

Project Introduction

In the most recent Community Health Assessment, conducted by the Madison County Department of Health (MCDOH) and local hospitals, alcohol misuse was identified as a priority area for Madison County. In response, the MCDOH is developing a health issue profile to conduct a comprehensive assessment of alcohol misuse within the county. My project is to assist in the creation of this profile, which will eventually be shared with community stakeholders and the general public. The findings will be used to address the issue and to inform current and future alcohol-related initiatives in the county.

Research Questions

1. What is the current state of alcohol misuse on at the national, state, and county levels?
2. What are the risk (and protective) factors and high-risk populations for alcohol misuse?
3. What are the effects of alcohol at the individual, family, and community level?

	Madison County	New York State	National
Percentage of Adults Binge Drinking	25%	18.3%	16.7%
Age-Adjusted ER Rate due to Alcohol Abuse	25.0 per 10,000	82.7 per 10,000	-
Age-Adjusted Hospitalization Rate due to Alcohol Abuse	15 per 10,000	28.1 per 10,000	-
Financial Cost	-	\$16.3B	> \$200B per year

Table 1. Alcohol statistics at the county, state and national levels.

Underage Drinking

As of 2018, alcohol continues to be the most frequently used drug among youth in Madison County.

	Madison County	New York State	National
Youths who report alcohol use in the past 30 days	20%	-	18.8%
High school students who report alcohol use in the past 30 days	25.3%	27%	30%
Youths who report binge drinking in the past 30 days	9.7%	-	4.8%
High school students who report binge drinking in the past 30 days	12.5%	10%	13.5%

Table 2. Underage drinking behavior at the county, state and national level. Youths refers to those aged 12 to 20.

- In Madison County, of the high school students who used alcohol in the past 30 days, almost half of them (49.3%) had engaged in binge-drinking

Madison County Youth Alcohol Perceptions Survey 2020

We designed a qualitative survey to capture youth perceptions of alcohol use among peers and adults in their communities. The survey also asks about the factors that influence youth attitudes and behaviors regarding alcohol use. The survey has been distributed to youths across the county and will run until 24 July.

References

1. Griswold MG, Fullman N, Hawley C, et al. Alcohol use and burden for 195 countries and territories, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016. *Lancet*. 2018;392(10152):1015-1035. doi:10.1016/S0140-6736(18)31310-2
2. CDC. Excessive Alcohol Use. Centers for Disease Control and Prevention. Published 2019. Accessed June 30, 2020. <https://www.cdc.gov/chronicdisease/resources/publications/factsheets/alcohol.htm>
3. Substance Abuse and Mental Health Services Administration (SAMHSA). 2018 National Survey on Drug Use and Health (NSDUH). Table 2.1B—Tobacco Product and Alcohol Use in Lifetime, Past Year, and Past Month among Persons Aged 12 or Older, by Age Group: Percentages, 2017 and 2018. Accessed July 20, 2020. <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHDetailedTabs2018R2/NSDUHDetailedTabs2018R2.htm#tab2-1b>
4. Grant BF, Chou SP, Saha TD, et al. Prevalence of 12-month alcohol use, high-risk drinking, and DSM-IV alcohol use disorder in the United States, 2001-2002 to 2012-2013: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *JAMA Psychiatry*. 2017;74(9):911-923. doi:10.1001/jamapsychiatry.2017.2161
5. Gruza RA, Sher KJ, Kerr WC, et al. Trends in Adult Alcohol Use and Binge Drinking in the Early 21st-Century United States: A Meta-Analysis of 6 National Survey Series. *Alcohol Clin Exp Res*. 2018;42(10):1939-1950. doi:10.1111/acer.13859
6. HealthCNY. Indicators: Adults who Binge Drink. Accessed July 5, 2020. <http://www.healthcny.org/indicators/index/view/indicatorId=55&localTypeId=2&periodId=271>
7. HealthCNY. Indicators: Alcohol-Related Driving Deaths. Accessed July 5, 2020. <http://www.healthcny.org/indicators/index/view/indicatorId=2364&localTypeId=2>

Overview

Alcohol use contributes significantly to the disease burden in the United States and worldwide.¹ Excessive alcohol use, which includes behaviors such as binge drinking, heavy drinking, and any alcohol use by anyone < 21 or by pregnant women, is responsible for an estimated 88,000 deaths annually in the United States, with binge drinking accounting for half of these deaths.² Other than its association with health risks, excessive alcohol use also leads to large economic and social costs.²

Quick Facts:

- In the U.S., 70% of people ≥18 reported drinking alcohol in the past year, and 55.3% reported drinking in the past month³
- An estimated 1 in 6 U.S. adults binge drinks about once a week, consuming an average of 7 drinks per binge²
- Sharp national increases in alcohol use over the past 10-15 years across most sociodemographic groups^{4,5}

