Opioid-Related Overdose, Prevention, and Treatment in Cortland County: A Needs Assessment

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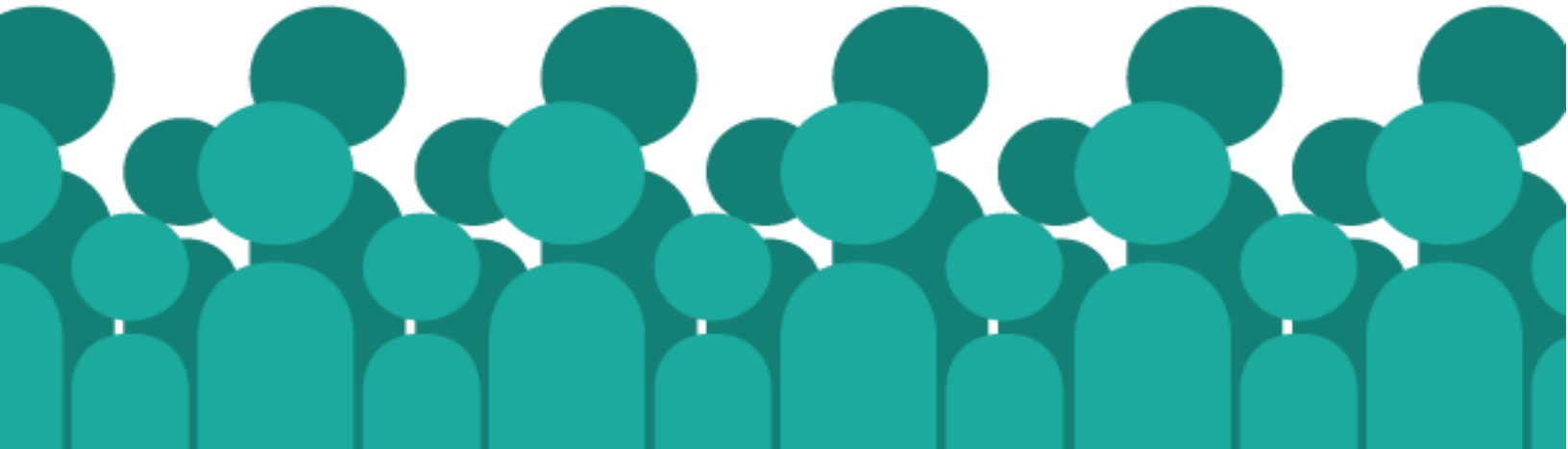
Cortland Area Communities That Care engages the community to promote a healthy culture for positive youth development. Our vision is for a community where all youth have the opportunity to be healthy and successful.



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Key Findings

Opioid-related overdose

- Preliminary 2020 reports indicate that opioid-related overdose fatalities were equal to or slightly higher than in 2019.
- While opioid-related overdose deaths have fluctuated in Cortland County over the last decade, total opioid-related overdoses (both fatal and nonfatal) have been on the rise since 2017. Partial year reports for 2021 show that total opioid-related overdoses are projected to surpass 2020 totals.
- Polysubstance continues to be very prevalent in opioid-related overdose deaths in Cortland County. Preliminary 2020 data shows that polysubstance was indicated in over 88% of opioid-related overdose fatalities.
- In 2020, fentanyl continued to play a role in driving opioid-related fatalities, being present in over 56% of fatalities.

Differences by age and sex

- The reported overdose data shows increases in the opioid-related overdose rate for males in the 20-29, 40-49, and 50-59 age groups. Of particular note, the overdose rate for the 50-59 age group doubled from 2020 to 2021 on partial year data.
- Reported overdose rates for females either decreased or stayed the same in all age groups.
- In the 20-29, 40-49, 50-59, and 60-69 year old age groups, the reported overdose rate for males quadrupled that of females in Cortland County.

Naloxone saves lives

- Results from Microsurvey #2 show that the overwhelming majority of respondents (at least 94%) believe that increasing access to naloxone will saves lives.
- Through the first half of 2021, Cortland County OOPPs have distributed more naloxone kits (627) than any previous total year, driven largely by the efforts of FCCS.

Introduction

Healing Cortland

Healing Cortland is a community-led initiative to better understand and improve opioid-related outcomes for Cortland County residents and community organizations. Using a data-driven approach, the project's goal is to reduce fatal and nonfatal overdoses, expand access to prevention and harm reduction resources, lessen stigma around opioid use, and help develop a more responsive treatment and recovery infrastructure. In doing so, the Healing Cortland initiative will support the adoption of evidence-based practices that better serve the prevention, treatment, and recovery needs of the county.

Healing Cortland is a precursor to a larger research study, the HEALing Communities Study (HCS), that lasts until July 2023. The Healing Cortland initiative will take lessons learned from the HCS to create a sustainable approach that serves Cortland County after the research project is over. By bringing together partners from the community, the initiative will foster a proactive framework for collecting timely data, sharing analysis across agencies, and better responding to opioid-related trends that impact the people of Cortland County.

The Healing Cortland Advisory Board helps guide activities and oversees the Healing Cortland initiative and the HCS project in a way that is responsive to community needs and representative of the county. Healing Cortland has supported partner organizations like Family and Children's Counseling Services (FCCS), the Cortland County Health Department, and Healing Hearts Collaborative as they have led the way in overdose education and naloxone distribution. Moving forward, Healing Cortland will continue supporting these activities, as well as collecting and analyzing data to develop more comprehensive strategies. In July 2022, the HCS will enter its project implementation phase led by a team from Columbia University. At this time, Columbia staff will provide targeted support to the Healing Cortland team and partners, using HCS project resources to help implement evidence-based practices and campaigns in the county.

HEALing Communities Study (HCS) Overview

In 2019, Cortland County was selected as one of 16 counties in New York to participate in the HCS. The project is funded by the National Institutes of Health (NIH) and the Substance Abuse and Mental Health Services Administration (SAMHSA).[1] Through HCS, the Healing Cortland initiative will investigate how tools for preventing and treating opioid misuse, opioid use disorder (OUD), and overdose are most effective at the local level. This multi-site research study will test the impact of evidence-based practices across health care, behavioral health, justice, and other community-based settings.

The larger HEALing Communities Study is being conducted in two waves. Wave 1 communities started receiving the study intervention in January 2020 and Wave 2 communities will receive their intervention in July 2022. The Intervention Phase will last for one year and because of the deferred sequence of the study interventions, Wave 2

communities may benefit from lessons learned in Wave 1. Cortland County is a Wave 2 community.

The primary goal of HCS is to reduce opioid-related overdose deaths by 40% over the course of three years. Major research institutions like Columbia University and the Boston Medical Center (among others) are partnering with 67 communities impacted by opioid use in four states – New York, Kentucky, Massachusetts, and Ohio. In addition, there are a number of secondary outcomes that address specific prevention and treatment measures:

- Enhanced numbers of providers treating OUD with medication for opioid use disorder (MOUD) including buprenorphine, methadone, and naltrexone;
- Increased number of people and community-based organizations trained to administer naloxone and provide overdose education;
- Reduced number of non-fatal overdoses;
- Increased numbers of people accessing MOUD and other drug treatment;
- Increased identification of people with opioid use disorder; and
- Reduced number of people progressing to opioid use disorder.

Driven by the Needs Assessment process, Healing Cortland will develop data-driven plans to implement evidence-based practices across multiple community sectors to reduce opioid overdose deaths and address associated outcomes. This process is called the intervention and seeks to promote a common vision, shared goals, and tailored strategies to mobilize communities to adopt evidence-based practices. The intervention will use a stepwise community change process with three components:

- Community engagement,
- The Opioid Reduction Continuum of Care Approach (ORCCA), and
- A community-based communication campaign

Purpose of Needs Assessment

The HEALing Communities Study is meant to complement and build on existing efforts in Cortland County related to opioid education and prevention. In addition, the study process seeks to streamline data collection and sharing among community partners. The primary purpose of the HCS is to reduce overdose deaths significantly over the life of the grant (and beyond). In order for that goal to be realized, the Healing Cortland initiative must determine the most effective and efficient way to implement an array of evidence-based practices.

The first step in developing implementation strategies is conducting a community-wide needs assessment that identifies baseline measures, existing service capacity, and gaps in data and resources across the prevention, treatment, and recovery spectrum. Healing Cortland is treating the needs assessment as a continuous process where the document will be updated as new data is collected and analyzed. This first update incorporates newly released archival data from NYS, community survey results, and

local law enforcement data. Upon completion of each update, Healing Cortland will present findings to community partners and local government representatives.

Acknowledgements

This needs assessment, as well as ongoing data collection and analysis, would not be possible without contributions from partner agencies. Healing Cortland would like to acknowledge the following agencies for their continuing engagement and support:

- Family and Children's Counseling Services,
- City of Cortland Police Department,
- Village of Homer Police Department,
- Cortland County Sheriff's Office,
- Cortland County Health Department,
- Cortland County Coroner's Office
- Cortland County Mental Health
- Catholic Charities of Cortland County,
- Southern Tier AIDS Project,
- The REACH Project, Inc.,
- Care Compass Network,
- Family Health Network,
- Guthrie Cortland Medical Center, and
- Central Region Addiction Resource Center.

In addition, the Healing Cortland initiative would not be as effective without the hard work, guidance, and support of the Advisory Board members and other involved community partners.

Definition of Terms

Age-adjusted rate: A rate that accounts for differences in age distributions in populations. Age-adjusted rates allow for more reliable comparisons across counties with different age structures.

Buprenorphine (Suboxone): Long-acting partial opiate agonist that acts on the receptor targets of heroin and morphine, but does not produce the same intense "high" or dangerous side effects.[39]

Center of Treatment Innovation (COTI): In Cortland County, the COTI program is operated by Family and Children's Counseling Services and engages people in treatment through mobile clinic services. The program is funded by NYS OASAS and connects treatment staff with underserved areas.

Central New York (CNY): CNY consists of five counties – Cayuga, Cortland, Madison, Onondaga, and Oswego. Syracuse (Onondaga) is the largest city in the region.

Comorbidity: A health diagnosis that occurs in combination with another.[38]

Cortland County Youth Development Survey (YDS): The YDS is a 138-question survey that Cortland County students take every fall. It asks about substance use habits, bullying, mental health, and risk and protective factors related to problem behaviors in youth.

Crude rate: Crude death rate measures the number of deaths occurring in a specified population per year, expressed as the number of cases per 100,000 population. This calculation allows for standard comparison across counties with different population sizes. Crude Rate = (Number of Deaths ÷ Total Population) x Constant (100,000)

Detoxification (Detox): A process by which a substance user stops using intoxicating substances, allowing the body time to fully clear itself of that substance.[38]

Evidence-Based: SAMHSA defines evidence-based interventions as those that are included in a federal registry of evidence-based interventions, have positive effects on the target outcome reported in a peer-reviewed journal, or have "documented evidence of effectiveness based on guidelines developed by the Center for Substance Abuse Prevention and/or the state, tribe, or jurisdiction" where it took place.

Fentanyl: Synthetic opioid 50–100 times as potent as morphine. Commonly found as an additive in heroin preparations that greatly increases the risk of accidental overdose.[38]

Harm reduction: Strategies that seek to reduce the health, social, and socioeconomic risks associated with drug use (whether legal or illegal) without necessarily reducing drug consumption.[38]

Heroin: Strong, rapidly acting opioid receptor agonist that acts on the brain to cause powerful feelings of euphoria. It is derived from morphine and can be snorted, injected, or smoked.[38]

Inpatient: A medical facility that houses patients during treatment.[38]

*Low-threshold buprenorphine: A*n alternative approach to buprenorphine induction that attempts to remove as many barriers to treatment as possible, including same-day treatment, a harm-reduction approach, increased flexibility, and wider availability in places frequented by people with opioid use disorder.[2]

Medication Assisted Treatment (MAT): A treatment plan for opioid recovery and/or alcohol use disorder that involves the medically supervised use of methadone, buprenorphine, or naltrexone.[38]

Medication for Opioid Use Disorder (MOUD): SAMHSA recommends MOUD be used in place of MAT in order to reinforce the idea that medication is its own treatment form.[38]

Methadone: Synthetic opioid receptor agonist used to decrease withdrawal symptoms for people who have stopped using opioids. It is used in MAT/MOUD programs and often requires more stringent oversight from providers.[38]

Naloxone (Narcan): Opioid receptor antagonist that binds and blocks receptor activity. It has been effectively used as an antidote for suspected opioid overdoses, rapidly reversing the respiratory depression that causes death.[38]

Naltrexone (Vivitrol): Synthetic opioid receptor antagonist used in MAT/MOUD and administered in pill or injectable form.[38]

Opioid: Class of drug that binds to receptors in the brain, blocking pain signals.[38]

Opioid dependency: The state of feeling unable to discontinue the use of opioid drugs.[38]

Opioid overdose: An acute condition due to excessive use of opioids that may cause death.[38]

Opioid use disorder (OUD): A pattern of opioid use leading to impairment or distress that is clinically significant.[38]

Outpatient: A treatment facility that renders care to patients without housing them.[38]

Persons who use drugs (PWUD): PWUD refers to those who use or have used any illicit drug or drugs by any route.[38]

Recovery: A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential.[38]

Residential treatment: A form of treatment where patients live in a non-hospital setting and receive 24-hour care. Residential treatment programs can be long-term (6 to 12 months) or short-term (less than 6 months).[38]

SAMHSA: Substance Abuse and Mental Health Services Administration. An agency within the US Department of Health and Human Services that leads public health efforts to advance the behavioral health of the nation.

Stigma: Disapproval or negative perceptions of certain behaviors or health conditions.[38]

Methods

Secondary and Archival Data

The Healing Cortland initiative collected and analyzed archival data from community partners and New York State (NYS) databases to identify opioid-related trends in Cortland County. With respect to fatal and nonfatal overdose information, staff collected data from the following local sources:

- Cortland County Coroner's Office,
- Village of Homer Police Department, and
- City of Cortland Police Department,

In addition, staff utilized data from the NYS – County Opioid Reports (2014 – 2021).

With respect to OUD screening, assessment, and treatment data, staff relied on the following community partners for information:

- Family and Children's Counseling Services
- The REACH Project, Inc., and
- Helio Health

In addition, staff utilized data from the New York State Opioid Dashboard to examine MOUD prescription rates and admissions to treatment facilities for opioid use. With respect to naloxone distribution, staff collected data from the following sources:

- Central Region Addiction Resource Center,
- Cortland County Health Department,
- Guthrie Cortland Medical Center, and
- Family and Children's Counseling Services

Upon collection, all data was cleaned and organized using SPSS statistical software and Microsoft Excel. Crude and age-specific rates were calculated using data from the US Census American Community Survey (ACS, 2014-2019). The ACS replaced the long form of the decennial census in order to provide annual demographic, socioeconomic, and housing data estimates. However, higher frequency data comes with larger margins of error, especially for sub-county geographies (e.g. zip codes, census tracts, block groups). CACTC staff recognizes this uncertainty when including data and can provide margin-of-error ranges for variables upon request. In addition, ArcGIS was used for mapping and geospatial activities.

Community Outreach

Healing Cortland conducted surveys and key informant interviews to assess community perceptions of opioid-related issues, community readiness to commit resources to reducing opioid overdoses, and unmet needs across the continuum of care. As part of

the community readiness process, the initiative surveyed key informants across six community sectors: law, education, health, business, government, and involved citizens for semi-structured interviews (see Appendix A for the full Community Readiness report). In order to collect information around stigma, Healing Cortland staff surveyed members of the general public using topical microsurveys focused on naloxone use and opioid use stereotypes (see Appendices B and C for the full microsurvey reports).

Data Challenges

Collecting and analyzing opioid-related overdose data in Cortland County presents many challenges. Due to the sensitive nature of the data, many organizations are reticent to share detailed information that identifies age, sex, race, and/or ethnicity. In addition, there are limited formal data sharing agreements among agencies in the county which means there is not a uniform process for de-identifying and/or aggregating data for analysis and reporting purposes.

Also, timely overdose-related data cannot be viewed as absolute or final because it is subject to ongoing investigation or testing. Of particular note, data from the CPD and HPD is based on evidence collected at crime scenes and through interviews, making substance-specific analysis related to findings challenging. For example, an overdose scene investigation might not always capture the presence of polysubstance or in case of a fatality, some evidence of specific substances could be missed if a person spends time in the hospital for an extended period of time. The overdose death data for 2020 used in this updated assessment is based on NYS data that is subject to change as additional information and toxicology results are submitted. Once verified, that data and any rates calculated from that data will be adjusted.

Community Overview

Opioid-related fatalities have contributed to a decrease in US life expectancy over the last decade.[13] The challenges related to opioid use go far beyond issues of prescription practices and licit/illicit supply chains. Numerous research studies have shown strong connections between opioid-related overdoses and socioeconomic and demographic factors.[14,15,16] In this section, Cortland County demographic, social, economic, and housing characteristics are explored to illustrate the broader challenges residents face.

Located in Central New York (CNY), Cortland County is one of the northernmost counties in the Appalachian region.[17] While the county is predominantly rural with large expanses of agricultural and forest lands, it is close to three major urban centers: Syracuse, Ithaca, and Binghamton.[19] Spread out over 500 square miles, the county is made up of 15 towns, 3 villages, and the county seat – the City of Cortland.[19] Figure 1 shows Cortland County in the context of the CNY region.

Figure 1. Map of Cortland County and Central

In 2019, the Cortland County population was 47,581 with over 39% of county residents concentrated in the City of Cortland.[18] Since 2010, the county population has decreased by around 3%. During that same time, the county's population centers trended in the same direction – City of Cortland (-2.7%), Homer (-3.5%), and Cortlandville (-4.3%).[18]

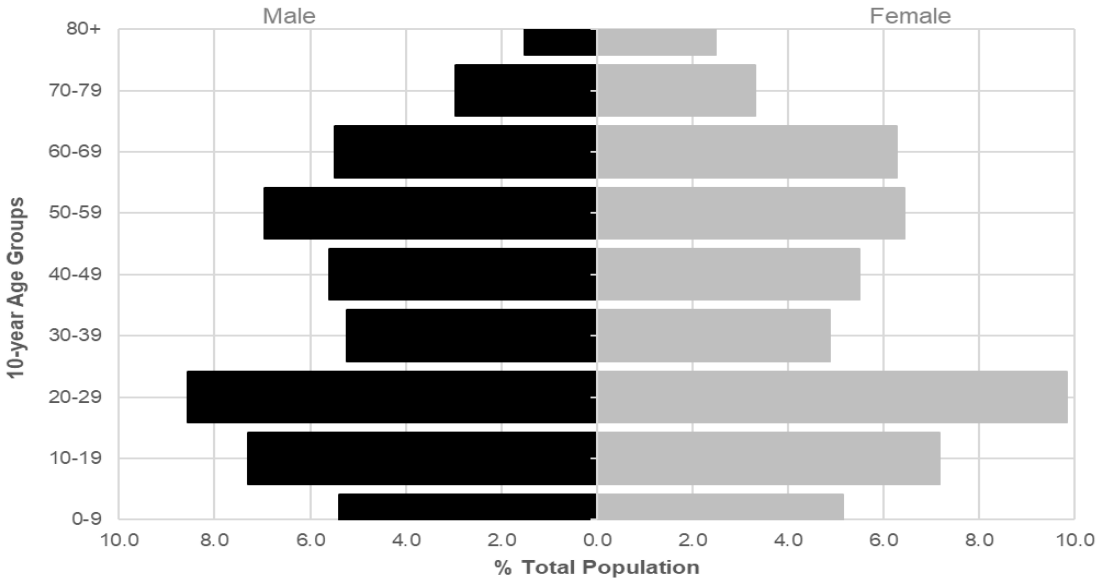
Sex and Age

The median age in Cortland County is 36.4 years which is the lowest in the Central NY region by almost 3 years. In 2019, the percentage of the population that identified as male was 48.9% and female was 51.1%. Figure 2 shows the age and sex population breakdown by 10-year age groups. Cortland's lower median age is driven by a large 20-29 age group (18.4% of total population), as well as a sizeable under age 18 population (19.2%).[18]

In more detail, the two largest age groups in Cortland County are 20-24 which makes up 12% of total population (5.5.% male, 6.5% female) and 15-19 which makes up 9.3% of total population (4.5% male, 4.8% female). With respect to opioid-related overdoses,

males aged 30-39 have the highest overdose rate by a significant margin when compared to other age and sex rate combinations (see Figure 12 in State of Overdoses section). However, males aged 30-39 are the smallest age group in the county for any population under 70 years old.

