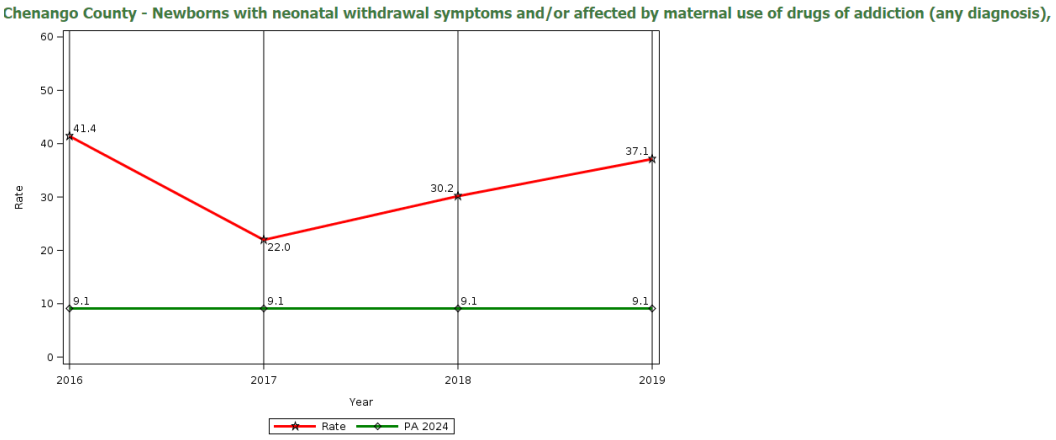
Substance Misuse Adverse Outcomes

In 2015, Chenango County's age-adjusted rate of overdose deaths from any drug, 10.2 per 100,000 population, was lower than the 2024 Prevention Agenda goal of 14.3. The age-adjusted rate per 100,000 for patients who received at least one buprenorphine prescription for opioid use disorder was 1118.7, much higher than the NYS rate of 419.1. These data suggest that opioid use has declined in the county. Unfortunately, Stakeholders and survey participants commented that substance use is more prevalent than ever within Chenango County. This decline in opioid use may corresponded to an increase in methamphetamine use.





Another key indicator of substance use is the number of babies born with a drug-related diagnosis. The most recent Chenango County crude rate per 1,000 newborn discharges is 37.1, substantially worse than the NYS rate of 7.9. Between 2017 and 2019, the rate has continued to increase dramatically.



Adverse Childhood Experiences (ACES)

In 2018, 382 Chenango County children were identified as victims of one or more substantiated allegations through Child Protective Services (CPS). Chenango County's rate of 35.52 per 1,000 children was more than double the state-wide rate of 15.10.

The rate of children who live in families with a preventive services case in Chenango County, 127 children or 11.81 per 1,000 children,[125] was similar to the statewide rate of 10.98. However, the number of these families who had a substantiated CPS allegation within 12 months of the opening of their preventive case (18.5%) was higher than that of New York State as a whole (13.1%). Chenango County also has a higher rate of children (29.66%) with new substantiated reports within 12 months of the first report than New York State as a whole (19.11%). These data indicate that children in Chenango County are experiencing neglect or abuse at a higher rate than NYS and that the neglect or abuse is continuing for a high portion of those children even with preventive services.

Summary of Assets and Resources

When asked to describe the strengths of the health care system in the county, community members and stakeholders most frequently remarked on the hospital, local community-based organizations, primary care providers and the collaborative approach used to address community issues. Despite the relatively small number of community-based organizations and limited resources within the county, information from CMH, CCPH, and CHN (below) show significant efforts to work together to address county health issues.

Department of Public Health

The Chenango County Department of Health receives its legal authority to operate through licensure by the New York State Department of Health. The Chenango County Board of Supervisors oversees the continued operation of the department. A full-time Public Health Director is authorized to manage the department's four divisions: Nursing, Environmental Health, Children with Special needs and Codes Enforcement. The department also employs a part time Emergency Preparedness Coordinator. A financial officer provides budgetary support to each of the divisions.

Chenango County contracts with a local physician affiliated with the Bassett Healthcare Network to serve as the Department's Medical Director. The Medical Director consults with all divisions within the Health Department. The Medical Director is responsible for medical policy and procedure review; providing medical opinions on population-based programming and risk; providing medical management recommendations for victims of mass casualty; chairing the Health Services Advisory Committee; authorizing plan-of-action care for the Children with Special Needs Program; providing medical consultation on communicable disease outbreaks; and providing staff in-service training. The Medical Director is also responsible for the Health Department's Quality Assurance Program.

The Nursing Division full time staff includes 9 RN's, 1 Health Educator, and 2 Supervising Administrators (DPS and SCHN) as well as 12 per diem nurses, contracted Medical Social Workers and a Nutritionist. The Nursing Division management participates in 14 County work groups, coalitions and advisory committees in partnership with many local agencies and organizations including:

- Head Start Professional Advisory Committee (SCHN)
- S-E Schools Professional Advisory Committee (SCHN)
- Mental Health Subcommittee (DPS)
- Central Region Immunization Coalition (SCHN)
- Chenango Substance Abuse Coalition (DPS, SCHN, staff)
- Early Intervention Coordinating Council (DPS)
- United Way Dental Task Force (DPS, staff)
- Area Agency on Aging Long Term Care Counsel (DPS)
- Area Agency on Aging No Wrong Door Transition team (SCHN)
- Breast Feeding Coalition (DPS, SCHN, staff)
- Building a Healthier Community (SCHN, staff)
- NYLinks Central Region Coalition (SCHN)
- Harm Reduction Subgroup Co Chair (DPS)
- Interagency Care Counsel (staff)

The Department collaborates routinely with local institutions including schools, churches, physicians, pharmacists, businesses, and organizations in order to improve the health status of county residents. The Public Health Department maintains linkages with an array of health and human service providers as a means for expanding and strengthening the local public health system. Because Chenango County is a small, rural county, many of the collaborating partners participate in several coalitions and planning groups. These agencies and groups face decreasing funding and staffing but continue to be held to more regulation and mandates.

