



HEALTHY CAPITAL DISTRICT INITIATIVE

Building A Healthier Community

Health Equity Report

Mental Disease and Disorders

Healthy Capital District Initiative
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Introduction

Mental and emotional well-being is essential to overall health. Mental Health has been defined as a “state of successful performance of mental function, resulting in productive activities, fulfilling relationships with people, and the ability to adapt to change and cope the challenges”.¹ Mental disorders are health conditions that can be characterized by alterations in thinking, mood, and/or behavior that are associated with distress and/or impaired functioning.¹ Such disorders are also associated with a higher probability of risk behaviors (e.g. tobacco, alcohol, or other drug use, risky sexual behavior), partner and family violence, other chronic and acute conditions (e.g. obesity, diabetes, cardiovascular disease, HIV/STDs) and premature death.²

This Equity Report will review data from vital statistics, ED visits and hospitalizations for mental disease and disorders (primary diagnosis), depression (primary diagnosis), self-inflicted injuries, and suicide for Capital Region, county, and sub-county levels. These conditions were identified utilizing International Classification of Disease (ICD) codes. National and New York State (NYS) data from the National Survey on Drug Use and Health (NSDUH) utilized diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). Substance abuse disorders was not be a focus of this Equity Report as these were covered in a previous Opioid Overdose Health Equity Report.³

(http://www.hcdiny.org/content/sites/hcdi/equity_reports/Health_Equity_Report_Opioids_Narrative_1.pdf).

Federal and State Context

Improving mental health and reducing mental disorders is a Healthy People 2020 Goal, with objectives for the reduction of suicide deaths and suicide attempts, and the reduction of Major Depressive Episodes in adolescents and adults.¹ New York State’s Prevention Agenda also identifies promoting mental health and preventing substance abuse as a focus area, with objectives including the reduction of suicide mortality, reduction in poor mental health days in adults, and reduction in the percent of youth who feel sad or hopeless and youth who attempted suicide.²

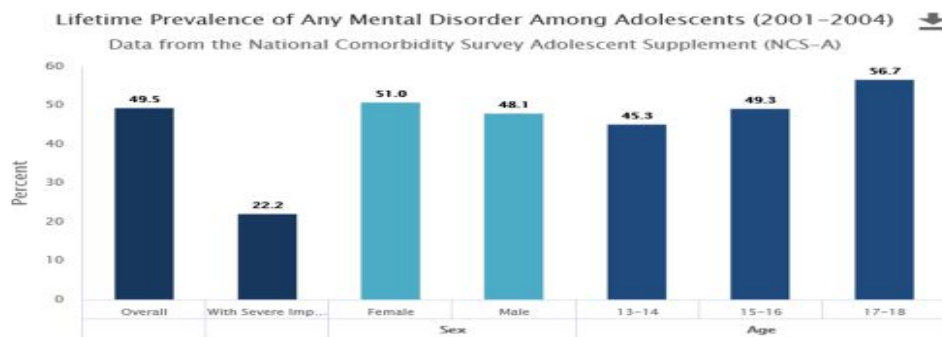
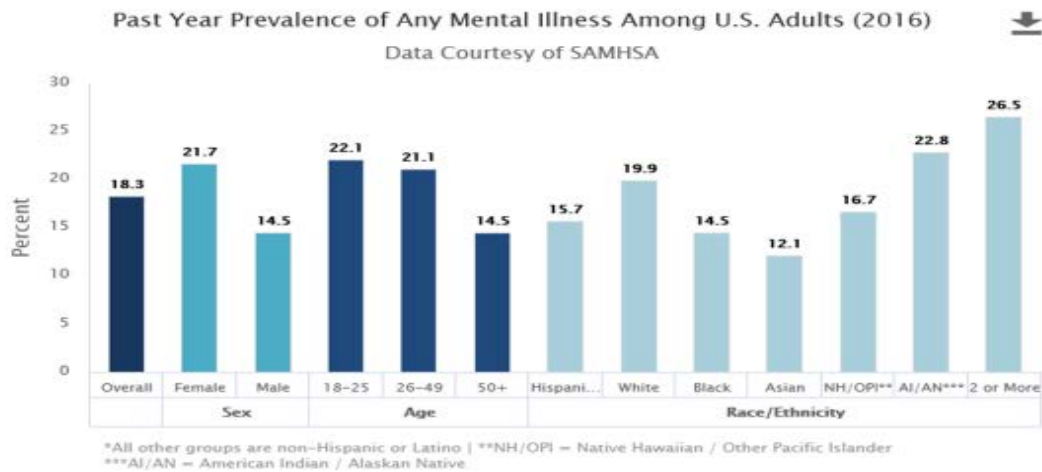
Federal Context

Mental illnesses are common the US. The Substance Abuse and Mental Health Services Administration (SAMHSA) estimated that the US national expenditure for mental health care was \$147B in 2009. Combining this figure with projections of lost earning and public disability insurance payouts associated with mental illness, an estimated cost of mental disorders was at least \$467B in the US in 2012.⁴ Mental disorders include many different conditions that vary in degree of severity from mild to severe. Two broad categories, utilized in the NSDUH, can be used to describe such conditions: Any Mental Illness (AMI) and Severe Mental Illness (SMI). AMI is defined as a mental, behavioral, or emotional disorder, and can vary in impact from no impairment to mild, moderate of severe impairment. SMI is a mental, behavioral, or emotional

disorder resulting in serious functional impairment, which substantially interferes with, or limits one or more major life activities.⁵