Figure 2. Population pyramid for Cortland County, 2019[18]



Race and Ethnicity

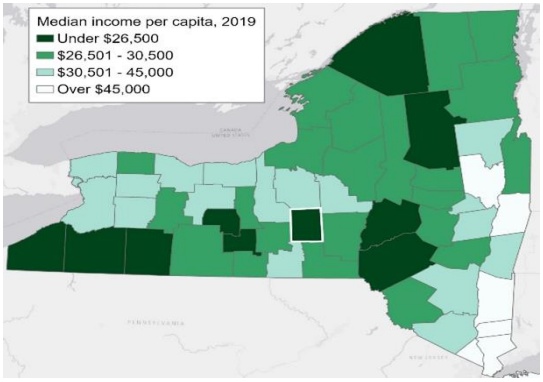
For a decade, the racial and ethnic makeup of Cortland County has remained consistent. In 2019, 92.6% of the Cortland County population identified as non-Hispanic white which was a slight decrease from 2010 (-1.4%).[18] Over that same time period (2010-2019) the percentage of the county identifying as non-Hispanic African American increased from 1.3% to 1.9% and the percentage identifying as non-Hispanic Asian stayed the same at 0.8%. The percentage of Cortland County identifying as Hispanic increased from 2.2% to 2.7% from 2010 to 2019.[18]

Poverty and Income

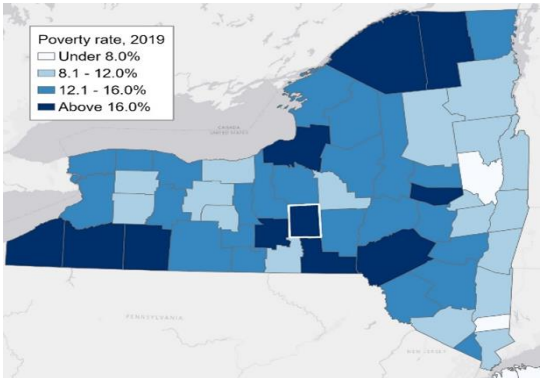
Poverty and income are consistently identified as key social determinants of health outcomes.[16] In comparison to other Central NY counties, Cortland has the lowest median per capita income ($26,380) and the highest poverty rate (16.4%). In addition, 7.1% of people in the county are in extreme poverty (living at less than 50 percent of the poverty level) and 14.4% of households receive either cash assistance or SNAP benefits. Figure 3 shows the county poverty rates and median per capita income in NYS. Cortland County has one of the lowest median per capita incomes in CNY and has a higher poverty rate than many surrounding counties.[18]

Figure 3. Map of per capita income and poverty rates in NY counties, 2019[18]

Median income per capita, 2019



Poverty rate, 2019



Looking a little closer at the poverty rates in Cortland County shows that poverty differs across various county populations. Table 1 shows poverty rates in relation to various demographic characteristics from the 2019 US Census/ACS.[18] In particular, there are disproportionately high poverty rates for female headed households with no spouse present, for individuals with less than a high school degree, and for persons with a disability. Of particular note, Cortland County has a higher proportion of persons with a disability (9.4%) than NYS (7.6%).

Table 1. Cortland County poverty rates for select characteristics, 2019

Variable	Poverty rate
Male	12.7
Female	**20**
Under 18 years	**18.2**
18 to 64 years	17.5
65 years and over	10.3
White	16.1
Black or African American	15.4
Asian	5.4
Hispanic	**36.5**
Married-couple family	4.8
Female householder, no spouse	**34.3**
Less than high school	**27.2**
High school graduate	13.7
Bachelor's degree +	6.2
With any disability	**24.8**
No disability	15.1

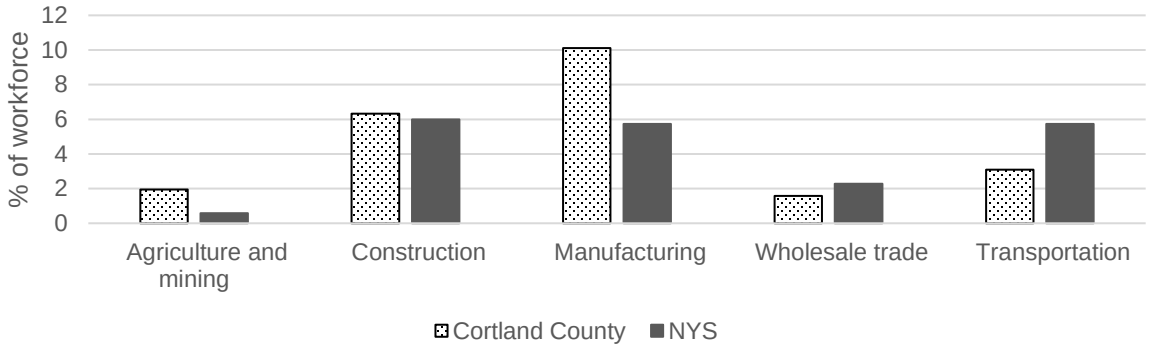
Education and Employment

Educational attainment and employment rates are also significant determinants of health outcomes.[16] Cortland County has the second highest percentage of residents with at least a bachelor's degree (27.9%) in Central NY, but the county lags behind the NYS rate (38.8%). Cortland County's unemployment rate is 5.3%, which is the second highest in Central NY and higher than NYS (4.4%).[18]

Communities with higher proportions of their workforce in physically demanding industries are more prone to injury; and some studies have shown these employment proportions to correlate with higher overdose rates.[15] However, this does not mean that workers in these industries are using opioids or overdosing at higher rates than the general population. As of 2019, Cortland has 23.1% of its workforce in these physically demanding industries – agriculture, forestry, mining, construction, manufacturing, and

transportation. This is higher than the NYS rate of 20.1%. Figure 4 shows the industry-specific breakdown for physically demanding employment in Cortland County. For more information on Cortland County's education and employment infrastructure refer to the Cortland County Community Health Assessment and Improvement Plan 2019-2024.[19]

Figure 4. Cortland County employment in physically demanding industries, 2019[18]



The National Association of Counties (NACo) and the Appalachian Regional Commission (ARC) identified a number of socioeconomic indicators that correlate with opioid-related overdoses. "Although these factors did not necessarily cause the epidemic, they created an environment in which opioid misuse flourished in Appalachian counties more easily than in other parts of the nation, resulting in a crisis that has hurt both county residents and the county governments that serve them."[17] Table 2 shows how Cortland County compared to Appalachian and Non-Appalachian counties during the Healing Cortland baseline year, 2017 (and the last year of a common data point across factors). Of particular note, Cortland County scored favorably (compared to other Appalachian counties) in education, government revenue, and opioid prescription rate; but still had a higher overdose rate than Appalachian and Non-Appalachian counties.

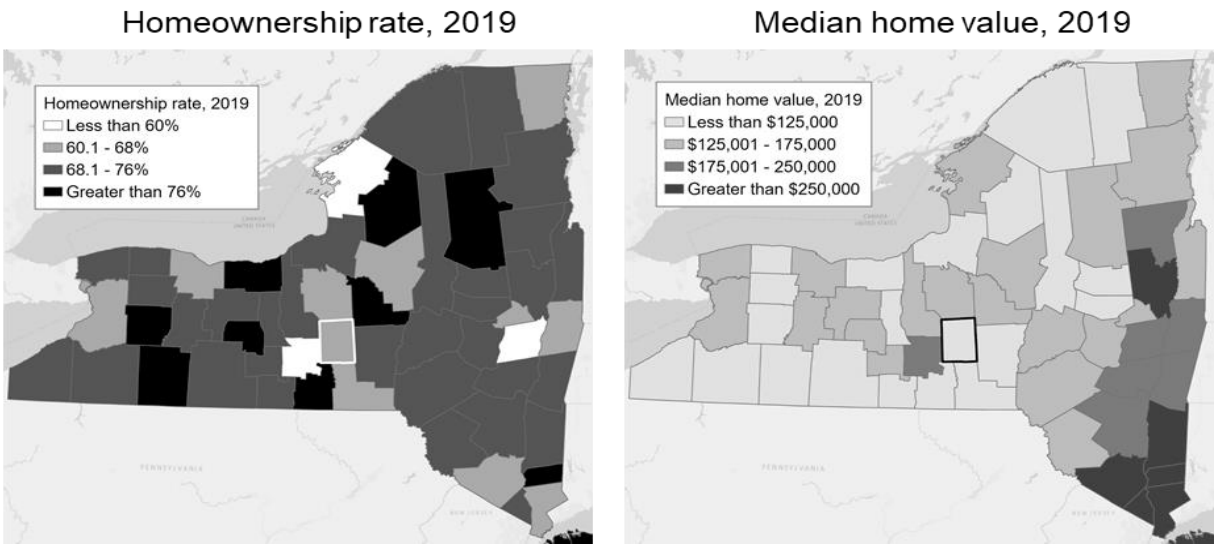
Table 2. Data spotlight, socioeconomic indicators, 2017

Indicator	Cortland County	Appalachian Counties	Non-Appalachian Counties
% with Bachelor's degree	28%	23%	31%
% growth in labor force, 2000-2017	3%	3%	13%
County government revenue per capita	$1,591	$1,174	$1,823
Poverty rate	16%	15%	13%
Opioid prescription rate, per 100	59	84	58
Opioid overdose death rate, per 100k	29.3	24	14

Housing

While not commonly thought of in relation to opioid-related overdoses, certain housing characteristics have been shown to be intertwined with opioid-related outcomes.[16,20] As of 2019, there were 20,737 housing units in Cortland County. Over 85% of these units are occupied and 14.4% are vacant.[18] Of those occupied units, 65.6% are owner-occupied. Figure 5 shows the homeownership rates and median home value for NY counties. Cortland County has some of the lowest home values and owner-occupancy rates in CNY.[18]

Figure 5. Map of homeownership rates and median home value, 2019[18]



Cortland has the second lowest median home value in Central NY at $123,800, but a middle-of-the-pack median rent of $778 per month.[18] While Cortland's rent and home prices are not higher than surrounding counties, 46.1% of renters are rent-burdened and 20.9% of homes with a mortgage are cost-burdened. This means that renters and homeowners spend more than 30% of their monthly income on rent or mortgage payments.

Healthcare and Insurance

Cortland County is a designated Medically Underserved Area (MUA) and a Health Professional Shortage Area (HPSA) for both primary care and mental health professionals.[21] In particular, there are specific towns in the county that have been identified as MUAs – Cincinnatus, Marathon, and Truxton – illustrating the disparate impacts experienced by smaller and more isolated communities. Cortland County has a higher percentage of insured persons (95.6%) than NYS (93.9%), but it has a lower rate of adults who have a regular healthcare provider.[19]

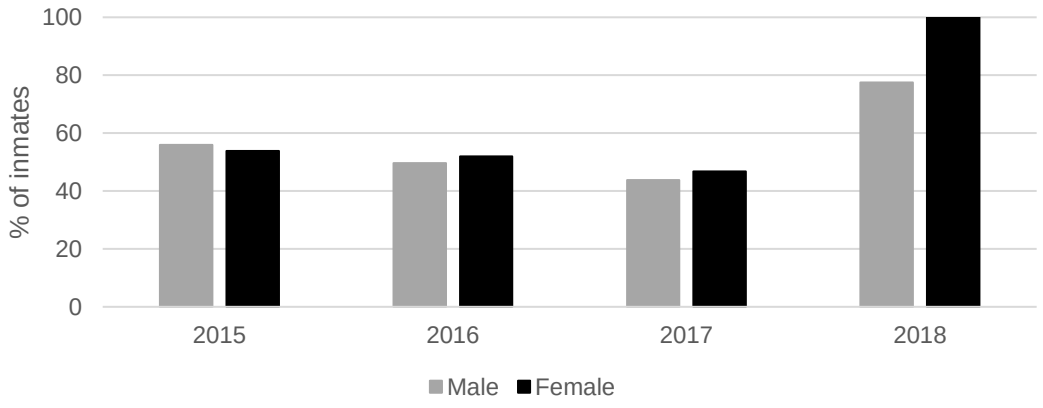
In addition, Cortland has a lower number of available primary care providers (24.3 per 10,000 people) compared to metro counties and other rural counties in NYS. [23,24] In Cortland County, the top five leading causes of death are cancer, heart disease, stroke, respiratory diseases, and unintentional injury.[19] In a recent study, heart and respiratory disease were identified as co-occurring with OUD at a higher rate than any other comorbidity besides mental disorders (e.g. post-traumatic stress disorder, anxiety disorder).[22]

Law Enforcement and Criminal Justice

There are four law enforcement agencies serving Cortland County – Village of Homer Police Department (PD), City of Cortland PD, SUNY Cortland PD, and the Cortland County Sheriff (which operates the county jail). City and Village police departments provide overdose response data to the Healing Cortland initiative. Over the five years 2015 to 2019, the county jail averaged around 775 incarcerated persons per year, with male inmates outnumbering female inmates nearly three-to-one.[35]

Incarcerated inmates are assessed for substance use and mental health challenges upon admittance. In the first quarter of 2018, 77.5% of male inmates indicated they had either a substance use or co-occurring substance use and mental health issue. In that same quarter, 100% of female inmates indicated they had either a substance use or co-occurring substance use and mental health issue. Figure 6 shows the percentage of inmates self-identifying with a substance use or co-occurring mental health and substance use issue from 2015-2018. The 2018 data is only for the first quarter of the year and should not be compared to the other years.

Figure 6. Substance use issues for Cortland County jail inmates, 2015-2018



Opioid-Related Trends and Resources

During the 1980's, more and more states across the US began recognizing pain as a problem that should be addressed through aggressive treatment.[3] This more formalized pain management treatment program combined with misleading and often deceptive marketing campaigns to create an atmosphere where highly addictive opioids were prescribed at prohibitive levels with little-to-no oversight or consumer education.[3] As opioid prescription rates rose throughout the 1990's, overdose fatalities began rising with them.[4]

Opioid-related overdose deaths continued increasing through the 2000's driven largely by prescription pain relievers, especially OxyContin. However, as more stringent prescription monitoring and patient tracking systems came onboard, overdose deaths began to plateau around 2009. This increased oversight made space for an exponential rise in illicit opioids - heroin beginning in 2010 and then fentanyl in 2013.[4]

From 1999 to 2018, nearly half a million people died from an opioid overdose in the US. However, these deaths were not distributed evenly across the country. Much research has shown disproportionately high overdose rates in Appalachian communities, with acute impacts in central Appalachian states.[5] While this crisis was first noticed in these rural communities, overdoses were in no way limited to these areas.

As media attention focused on central Appalachia – the opioid epidemic became synonymous with rural communities in states like West Virginia and Kentucky. Many of these places provided ideal conditions for increasing overdose rates – limited medical and mental health infrastructure, socioeconomically isolated populations, high unemployment and poverty, and aggressive opioid prescribing practices.[6,5] Opioid-related misuse and overdoses were hardly limited to Appalachia and/or rural communities; however, their impacts often presented more acutely in places that were less equipped to deal with the complex nature of addiction (and its indirect drivers).

Most recently, the CDC's National Center for Health Statistics released overdose data for the United States. In 2020, nearly 70,000 people died from an opioid overdose, an increase of 19,253 deaths from 2019. NYS saw an increase of 31% in total overdose deaths in 2020 and an increase of 37% in opioid-related overdose deaths.

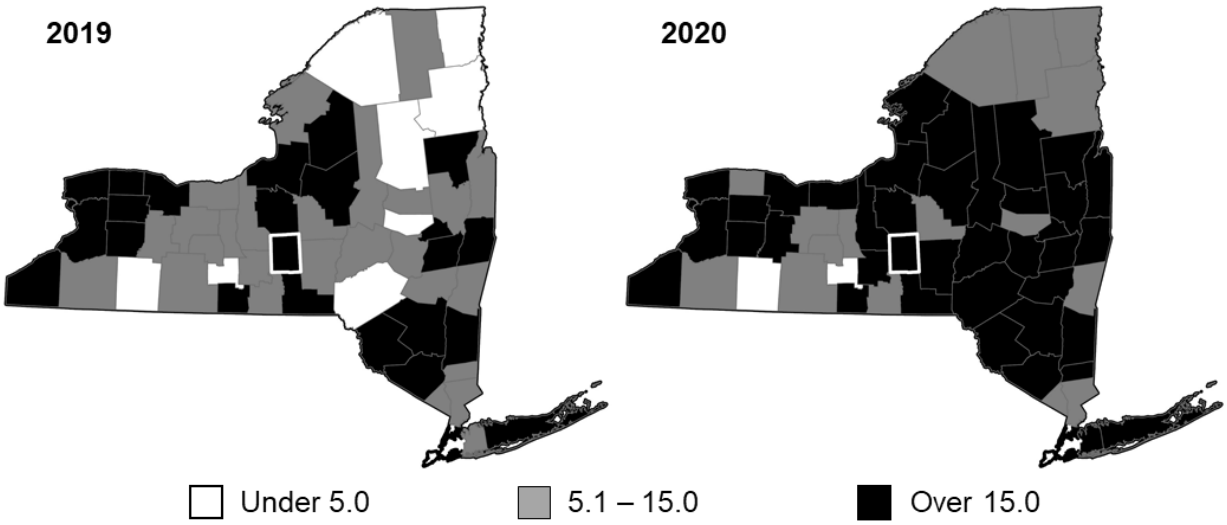
New York State Trends

In the late 2000's through 2010's, states in the Northeast US (New York, Massachusetts) saw accelerated growth in opioid-related overdose deaths.[5] For example, in New York State (NYS) there were nearly 1,000 opioid-related overdose deaths in 2009; 2,185 in 2015; and 3,224 in 2017.[7] From 2010 to 2017 in NYS, the opioid-related overdose death rate (crude) tripled from 5.0 to 16.8 deaths per 100,000 population.[7]

During this same time period, opioid-related deaths in NYS increasingly involved heroin and/or synthetic opioids like fentanyl (mirroring national patterns). All opioid-related fatalities increased by 200% between 2010 and 2017, driven by an over 1100% increase in synthetic opioid-related deaths.[7] As a separate indicator, the Medicare prescription drug benefit (Medicare Part D) opioid prescribing rate for NYS declined between 2013 and 2018 at the same time the Drug Enforcement Agency implemented more stringent opioid prescribing guidelines.[27]

Just as opioid-related overdoses vary significantly by specific opioid substance (e.g. prescription vs fentanyl), NYS has distinct geographical patterns in opioid overdose rates. Figure 7 shows that in 2019, Western New York, Central New York (CNY), and the Hudson Valley had disproportionately higher opioid overdose rates (crude, per 100,000) when compared to other regions. In 2020, more counties experienced higher opioid-related overdose rates, as noted by increases in the Capital region and northern NYS. When factoring in county age structure, this regional pattern maintains and many counties with already high rates show increases in overdose death rate – including Cortland County.

Figure 7. Opioid overdose rate (crude) by county (per 100k): 2019, 2020[7]



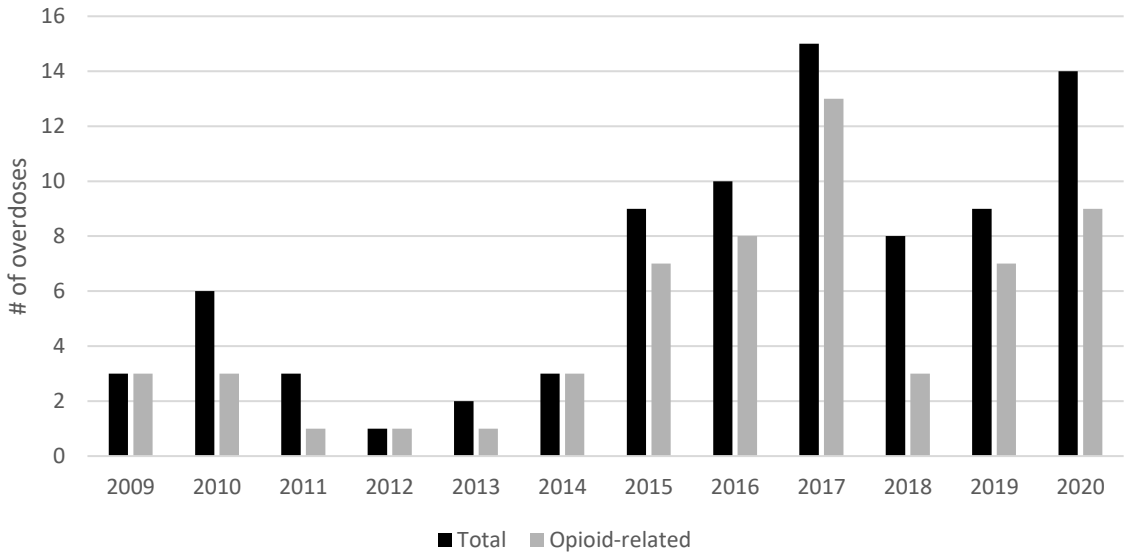
State of Overdoses in Cortland County

According to the Cortland County coroner, between the years 2009 and 2020, there were 83 fatal drug overdoses in Cortland County (as a result of all substances).[8] Preliminary data for 2020 show 14 fatal overdoses in the county in total and 9 opioid-related overdoses. However, these numbers have not been confirmed through toxicology reports. In addition, the coroner data differs from NYS data for one main reason, the coroner's data tracks all deaths that occur in Cortland County regardless of

the county of residence of the decedent, but the NYS data takes county of residence into account.