The Nursing Division works very closely with the Environmental Division in several programs and projects. The two divisions collaborate on food borne outbreaks, arthropod investigations, rabies case management, health education topics, and environmental safety issues. Environmental staff participates in community immunization & flu clinics as the need arises.

In addition to this collaboration, the Nursing Division is responsible for the implementation and oversight of many programs and projects (see page 71 of this document for a full listing). Nursing staff hold certifications in 7 areas including lactation counselors, fall prevention programs, Baby & Me Tobacco Free counselors, and car seat technicians.

Nursing Division Programs

Lead Poisoning Prevention Program
Communicable Disease Investigation, Case Management
STD investigation, Case Management, Project Venus
Arthropod Investigation, Case Management
Tuberculosis Investigation, Case Management and clinic (every other month)
Rabies post exposure prophylaxis and follow-up
Immunization Clinics

- weekly clinic
- Monday & Friday Office
- Outreach Community Flu Clinics (15+ clinics)

Family Health Promotion

- Birth Calls (breastfeeding, spacing and other)
- 6month Calls (breastfeeding)
- Birth Mailings (Drink guidelines, dental and resource booklet)
- Home visits (Nursing, Certified Lactation Consultation, Nutrition and MSW)
- Prenatal Yoga (supports healthy birth outcomes)
- Safe Sleep Crib Program

Baby & Me – Tobacco Free Program (supports health birth outcomes)
Annual Community Campaign (Nurse and Health Educator)
Stepping On (Fall prevention program for Senior Citizens)
Partnership with Local Department of Social Services

- Personal Care Aid Assessments
- PRI/Screens for Nursing Home Placement
- Annual PRI/Screens for Preston Manor Residents
- Traumatic Brain Injury Waiver Program care plans
- Care At Home Waiver Program care plans
- Nursing Home Transition/Diversion Waiver care plans Emergency Preparedness trainings/PODS

New York Connects Program

- NWD Screens via Peer Place
- Information & Assistance
- Options Counselling
- Transition of Care
- Linkage to Care
- Assist with Application Processes
- Statewide Resource Directory Maintenance
- Program Outreach and Promotion
- Public Education
- In Home Fall Screens
- Referral to Stepping On Program
- Data Collection and Reporting

Work plans/Annual State Reporting

- Lead work plan, deliverables, & quarterly reports
- Immunization, work plan, deliverables, & reports TB program quarterly reports
- Employee state Flu report
- LHCSA statistical report

Nursing Division Projects

Promote the “Baby Nook" with Certified Lactation Consultant support services
Partner with STAP-Fixed Needle Exchange Site
Safe Sleep Campaign – Education and Updates 2019
Rethink Your Drink: Chenango Campaign 2019
Provider Detailing Visits (HPV, Postpartum Depression and Baby & Me-Tobacco Free Program)
Staff Certifications trainings

- Certified Lactation Counselors (4)
- Certified Trainers: Stepping On Fall Prevention (2)
- Certified Car Seat Technicians (1)
- Certified in PRI/Screen completion (3)
- Certified Baby and Me Tobacco Free Program Facilitators (4)

UAS computer assessment/ training (Ongoing)
Peer Place computer assessment/ training (Ongoing)
Emergency Shelter Staff training/Drills
Disease outbreak incident command (Ongoing)
Referral source for Health Exchange Navigators
Ebola response training (Ongoing)
New Work Plans/State Reporting
Emerging Disease Action Plans and reporting (Zika, Ebola)
Partner with United Way to provide dental supplies and education in schools (Target – Elementary)
Maintenance of resource booklet for new families
Prevention Agenda annual updates
Community Health Assessment and Community Health Improvement Planning 2018-2021

Hospitals

UHS Chenango Memorial Hospital is a 138-bed facility located in Norwich, NY, and is affiliated with United Health Services. The hospital provides numerous services as listed in the table below.
The hospital operates the only Emergency Department in Chenango County. It is physician staffed 24/7 and consistently has over 18,000 visits per year.

UHS Chenango Memorial Hospital is a major employer in the county employing 543 individuals, 380 work full-time. The hospital contracts with an additional 61 people to provide security, dietary, housekeeping and therapy services. The medical staff consists of 73 licensed professionals including 43 physicians and 30 physician assistants and nurse practitioners. The hospital also provides its patients with access to care coordination services through the placement of wellness coordinators in all of its primary care offices. In addition, it should be noted that UHS Chenango Memorial's footprint extends into Delaware County with a health center in Sidney. Delaware Valley Hospital is located in Walton, also in Delaware County, and is affiliated with United Health Services as well.