Binge Drinking

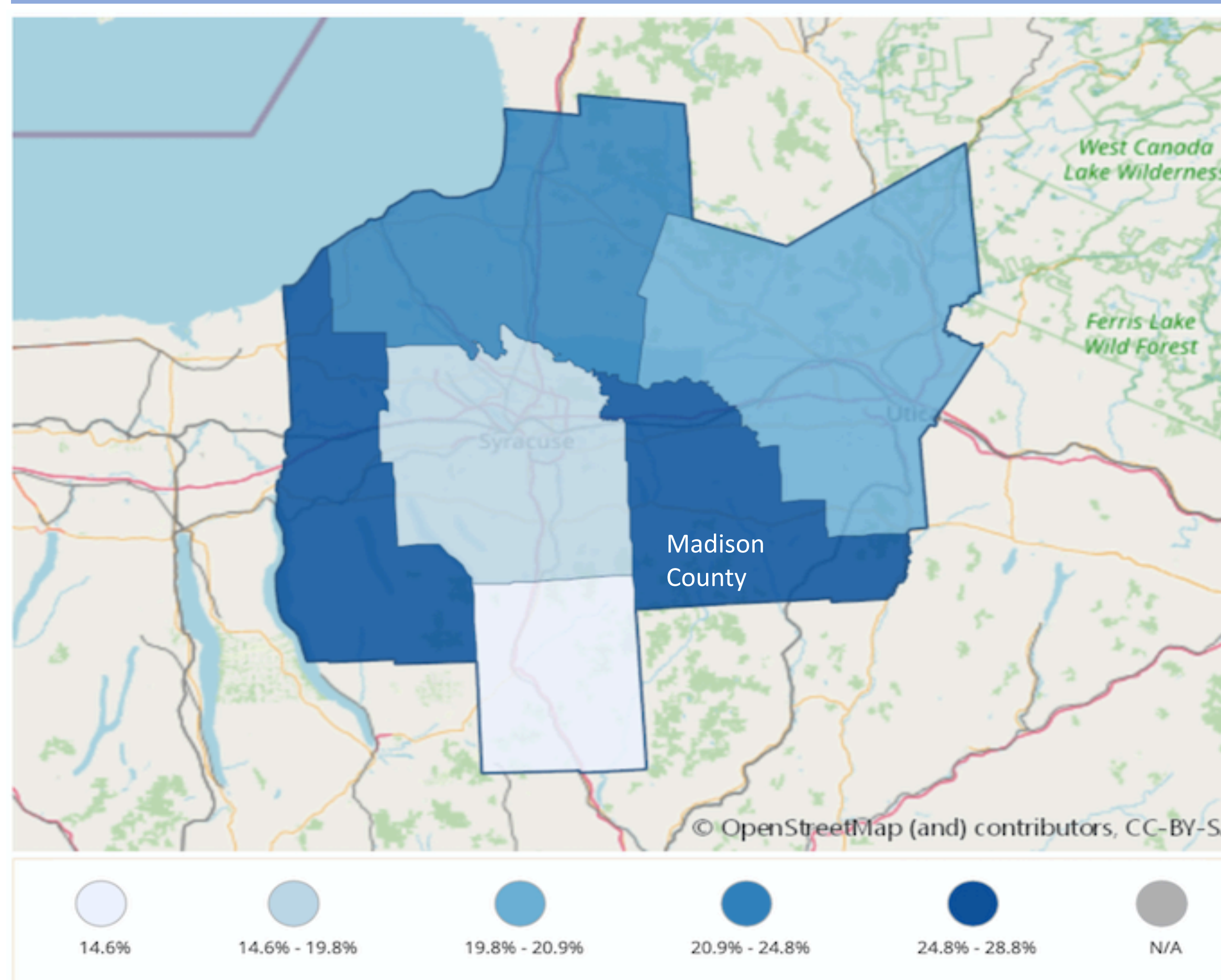


Figure 1. Adults who reported binge drinking in the 30 days prior to being surveyed, in Madison County and surrounding counties⁶

Risk and Protective Factors

Many characteristics at the genetic, psychological, family, community, or cultural level can affect a person's likelihood of using and misusing alcohol. Some of the risk factors for developing Alcohol Use Disorder (AUD) include:

- Family history
- Genetics
- Experiencing trauma and/or high levels of stress
- Peer pressure
- Lack of family supervision or involvement
- High liquor store density in communities

Protective Factors:

- Social, emotional, behavioral, cognitive and moral competence
- Parental involvement
- Policies limiting alcohol sales
- Healthy community norms about not misusing alcohol

Recommendations

Recommendations were adapted from resources provided by the CDC's Community Preventive Services Task Force to meet the needs of Madison County. Some of the proposals are outlined here.