Figure 8 shows that opioid-related overdoses make up the majority of all overdose deaths in Cortland County. Over 71% (59) of total overdose fatalities were related to opioids, with the majority of deaths occurring after 2014.[8] From 2009 to 2014, there were less than four opioid-related overdoses per year in Cortland County. The opioid-related overdose death rate more than doubled from 2014 to 2015 (6.2 to 14.5), peaked in 2017 (27.2), declined in 2018, and has continued to rise since.

Figure 8. Cortland County overdoses (fatal), 2009 – 2020[8]



In the Healing Community Studies baseline year, 2017, Cortland County had an opioid-related overdose death rate of 29.3 – almost 10 points higher than the NYS rate and higher than other counties in the Central NY region. In 2018, many of Cortland County's opioid-related overdose statistics fell: opioid-related overdose death rate dropped from 29.3 to 8.4; opioid-related death rate involving synthetic opioids decreased from 16.7 to 4.2; and the opioid burden rate decreased from 221.6 to 188.2. (Opioid Burden is a NYS measure that captures outpatient emergency department visits and hospital discharges for non-fatal opioid overdose, abuse, dependence, and unspecified use; and opioid overdose deaths.[9]) Table 3 compares Cortland County opioid-related statistics to central NY counties, the CNY region, and NYS (excluding NYC). Cortland had the highest emergency department visit rate related to opioids amongst the cross-section of counties. It is important to note that 2018 had the lowest number of opioid-related overdose deaths since 2014 and that overdose fatalities increased substantially in 2019 and 2020.

Table 3. Opioid-related rates (crude) for select geographies, 2018[9]

	Cortland	Cayuga	Madison	Onondaga	CNY	NYS excl NYC
Overdose deaths involving any opioid	8.4*	15.6	15.5	**17.3**	15.9	17.2
Overdose deaths involving synthetic opioids (not methadone)	4.2*	**14.3**	9.9*	13.2	11.5	12.7
ED visits (outpatients and admitted patients) involving any opioid overdose	188.2	186.7	159.6	**303.6**	235.7	256.1
Opioid burden	83.6	62.2	52.3	83.4	74.3	67.2

* Fewer than 10 events in the numerator, therefore the rate is unstable.

When accounting for specific age groups in the county, Cortland has some of the lowest overdose death rates amongst CNY counties, see Table 4. This is in stark contrast to 2017 data, in which Cortland County had the highest rates out of CNY counties in eight of the nine categories in Table 4 (see Needs Assessment 1 for comparison). However, Cortland has higher death rates in the 18-44 year old age groups compared to other Cortland County statistics. More age-specific data will be examined further in following sections. As shown in Figure 8, 2018 had the lowest number of opioid-related overdose deaths for Cortland County – an outlier in the period 2015-2020.

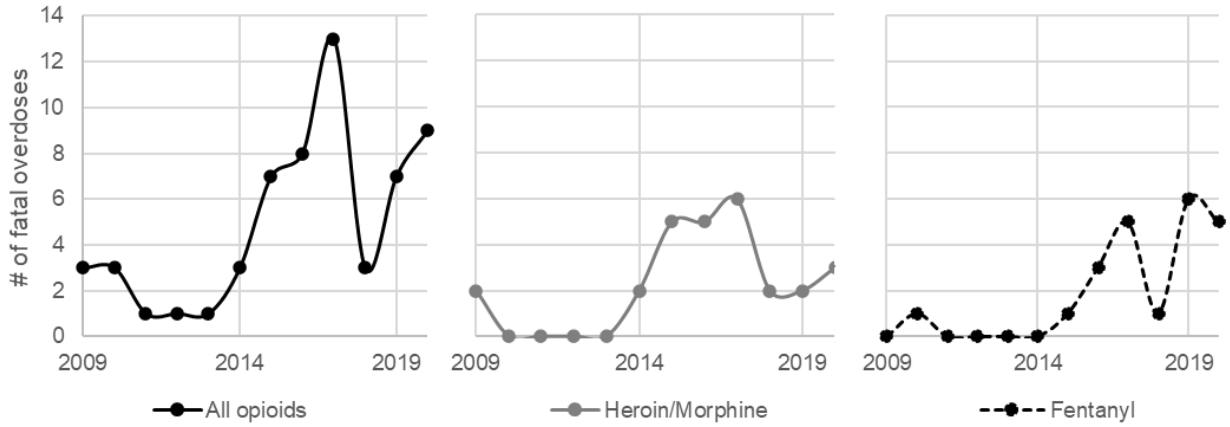
Table 4. Age group specific overdose death rates for select geographies, 2018[9]

	Cortland	Cayuga	Madison	Onondaga	CNY	NYS excl NYC
Overdose deaths involving any drug	10.5*	19.4	17	**21.9**	19.6	20.9
Overdose deaths involving any drug - Aged 18-44	26.5*	**44.1**	33.3*	36.6	34.5	36.6
Overdose deaths involving any drug - Aged 45-64	0.0*	17.9*	19.6*	**31.5**	25.9	26.6
Overdose deaths involving any opioid	8.4*	15.6	15.5	**17.3**	15.9	17.2
Overdose deaths involving any opioid - Aged 18-44	21.2*	**40.1**	29.2*	31.6	29.6	32.5
Overdose deaths involving any opioid - Aged 45-64	0.0*	9.0*	19.6*	**21.8**	19.7	20.2
Overdose deaths involving heroin	4.2*	5.2*	**11.3***	7.1	7.2	6.1
Overdose deaths involving opioid pain relievers (incl. fentanyl)	8.4*	14.3	12.7*	16	14.5	**15.8**
Overdose deaths involving synthetic opioids (not methadone)	4.2*	**14.3**	9.9*	13.2	11.5	12.7

* Fewer than 10 events in the numerator, therefore the rate is unstable.

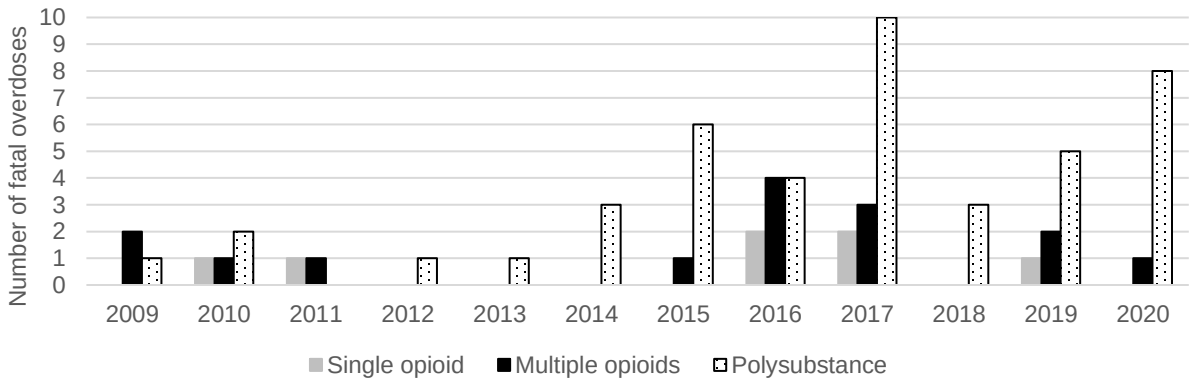
When looking at opioid-related overdose death rates in Cortland County, there is a distinct pattern related to specific opioids. Figure 9 shows the number of overdoses where each substance appeared in the toxicology reports. Prescription opioids (including methadone) were the biggest drivers of overdose fatalities until 2014. In 2016 and 2017, there was an increase in heroin and fentanyl in toxicology reports. In 2019, fentanyl was present in over 85% of opioid-related deaths and 66% of all overdoses. In 2020, preliminary data shows that fentanyl was again the most identified opioid in toxicology reports – present in 56% of opioid-related deaths and 36% of all overdoses.

Figure 9. Select substance-specific opioid-related overdoses, 2009-2020[8]



Nationally, polysubstance use has been increasing throughout the US.[10] In Cortland County, coroner toxicology reports indicate rising polysubstance use in overdose fatalities, as shown in Figure 10. Starting in 2015, multiple opioids and/or polysubstances outpaced single opioid-related overdoses. Since 2014, there has been an increase in the proportion of overdose fatalities with multiple substances present. Common substances seen in combination with opioids in toxicology reports are benzodiazepines, antidepressants, and methamphetamine. Of particular note, cocaine was found in 44% of opioid-related overdose deaths according to 2020 coroner reports.

Figure 10. Single opioid, multiple opioids, and polysubstance use, 2009-2020[8]



With respect to emergency department visits related to opioid use, Cortland County had higher rates than many surrounding counties, see Table 5. When accounting for the age structure of each county or region listed, Cortland had the highest emergency department visit rate involving any opioid overdose. More specifically, Cortland had the highest emergency department visit rate for heroin only and for opioids excluding heroin. In looking at opioid-related overdoses specifically, Cortland had the second highest emergency department visit rate for all opioid-related overdoses; persons aged 25-44 with any opioid-related overdose; and for all heroin-related overdoses.

Table 5. Emergency department visit rates for select counties, 2018[9]

	Cortland	Cayuga	Madison	Onondaga	CNY	NYS excl NYC
Any drug overdose	246.7	268.3	213.3	**327**	283.9	201.4
Any drug overdose, aged 18-24	138.5	**563.6**	209.8	448.6	370.6	289
Any drug overdose, aged 25-44	450.6	431.1	441.3	**555.3**	486	331.7
Any drug overdose, aged 45-64	186.1	148	132.6	**281.5**	222.6	161
Any drug overdose, age-adj rate	265.5	291.6	244.7	**341.5**	299.6	210.7
Any opioid overdose	**83.6**	62.2	52.3	83.4	74.3	67.2
Any opioid overdose, aged 18-24	s	**203.5**	s	96.4	93.4	90.8
Any opioid overdose, aged 25-44	**235.1**	140.1	160.5	195.7	183.5	162.1
Any opioid overdose, aged 45-64	**76.1***	26.9*	29.5*	72.6	57.6	53.5
Any opioid overdose, age-adj rate	**97.3**	68.9	62.8	87.9	80	71.9
Any heroin overdose, age-adj rate	**68.6**	39.8	49.1	63.7	55.7	48.1
Any opioid overdose excl heroin, age-adj rate	**28.6**	**29**	13.7*	24.1	24.1	23.5

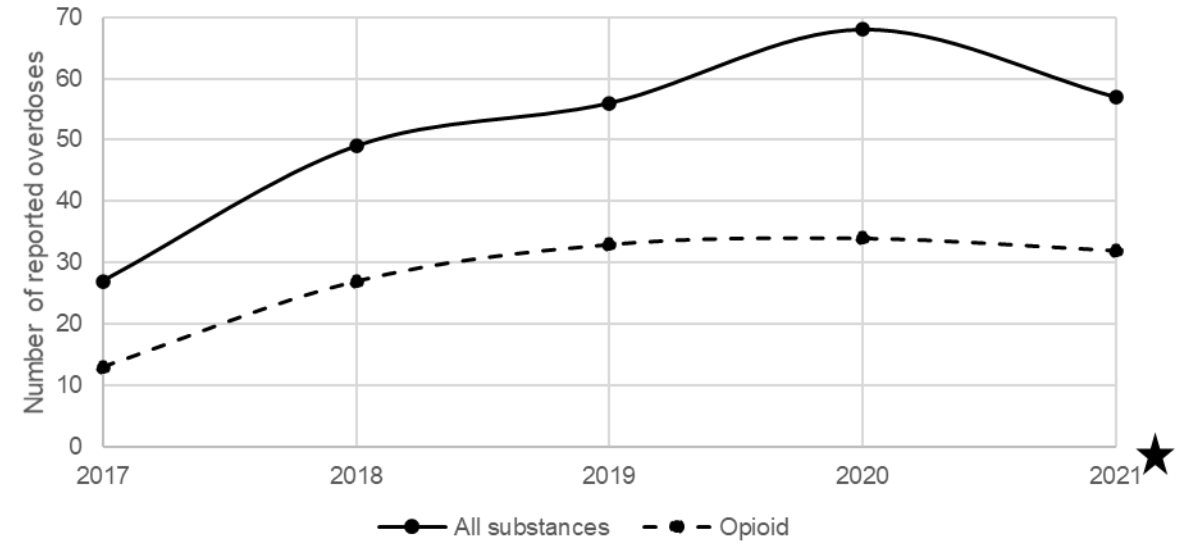
* Fewer than 10 events in the numerator, therefore the rate is unstable.

"s" means that data do not meet reporting criteria established by NYS

When focusing only on opioid related deaths, annual fluctuations can appear rather extreme. However, when factoring in both fatal and non-fatal overdoses (as reported by local law enforcement and emergency personnel), opioid-related overdoses assume a different pattern. Figure 11 shows the yearly number of overdoses – both fatal and nonfatal in Cortland County as reported by Cortland and Homer Police Departments. These data tell a more consistent story of increasing opioid-related overdoses, as well as a general increase in all drug overdoses.

While 2021 data only covers the months January through July, the total overdoses (57) and opioid-related overdoses (32) have nearly reached 2020 totals. During the first seven months of 2020 there were 31 total overdoses and 15 opioid-related overdoses reported. 2021 totals will be included in the next needs assessment update.

Figure 11. Cortland County total overdoses (fatal and nonfatal), 2017 – 2021[11]

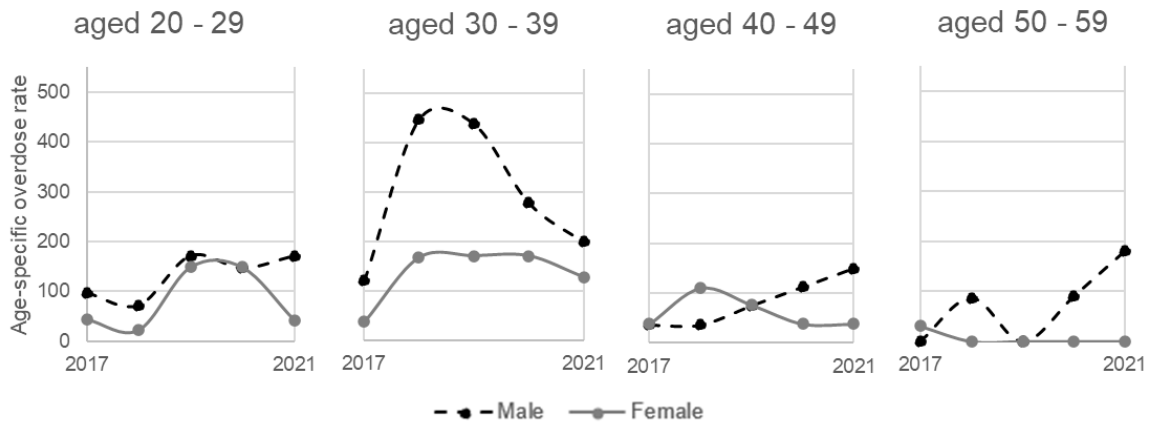


Data for 2021 includes overdoses reported January 01 – July 31 2021

While Table 4 highlighted the broader age group-specific overdose trends, there is even more variation across smaller sex disaggregated, age-group cohorts. Figure 12 shows the opioid-related overdose rates for four age groups by male and female populations in Cortland County. This data comes from Cortland and Homer Police Departments and covers the period January 2017 through July 2021. **Thus, 2021 rates are expected to rise as reported overdoses are updated throughout the year.**

The reported overdose data shows increases in overdose rate for males in three of four age groups: 20-29, 40-49, and 50-59. Of particular note, the overdose rate for the 50-59 age group doubled from 2020 to 2021 on partial year data. Reported overdose rates for females either decreased or stayed the same in all age groups. In all the age groups shown in Figure 12 (except for 30-39), the reported overdose rate for males quadrupled that of females in Cortland County. In many of the rate calculations the numerator (reported overdoses) was below 10, potentially making the rate unstable.

Figure 12. Age group specific overdose rates, 2017-2021*



Community Readiness

The community Readiness Survey (CRS) asks key informants about factors that impact the readiness of the Cortland County to support and commit resources to opioid prevention, treatment, and recovery services. Following administration of the CRS, it was determined that two major knowledge gaps exist amongst community members in the county (as indicated by survey respondents). 79.7% of respondents indicated that community members knew “Nothing” or “A little” about the best practices for treating opioid use disorder. 64.0% of respondents indicated that community members knew “Nothing” or “A little” about the effects of stigma.

CRS respondents indicated that counseling efforts are the most prevalent in the community to address opioid-related issues, with 73.3% of respondents indicated that Counseling efforts were “Somewhat Prevalent” or “Very Prevalent.” In contrast, CRS respondents indicated that harm reduction efforts were the least prevalent with 16.0% of respondents indicated that harm reduction efforts were “Not Prevalent.” The full reports is available in Appendix A.

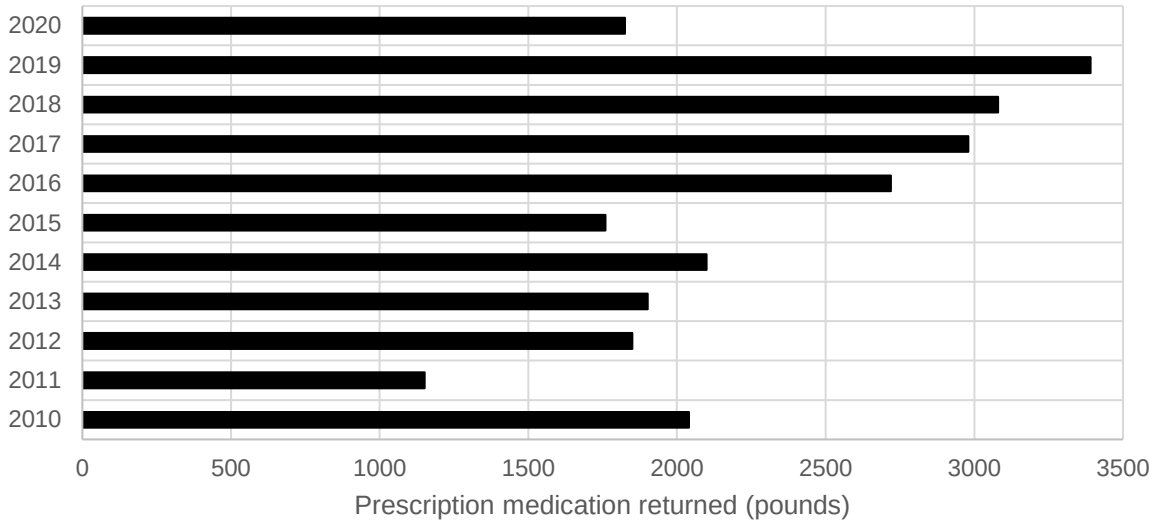
Prevention

Cortland County has a long-standing history of prevention activities involving alcohol and substance use education. Many of these activities have focused on youth populations, while some address a broader constituency. Over the last 20 years, CACTC and community partners have received funding from federal (SAMHSA) and state (NYS OASAS) agencies.

Historically, much of the prevention work conducted in Cortland County is dependent on grant funding which means that prevention programming often ends when individual agencies cannot sustain efforts. However, many programs, like drug take-back events, have been maintained. In 2019, there were 23,301 opioid analgesic prescriptions in Cortland[9] and in 2020 there were over 1,800 pounds of medication collected through

the Cortland County Drug Disposal Program. On average, around 12% of take-back medication is identified as being a narcotic. In 2020, returned medication fell to a five-year low. Figure 13 shows the pounds of total prescription drugs collected during bi-annual collection events in the county.

Figure 13. Cortland County prescription drug take-backs, 2010-2020[36]



According to the 2020 YDS, 39.3% of students that have used prescription pain relievers not prescribed to them report accessing them at home. Broken down by grade cohorts, 66.7% of students in grades 7-8, 45.5% of students in grades 9-10, and 28.6% of students in grades 11-12 indicated accessing prescription pain relievers at home the last time they used them. While this access data is informative, it reflects a small percentage of Cortland County 7th-12th graders, as only 1.2% of students indicated prescription drug use in the past 30 days.

Naloxone Distribution and Administration

One of the most effective practices in preventing overdose deaths is the increased availability of naloxone training and the distribution of naloxone kits.[28] Therefore, NYS has focused on eliminating barriers in accessing and distributing naloxone across all counties.[29] Opioid Overdose Prevention Programs (OOPPs) provide training on how to recognize an overdose, administer naloxone, and provide trainees with a naloxone kit upon completion of training. Currently, there are at least five OOPPs serving Cortland County.

Historically, the largest distributor of naloxone in Cortland County has been the County Health Department. In 2020, they distributed 237 total kits with 41% of those going directly to law enforcement personnel. In 2021, Family and Children's Counseling Services increased their naloxone distribution efforts through virtual and in-person pop-up events in various locations around the county. In the first and second quarter of 2021, FCCS distributed 530 naloxone kits. Figure 14 shows the number of kits

distributed by Cortland County OOPPs from 2016 – July 2021. (From 2016 through 2019, the Health Department was the only organization to report distribution data to Healing Cortland and one of the only OOPPs operating in the county). In addition, other OOPPs and organizations distribute naloxone in Cortland County or to Cortland County residents; however, that data has not been collected.