Table 60. Chenango Memorial Hospital Services

Acute Services	*Physician Services*
Medical/Surgical	UHS Pediatrics -Norwich
Intensive Care	UHS Primary Care -Norwich
Maternity	UHS Primary Care -Oxford
Observation	UHS Primary Care - Sherburne
Swing Bed Program	UHS Primary Care - Sidney
	Geriatrics
Ambulatory Services	CMH OB/GYN
Emergency Room	CMHOB/GYN
Ambulatory Surgery	CMH General Surgery
Special Procedures	UHS Cardiology & Rehabilitation
Clinical Laboratory	GI Clinic
Physical Therapy	Orthopedics
Occupational Therapy	Pain Management Clinic
Speech Therapy	Oncology
Magnetic Resonance Imaging	Ophthalmology Surgery
Ultrasound	Podiatric Surgery
Mammography	Vascular Surgery
Cat Scan	
Nuclear Medicine	*Residential Health Care Facility*
Imaging – Diagnostic	Long Term Care
	Short Term Rehab

Chenango Health Network

Established in 1995, CHN is a community-based, not-for-profit rural health network whose mission is to bring together health and human services professionals, business people and consumers to strengthen health care in Chenango County. CHN is dedicated to improving access to health services for Chenango County residents. As a result, CHN focuses much of its efforts assisting the uninsured, underinsured and medically underserved populations of Chenango County.

The organization is governed by a Board of Directors consisting of 7-16 members who represent senior level management of health and human service providers and businesses as well as community members. Members bring the perspective of their profession and organization, the ability to make

policy level decisions, an understanding of issues and community, influence among their peer group and community in general, willingness to work collaboratively and a strong commitment to the purpose and goals of the network. CHN convenes and facilitates meetings among representatives of the local public health system to assist with program development, implementation, and evaluation; to collaborate on specific initiatives; to coordinate services; and to carry out specific activities in Chenango County.

CHN offers the following services:

- *Cancer Support Group* - A group of individuals with common experiences or concerns who provide each other with encouragement, comfort, and advice.
- *Drug Free Chenango Coalition* - The mission of the Coalition is to bring individuals and organizations together to promote a clean, safe, and addiction-free community.
- *Community Health Advocate Program* – Community Health Advocates assist individuals with a wide range of health-related issues from finding a health care provider to understanding medical bills.
- *Dental Project* - This initiative provided a dental kit to each student in Chenango County up to fifth grade. The dental kits included a toothbrush, toothbrush cover, toothpaste, floss and educational materials on proper brushing techniques.
- *Financial Assistance Program* - Assists individuals with a breast or gynecological cancer diagnosis pay for treatment and/or other needs related to their cancer diagnosis.
- *Health Insurance Navigator Assistance Program* – Trained Navigators assist individuals to apply for health insurance through the New York State of Health Insurance Marketplace.
- *Prescription Assistance Program* - Assists individuals with enrollment into pharmaceutical companies' patient assistance programs so that medically underserved individuals are able to obtain medicines needed to manage their health.
- *Community Health Worker:* Works 1:1 with Chenango and Delaware County residents that have or at risk of developing a substance use disorder. Provides assistance with obtaining needed services such as employment, education, housing, healthcare, food, and transportation.
- *Tobacco Free Chenango:* Harnesses the power of our community youth to reduce the effects of tobacco advertising in retail, movies, and outdoor spaces. Hosts the Reality Check youth group

Other Medical Services in Chenango County

Primary Care Offices

In addition to the UHS Chenango Memorial Hospital's outpatient offices, UHS maintains a primary care center in Greene and Bassett Health Care Network has family health centers in Sherburne, Greene, and Norwich as well as school-based clinics in the Sherburne-Earlville and Unadilla Valley school districts. Family Planning of South-Central New York maintains a clinic in Norwich and the Albany Stratton VA maintains an outpatient clinic in Bainbridge. There are six private practice physicians, four in the Norwich area and one in Bainbridge and a privately owned family health center is located in Afton (Afton Family Health Center).

Dental Care

There are 13 dental practices employing 17 dentists in Chenango County. There is one Orthodontics practice employing two Orthodontists, and no pediatric dentists. There are no dental offices accepting Medicaid, down by two practices from the time of the last Needs Assessment. Chenango County

NYSARC does maintain an Article 16 dental clinic through a satellite arrangement with the Broome Developmental Disabilities Services Office.

Long-Term Care and Short-Term Rehabilitation

UHS Chenango Memorial Hospital is one of the few hospitals in New York State that includes a skilled nursing facility. There are a total of five residential health facilities in the county, all of which maintain Medicaid and Medicare certifications. UHS Chenango Memorial Hospital is licensed for 80 long-term care beds. Some of the beds are used for short-term rehab, primarily for orthopedic patients recovering from surgery.

There are no NYSDOH-licensed assisted living facilities in Chenango County. There are seven adult residential care facilities, three of which are licensed by New York State.

Other Community Partners

- United Health Services (UHS)
- Delaware County Department of Health
- Local Businesses
- Mothers & Babies Perinatal Network
- Norwich YMCA
- Cornell Cooperative Extension
- Catholic Charities
- Liberty Partnership
- New York Connects
- Public Libraries
- Various Community Foundations
- Chenango County Office of the Aging
- Chenango County United Way
- Local School Districts
- Chenango County Mental Health Services
- Hospice & Palliative Care of Chenango County
- Friends of Rogers
- Care Compass Network
- Crouse Hospital
- Opportunities for Chenango and Headstart
- Women, Infants & Children (WIC)
- Community Foundation of South-Central New York

Community Health Improvement Plan/Community Service Plan

Priority Selection Process

Chenango County engaged in an iterative process to select the priorities and activities for the CHIP/CSP. The process allowed for significant input from stakeholders and integrated feedback from the community.