1. Reduce excessive alcohol consumption and related harms by implementing community-wide policies and programs:
 - Limiting alcohol outlet density using licensing or zoning processes
 - Increase state dram shop liability laws
 - Limit or maintain the days or/and hours when alcohol can be sold
 - Enhance enforcement of laws prohibiting alcohol sales to minors
2. Implement a county-wide campaign to raise awareness of the risks associated with excessive alcohol use
3. Promote non-alcohol social gatherings in the community
4. Monitor excessive alcohol use in the county:
 - Implement screening for excessive alcohol use in primary care settings for adults aged 18 years of older, including pregnant women. Provide people engaged in excessive alcohol use with brief behavioral counseling interventions.
 - Report prevalence of drinking behaviors for different subpopulations

Alcohol-Related Motor Vehicle Accidents

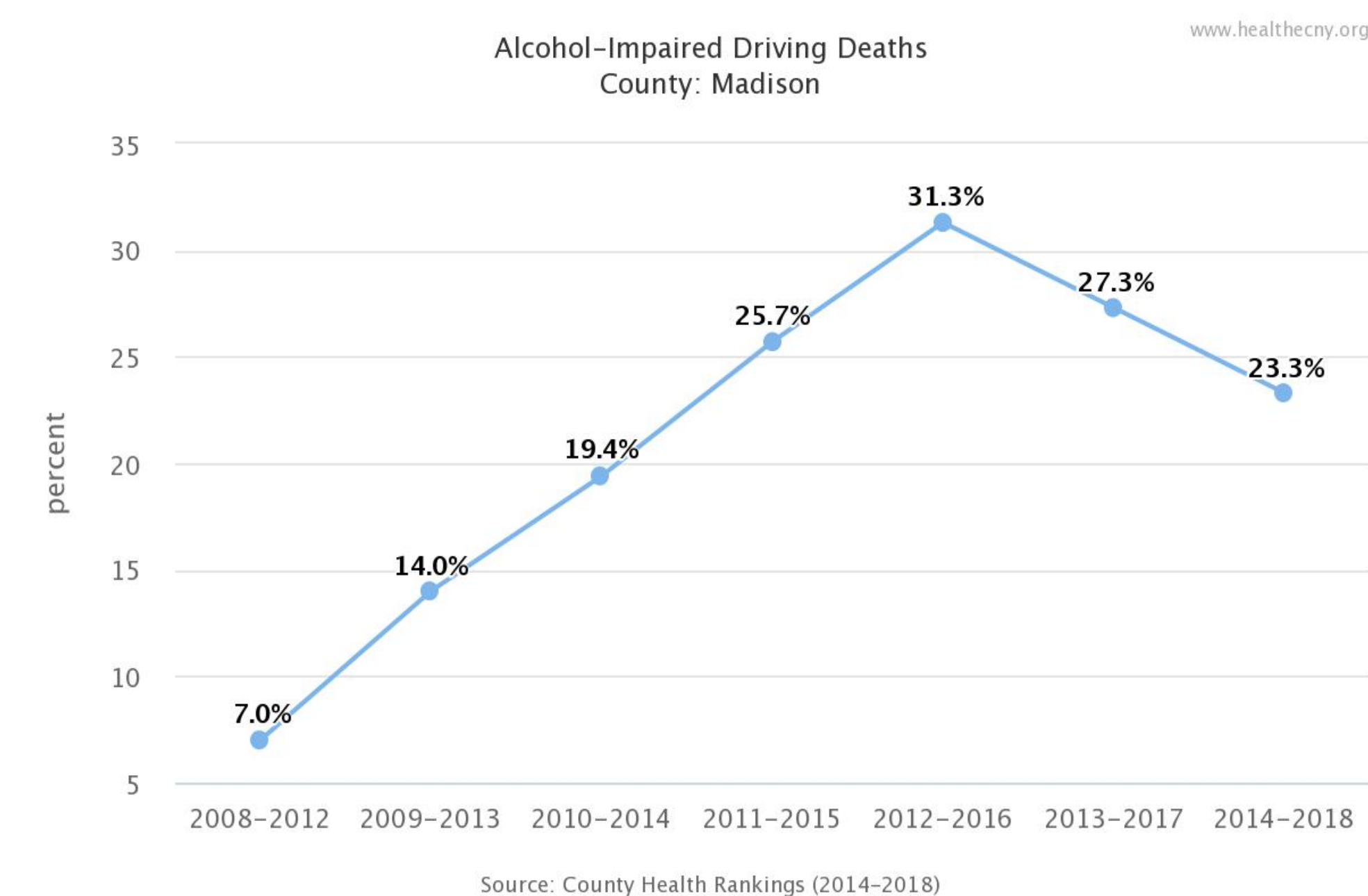


Figure 2. Madison County alcohol-impaired driving deaths over time⁷
The percentage of alcohol-impaired driving deaths has fluctuated between 2008 and 2018. The percentage increased steadily and peaked at 31.1%, the average from 2012-16. The rate of alcohol-related motor vehicle deaths has since declined to 23.3%. This percentage remains higher than the New York State average (20.9% average for 2014-2018).