Figure 14. Cortland County naloxone distribution, 2016-2021(Q1,Q2)

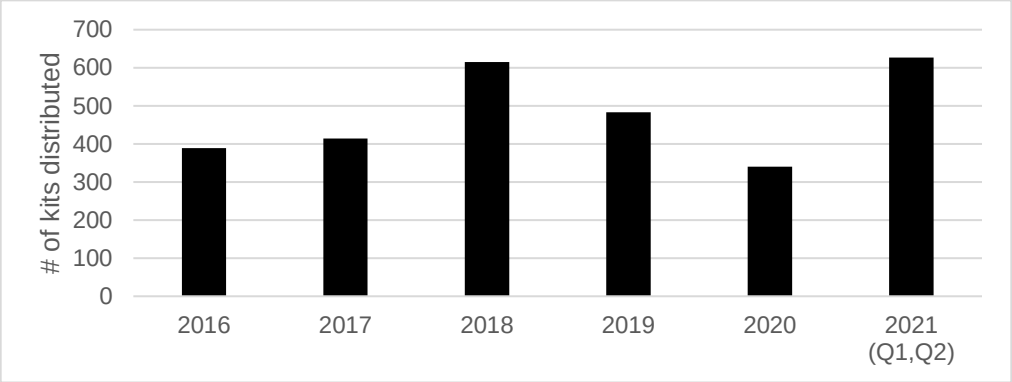
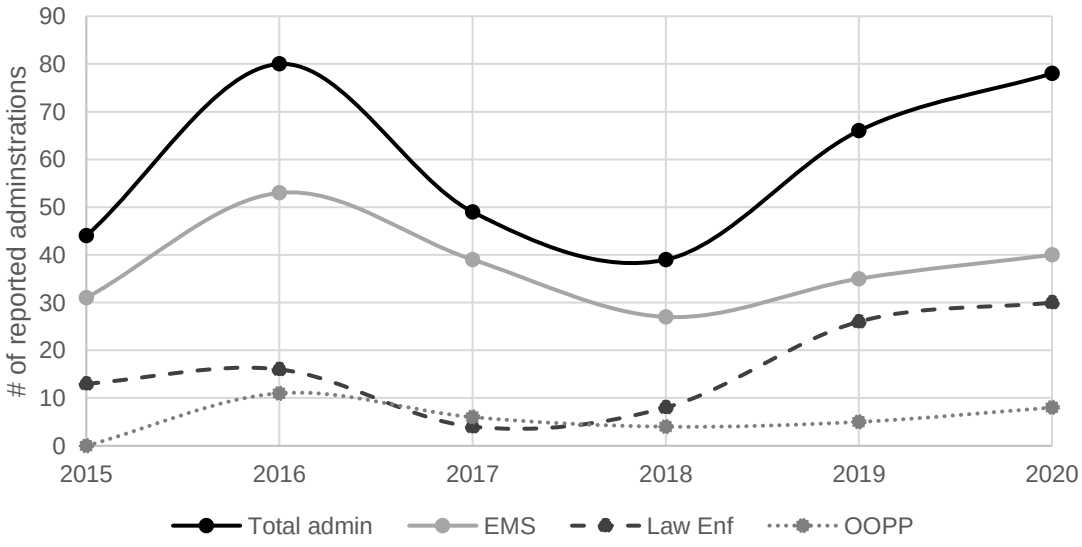


Figure 15 shows the number of naloxone administrations that occurred in Cortland County from 2015 to 2020 reported to the NYS DOH. The naloxone administration totals are low in comparison to the number of kits distributed as naloxone use often goes unreported. Thus, administration numbers should be considered a minimum during this time period.

Figure 15. Cortland County naloxone administration, 2015-2020[9]



Harm Reduction

Harm reduction services are focused on keeping people who use opioids or other substances safer from detrimental effects. These can include the distribution of naloxone and syringe exchange services that mitigate impacts of infectious diseases related to intravenous drug use. Based on data from the County Health Department, Cortland County had a higher Hep-C infection rate than NYS (excluding NYC) from 2015-2018 (the last year for NYS data).[34] In addition, over 13% of Cortland County patients receiving treatment for OUD at a regional provider are positive for Hepatitis C. While age-specific Hep C data is not available at the county level, the NYS Department of Health report that increases in Hep-C prevalence is driven by occurrences in those aged 30-39.

The Southern Tier AIDS Program (STAP) operates syringe exchange services throughout the Southern Tier region with locations in Ithaca, Johnson City, and Norwich. In addition, they provide services to Cortland County residents. In 2020, STAP provided services to over 64 Cortland County residents per month (on average) and facilitated the exchange of over 100,000 syringes through mobile and secondary outreach, as well as through three sharps disposal kiosks located at City Hall, the Homer Police Department, and the County Office Building.

Microsurveys

During the needs assessment process, Healing Cortland staff had myriad conversations with community partners and concerned citizens about the role that stigma plays in constructing barriers to opioid-related prevention, treatment, and recovery. However, there was little data on how stigma presents in Cortland County and the surrounding areas. To start addressing this data gap, Healing Cortland staff conducted two microsurveys focused on stigma around naloxone use and opioid use stereotypes. A summary report for Microsurvey #1 is listed in Appendix B and Microsurvey #2 is in Appendix C.

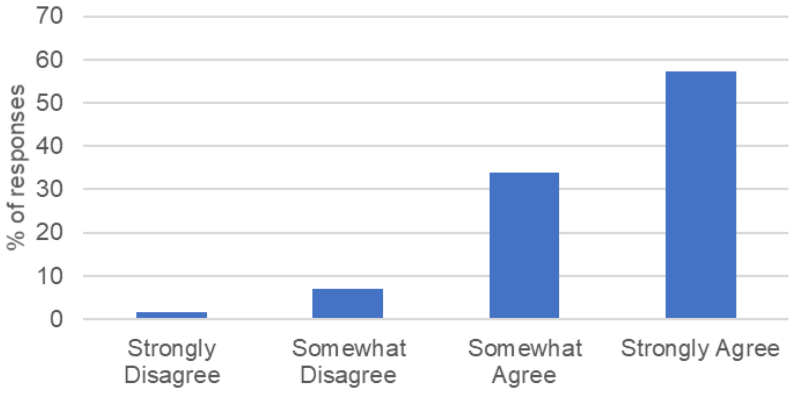
Microsurvey #1 – Public Perceptions and Opioid-related Stigma focused on individual and community beliefs about opioid-related stereotypes. The survey had 188 respondents through online and in-person options. The survey respondents indicated a strong belief that the larger community believed persons who used opioids were untrustworthy and dangerous. For example, the survey asked respondents to what degree they agreed with the statement “Most people believe that a person who is addicted to opioids cannot be trusted.” Figure 16 shows the summary breakdown of those responses with a majority of respondents (91.4%) strongly or somewhat agreeing that most people believe a person who is addicted to opioids cannot be trusted.

In addition, Microsurvey #1 showed that annual household income may impact people’s perceptions on opioid-related stereotypes. For example, 44% of respondents with an annual household income under $35,000 agreed with the statement that “I believe that a

person who is addicted to opioids cannot be trusted," compared to 69% of respondents with a household income above $75,000.

Figure 16. Most people believe that a person who is addicted to opioids cannot be trusted

Agreement Scale	Count
Strongly Disagree	3
Somewhat Disagree	13
Somewhat Agree	64
Strongly Agree	108
Total	188



Microsurvey #2 – Public Perceptions and Naloxone-related Stigma focused on overdose prevention and naloxone use. The survey had 169 responses through online and in-person options. The survey respondents indicated a strong belief that increasing access to naloxone will save lives. For example, the majority of respondents (96.5%) agreed with the statement "Providing naloxone (Narcan) to first responders would save lives" and 94.1% of respondents agreed with the statement "Providing naloxone (Narcan) to friends and family members would save lives."

However, roughly one third of respondents felt that increased access to naloxone could have mixed effects. For example, 33.1% of respondents agreed with the statement "Distributing naloxone (Narcan) will encourage people to use even more opioids." Of particular note, 60.9% (14) of respondents aged 30-39 agreed with the statement "Distributing naloxone (Narcan) will encourage people to use even more opioids." This makes respondents in their 30's the only age group where a majority of respondents felt that distributing Narcan will encourage people to use even more opioids. As discussed in the needs assessment, the 30-39 year old age group is the most acutely impacted cohort in terms of opioid-related overdoses. (*To be clear, survey respondents and responses are not intended to be representative of Cortland County residents, but this cross tabulation proved to be statistically significant. Additional details can be found in the full report).

Treatment

Opioid use treatment options include psychosocial elements like counselling and pharmacological elements like medication for opioid use disorder (MOUD). Treatment can occur in inpatient or outpatient facilities, as well as in non-clinical settings. Cortland County is missing inpatient, detoxification, and low-threshold buprenorphine induction options, forcing residents to travel outside the county for more intensive services.

In 2019 and 2020, REACH Medical, a low threshold buprenorphine treatment facility with offices in Ithaca and Johnson City, provided medication assisted treatment to more than 230 Cortland County residents. Table 6 shows age and sex characteristics for Cortland County residents receiving OUD treatment at FCCS and REACH Medical. Table 6 does not include all Cortland County residents receiving opioid-related treatment, but it does capture two of the biggest treatment providers in the region. The largest age group receiving treatment is 30-39, in line with Cortland County overdose trends. The overwhelming majority of patients receiving treatment are utilizing MOUD with similar rates across sex.

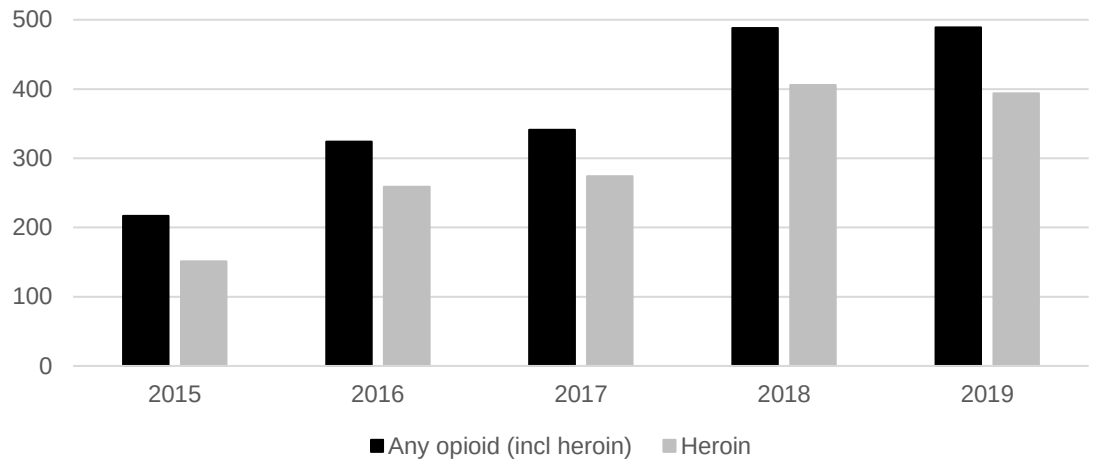
Table 6. Demographic data for Cortland County residents receiving OUD treatment through REACH Medical and FCCS, 2019-2020

	2019		2020	
Age	**Patients**	**% MOUD**	**Patients**	**%MOUD**
10-19	3	100	2	50
20-29	79	96.2	61	96.7
30-39	101	94.1	96	97.9
40-49	39	92.3	44	95.5
50-59	23	91.3	20	100
60+	1	100	5	100
Sex	**Patients**	**% MOUD**	**Patients**	**%MOUD**
Male	130	93.1	123	96.7
Female	116	94.8	105	97.1

Currently, the county has two outpatient substance use treatment clinics operated by FCCS and Syracuse Recovery Services (SRS). Recently, a third treatment provider, Beacon Center, left the community. In 2018, Family Health Network (FHN) began offering MOUD to patients with SUD/OUD through a partnership with FCCS. FHN provides buprenorphine through at least one DATA waivered provider and requires patients participate in counseling to receive MOUD.

For more historical context, Figure 17 shows Cortland County resident admissions for opioid-related treatment in NYS OASAS certified facilities from 2015 to 2019. The NYS data show an increase in opioid-related treatment admissions. However, the state began reporting admissions differently in 2018, counting number of admissions and not necessarily unique patients. Thus, the 2018 and beyond data should not be compared to previous years.

Figure 17. Admissions for opioid-related treatment in NYS OASAS certified treatment facilities, 2015-2019[9]



Medication for Opioid Use Disorder (MOUD)

MOUD is recognized as the most effective treatment for opioid use disorder (OUD) and comes in three FDA-approved forms – buprenorphine, naltrexone, and methadone. [12,30] Buprenorphine is "a long-acting partial opiate agonist that acts on the receptor targets of heroin and morphine, but does not produce the same intense 'high' or dangerous side effects."[39] It can be taken sublingually, buccally, and by injection. Naltrexone is an opioid antagonist that blocks the effects of opioids and can be taken by injection. Methadone is a full opioid agonist that reduces opioid cravings and it is most often taken daily, in liquid form. It can only be dispensed by a SAMHSA-certified treatment program, under the supervision of an approved provider.

Cortland County has the fifth highest percentage of physicians over the age of 75 in NYS.[23] Some research has shown that older physicians are more likely to prescribe opioid analgesics and less likely to prescribe buprenorphine because of lack of specialty support and lack of confidence in their ability to manage opioid use disorder.[25,26] This pattern proves true in Cortland County where the 2019 opioid analgesic prescribing rate (489.7 per 100,000) is higher than NYS (444.3) and the Central New York region (488.2). In contrast to 2018, the 2019 buprenorphine prescription rate in Cortland County (607.4) is higher than the CNY rate (596.5) and the NYS (excluding NYC) rate (557.1).[9] Of particular note, Cortland age-adjusted buprenorphine prescription rate (763.1) is considerably higher than CNY(681.6) and NYS (621.1).[9]

Treatment options for opioid use disorder can include a variety of inpatient and outpatient services. In particular, the utilization of MOUD has been shown to be one of the most effective strategies for helping reduce fatal overdoses and sustain treatment.[30,31] As noted above, there are three FDA-approved medications for treating OUD.[30] Of the three, methadone is not available in Cortland County.

In Cortland County, MOUD is offered through outpatient services by Syracuse Recovery Services, FCCS, and FHN. According to the SAMHSA buprenorphine prescriber directory, there are three to five providers in Cortland County offering buprenorphine induction. In addition, Cortland County residents can access MOUD (buprenorphine, naltrexone, and in some cases, methadone) outside of the county. Table 7 shows the 2019 buprenorphine prescription rate for Cortland County residents. In both crude and age-adjusted forms, Cortland has highest buprenorphine induction rates of the counties and regions listed.

Table 7. Buprenorphine prescription rates for select counties, 2019[9]

	Cortland	Cayuga	Madison	Onondaga	CNY	NYS excl NYC
Buprenorphine prescription	**607.4**	441.4	537.1	570	596.5	557.1
Buprenorphine prescription, age-adj rate	**763.1**	513.1	688.4	629.6	681.6	621.1

OUD Screenings, Assessments, and Referrals

Another major need in the county is the improved collection of SUD/OUD screening, assessment, and referral coordination data. In 2020, one major treatment provider reported that 310 patients were identified through SUD/OUD screenings/assessments but were not admitted for further services (out of almost 400 total assessments). According to the National Survey on Drug Use Health, people do not access treatment for a variety of reasons, including they “did not feel that they needed treatment” or they “felt that they needed treatment but did not make an effort to get treatment.”[37] In 2019, 70 SUD/OUD evaluations were completed at the County Jail where over 300 inmates self-identified as having a substance abuse, mental health, or co-occurring issue.

In addition, many individuals present at the emergency department with opioid-related issues. In 2020 there were 21 opioid-related emergency department visits (down from 33 in 2019) and 14 hospitalizations (up from 10 in 2019).[9] In 2020, COTI, the primary agency responsible for response and transitions in Cortland, received five referrals from the ED.

Although screenings have been implemented in most practices/medical settings there are gaps in treatment, referrals, and care coordination. In 2020, the Compass Care Network (CCN) collected substance use screening data for Medicaid patients from Cortland County providers. Out of 1,143 documented screenings, 10 referrals were made and tracked. The CCN only tracks Medicaid patients, so those using private insurance or the pay-as-you-go approach are missing from these datasets.

Recovery

SAMHSA has developed a working definition of recovery – “A process of change through which individuals improve their health and wellness, live a self-directed life, and

strive to reach their full potential."[38] In addition, the SAMHSA recovery process focuses on four dimensions of recovery – health, home, purpose, and community – that promote financial independence, housing stability, and supportive social networks. Specific recovery services can include "mutual aid groups (like 12-step programs), recovery coaching, recovery housing, and recovery-based education."[39]

Catholic Charities of Cortland County (CCOCC) is the primary agency responsible for recovery activities, offering the only residential recovery programs in the county. CCOCC offers supportive and temporary housing programs, as well as peer recovery services through the Peer Wishing Wellness Center. CCOCC has historically employed multiple full-time and part-time peers.

Research has shown that peers improve treatment outcomes for individuals with OUD and individuals experiencing an opioid-related overdose.[32] A stronger peer workforce supports improved service coordination as peers provide insight in navigating the prevention, treatment, and recovery continuum.[33,32] In addition to the above CCOCC peers, FCCS employs 1 full-time Certified Peer Recovery Advocate (as of this publishing). In addition, Prevention Network provides a Family Support Navigator to a five-county region in Central New York including Cortland County. However, due to lack of meeting space and other barriers this service has not been readily available and utilized in the community.

Most recovery services are concentrated in the City of Cortland, leaving residents in the more rural and isolated areas of the county with limited access. While there are 19 Alcoholics Anonymous (AA) and 3 Narcotics Anonymous (NA) meetings weekly around the City of Cortland, there is only one AA meeting in the more rural towns and villages of the county. Currently, there is no formalized recovery community in Cortland County other than the Wishing Wellness Center and independent AA/NA Groups.

Next Steps

Healing Cortland staff will continue to identify unmet needs through data collection, surveys, and interviews focused on opioid-related issues. This information will be incorporated into future iterations of the needs assessment and will further support CACTC's data-driven planning approach.

During the needs assessment process, Healing Cortland staff had myriad discussions with service providers, local and regional treatment professionals, and community partners. While anecdotal in nature, these discussions shed light on the continuum of care coordination and referral challenges facing Cortland County organizations. In addition, partners emphasized the outsized impact that stigma plays in shaping perceptions of opioid prevention, treatment, and recovery services.

Moving forward, the project will focus on ways to collect, quantify, and operationalize opioid-related data in Cortland County. A major part of that will be formalizing data sharing agreements with community partners around opioid overdose, treatment, referral, and recovery data. In addition, the Healing Cortland project will continue to investigate the impacts that stigma and harm reduction measures have in the county. The microsurvey process has shed light on stigma-related issues, but further investigation and data collection is needed. These steps are instrumental in establishing community-wide data sharing infrastructure and developing a more comprehensive picture of opioid-related resources.

Communicating Findings

In Fall 2021, CACTC staff will post the updated assessment on the Healing Cortland website. In addition, staff will present needs assessment and survey findings to the Healing Cortland Advisory Board, Naloxone Working Group, local government members, and community leaders and organizations. These presentations will be used to communicate data and trends to various stakeholders in the county. In addition, Healing Cortland staff will identify specific elements of the needs assessment that will be investigated further. Staff will create Strategy Reports for these elements that will be shared with partners and form the foundation for project implementation strategies.

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Appendix A – Community Readiness Report

Community Readiness Survey: Opioid prevention, treatment, and recovery in Cortland County Results

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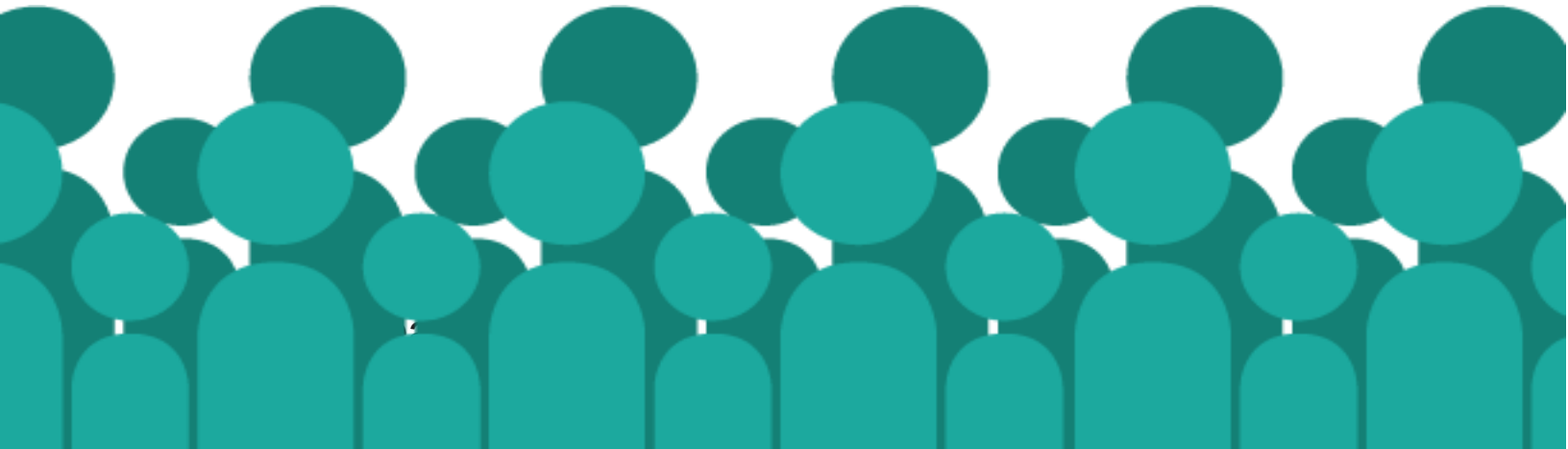
August 2021

Cortland Area Communities That Care engages the community to promote a healthy culture for positive youth development. Our vision is for a community where all youth have the opportunity to be healthy and successful.