Step 1: A draft of the Community Health Assessment report, including a comprehensive review of indicator data and qualitative data collected from community members and key stakeholders (Appendix I) was shared periodically with the Needs Assessment Committee for comment and a completed draft was distributed to the Committee on December 09, 2022. Throughout the needs assessment process, priority areas and potential interventions were discussed and evaluated for effective impact.

Step 2: Meetings with key community partners were convened to share the preliminary results of the assessment. After review of the draft, partners worked to identify interventions that targeted key areas of concern impacting the community. This resulted in the identification of three main focus areas:

- Mental Health and Substance Use Prevention
- Healthy Women, Infant, and Children
- Promote a Healthy and Safe Environment

Step 3: The Needs Assessment Committee then reviewed the data, goals and objectives related to these three focus areas. They identified current and potential programming and assessed the feasibility of addressing them. This process resulted in the selection of five goals related to these three focus areas (Appendix II). Within these three focus areas, current resources were mapped out to identify opportunities for collaboration and enhancement of programming to address potential gaps in service and improve community health outcomes.

Step 4: The Needs Assessment Committee, in conjunction with community partners, began to design interventions with the greatest opportunity to optimize on current resources and that would have the greatest impact on the focus areas related to the county's most significant health issues.

Selected Priority Areas and Interventions

Chenango County is faced with several overarching issues including an aging population, economic decline, geographic isolation, and a lack of health care services. Largely rural and with a relatively small population, the county's lack of public transportation and limited resources combine to create barriers to good health for individuals and families across all demographic groups. For people with limited incomes, these challenges are exacerbated significantly. The three primary health challenges are Mental Health and Well-Being, Healthy Women, Infants and Children, and Creating a Healthy and Safe Environment.

Promote Healthy Women, Infants and Children: Perinatal and Infant Health

Interviews with Stakeholders and survey participants identified two main focus areas that were prominent areas for intervention within Chenango County.

Goal 2.1: Reduce infant mortality and morbidity
Goal 2.2: Increase breastfeeding

Breastfeeding has many benefits to providing infants with essential nutrition. Among its other known health benefits, breastfeeding also offers protection against common childhood infections and better survival during a baby's first year, by working with safe sleep to reduce a baby's risk of Sudden Infant Death Syndrome (SIDS) and sleep-related infant death.

Chenango County has had past success with increasing rates of breastfeeding. 68.4% of Chenango County infants exclusively breastfed in the hospital in 2018, far surpassing the 2024 Prevention Agenda goal of 51.7%. Continuing efforts towards improving these rates can continue to improve rates of infant mortality and morbidity.

Chenango County will utilize a program called Project Safe Sleep to focus on sharing information about actions new parents and others can take to help babies sleep safely, with the goal of reducing infant's risk of Sudden Infant Death Syndrome (SIDS) and other sleep-related causes of infant death.
Chenango County Public Health will provide logistical support, training materials, trainers, and event promotion. Multiple health service organizations throughout the county will serve to host, refer and promote events. Chenango Memorial Hospital will act as a referral partner, allowing access to providers.

The second goal identified in interviews was: Goal 3.3: Reduce dental caries among children

The Chenango County Dental Task Force works to integrate oral health messages and evidence-based prevention strategies within community-based programs serving women, infants, and children.

Chenango County Public Health will create and publish dental health education materials while multiple partners in Dental Task Force will work to distribute the health information.

Promote a Healthy and Safe Environment: Injuries, Violence and Occupational Health

Chenango County has a high percentage of its population that are aged 65 and older. Overall, the rate of falls hospitalizations among Chenango County residents is better than that of New York State as a whole. The rate of falls among residents aged 65 and over is considerably lower than the NYS rate and well below the Prevention Agenda goal of 170.1. Having the aging population that Chenango County has, it is a priority to understand why senior falls are happening, how to prevent them, and how to implement measures to limit the number of occurrences in the future. Prioritizing projects aimed at increasing physical fitness in this population is imperative to reduce hospitalizations from falls for the elderly.

Utilizing the program Bingocize, which is an evidenced based senior movement that combines exercise and health information with the familiar game of bingo, has been shown to be a great way to get seniors moving while socializing. The goal of participation is improved and/or maintained mobility and independence as it is adaptable and beneficial for all ranges of physical and mental ability. The overall goals of the program are to help older adults improve and/or maintain mobility and independence, learn and use health information focused on falls reduction to promote wellness, socialization and connectedness. Chenango County Public Health will collaborate with Chenango County's Area Agency of the Aging to provide the certified trainer, logistics, promotion, referral, and implementation of program. Chenango Memorial Hospital will provide promotion and referral services for the program.

Promote Well-Being and Prevent Mental and Substance Use Disorders: Promote Well-Being

Chenango County has high rates of poor self-reported mental health in adults, has high rates of youth disconnection, and is designated as a health provider shortage area for mental health. While increasing the number of mental health care providers would be of benefit to the county, a more immediate and effective community-based intervention would be to expand the number of people trained to identify mental health issues in their professional sphere and provide appropriate support. In particular, negative youth mental health outcomes in the county have been increasing. Early intervention could have a significant impact on the trajectory of the young people in the county and improve those outcomes.

CHN has added the evidence-based training program *Mental Health First Aid* to their programming. Since the beginning of 2019, CHN has trained 35 Chenango County residents in Adult Mental Health First Aid and has plans for training more through the *Youth Mental Health First Aid* module. This training creates more opportunities for early detection and intervention, and with the increasing negative youth mental health outcomes in the county, early intervention could have a significant impact on the trajectory of young people in the county.