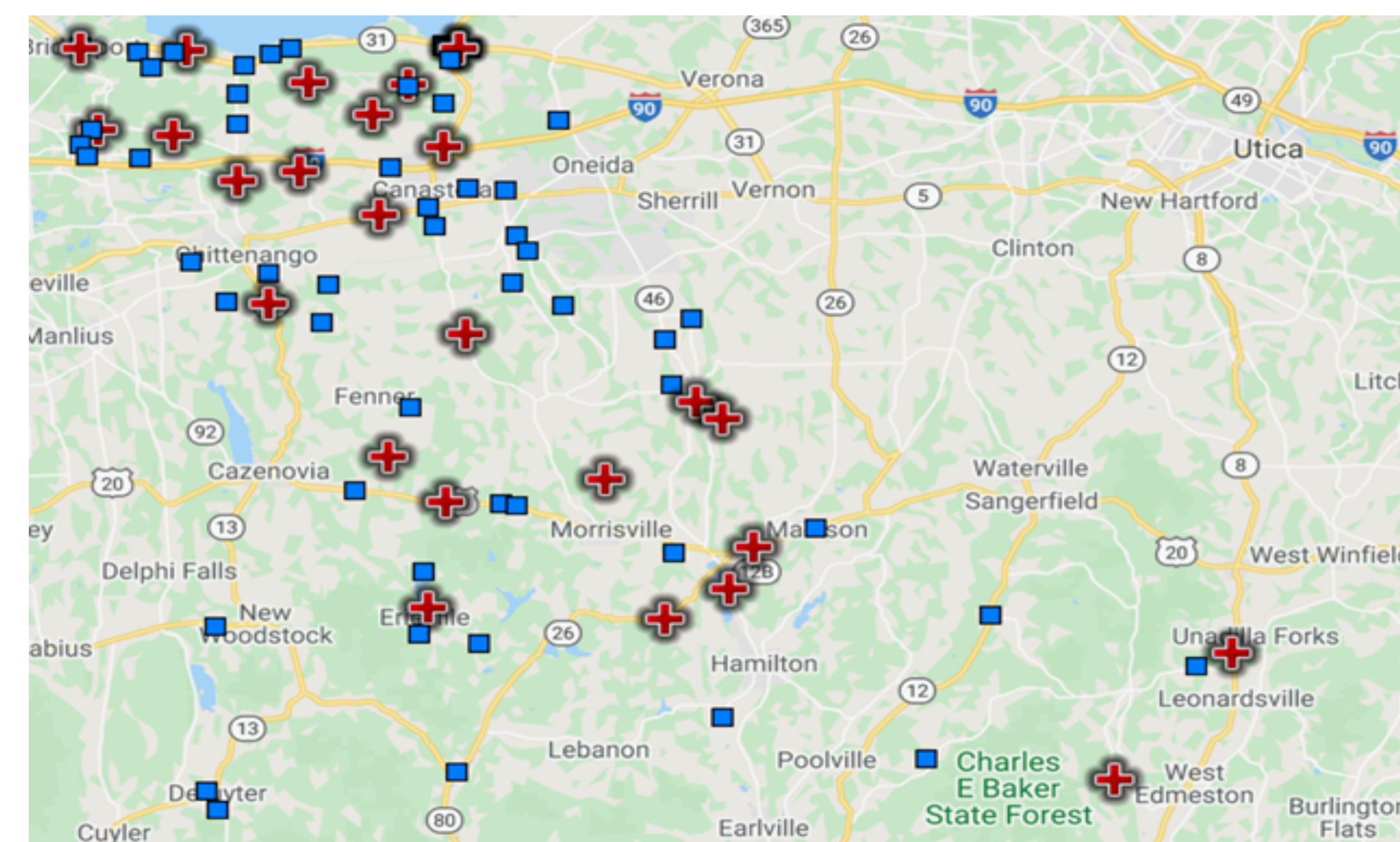


Figure 3. Alcohol related vehicle crashes from 2017 to 2019 investigated by the Traffic Safety Office, Madison County Sheriff's Department
Blue dots = property damage crashes, red crosses = personal injury crashes. There were no alcohol-related vehicle fatalities investigated by the Sheriff's Department between 2017-2019. This could explain the recent declining trend of alcohol-related driving fatalities in Madison County. It is important to note that there are other law enforcement agencies who investigate crashes in Madison County.

High Risk Populations

- Youth
- Older Adults
- College Students
- Race/Ethnicity (Native American, Hispanic and Blacks)
- LGBTQ+