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Key Findings

Note: all data reported in this report is based on the *perceptions* of the key informants who filled out the survey in regards to opioid prevention, treatment, and recovery in Cortland County.

Existing Efforts

- Counseling efforts are the most prevalent in the community. 73.3% of respondents indicated that Counseling efforts were “Somewhat Prevalent” or “Very Prevalent.”
- Harm Reduction efforts were the least prevalent in the county. 16.0% of respondents indicated that harm reduction efforts were “Not Prevalent.”

Community Knowledge

- According to respondents, community members have the least amount of knowledge in the areas of “Best practices for treating opioid use disorder” and “The effects of stigma.”
- 92.0% of respondents indicated that community members are aware of “some” or “many” efforts in the county to address opioid prevention, treatment, and/or recovery.

Community Attitudes

- 88.0% of respondents indicated that opioid prevention is “A concern” or “A very great concern” to community members.
- 66.7% of respondents indicated that opioid treatment is “A priority” or “The highest priority” for community members.

Leadership Attitudes

- 58.1% of respondents indicated that “many” or “most” leaders passively support efforts to address opioid prevention, treatment, and recovery. However, only 18.7% of respondents indicated that “many” or “most” leaders play a key role in ensuring the long-term viability of such efforts.
- 65.8% of respondents indicated that opioid treatment is “A priority” or “The highest priority” for leaders.

Purpose

Healing Cortland, a project of Cortland Area Communities That Care (CACTC), is a community-led initiative to better understand and improve opioid-related outcomes for Cortland County residents and community organizations. In May 2020, CACTC was selected to lead the implementation phase of the HEALing Communities Study (HCS) in Cortland County, NY. HCS is a National Institutes of Health (NIH) funded project being managed by Columbia University in NYS. Cortland County is a Wave 2 community, meaning that study implementation does not begin until July 2022.

The purpose of HCS is to reduce opioid-related overdoses by 40% over the course of three years. Using a data-driven approach, Healing Cortland staff will work to reduce fatal and nonfatal overdoses, expand access to prevention and harm reduction resources, lessen stigma around opioid use, and help develop a more responsive treatment and recovery infrastructure. The initiative will support the adoption of evidence-based practices that better serve the prevention, treatment, and recovery needs of the county.

In accordance with CACTC's data-driven process, a needs assessment was initiated in December 2020. A major aspect of this process is to assess the readiness of the community to commit resources to opioid prevention, treatment, and recovery resources. Many factors can impact community readiness, including stigma around substance use issues, community knowledge of the problem, existing efforts in the community, and the role of leadership in providing guidance and support.

It was determined by the Executive Director of CACTC and the Healing Cortland Project Director that the best way to assess community readiness would be to distribute a survey to a pre-determined list of key informants across six community sectors: law, education, health, business, government, and involved citizens. Surveys were collected utilizing Survey Monkey's online platform between 02/24/21 to 03/01/21 and included questions about factors that impact the readiness of the community to support and commit resources to opioid prevention, treatment, and recovery services.

Methods

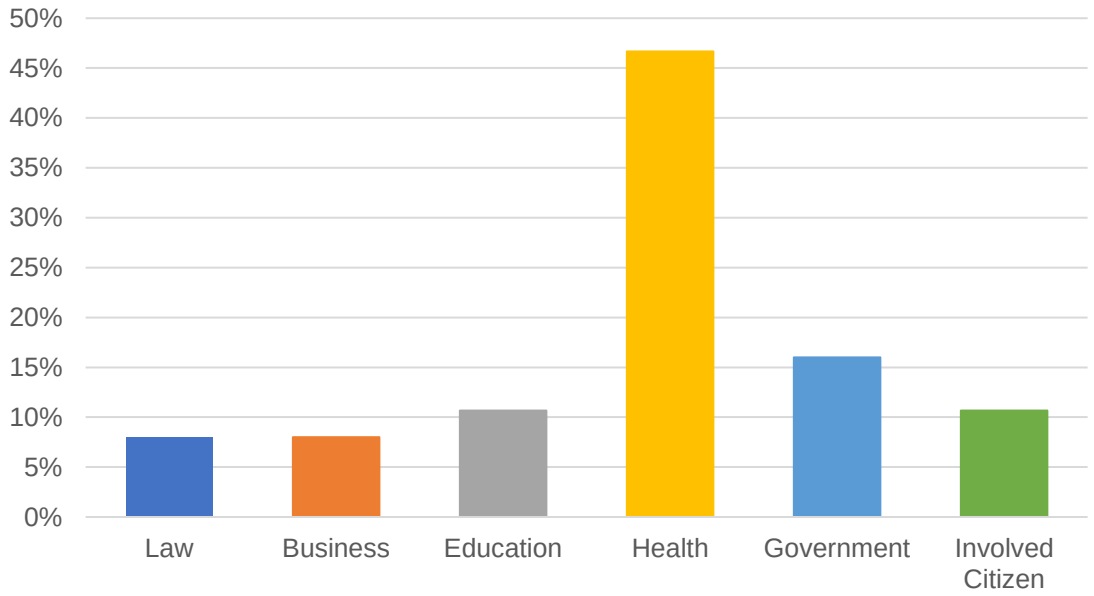
The Community Readiness Survey: Opioid Prevention, Treatment, and Recovery in Cortland County was adapted from a 36-question long community readiness interview included in the Tri-Ethnic Center Community Readiness Handbook 2nd Edition. Previously, CACTC had used the full-length survey, but it proved difficult to collect a significant number of responses. In the interest of obtaining a more complete picture of community readiness through a larger response pool, this Community Readiness Survey (CRS) consisted of fewer total questions. The survey had 10 questions with an estimated completion time of five minutes.

Results

Sector of Community Involvement

Figure 1 shows the sector distribution of survey respondents. The largest cohort of respondents indicated Health (46.7%) as the sector of community involvement that best describes them. This was followed by Government (16.0%) and Education (10.7%). The least represented sectors were Law and Business, both with 8.0% of responses.

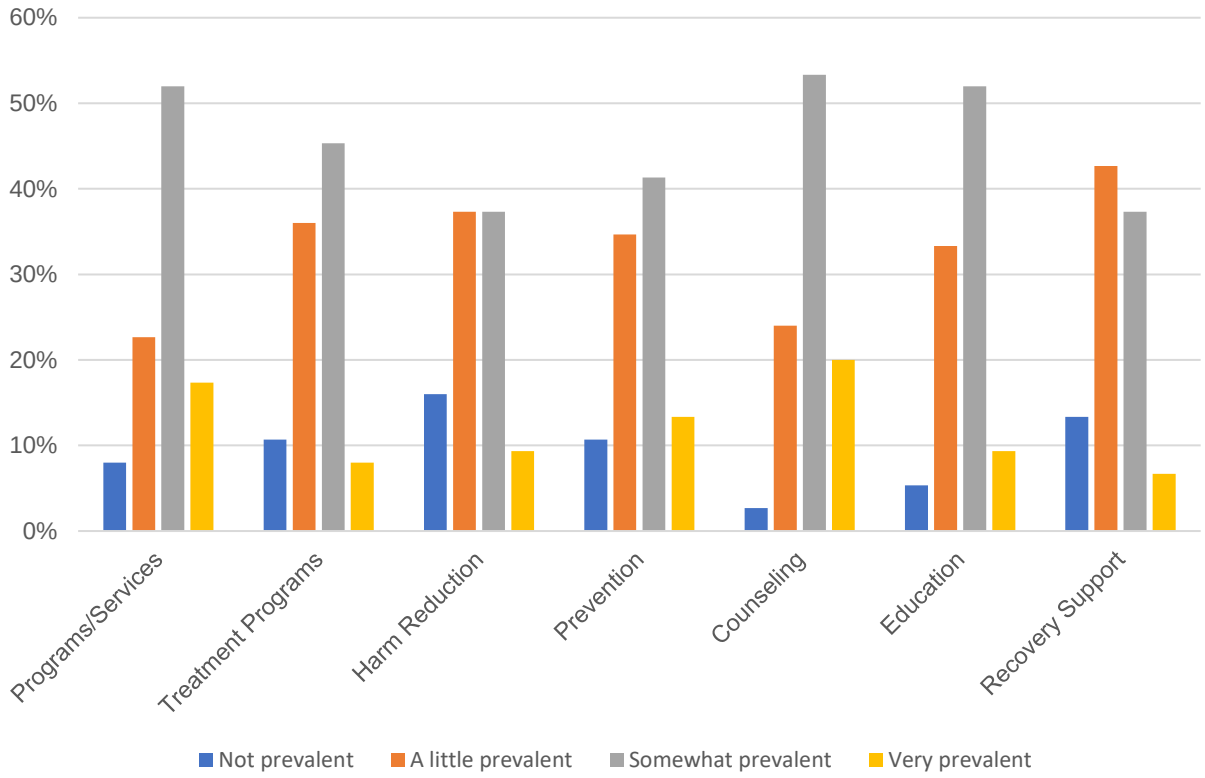
Figure 1. Distribution of sectors



Efforts to Address Opioid Prevention, Treatment, and Recovery

The CRS asked how prevalent various efforts were to address opioid prevention, treatment, and recovery in Cortland County. Respondents answered using a 1-4 scale: Not prevalent, A little prevalent, Somewhat prevalent, and Very prevalent. Respondents indicated that Counseling (53.3%) Education, (52.0%), and Programs/Services (52.0%) were “Somewhat Prevalent.” These three responses received the highest percentage of respondent selections. Over one-third of respondents indicated that Treatment programs, Harm Reduction, Prevention, Education, and Recovery Support were “A little prevalent” in the county. 16% of respondents indicated that Harm Reduction efforts were “Not prevalent.” Figure 2 shows a breakdown of survey responses.

Figure 2. Please indicate how prevalent each of the following efforts are in Cortland County to address opioid prevention, treatment, and recovery?



Community Knowledge about Opioid Prevention, Treatment, and Recovery

The CRS asked respondents to indicate how much community members know about a variety of items related to opioid prevention, treatment, and recovery, such as: the signs and symptoms of an opioid overdose, how to properly dispose of medications, and the effects of stigma. The majority of respondents indicated that community members knew “A Little” or “Some” about all of the items listed – accounting for at least 78% of responses across all items. 16.2% of respondents indicated that community members knew “Nothing” of best practices for treating opioid use disorder and 14.7% knew “Nothing” about the effects of stigma. Table 1 shows a detailed breakdown of question responses.

Table 1. How much do community members know about each of the following as they pertain to opioid prevention, treatment, and recovery?

	Nothing	A Little	Some	A Lot	Total
The signs and symptoms of an opioid overdose	2.7%	42.7%	**44.0%**	10.7%	75
The signs and symptoms of an opioid use disorder	6.7%	**49.3%**	37.3%	6.7%	75
How to properly dispose of medications	5.4%	36.5%	**41.9%**	16.2%	74
How to access and administer Naloxone (Narcan)	5.3%	**50.7%**	41.3%	2.7%	75
How to access treatment and recovery services	5.3%	**50.7%**	40.0%	4.0%	75
What is happening locally in terms of the opioid and overdose crisis	2.7%	**46.7%**	40.0%	10.7%	75
The effects of stigma	14.7%	**49.3%**	32.0%	4.0%	75
Best practices for treating opioid use disorder	16.2%	**63.5%**	20.3%	0.0%	74

The CRS asked how many community members are aware of efforts within the community to address opioid prevention, treatment, and recovery. The majority of respondents indicated that “some” community members have awareness of the different aspects of efforts listed in Table 2. Respondents also indicated that “many” community members have heard of efforts (32.0%), can name efforts (16.0%), and know the purpose of efforts to address opioid prevention, treatment, and recovery (24.0%). When asked how many community members know the effectiveness of efforts, 17.3% of respondents indicated “none,” the second highest option for that sub-question.

Table 2. How many community members are aware of each of the following aspects of efforts within the community to address opioid prevention, treatment, and recovery?

	None	Some	Many	Most	Total
Have heard of efforts?	1.4%	**54.7%**	32.0%	12.0%	75
Can name efforts?	6.7%	**76.0%**	16.0%	1.3%	75
Know the purpose of efforts?	6.7%	**62.7%**	24.0%	6.7%	75
Know how the efforts work?	8.0%	**85.3%**	4.0%	2.7%	75
Know the effectiveness of efforts?	17.3%	**76.0%**	5.3%	1.3%	75

Community Attitudes about Opioid Prevention, Treatment, and Recovery

The CRS asked how much of a concern opioid prevention, treatment, and recovery is to community members in Cortland County. Respondents answered using a 1-4 scale: Not a concern at all, A slight concern, A concern, and A very great concern (see Table 3 for detailed breakdown of responses). The majority of respondents (88%) indicated that opioid prevention was "A concern" or "A very great concern." The majority of respondents (82.1%) indicated that opioid treatment was "A concern" or "A very great concern" for community members. The majority of respondents (76.7%) indicated that opioid recovery was "A concern" or "A very great concern." Less than 3% of respondents indicated that opioid prevention, treatment, or recovery was "Not a concern at all" for community members.

Table 3. How much of a concern is opioid prevention, treatment, and recovery to community members in Cortland County?

	Not a concern at all	A slight concern	A concern	A very great concern	Total
Prevention	2.7%	9.3%	**45.3%**	42.7%	75
Treatment	1.4%	16.4%	38.4%	**43.8%**	73
Recovery	1.4%	21.9%	32.9%	**43.8%**	73

The CRS asked how much of a priority opioid prevention, treatment, and recovery is to community members. Respondents answered using a 1-4 scale with 1 being "Not a priority at all" and 4 being "The highest priority" (see Figure 3 for a detailed breakdown). The majority of respondents (60%) indicated that opioid prevention was "A priority" or "The highest priority," 38.7% and 21.3% respectively. 33.3% of respondents indicated that opioid prevention was "A slight priority." The majority of respondents (66.7%) indicated that opioid treatment was "A priority" or "The highest priority," 40.0% and 26.7% respectively. 29.3% of respondents indicated that opioid treatment was "A slight priority." The majority of respondents (57.4%) indicated that opioid recovery was "A priority" or "The highest priority," 38.7% and 21.3% respectively. 33.3% of respondents indicated that opioid recovery was "A slight priority."

Table 4 shows responses to the question: "How many community members show support for efforts within the community that address opioid prevention, treatment, and recovery?." The highest proportion of responses for each category was "some," capturing 88% of respondents in the "Participate in developing, improving, or implementing efforts" category. In the first category (At least passively support community efforts without being active in support), respondents were evenly split between "some" and "many," 37.3% and 36.0% respectively. Table 4 shows a more detailed breakdown of question responses.

Figure 3. How much of a priority is opioid prevention, treatment, and recovery to community members in Cortland County?

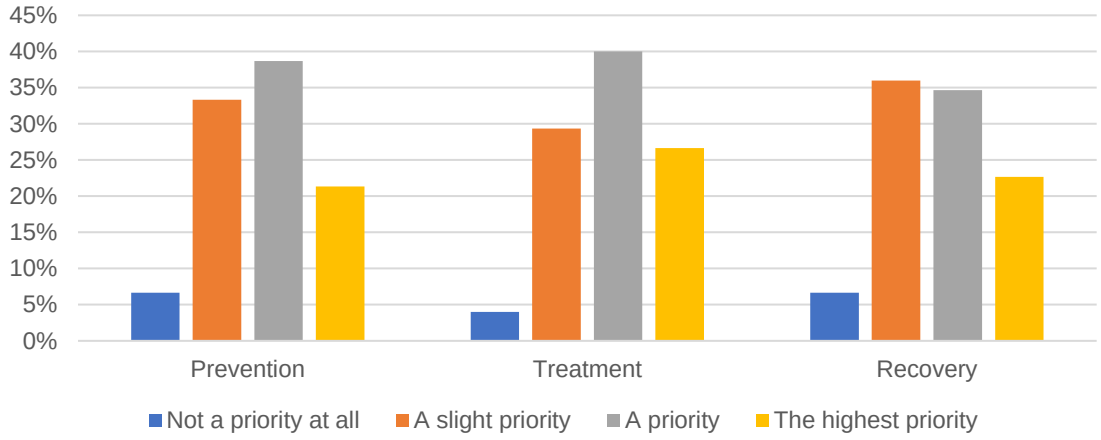


Table 4. How many community members show support for efforts within the community that address opioid prevention, treatment, and recovery?

	None	Some	Many	Most	Total
At least passively support community efforts without being active in support.	1.3%	**37.3%**	36.0%	25.3%	75
Participate in developing, improving, or implementing efforts.	2.7%	**88.0%**	8.0%	1.3%	75
Play a key role as a leader or driving force in planning, developing and implementing efforts.	10.7%	**84.0%**	4.0%	1.3%	75
Are willing to pay more to help fund community efforts.	26.7%	**62.7%**	10.7%	0.0%	75

Leadership Attitudes about Opioid Prevention, Treatment, and Recovery

The CRS asked how much of a concern opioid prevention, treatment, and recovery is to leadership in Cortland County. The majority of respondents (77.3%) indicated that opioid prevention was "A concern" or "A very great concern," 40.0% and 37.3% respectively. The majority of respondents (78.7%) indicated that opioid treatment was "A concern" or "A very great concern," 38.7% and 40.0% respectively. The majority of respondents (72.0%) indicated that opioid recovery was "A concern" or "A very great concern," 40.0% and 32.0% respectively. 2.7% of respondents indicated that opioid prevention was "Not a concern at all" to leadership, with 7.3% and 4.0% indicating that treatment and recovery (respectively) was "Not a concern at all" for leadership. Table 5 shows a detailed breakdown of question responses.

Table 5. How much of a concern is opioid prevention, treatment, and recovery to leadership in Cortland County?

	Not a concern at all	A slight concern	A concern	A very great concern	Total
Prevention	2.7%	20.0%	**40.0%**	37.3%	75
Treatment	7.3%	20.0%	38.7%	**40.0%**	75
Recovery	4.0%	24.0%	**40.0%**	32.0%	75

The CRS asked how much of a priority opioid prevention, treatment, and recovery is to leadership. The majority of respondents (78.1%) indicated that opioid prevention was "A slight priority" or "A priority" for leadership. 16.4% of respondents indicated that opioid prevention was "The highest priority" for leadership. The majority of respondents (74.0%) indicated that opioid treatment was "A slight priority" or "A priority" for leadership. 17.8% of respondents indicated that opioid prevention was "The highest priority" for leadership. The majority of respondents (79.5%) indicated that opioid recovery was "A slight priority" or "A priority" for leadership. 12.3% of respondents indicated that opioid recovery was "The highest priority." Figure 4 shows the complete question responses.

Figure 4. How much of a priority is opioid prevention, treatment, and recovery to leadership in Cortland County?

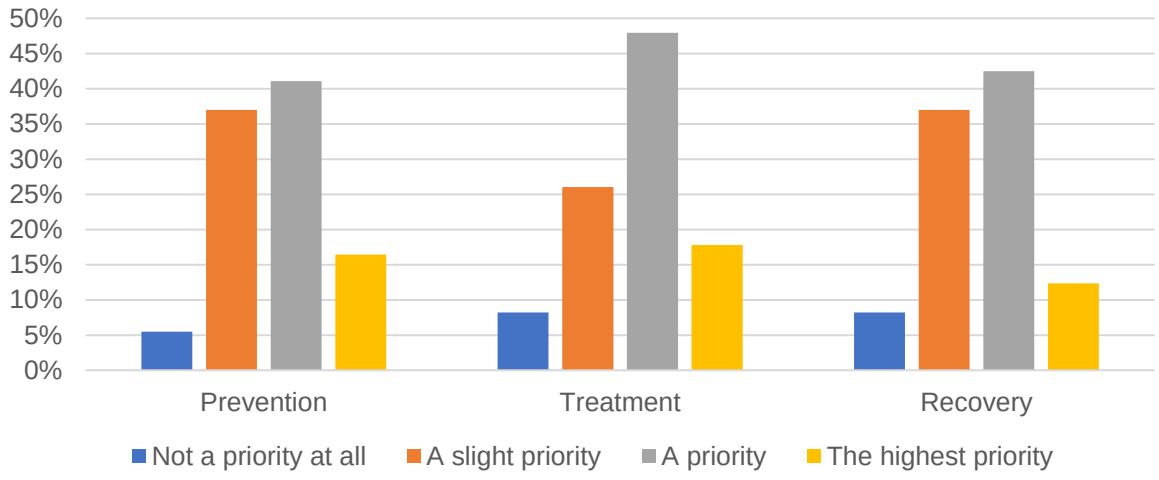


Table 7 shows responses to the question: "How many leaders show support for efforts within the community that address opioid prevention, treatment, and recovery?." The highest proportion of responses for each category was "some," ranging from 39.2% to 68.0%. The majority of respondents indicated either "some" or "many" for all categories. 21.6% of respondents indicated that leaders "At least passively support community efforts without being active in support," making that category the most evenly split of all

question responses. For the last category, 14.7% of respondents indicated that no leaders (“none”) play a key role in ensuring the long-term viability of community efforts.