Chenango County proposes to expand the *Mental Health First Aid* program by making hospital staff, health department staff, and providers available for training. In addition, efforts will be made to promote the program and organize trainings for other stakeholders and professionals from community-based organizations. A particular emphasis will be placed on training individuals who work with young people such as school staff, educators, and organizations serving youth.

Process for Distribution

The CHA/CHNA/CHIP/CSP report will be posted on the Chenango County website at: www.co.chenango.ny.us/public-health/ and on the hospital website at: WWW.NYUHS.ORG. A hard copy of the report will be made available upon request.

Process for Maintaining Partner Engagement

The Chenango County Needs Assessment Committee will continue to meet and provide oversight to the on-going efforts. The Needs Assessment Committee will also create and maintain planning committees for each of the identified priority areas. These committees, and sub-committees, will bring together community stakeholders representing various constituencies including community-based organizations, governmental entities, funders, faith communities, and employers.

The committees will be charged with activity planning, measuring progress toward goals, and reporting on each priority area.

Process Measures, Time-Framed Targets and Work Plan

Process Measures, Time Frame Targets and Work Plan

Identification of 2022 – 2024 Priorities

Priority: Promote Well-Being and Prevent Mental and Substance Use Disorders	
Focus Area 1:	Promote Well Being
Goal 1.2:	Facilitate supportive environments that promote respect and dignity for people of all ages
Objective:	Increase Chenango County community score by 7% to 46.8 (see NYS PA dashboard)
Disparities:	Lack of education and awareness surrounding mental health issues in the community

Interventions

- Mental Health First Aid- Evidence based community level intervention aimed at raising awareness and increasing capacity of the community to identify and intercept mental health crises.

Family of Measures

Mental Health First Aid

- The number of people in mental health and related workforce trained in Mental Health First Aid.
- The number of individuals who have received training in prevention or mental health promotion.
- The number of individuals referred to mental health or related services

Projected (or completed) Year 1 Interventions

Mental Health First Aid

- Trained ~700 community members in MHFA.
- Trained 20% of Chenango and surrounding County First Responders in Mental Health First Aid
- Establish linkages with 20% of participating school- and/or community-based mental health agencies in Chenango and surrounding Counties to refer individuals with the signs or symptoms of mental illness to appropriate services

Implementation Partner, Role(s) and Resources

Local Health Department

Mental Health First Aid

Chenango County Public Health. Organization will provide PHC staff to be trained, host MHFA training for staff and COB partners, refer and promote scheduled training events, generally support implementation as needed.

Hospital

Mental Health First Aid

Chenango Memorial Hospital. CMH will host MHFA training for staff and partners, refer and promote scheduled training events, generally support implementation as needed.

Community Based Organizations

Mental Health First Aid

Chenango Health Network- Project lead. Organization will coordinate certified training. Host, organize and promote community training events.

Business
Mental Health First Aid
Host MHFA training for staff

Other
Mental Health First Aid
Multiple Community Partners: refer and promote scheduled training events.

Priority: Promote a Healthy and Safe Environment

Focus Area 1: Injuries, Violence and Occupational Health
Goal 1.1: Reduce falls among vulnerable populations.
Objective 1.1.b: Decrease the annual rate of hospitalizations due to falls among residents ages 65 and over by 5% to 136.1 per 10,000 residents.
Disparities: Age, SES, and Access to Services

Interventions
- Bingocize- Evidence based senior movement courses designed to increase mobility and stability in participants

Family of Measures
- # of seniors completing the course

Outcomes to be completed by 2024
- Completed staff training
- Designed program
- Hold at least one series of classes

Implementation Partners, Roles(s) and Resources
Local Health Department
Chenango County Public Health will provide certified trainers, logistics, promotion, and implementation of program.

Hospital
CMH will provide promotion and referral services for the program.

Office for the Aging
Area Agency on Aging will provide certified trainer, logistics, promotion, referral, and implementation of program.

Priority: Promote Healthy Women, Infants and Children	
Focus Area 2:	Perinatal and Infant Health
Goal 2.3:	Goal 2.1: Reduce infant mortality and morbidity Goal 2.2: Increase breastfeeding
Objective:	Objective 2.1.1: Decrease the infant mortality rate by 25% to 7.95 infant deaths per 1,000 live births. Objective 2.2.1.0: Increase the percentage of infants who are exclusively breastfed in the hospital by 10% from 69.9% (2019) to 76.89% among all infants Objective 3.3.3: Integrate oral health messages and evidence-based prevention strategies within community-based programs serving women, infants, and children.
Disparities:	Rural, SES, Access to Care

Interventions

- Project Safe Sleep
  - # of Community Events
  - # Enhanced birth packets including a new Sleep Sack distributed
- Breastfeeding Coalition
  - # of available CLC counselors

Family of Measures

- # of available CLC counselors
- # of Dental kits distributed
- # of educational materials published

Implementation Partners, Partner Role(s) and Resources

Project Safe Sleep

Local Health Department

Provide logistical support, training materials, trainers, and event promotion.

Other (please describe partner and role(s) in column D)

Multiple health services organizations serve to host, refer and promote events.

Hospital

Referral partner allows access to providers.

Breastfeeding Coalition

Local health department

Accept referrals, provide counselling services, employ certified counselors, and promote the program.

Community-based organizations

PACT-Healthy Families organization, Mothers and Babies Perinatal Network, Greater Opportunities WIC; Referral agency. Host and partner for educational events.

Hospital

CMH Women's Health Center-Referral agency. Host and partner for educational events

Priority: Promote Healthy Women, Infants and Children	
Focus Area 3:	Child & Adolescent Health, including children with special health care needs (CSHCN)
Goal 3.3:	Goal 3.3: Reduce dental caries among children
Objective:	Objective 3.3.3: Integrate oral health messages and evidence-based prevention strategies within community-based programs serving women, infants, and children.
Disparities:	Rural, SES, Access to Care

Interventions

- Chenango Dental Taskforce
    - # of Dental kits distributed
    - # of educational materials published

Family of Measures

- # of Dental kits distributed

Implementation Partners, Partner Role(s) and Resources

Chenango Dental Taskforce

Local Health Department

Chenango County Public Health- Create and publish dental health education materials.

Other

Multiple partners in Dental Task force distribute health information.

Appendix I. Qualitative Data Collection Methodology, Results and Guides

Community Input

Qualitative data was gathered from a total of 784 Chenango County residents via Surveys and telephone interviews. Survey members and telephone interviewees were recruited through social media outreach as well as from various community organizations. The survey was distributed through collaborative partners via web link, social media links, and mailed surveys.

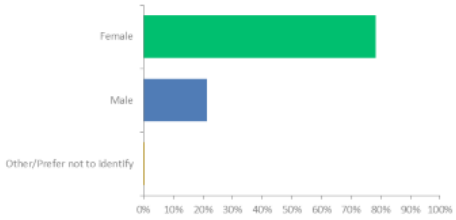
To include residents with limited access to internet, residents were also offered the opportunity to participate by telephone or by mail. Paper surveys were available at the County Office Building for pickup and were mailed to residents when requested, with a return posted envelope. The survey took approximately 10 minutes to complete and had a great response rate.

The age representation in the surveys and interviews represented all age groups, with a majority being middle aged respondents. In addition, substantially more women participated than men.

The bulk of participants identified as White or Caucasian which is in keeping with Chenango County's population as a whole. Nearly 25% of respondents identified as having a household income of less than $35,000 per year. As it is the low-income population that is most likely to be dealing with challenges related to social determinants of health, gathering feedback from this particular group was critical for this project. Where possible, differences in responses based on income are noted throughout the report.

Q2: What is your gender?

Answered: 675 Skipped: 4



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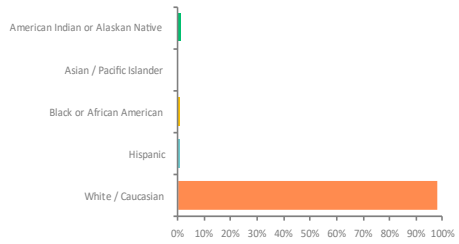
Q3: Which race/ethnicity best describes you? (Please choose only one.)

Answered: 670 Skipped: 9



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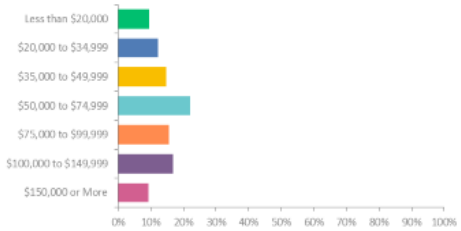
Q8: What is your total household income?

Answered: 657 Skipped: 22



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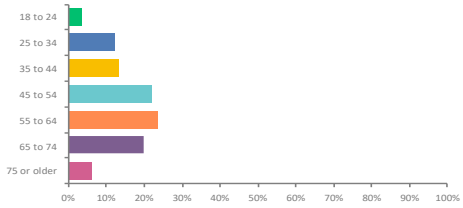
Q1: What is your age?

Answered: 678 Skipped: 1



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Stakeholder Input

In addition to gathering information from county residents, 23 key stakeholders were identified and interviewed to gain further insight into the barriers and strengths of the county with respect to health and health care. Stakeholders were identified through a collaborative effort with the project's Needs Assessment Committee and represented a range of non-profit organizations, government agencies, and providers. Stakeholders were contacted with a brief explanation of the project and a request to participate in a short telephone interview. The interviews were conducted using an interview guide (see page 99) with responses captured in real-time. The interviews lasted approximately 30 minutes.

After completing the survey and telephone interviews, the information was analyzed by identifying, coding, and categorizing primary patterns in the data. The consistent patterns found in the analysis of the data within groups and between key informants and survey participants supports the validity of the information gathered but should not be assumed to be *statistically* representative of the population as a whole. The information provided in this report should be used to identify salient issues relevant to the population and provide contextual information for the larger assessment process.

Indicator Data

Healthcare data and social determinants of health data were collected from a variety of sources including, but not limited to, the New York State Department of Health (NYSDOH), the US Census, the NYS Department of Education (NYSED), the NYS Office of Family and Children (OCFS), the Behavioral Risk Factor Surveillance Survey and resources such as the University of Wisconsin Population Health Institute, and other local needs assessment reports.

Survey and interview questions are provided below.