Table 7. How many leaders show support for efforts in the following ways?

	None	Some	Many	Most	No efforts	Total
At least passively support community efforts without being active in support	1.4%	**39.2%**	36.5%	21.6%	1.4%	75
Participate in developing, improving, or implementing efforts.	6.7%	**62.7%**	22.7%	6.7%	1.3%	75
Support allocating resources to fund community efforts	8.0%	**62.7%**	22.7%	5.3%	1.3%	75
Play a key role as a leader or driving force in planning, developing and implementing efforts	12.0%	**68.0%**	14.7%	4.0%	1.4%	75
Play a key role in ensuring the long-term viability of community efforts.	14.7%	**65.3%**	16.0%	2.7%	1.3%	75

Next Steps

The Community Readiness Survey uncovered a few major gaps in community knowledge/awareness and leadership attitudes around opioid prevention, treatment, and recovery. More than half of the survey respondents indicated that community members have “a little” or “no” knowledge of the:

- signs and symptoms of opioid use disorder,
- how to access and administer naloxone,
- how to access treatment and recovery services,
- the effects of stigma, and
- best practices for treating opioid use disorder.

In addition, respondents indicated that community members are unaware of how effective current efforts are in addressing opioid prevention, treatment, and recovery. These results will help inform the development of outreach campaigns and targeted messaging during the implementation phase of the project (July 2022 for Wave 2).

Another major gap was the willingness of leadership to play key roles in the long-term viability of supporting opioid efforts. The majority of respondents indicated that leadership in the county passively supports efforts, but few play roles in sustaining support. This information will be used to target needs assessment outreach and presentations to county leadership.

Furthermore, the results of this CRS will be included in future versions of the needs assessment (Summer/Fall 2021). In addition, another CRS could be completed as project leadership see fit.

For more information on this publication, contact:

Sara Watrous, Project Director
swatrous@cortlandareactc.org

Cortland Area Communities That Care Coalition, Inc.

45 Crandall Street Cortland, NY 13045
607-299-4910
www.cortlandareactc.org

Appendix B – Microsurvey #1 Report

Microsurvey #1 – Public Perceptions and Opioid-related Stigma

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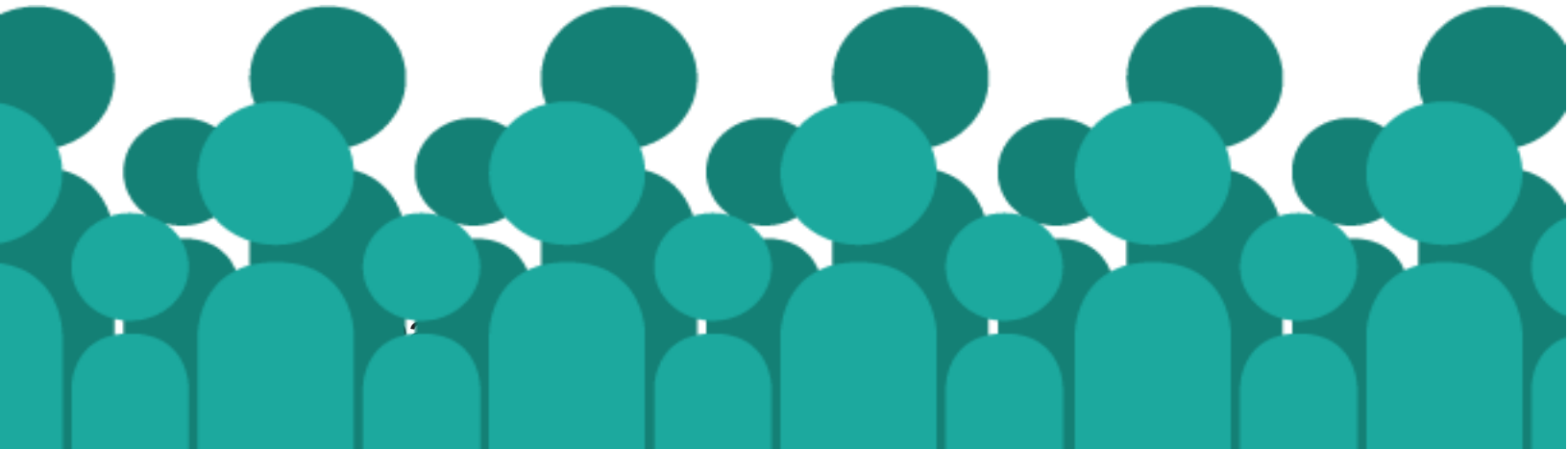
August 2021

Cortland Area Communities That Care engages the community to promote a healthy culture for positive youth development. Our vision is for a community where all youth have the opportunity to be healthy and successful.



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Key Findings

Summary results

- The majority of respondents (91.4%) agreed with the statement that “Most people believe that a person who is addicted to opioids cannot be trusted.”
- 75.5% of respondents agreed with statement that “Most people think that a person who is addicted to opioids is to blame for his or her problems.”
- 75.0% of respondents strongly or somewhat disagreed with the statement that ““I think that a person who is addicted to opioids is to blame for his or her problems.”

Individual belief appears to differ from perceptions of the wider community.

- 58.2 % of respondents agree with the statement “I believe that a person who is addicted to opioids cannot be trusted.” In contrast, 91% of respondents agree with the statement that “Most people believe that a person who is addicted to opioids cannot be trusted.”
- 38.1 % of respondents agree with the statement “I believe that a person who is addicted to opioids is dangerous.” In contrast, 76.5 % of respondents agree with the statement “Most people believe that a person who is addicted to opioids is dangerous.”

Annual household income appears to impact some individual beliefs.

- 44% of respondents with an annual household income under $35,000 agreed (somewhat or strongly) with the statement that “I believe that a person who is addicted to opioids cannot be trusted,” compared to 69% of respondents with a household income above $75,000.
- 41% of respondents with an annual household income under $35,000 agreed with the statement “I think that a person who is addicted to opioids is to blame for his or her problems,” compared to 28% of respondents with a household income above $75,000.

Purpose

Healing Cortland, a project of Cortland Area Communities That Care (CACTC), is a community-led initiative to better understand and improve opioid-related outcomes for Cortland County residents and community organizations. In May 2020, CACTC was selected to lead the assessment and implementation phases of the HEALing Communities Study (HCS) in Cortland County, NY. HCS is a National Institutes of Health (NIH) funded project being managed by Columbia University in NYS.

The purpose of HCS is to reduce opioid-related overdoses by 40% over the course of three years. Using a data-driven approach, Healing Cortland staff will work to reduce fatal and nonfatal overdoses, expand access to prevention and harm reduction resources, lessen stigma around opioid use, and help develop a more responsive treatment and recovery infrastructure. The initiative will support the adoption of evidence-based practices that better serve the prevention, treatment, and recovery needs of the county.

Through the assessment and community readiness phases of the project, Healing Cortland staff identified information and data around opioid-related stigma as a significant knowledge gap in the county. To partially address this gap, the initiative conducted this microsurvey to gather public perceptions on opioid-related stigma. Microsurveys are short, targeted surveys designed to capture input on a specific topic.

It was determined by the Healing Cortland Project Director and Data Coordinator that an effective way to collect data about opioid-related stigma would be to conduct a series of microsurveys around various opioid-related topics. This first survey was distributed through CACTC listservs and newsletters, conducted in-person as an intercept survey, and accessed by community members through QR codes on posters. Surveys were collected utilizing Survey Monkey's online platform from May 05 2021 to May 26 2021 and included questions taken from the Brief Opioid Stigma Scale.[1]

Methods

The Healing Cortland Microsurvey #1 (Public Perceptions and Opioid-related Stigma) was adapted from the Brief Opioid Stigma Scale, a survey instrument designed to assess stereotype awareness and agreement around opioid use.[1] The 7-question survey also included demographic questions including age group, race, ethnicity, gender identity, household income, level of education, and county of residence. Midway through survey release, the gender identity question was changed from "Gender:" to "How Do You Identify?" Because of this change, gender identity responses are not used in the cross-tabulation analysis later in this report. Cross-tabulation results are shown for variable relationships deemed statistically significant through a Chi-Squared test for variable independence. The survey had an estimated completion time of 2-3 minutes.

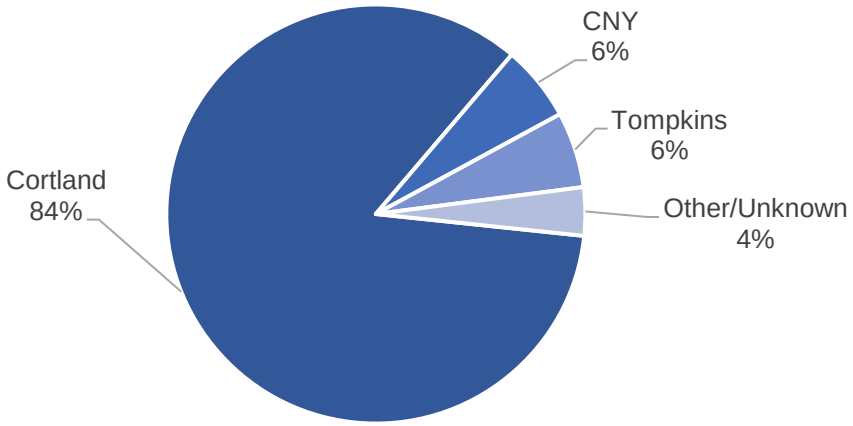
[1] Yang et al. 2019. A New Brief Opioid Stigma Scale to Assess Perceived Public Attitudes and Internalized Stigma: Evidence for Construct Validity. Jrnal of Subst Abuse Treatment. April; 99:44-51.

Results

Summary of Survey Respondents

In total, there were 188 responses to the Healing Cortland Public Perceptions Survey #1. Figure 1 provides a breakdown of respondents by county. 84.6% (159) of respondents were from Cortland County; 5.9% (11) were from Central New York counties (CNY; Madison, Onondaga, Cayuga); 5.9% (11) were from Tompkins County; and the remaining 3.7% (9) were from other counties or did not indicate a county in their response.

Figure 1. Breakdown of Respondent County of Residence

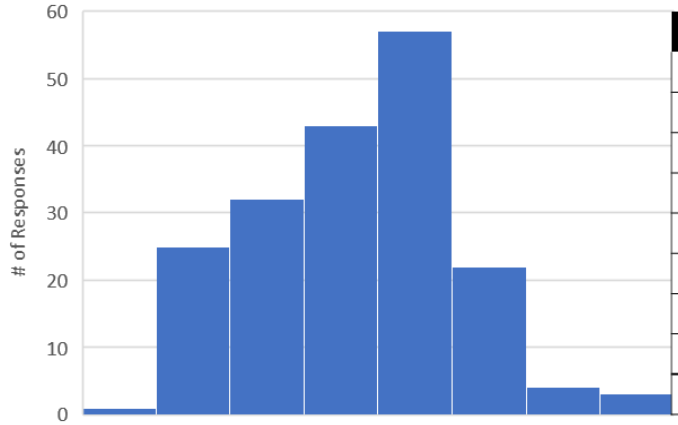


The survey captured basic demographic information from respondents, including age, race, ethnicity, household income, and education level. This section will briefly summarize characteristics of survey respondents. In addition, these demographic characteristics will be used for cross-tabulation analysis later in this report.

Figure 2 shows the age group distribution of survey respondents. The largest response group was aged 50-59 years old (30.3%), followed by the 40-49 year old (22.9%) and 30-39 year old group (17.0%). Figure 3 shows the race and ethnicity breakdown of respondents. The majority of respondents identified as Non-Hispanic white (85.1%),

followed by Non-Hispanic African American or Black (4.8%) and Hispanic (2.1%). 5.9% of respondents declined to share their race and/or ethnicity.

Figure 2. Age Group Distribution of Survey Respondents



Group	Count	Percent
Under 20	1	0.5
20-29	25	13.3
30-39	32	17.0
40-49	43	22.9
50-59	57	30.3
60-69	22	11.7
70+	4	2.1
Decline	3	1.6
Total	187	99.5

Figure 3. Race and Ethnicity Breakdown of Survey Respondents

Group	Count
White	160
African American or Black	9
Native American	2
Other	2
Hispanic	4
Decline	11
Total	188

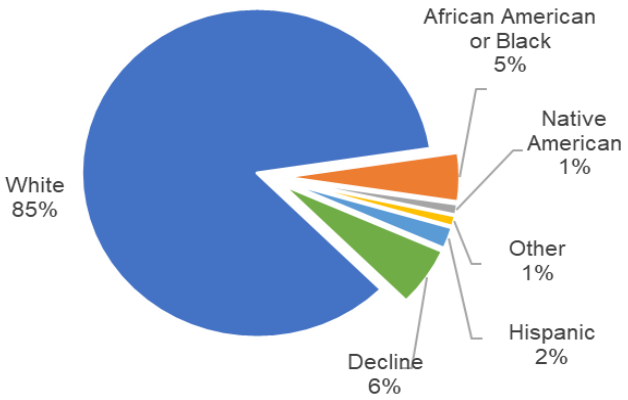


Figure 4 shows the household income group distribution of survey respondents. Over one-third of respondents (33.5%) reported annual household incomes over $75,000. The second largest group reported a household income of $50,000 – 75,000 (19.1%), followed by those reporting household income of $35,000 – 50,000 (14.9%). 10.6% of respondents declined to answer. Figure 5 shows the education level of respondents.

Respondents reporting a Bachelor's degree make up the largest cohort (29.8%), followed by Graduate degree (25.0%) and Associate's degree (22.9%).

Figure 4. Annual Household Income of Survey Respondents

Group	Count
Under $25k	21
$25-$34k	20
$35-50k	28
$50k-75k	36
More than $75k	63
Decline	20
Total	188

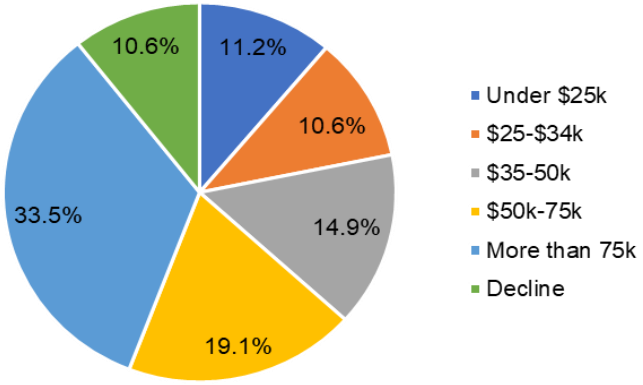
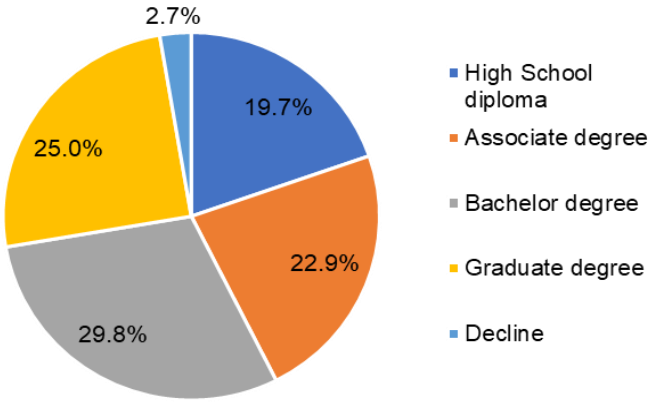


Figure 5. Education Level of Survey Respondents

Group	Count
High School diploma	37
Associate degree	43
Bachelor degree	56
Graduate degree	47
Decline	5



As described in the Methods section, the gender identity question changed during the survey release period, preventing its use in cross-tabulation analysis. However, some response options stayed the same, allowing for basic descriptive analysis. The majority of respondents identified as female (75.5%) with the second largest group identifying as male (20.7%).

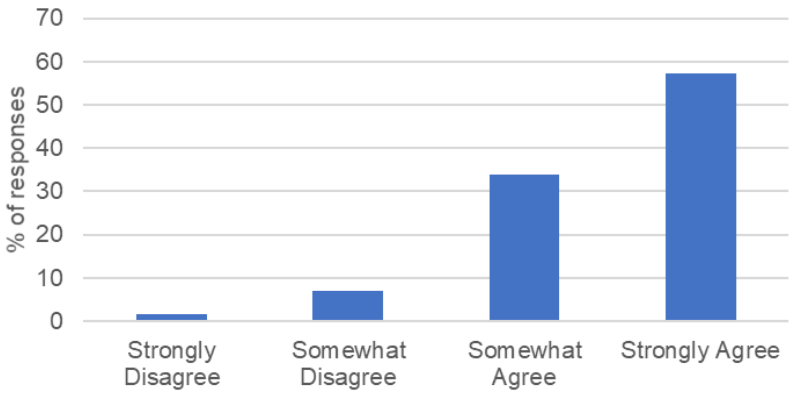
Overview of Stigma Questions

The opioid-related stigma survey asked to what degree respondents agreed with a series of statements in two general categories. The first four statements reference how "most people" in the community feel/think/believe about an opioid-related stereotype. The last three statements reference a respondent's individual feelings/beliefs/thoughts on those same stereotypes.

The survey asked respondents to what degree they agreed with the statement “Most people believe that a person who is addicted to opioids cannot be trusted.” Figure 6 shows the summary breakdown of those responses. The majority of respondents (91.4%) strongly or somewhat agree that most people believe a person who is addicted to opioids cannot be trusted. 57.4% of respondents strongly agreed with that statement, making it the largest response category.

Figure 6. Most people believe that a person who is addicted to opioids cannot be trusted

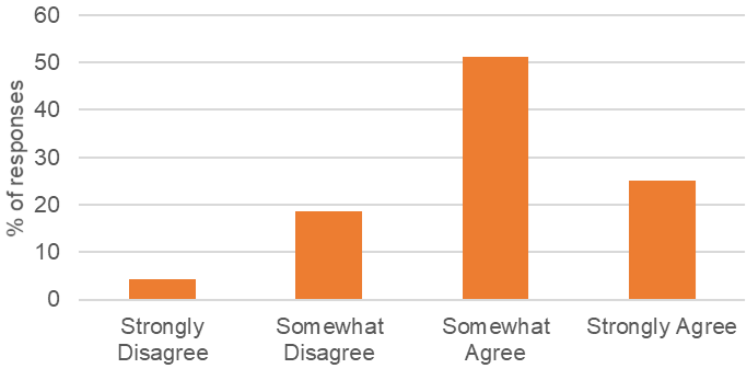
Agreement Scale	Count
Strongly Disagree	3
Somewhat Disagree	13
Somewhat Agree	64
Strongly Agree	108
Total	188



The survey asked respondents to what degree they agreed with the statement “Most people believe that a person who is addicted to opioids is dangerous.” Figure 7 shows the summary breakdown of those responses. Similar to the first statement, the majority of respondents (76.1%) strongly or somewhat agree that most people believe a person who is addicted to opioids is dangerous. 51.1% of respondents somewhat agreed with that statement, making it the largest response category. In addition, 18.6% of respondents somewhat disagreed with the statement.

Figure 7. Most people believe that a person who is addicted to opioids is dangerous

Agreement Scale	Count
Strongly Disagree	8
Somewhat Disagree	35
Somewhat Agree	96
Strongly Agree	47
Total (missing 2)	186

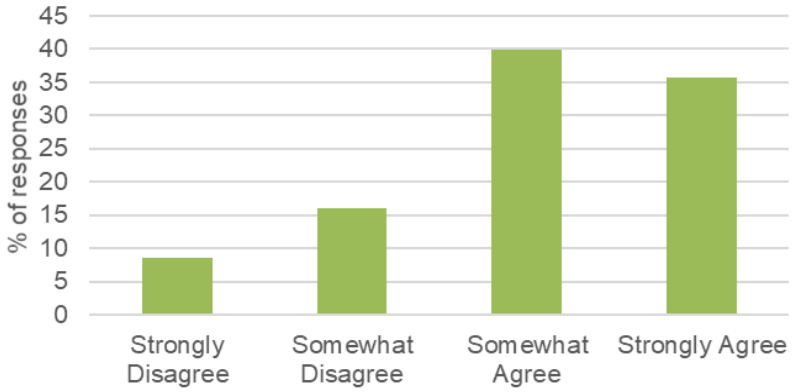


The survey asked respondents to what degree they agreed with the statement “Most people think that a person who is addicted to opioids is to blame for his or her problems.” Figure 8 shows the summary breakdown of those responses. The majority of

respondents (75.5%) strongly or somewhat agree that most people believe a person who is addicted to opioids is to blame for his or her problems. The somewhat agree and strongly agree categories were almost evenly split, with 39.9% and 35.6% of responses respectively. 16.0% of respondents indicated that they somewhat disagreed with the statement.