CHENANGO COUNTY COMMUNITY HEALTH ASSESSMENT
COMMUNITY SURVEY PARTICIPANTS GUIDE

1. What is your age?
2. What is your gender?
3. Which race/ethnicity best describes you?
4. What is the highest level of education you have completed?
5. Which of the following categories best describes your employment status?
6. What is your 5-digit zip code?
7. How many people currently live in your household?
8. What is your total household income?
9. What type of health insurance do you have?
10. Are you a resident of Chenango County?
11. Please share your opinions about the quality of life in Chenango County
12. In thinking about having a healthy community to live and work, which of the following are concerns for you or you think are a problem in Chenango County?
13. In your opinion, how important are these health issues to you?
14. In general, how would you rate your overall physical health?
15. In general, how would you rate your overall mental or emotional health?
16. In the past year, have you used medical, dental, or mental healthcare services in Chenango County?
17. In the past year, have you needed medical, dental, or mental healthcare services but you were not able to receive the care you needed?
18. If you needed or used medical, dental, or mental healthcare services in the past year, which of the following was/were a problem?
19. In your opinion, how adequate are the health services available in our community?
20. Which changes would you like to see in Chenango County to make it a healthier place to live? Please select your top three (3)
21. In 2020, we saw the beginning of the COVID-19 Pandemic. What type of challenges did you face during this time?
22. Please explain any positive or negative influences from the COVID-19 pandemic in following area:
23. What did our county do well at in regard to how COVID-19 was handled locally?
24. What could our county have done better in regard to how COVID-19 was handled locally?
25. Do you feel the county had access to adequate resources for COVID-19 testing?
26. Do you feel the county had access to adequate resources for Vaccination?
27. Do you feel the county had access to adequate resources for COVID-19 Supports?
28. What is your COVID-19 Vaccination Status?

CHENANGO COUNTY COMMUNITY HEALTH ASSESSMENT
STAKEHOLDERS INTERVIEW GUIDE

1. How do you think housing instability links to health outcomes?
2. How do you think the lack of health literacy impacts the community, in regard to knowing how to navigate the system, insurance, or even taking medications?
3. What are your thoughts on the lack of civic participation in the county? Do you think the public cares about the community environment enough to get involved specifically in the area of substance use disorders?
4. What are some challenges you think elderly folks living alone in this rural climate face?
5. In regard to access to healthcare, what are your thoughts about the impact of insurance costs and high deductible plans on the individuals that reside in Chenango County?
6. What do you think is the impact of the county's lack of primary care physicians as a challenge that is exacerbated by the high rate of physician turnover?
7. How about the access to specialty care providers such as Mental or Dental care? crucial specialty care challenge areas?
8. Do you believe that one of the key strengths within the county's health care system is the presence of the hospital, why?
9. What kind of impact do you think that the walk-in clinic has had on the counties healthcare system? Impact on the emergency department?
10. Do you see a lack of homecare providers in the county? How do you think this affects county members to age in place? Are there issues staffing homecare positions?
11. How are health outcomes effected by the lack of quality or substandard housing? Supportive housing for people with developmental disabilities?
12. How are health outcomes effected by the lack of quality or substandard housing? Do you believe that homelessness is an issue in the county? What obstacles do you think are involved in solving this dilemma?
13. What are some challenges that individuals receiving SNAP benefits face? Do you think these benefits are sufficient for food security?
14. Do you believe there is an issue with transportation to gyms or inadequate outside exercise options in the county?
15. How do you explain the effects of tobacco use on managing mental health and financial challenges on low-income populations?
16. Do you believe that Obesity in adults and children is a problem in Chenango County? How is this linked to chronic disease?
17. What do you think are some of the effects are stemming from a lack of preventative care in Chenango County? Is the large population of Medicaid recipients a challenge in regard to preventative health?
18. How does the lack of domestic violence shelter in Chenango County put women and children at risk? What other obstacles does this create?
19. How do you think early intervention with Chenango County children could potentially help problems faced in adulthood?
20. What kind and are you satisfied with the services your child receives? Are there any challenges that exist in obtaining services for your child through the county?
21. It is noted that there is a lack of dental care/providers in Chenango County, what challenges do you think this creates for community members? Medicaid recipients?
22. Are there sufficient childcare options in Chenango County? What types of obstacles do the lack of regulated childcare providers present?
23. How are Mental health disabilities linked to suicide and substance use disorders in the county?

Appendix II. Potential Goal Areas

NYS DOH requires county health departments/community hospitals to choose TWO focus areas and ONE health disparity associated with that focus area. The focus areas selected can be within one priority area or two priority areas. The following spreadsheets outline the priorities and disparities identified for the 2022-2024 Community Health Improvement Project.

Priority	Focus Area	Goal	Objectives through 2024	Disparities	Interventions	Family of Measures	By December 2023, we will have completed . . .	Implementation Partner *(Please select one partner from the dropdown list per row)*	Partner Role(s) and Resources
Promote Well-Being and Prevent Mental and Substance Use Disorders	Focus Area 1: Promote Well-Being	Goal 1.2 Facilitate supportive environments that promote respect and dignity for people of all ages	Obj. 1.2.2 Increase Chenago County community score by 7% to 46.8 (see NYSPA dashboard)	Lack of education and awareness surrounding mental health issues in the community	Mental Health First Aid-Evidence based community level intervention aimed at raising awarness and increasein g capacity of the community to idntify and intercept mental health crisis'.	The number of people in mental health and related workforce trained in Mental Health First Aid.	Trainined ~700 community members in MHFA.	Community-based organizations	Chenango Health Network-Project lead. Organization will coordinate certified training. Host, organize and promote community training events.

						The number of individuals who have received training in prevention or mental health promotion.	Trained 20% of Chenango and surrounding County First Responders in Mental Health First Aid	Local health department	Chenango County Public Health. Organization will provide PHC staff to be trained, host MHFA training for staff and COB partners, refer and promote scheduled training events, generally support implementation as needed.
						The number of individuals referral to mental health or related services	Establish linkages with 20% of participating school- and/or community-based mental health agencies in Chenango and surrounding Counties to refer individuals with the signs or symptoms of mental illness to appropriate services	Hospital	Chenango Memorial Hospital. CMH will host MHFA training for staff and partners, refer and promote scheduled training events, generally support implementation as needed.

								Other (please describe partner and role(s) in column D)	Multiple Community Parnters: refer and promote scheduled training events.
								Business	Host MHFA training for staff

Priority	Focus Area	Goal	Objectives through 2024	Disparities	Interventions	Family of Measures	By December 2023, we will have completed . . .	Implementation Partner *(Please select one partner from the dropdown list per row)*	Partner Role(s) and Resources
Promote a Healthy and Safe Environment	Focus Area 1: Injuries, Violence and Occupational Health	Goal 1.1: Reduce falls among vulnerable populations	Objective 1.1.b. Decrease the annual rate of hospitalizations due to falls among residents ages 65 and over by 5% to 136.1 per 10,000 residents.	Age, SES, and Access to Services	Bingosize-Evidence based senior movement courses designed to increase mobility and stability in participants.	# of seniors completing the course.	Completed staff training, designed program, and held at least one series of classes.	Local health department	Chenango County Public Health will provide certified trainers, logistics, promotion and implementation of program.

								Local governmental unit	Area Agency on Aging will provide certified trainer, logistics, promotion, referral and implementation of program.
								Hospital	CMH will provide promotion and referral services for the program.

Priority	Focus Area	Goal	Objectives through 2024	Disparities	Interventions	Family of Measures	By December 2023, we will have completed . . .	Implementation Partner *(Please select one partner from the dropdown list per row)*	Partner Role(s) and Resources
Promote Well-Being and Prevent Mental and Substance Use Disorders	Focus Area 1: Promote Well-Being	Goal 1.2 Facilitate supportive environments that promote respect and dignity for people of all ages	Obj. 1.2.2 Increase Chenango County community score by 7% to 46.8 (see NYS PA dashboard)	Lack of education and awareness surrounding mental health issues in the community	Mental Health First Aid-Evidence based community level intervention aimed at raising awareness and increasing capacity of the	The number of people in mental health and related workforce trained in Mental Health First Aid.	Trained ~700 community members in MHFA.	Community-based organizations	Chenango Health Network-Project lead. Organization will coordinate certified training. Host, organize and promote

					community to identify and intercept mental health crisis'.				community training events.
						The number of individuals who have received training in prevention or mental health promotion.	Trained 20% of Chenango and surrounding County First Responders in Mental Health First Aid	Local health department	Chenango County Public Health. Organization will provide PHC staff to be trained, host MHFA training for staff and COB partners, refer and promote scheduled training events, generally support implementation as needed.
						The number of individuals referred to mental health or related services	Establish linkages with 20% of participating school- and/or community-based mental health agencies in Chenango and surrounding	Hospital	Chenango Memorial Hospital. CMH will host MHFA training for staff and partners, refer and promote scheduled

							Counties to refer individuals with the signs or symptoms of mental illness to appropriate services		training events, generally support implementation as needed.
								Other (please describe partner and role(s) in column D)	Multiple Community Partners: refer and promote scheduled training events.
								Business	Host MHFA training for staff

Priority	Focus Area	Goal	Objectives through 2024	Disparities	Interventions	Family of Measures	By December 2023, we will have completed . . .	Implementation Partner *(Please select one partner from the dropdown list per row)*	Partner Role(s) and Resources
Promote Healthy Women, Infants and Children	Focus Area 2: Perinatal and Infant Health	Goal 2.1: Reduce infant mortality and morbidity	Objective 2.1.1: Decrease the infant mortality rate by 25% to 7.95 infant	Rural, SES, Access to Care	Project Safe Sleep	# of Community Events	One Community Education event	Local health department	Provide logistical support, training materials, trainers, and event promotion.

			deaths per 1,000 live births.						
								Other (please describe partner and role(s) in column D)	Multiple health services organizations serve to host, refer, and promote events.
						# Enhanced birth packets including a new Sleep Sack distributed	Distribute packet to 100% of new born families in the county.	Hospital	Referral partner, allows access to providers.
		Goal 2.2: Increase breastfeeding	Objective 2.2.1.0: Increase the percentage of infants who are exclusively breastfed in the hospital by 10% from 69.9% (2019) to 76.89% among all infants	SES, Rural	Breastfeeding Coalition	# of of available CLC counselors	2 new CLC counselors certified	Local health department	Accept referrals, provide counseling services, employ certified counselors, and promote the program.

								Community-based organizations	PACT-Healthy Families organization, Mothers and Babies Perinatal Network, Greater Opportunities WIC; Referral agency. Host and partner for educational events.
								Hospital	CMH Women's Health Center-Referral agency. Host and partner for educational events.
	Focus Area 3: Child and Adolescent Health, including children with special health care needs (CSHCN)	Goal 3.3: Reduce dental caries among children	Intervention 3.3.3: Integrate oral health messages and evidence-based prevention strategies within community-based programs serving	Rural, SES, Access to Care	Chenango Dental Taskforce	# of Dental kits distributed	Purchased materials, assembled dental kits and distributed 3500 dental kits twice a year.	Local health department	Chenango County Public Health-Provide education to target demographic, logistical support, and promotion of intervention.

			women, infants, and children.						
								Community-based organizations	Chenango United Way- purchase dental supplies. Logistical lead agency, volunteer coordination and intervention promotion.
								Community-based organizations	Chenango Health Network- logistical support, and promotion of intervention.
								K-12 School	multiple districts- Allow access, integrate educations and host distribution.
						# of educational materials published	Executed at least three dental education campaigns	Local health department	Chenango County Public Health- Create and publish dental health education materials.
								Other (please describe partner and role(s) in column D)	Multiple partners in Dental Task force distribute health information.

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