Figure 8. Most people think that a person who is addicted to opioids is to blame for his or her problems

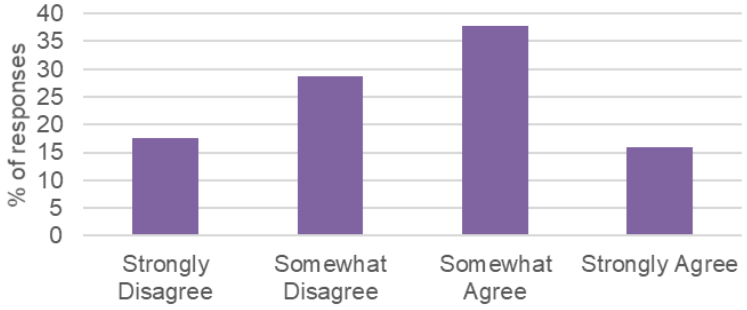
Agreement Scale	Count
Strongly Disagree	16
Somewhat Disagree	30
Somewhat Agree	75
Strongly Agree	67
Total	188



The survey asked respondents to what degree they agreed with the statement “Most people believe that a person who is addicted to opioids is lazy.” Figure 9 shows the summary breakdown of those responses. A slight majority of respondents (51.8%) strongly or somewhat agree that most people believe that a person who is addicted to opioids is lazy. 37.8% of respondents somewhat agreed with that statement, making it the largest single response category. However, the second largest response category was respondents who somewhat disagreed with that statement (28.7%). 17.6% of respondents strongly disagreed with the statement.

Figure 9. Most people believe that a person who is addicted to opioids is lazy

Agreement Scale	Count
Strongly Disagree	33
Somewhat Disagree	54
Somewhat Agree	71
Strongly Agree	30
Total	188

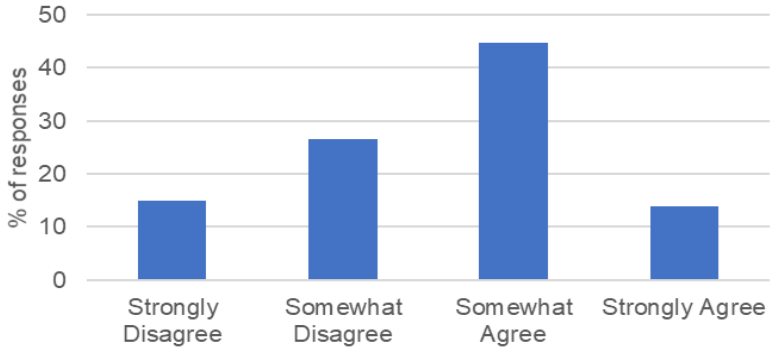


The following three statements reflect individual respondent’s thoughts and beliefs regarding opioid-related stereotypes. The survey asked respondents to what degree they agreed with the statement “I believe that a person who is addicted to opioids cannot be trusted.” Figure 10 shows the summary breakdown of those responses. A majority of respondents (58.5%) strongly or somewhat agree that a person who is

addicted to opioids cannot be trusted. 44.7% of respondents somewhat agreed with that statement, making it the largest single response category. The second largest response category was respondents who somewhat disagreed with that statement (26.6%).

Figure 10. I believe that a person who is addicted to opioids cannot be trusted

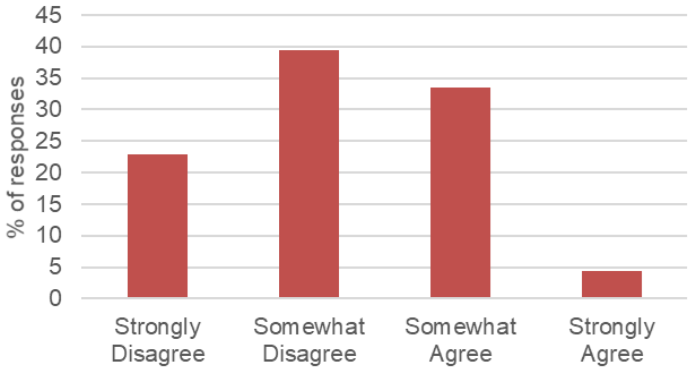
Agreement Scale	Count
Strongly Disagree	28
Somewhat Disagree	50
Somewhat Agree	84
Strongly Agree	26
Total	188



The survey asked respondents to what degree they agreed with the statement “I believe that a person who is addicted to opioids is dangerous.” Figure 11 shows the summary breakdown of those responses. A majority of respondents (62.3%) strongly or somewhat disagree that a person who is addicted to opioids is dangerous. This breaks from respondents’ earlier perceptions where 76.1% strongly or somewhat agreed with the statement that “Most people believe that a person who is addicted to opioids is dangerous.” 39.4% of respondents somewhat disagreed with that statement, making it the largest single response category. The second largest response category was respondents who somewhat agreed with that statement (33.5%).

Figure 11. I believe that a person who is addicted to opioids is dangerous

Agreement Scale	Count
Strongly Disagree	43
Somewhat Disagree	74
Somewhat Agree	63
Strongly Agree	8
Total	188

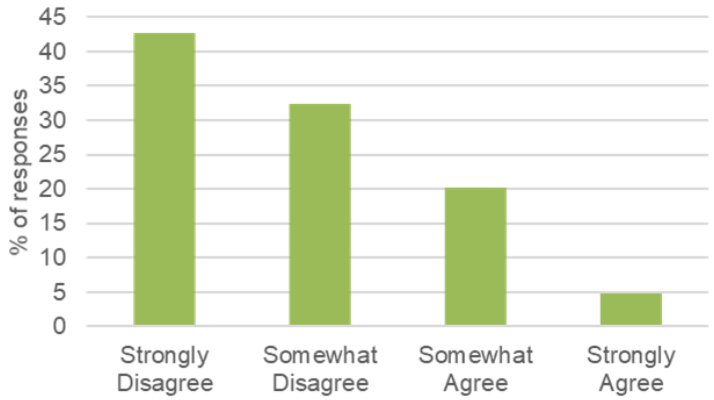


The survey asked respondents to what degree they agreed with the statement “I think that a person who is addicted to opioids is to blame for his or her problems.” Figure 12 shows the summary breakdown of those responses. A majority of respondents (75.0%) strongly or somewhat disagree that a person who is addicted to opioids is to blame for his or her problems. This breaks from respondents’ earlier perceptions where 75.5%

strongly or somewhat agreed with the statement that “Most people believe that a person who is addicted to opioids is to blame for his or her problems.” 42.6% of respondents

Figure 12. I think that a person who is addicted to opioids is to blame for his or her problems

Agreement Scale	Count
Strongly Disagree	80
Somewhat Disagree	61
Somewhat Agree	38
Strongly Agree	9
Total	188



strongly disagreed with that statement, making it the largest single response category. The second largest response category was respondents who somewhat disagreed with that statement (32.4%).

Cross-tabulation Analysis

Cross-tabulation analysis is a way to better understand the relationship between multiple variables in a survey instrument. It is often used to explore the relationship between categorical variables within data. For example, crosstabulation can be used to examine the relationship between household income and individual beliefs about opioid related issues (Are respondents with higher household incomes more likely to agree with the statement “I believe that a person who is addicted to opioids cannot be trusted”?). This section explores the statistically significant relationships (Chi-square) between survey responses on opioid-related stereotypes and various demographic variables. This analysis is not intended to be representative of Cortland County, but rather, reflects the responses provided by survey respondents.

Household Income Effects

The survey asked respondents to what degree they agreed with the statement “I believe that a person who is addicted to opioids cannot be trusted.” Our cross-tabulation analysis found a statistically significant relationship between reported household income categories and agree/disagree responses to the above statement. Table 1 provides a summary of the cross-tabulation counts for this statement.

Out of the 63 respondents reporting a household income of more than $75,000, 44 (or 69.8%) strongly or somewhat agreed with the statement “I believe that a person who is addicted to opioids cannot be trusted.” In comparison, 18 of the 41 (43.9%) respondents

reporting a household income of under $34,000 strongly or somewhat agreed with the statement. Out of the respondents who somewhat agree with the statement, 52 out of 80 (65.0%) reported a household income greater than $50,000.

Table 1. I believe that a person who is addicted to opioids cannot be trusted, Cross-tabulation of Household Income and Agreement Scale

	Under $25k	$25-$34k	$35-50k	$50k-75k	More than $75k	Decline	Total
Strongly Disagree	8	2	5	3	7	3	28
Somewhat Disagree	6	7	5	10	12	10	50
Somewhat Agree	6	7	15	20	32	4	84
Strongly Agree	1	4	3	3	12	3	26
Total	21	20	28	36	63	20	188

The survey asked respondents to what degree they agreed with the statement “I think that a person who is addicted to opioids is to blame for his or her problems.” Our cross-tabulation analysis found a statistically significant relationship between reported household income categories and agree/disagree responses to the above statement. Table 2 provides a summary of the cross-tabulation counts for this statement.

Out of the 63 respondents reporting a household income of more than $75,000, 46 (or 73.0%) strongly or somewhat disagreed with the statement “I think that a person who is addicted to opioids is to blame for his or her problems.” In comparison, 24 of the 41 (58.5%) respondents reporting a household income of under $34,000 strongly or somewhat disagreed with the statement. Out of the respondents who strongly or somewhat disagree with the statement, 79 out of 126 (62.7%) reported a household income greater than $50,000.

Table 2. I think that a person who is addicted to opioids is to blame for his or her problems, Cross-tabulation of Household Income and Agreement Scale

	Under $25k	$25-$34k	$35-50k	$50k-75k	More than $75k	Decline	Total
Strongly Disagree	13	5	15	17	26	4	80
Somewhat Disagree	1	5	8	16	20	11	61
Somewhat Agree	5	9	4	3	12	5	38
Strongly Agree	2	1	1	0	5	0	9
Total	21	20	28	36	63	20	188

Next Steps

While the survey responses are not necessarily representative of Cortland County, Microsurvey#1 provided some much-needed data on stigma around opioid-use. The survey showed differences in the way respondents felt individually about opioid-related stereotypes and the way they thought the community-at-large felt about those same stereotypes. For example, 57.4% of respondents indicated that most people believe a person addicted to opioids cannot be trusted; however, only 13.8% of respondents strongly agree with the statement “I believe that a person who is addicted to opioids cannot be trusted.”

In addition, the survey shed some light on the effects that household income has on individual beliefs around opioid-related stereotypes. In particular, higher incomes correlated with a higher individual belief that persons addicted to opioids cannot be trusted (within the survey respondents).

Moving forward, Healing Cortland will be conducting a second microsurvey focused on stigma around the use and distribution of naloxone (Narcan). The results of that survey will be reported in August 2021. Furthermore, the results of microsurveys will be included in future versions of the needs assessment (Summer/Fall 2021).

For more information on this publication, contact:

Sara Watrous, Project Director
swatrous@cortlandareactc.org

Cortland Area Communities That Care Coalition, Inc.

45 Crandall Street Cortland, NY 13045
607-299-4910
www.cortlandareactc.org

Appendix C – Microsurvey #2 Report

Microsurvey #2 – Public Perceptions and Naloxone-related Stigma

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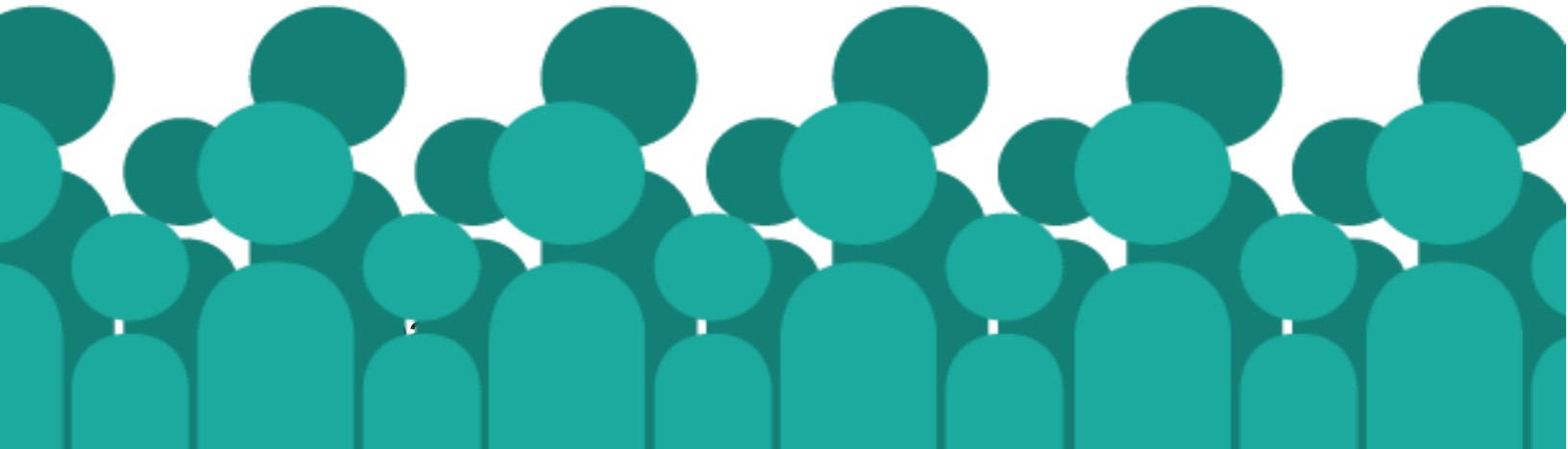
August 2021

Cortland Area Communities That Care engages the community to promote a healthy culture for positive youth development. Our vision is for a community where all youth have the opportunity to be healthy and successful.



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Key Findings

People believe increasing access to naloxone saves lives.

- The majority of respondents (96.5%) agreed with the statement “Providing naloxone (Narcan) to first responders would save lives.”
- The majority of respondents (94.1%) agreed with the statement “Providing naloxone (Narcan) to friends and family members would save lives.”
- The majority of respondents (82.8%) disagreed with the statement “Naloxone (Narcan) should only be given by medical professionals.” Of those 140 respondents who disagreed, 116 (82.8%) strongly disagreed with the statement.

People also believe that naloxone use has mixed effects.

- One third (33.1%) of respondents agreed with the statement “Distributing naloxone (Narcan) will encourage people to use even more opioids.”
- Nearly one third (30.2%) of respondents agreed with the statement “Preventing overdoses is not effective because people will overdose again.” 31.0% of respondents with less than a bachelor’s degree agreed with this statement compared to 23.2% of those with a bachelor or graduate degree.

Age may play a role in perceptions of naloxone use.

- 60.9% (14) of respondents aged 30-39 agreed with the statement “Distributing naloxone (Narcan) will encourage people to use even more opioids.” This makes respondents in their 30’s the only age group where a majority of respondents felt that distributing Narcan will encourage people to use even more opioids.
- 75.6% of respondents over the age of 50 strongly disagreed with the statement “Naloxone (Narcan) should only be given by medical professionals.” In comparison, 61.8% of respondents under 50 strongly agreed with the statement.

Purpose

Healing Cortland, a project of Cortland Area Communities That Care (CACTC), is a community-led initiative to better understand and improve opioid-related outcomes for Cortland County residents and community organizations. In May 2020, CACTC was selected to lead the assessment and implementation phases of the HEALing Communities Study (HCS) in Cortland County, NY. HCS is a National Institutes of Health (NIH) funded project being managed by Columbia University in NYS.

The purpose of HCS is to reduce opioid-related overdoses by 40% over the course of three years. Using a data-driven approach, Healing Cortland staff will work to reduce fatal and nonfatal overdoses, expand access to prevention and harm reduction resources, lessen stigma around opioid use, and help develop a more responsive treatment and recovery infrastructure. The initiative will support the adoption of evidence-based practices that better serve the prevention, treatment, and recovery needs of the county.

Through the assessment and community readiness phases of the project, Healing Cortland staff identified information and data around naloxone-related stigma as a significant knowledge gap in the county. To partially address this gap, the initiative conducted this microsurvey to gather public perceptions on naloxone-related stigma. Microsurveys are short, targeted surveys designed to capture input on a specific topic.

It was determined by the Healing Cortland Project Director and Data Coordinator that an effective way to collect data about opioid-related stigma would be to conduct a series of microsurveys around various opioid-related topics. This second survey was distributed through CACTC listservs and newsletters, conducted in-person as an intercept survey, and accessed by community members through QR codes on posters. In addition, community partners handed out the microsurvey through the course of their activities. Surveys were collected utilizing Survey Monkey's online platform from August 01 2021 to August 13 2021.

Methods

The Healing Cortland Microsurvey #2 (Public Perceptions and Naloxone-related Stigma) was adapted from research conducted by Hrushak et al. on attitudes and perceptions on naloxone use among patients and first responders.[2] The 6-question survey also included demographic questions including age group, race, ethnicity, gender identity, household income, level of education, and county of residence. Cross-tabulation results are shown for variable relationships deemed statistically significant through a Chi-Squared test for variable independence. The survey had an estimated completion time of 2-3 minutes.

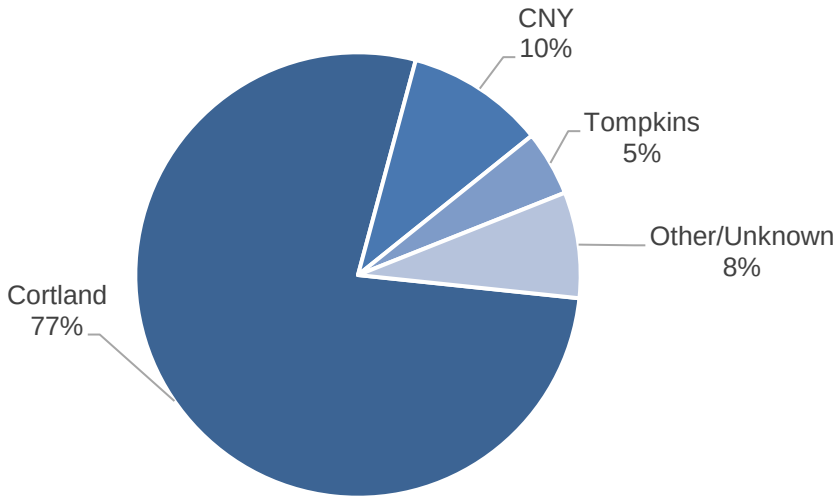
[2] Hruschak, Valerie, Beaugard, C., and Rosen, D. Attitudes and Perceptions of Naloxone Administration Among Chronic Pain Patients and First Responders: Implications for Research and Practice. 2020. Jrnl of Addiction and Addictive Disorders.

Results

Summary of Survey Respondents

In total, there were 169 responses to the Healing Cortland Public Perceptions Survey #2. Figure 1 provides a breakdown of respondents by county. 77.5% (131) of respondents were from Cortland County; 10.1% (17) were from Central New York counties (Cayuga, Madison, Onondaga, Oswego) with 14 of those indicating Onondaga; 4.7% (8) were from Tompkins County; and the remaining 7.7% (13) were from other counties or did not indicate a county in their response.

Figure 4. Breakdown of Respondent County of Residence

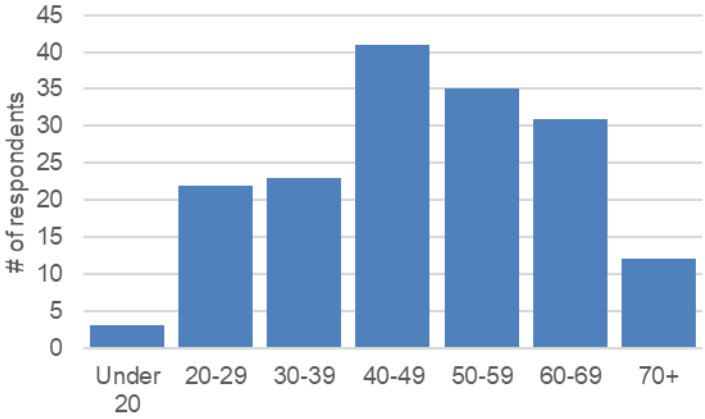


The survey captured basic demographic information from respondents, including age, race, ethnicity, household income, and education level. This section will briefly summarize characteristics of survey respondents. In addition, these demographic characteristics will be used for cross-tabulation analysis later in this report.

Figure 2 shows the age group distribution of survey respondents. The largest response group was aged 40-49 years old (24.3%), followed by the 50-59 year old (20.7%) and 60-69 year old group (18.3%). Figure 3 shows the race breakdown of respondents. The

overwhelming majority of respondents identified as Non-Hispanic white (94.6%), followed by Prefer not to say (3.0%). Zero survey respondents identified as Hispanic.

Figure 5. Age Group Distribution of Survey Respondents



Group	Count	Percent
Under 20	3	1.8
20-29	22	13.0
30-39	23	13.6
40-49	41	24.3
50-59	35	20.7
60-69	31	18.3
70+	12	7.1
Decline	1	0.6
Total	168	99.4

Figure 6. Race Breakdown of Survey Respondents

Group	Count
White	159
African American or Black	1
American Indian	1
Prefer not to say	5
Prefer to self describe	2
Total	168

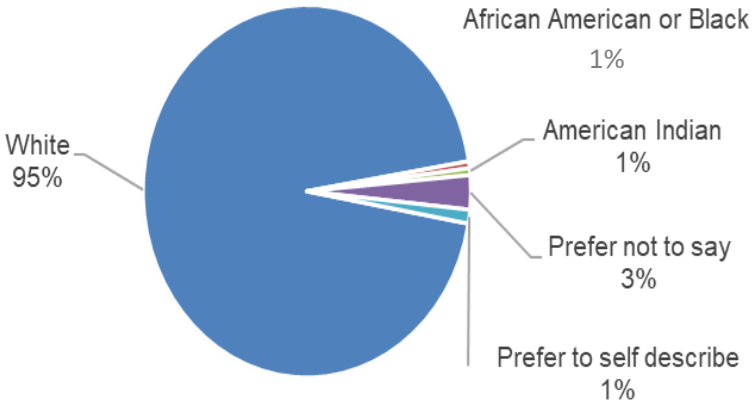


Figure 4 shows the household income group distribution of survey respondents. Over one-fourth of respondents (26.3%) reported annual household incomes over $75,000. The second largest group reported a household income of $50,000 – 75,000 (23.4%), followed by those reporting household income under $25,000 (15.0%). 12.6% of respondents preferred not to answer. Figure 5 shows the education level of

respondents. Respondents reporting a Graduate degree make up the largest cohort (23.3%), followed by Some college (20.9%) and Bachelor degree (19.6%).

Figure 4. Annual Household Income of Survey Respondents

Group	Count
Under $25k	25
$25-$34k	15
$35-50k	23
$50k-75k	39
More than $75k	44
Decline	21
Total	167

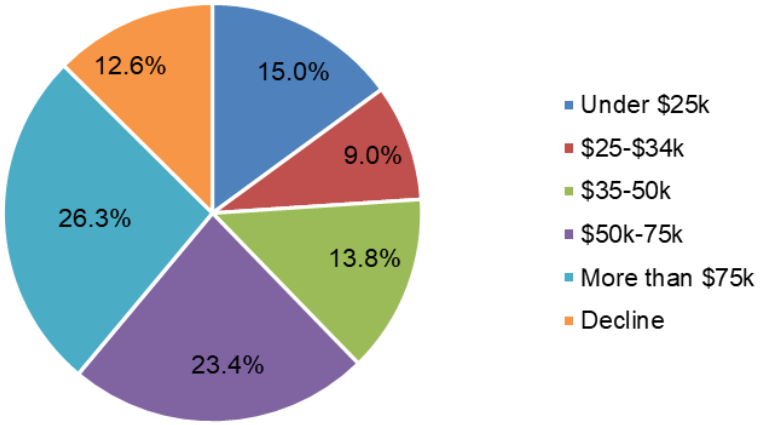
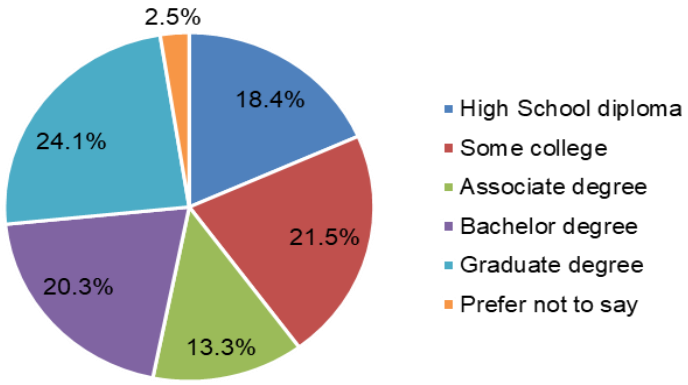


Figure 5. Education Level of Survey Respondents

Group	Count
Less than high school	5
High School diploma	29
Some college	34
Associate degree	21
Bachelor degree	32
Graduate degree	38
Prefer not to say	4
Total	163



With respect to gender identity, the survey asked respondents to self-describe; thus, responses represent respondent entries and not necessarily gender identities. Healing Cortland staff manually coded and grouped responses. Table 1 lists the responses, frequency, and percentage. The majority of respondents identified as female (69.2%)

with the second largest group identifying as male (17.2%). 7.7% of respondents did not answer.

Table 1. Respondent self-described responses to "What is your gender identity?"

Response	Count	Percent
Female	117	69.2
Woman (she/her, girl)	2	1.2
Male	29	17.2
Non-binary	2	1.2
Did not answer	13	7.7
Unknown response	6	3.6
Total	169	100

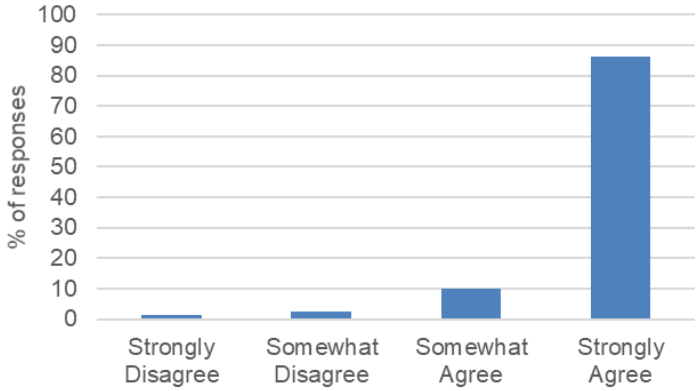
Overview of Naloxone-related Questions

First, the naloxone-related stigma survey provided a brief description of naloxone - "Naloxone (Narcan) is a nasal spray that can reverse the effects of an opioid overdose." Narcan is the most popular brand of naloxone medication. It is most often administered as a nasal spray, but intravenous options do exist. Next, the survey asked to what degree respondents agreed with a series of five statements on overdose prevention and the use of naloxone. The final question asked whether or not respondents were familiar with naloxone before taking the survey.

The survey asked respondents to what degree they agreed with the statement "Providing naloxone (Narcan) to first responders would save lives." Figure 6 shows the summary breakdown of those responses. The majority of respondents (96.5%) strongly or somewhat agree providing Narcan to first responders would save lives. 86.4% of respondents strongly agreed with that statement, making it the largest response category.

Figure 6. Providing naloxone (Narcan) to first responders would save lives.

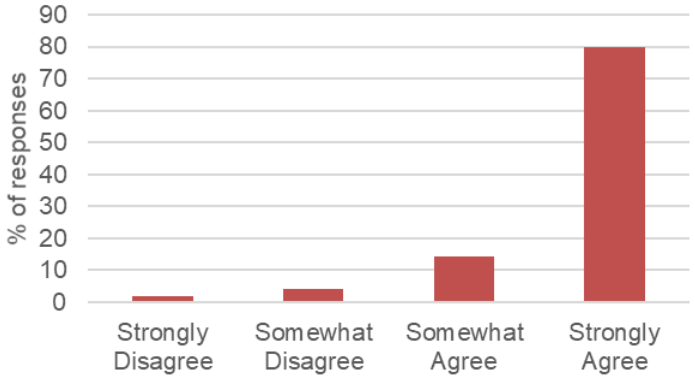
Agreement Scale	Count
Strongly Disagree	2
Somewhat Disagree	4
Somewhat Agree	17
Strongly Agree	146
Total	169



The survey asked respondents to what degree they agreed with the statement "Providing naloxone (Narcan) to friends and family members would save lives." Figure 7 shows the summary breakdown of those responses. Similar to the first statement, the majority of respondents (94.1%) strongly or somewhat agree that providing naloxone to friends and family members would save lives. 79.9% of respondents strongly agreed with that statement, making it the largest response category. In addition, 14.2% of respondents somewhat agreed with the statement.

Figure 7. Providing naloxone (Narcan) to friends and family members would save lives.

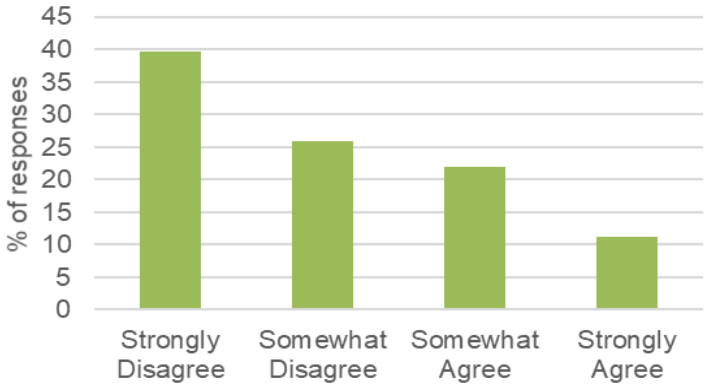
Agreement Scale	Count
Strongly Disagree	3
Somewhat Disagree	7
Somewhat Agree	24
Strongly Agree	135
Total	169



The survey asked respondents to what degree they agreed with the statement "Distributing naloxone (Narcan) will encourage people to use even more opioids." Figure 8 shows the summary breakdown of those responses. The majority of respondents (65.6%) strongly or somewhat disagree that distributing Narcan will encourage people to use even more opioids. 39.6% of respondents strongly disagreed with the statement, making it the single highest response category. 21.9% of respondents somewhat agreed with the statement. 11.2% of respondents indicated that they strongly agreed with the statement.

Figure 8. Distributing naloxone (Narcan) will encourage people to use even more opioids.

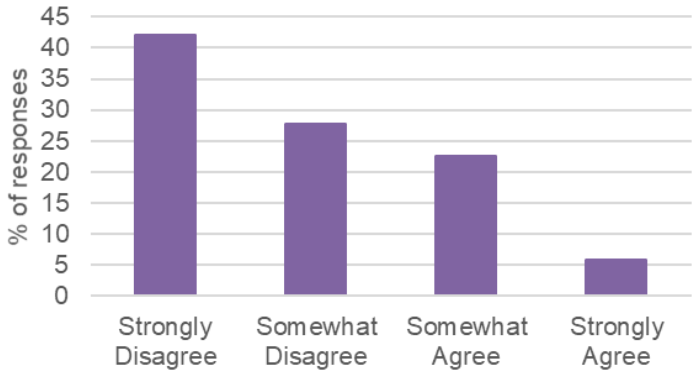
Agreement Scale	Count
Strongly Disagree	67
Somewhat Disagree	44
Somewhat Agree	37
Strongly Agree	19
Total	167



The survey asked respondents to what degree they agreed with the statement "Preventing overdoses is not effective because people will overdose again." Figure 9 shows the summary breakdown of those responses. A majority of respondents (69.8%) strongly or somewhat disagreed that preventing overdoses is not effective because people will overdose again. 42.0% of respondents strongly disagreed with that statement, making it the largest single response category. 22.5% of respondents somewhat agreed with the statement.

Figure 9. Preventing overdoses is not effective because people will overdose again

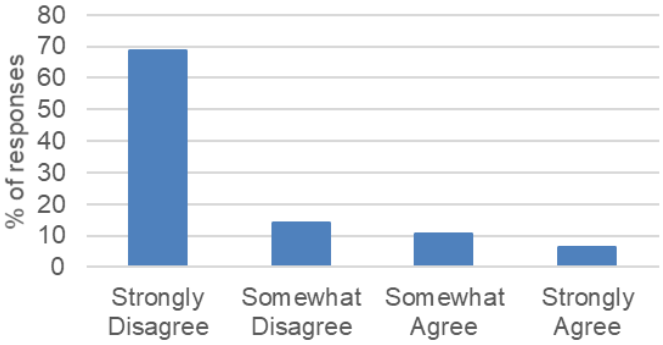
Agreement Scale	Count
Strongly Disagree	71
Somewhat Disagree	47
Somewhat Agree	38
Strongly Agree	10
Total	166



The survey asked respondents to what degree they agreed with the statement "Naloxone (Narcan) should only be given by medical professionals." Figure 10 shows the summary breakdown of those responses. A majority of respondents (82.8%) strongly or somewhat disagreed that Narcan should only be given by medical professionals. 68.6% of respondents strongly disagreed with that statement, making it the largest single response category. 10.7% of respondents somewhat agreed with the statement.

Figure 10. Naloxone (Narcan) should only be given by medical professionals

Agreement Scale	Count
Strongly Disagree	116
Somewhat Disagree	24
Somewhat Agree	18
Strongly Agree	11
Total	169



The final survey question asked respondents "Before this survey, had you heard of naloxone (Narcan)?" 95.3% (161) of respondents indicated that they had heard of naloxone before taking part in the survey.

Cross-tabulation Analysis

Cross-tabulation analysis is a way to better understand the relationship between multiple variables in a survey instrument. It is often used to explore the relationship between categorical variables within data. For example, crosstabulation can be used to examine the relationship between household income and respondent beliefs about naloxone use (Are respondents with higher household incomes more likely to agree with the statement “Distributing naloxone will encourage people to use even more opioids”?). This section explores the statistically significant relationships (Chi-square) between survey responses on naloxone use and various demographic variables. This analysis is not intended to be representative of Cortland County, but rather, reflects the responses provided by survey respondents.

Age Group Effects

The survey asked respondents to what degree they agreed with the statement “Distributing naloxone (Narcan) will encourage people to use even more opioids.” Our cross-tabulation analysis found a statistically significant relationship between age group categories and agree/disagree responses to the above statement. Table 2 provides a summary of the cross-tabulation counts for this statement.

Out of the 88 respondents under the age of 50, 37.5% (33) strongly or somewhat agreed with the statement “Distributing naloxone (Narcan) will encourage people to use even more opioids.” In comparison, 23 of the 77 (29.9%) respondents over the age of 50 strongly or somewhat agreed with the statement. 68.9% (28) of respondents aged 40-49; 81.8% (18) of respondents aged 20-29; and 74.3% of respondents aged 50-59 disagreed with the statement. 60.9% (14) of respondents aged 30-39 agreed with the statement – making this the only age group where a majority of respondents agreed that distributing Narcan will encourage people to use even more opioids.

Table 2. Distributing naloxone (Narcan) will encourage people to use even more opioids; Cross-tabulation of Age Group and Agreement Scale

	Under 20	20-29	30-39	40-49	50-59	60-69	70+	Prefer not to say	Total
Strongly Disagree	0	9	5	20	12	16	5	0	67
Somewhat Disagree	0	9	4	8	14	5	2	1	43
Somewhat Agree	2	3	7	9	7	5	4	0	37
Strongly Agree	0	1	7	4	2	4	1	0	19
Total	2	22	23	41	35	30	12	1	166

The survey asked respondents to what degree they agreed with the statement “Naloxone (Narcan) should only be given by medical professionals.” Our cross-tabulation analysis found a statistically significant relationship between age group

categories and agree/disagree responses to the above statement. Table 3 provides a summary of the cross-tabulation counts for this statement.

Out of the 89 respondents under the age of 50, 22.5% (20) strongly or somewhat agreed with the statement “Naloxone (Narcan) should only be given by medical professionals.” In comparison, 9 of the 78 (11.5%) respondents over the age of 50 strongly or somewhat agreed with the statement. 70.7% (29) of respondents aged 40-49; 80.0% (28) of respondents aged 50-59; and 80.6% of respondents aged 60-69 strongly disagreed with the statement.

Table 3. Naloxone (Narcan) should only be given by medical professionals; Cross-tabulation of Age Group and Agreement Scale

	Under 20	20-29	30-39	40-49	50-59	60-69	70+	Prefer not to say	Total
Strongly Disagree	0	13	13	29	28	25	6	1	115
Somewhat Disagree	1	6	2	5	5	3	2	0	24
Somewhat Agree	0	2	7	4	2	1	2	0	18
Strongly Agree	2	1	1	3	0	2	2	0	11
Total	3	22	23	41	35	31	12	1	168

Education Level Effects

The survey asked respondents to what degree they agreed with the statement “Distributing naloxone (Narcan) will encourage people to use even more opioids.” Our cross-tabulation analysis found a statistically significant relationship between education level categories and agree/disagree responses to the above statement. Table 4 provides a summary of the cross-tabulation counts for this statement.

Out of the 87 respondents with less than a bachelor’s degree, 40.2% (35) strongly or somewhat agreed with the statement “Distributing naloxone (Narcan) will encourage people to use even more opioids.” In comparison, 17 of the 70 (24.3%) respondents with a bachelor or graduate degree strongly or somewhat agreed with the statement. 81.6% (31) of respondents with a graduate degree disagreed with the statement and 77.4% (24 of 31) of those respondents strongly disagreed.

While the majority of all education level categories disagreed with the statement, some categories were more evenly split. Of the respondents reporting a high school diploma, 53.6% (15) disagreed and of the respondents with an associate degree, 52.4% (11) disagreed.

Table 4. Distributing naloxone (Narcan) will encourage people to use even more opioids; Cross-tabulation of Education Level and Agreement Scale

	Less than High School	High School Diploma	Some college, no degree	Associate Degree	Bachelor Degree	Graduate Degree	Prefer not to say	Total
Strongly Disagree	1	8	12	6	14	24	0	65
Somewhat Disagree	1	7	12	5	8	7	2	42
Somewhat Agree	1	6	8	8	7	5	0	35
Strongly Agree	1	7	2	2	3	2	2	19
Total	4	28	34	21	32	38	4	161

The survey asked respondents to what degree they agreed with the statement "Preventing overdoses is not effective because people will overdose again." Our cross-tabulation analysis found a statistically significant relationship between education level categories and agree/disagree responses to the above statement. Table 5 provides a summary of the cross-tabulation counts for this statement.

Out of the 87 respondents with less than a bachelor's degree, 31.0% (27) strongly or somewhat agreed with the statement "Preventing overdoses is not effective because people will overdose again." In comparison, 16 of the 69 (23.2%) respondents with a bachelor or graduate degree strongly or somewhat agreed with the statement. 77.4% (24) of respondents with a bachelor's degree and 76.3% (29) of respondents with a graduate degree disagreed with the statement. However, of those in disagreement, 72.4% (21 of 29) of those with a graduate degree strongly disagreed compared to 50% (12 of 24) of respondents with a bachelor's degree.

While the majority of all education level categories disagreed with the statement, some categories were more evenly split. Of the respondents reporting a high school diploma, 57.1% (16) disagreed with the statement – making it the only category where less than 70% of respondents disagreed with the statement (omitting the less than high school category, n=5).

Table 5. Preventing overdoses is not effective because people will overdose again; Cross-tabulation of Education Level and Agreement Scale

	Less than High School	High School Diploma	Some college, no degree	Associate Degree	Bachelor Degree	Graduate Degree	Prefer not to say	Total
Strongly Disagree	2	8	18	6	12	21	0	67
Somewhat Disagree	1	8	9	8	12	8	1	47
Somewhat Agree	1	8	6	5	7	8	1	36
Strongly Agree	1	4	1	1	0	1	2	10
Total	5	28	34	20	31	38	4	160

Next Steps

The results of Microsurvey #2 are not intended to be representative of Cortland County and its residents. However, the survey provided some much-needed data on stigma related to overdose prevention and naloxone administration. This should be thought of as just one step in further engaging with the community around issues of opioid prevention, treatment, and recovery. In addition, the survey builds on the findings of the first microsurvey to provide Healing Cortland more insight into the different forms of opioid-related stigma.

The survey respondents indicated consistent support for the use of naloxone (Narcan) in preventing overdoses and saving lives. For example, the overwhelming majority of respondents indicated that providing naloxone (Narcan) to first responders (96.5%) and to family members (94.1%) would help save lives. While there is strong indication from respondents that naloxone saves lives, there is also some indication that naloxone may contribute to opioid use. 33.1% of respondents agreed with the statement “Distributing naloxone (Narcan) will encourage people to use even more opioids.”

Moving forward, Healing Cortland is committed to examining the various ways that stigma around opioid-use presents in the community. Staff will continue to work with community partners to identify the best ways to engage with this topic and those most impacted by stigma. Furthermore, the results of both microsurveys will be included in future versions of the needs assessment (Summer/Fall 2021).

For more information on this publication, contact:

Sara Watrous, Project Director
swatrous@cortlandareactc.org

Cortland Area Communities That Care Coalition, Inc.

45 Crandall Street Cortland, NY 13045
607-299-4910
www.cortlandareactc.org

Healing Cortland understands the provisional nature of the data included in the assessment and invites anyone to share updated data sources or ideas for collecting more up-to-date data. To share information, or for more information on this publication, contact:

Sara Watrous, Project Director
swatrous@cortlandareactc.org

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www.cortlandareactc.org
www.healingcortland.org