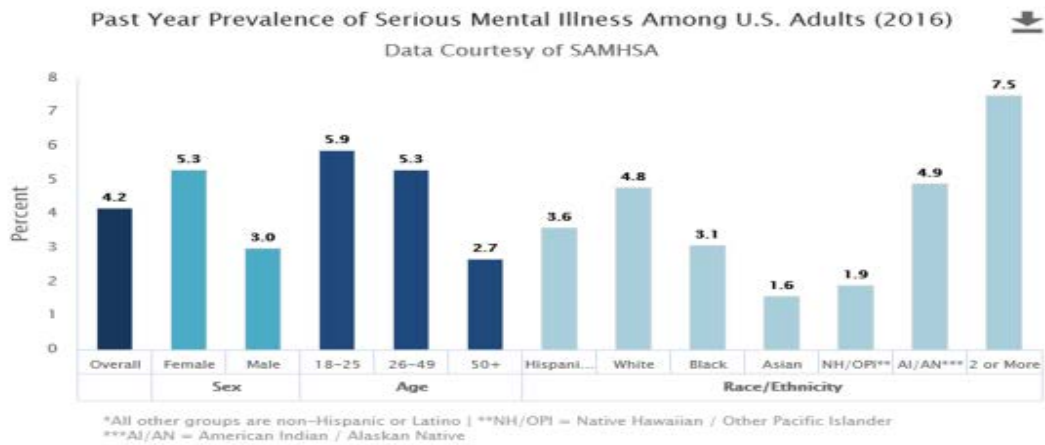
Any Mental Illness

In the US, 44.7 million adults (18+ yrs.) or 18.3% had AMI (NSDUH-2016). Prevalence was higher in women than men; higher in younger adults; and higher in multi-race and Native Americans. Of the individuals with AMI, only 43.1% received mental health treatment in the past year. About 49.5% of US adolescents (13-18 yrs.) had a lifetime prevalence of any mental disorder (NCS-A, 2001-2004).⁵



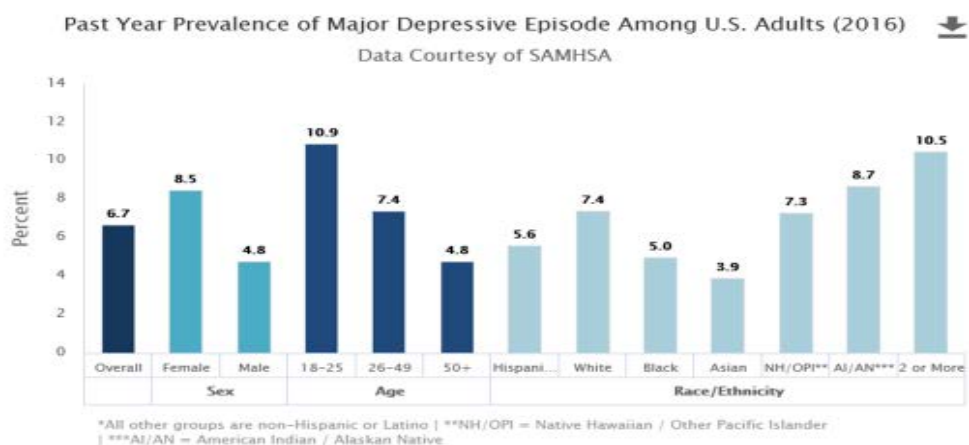
Serious Mental Illness

Approximately 10.4 million US adults, or 4.2%, had a SMI. Women, young adults, multi-race and Native Americans had higher SMI prevalence. Of individuals with SMI, 64.8% received mental health treatment in the past year. For US adolescents (13-18 yrs.) 22.2% had lifetime prevalence of AMI with a severe impairment.⁵

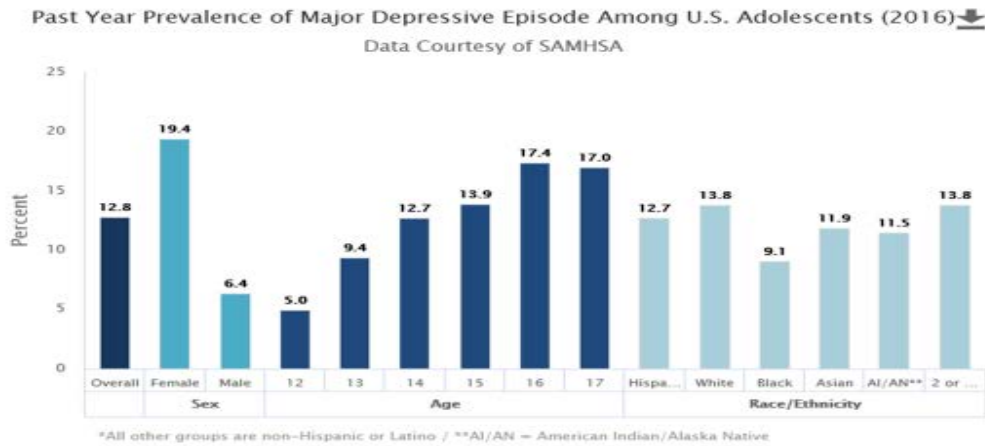


Depression

Depression is one of the most common mental disorders in the US and current research suggests that depression is caused by a combination of genetic, biological, environmental and psychological factors.⁶ Major depression can result in severe impairments that interfere with or limits one’s ability to carry out major life activities. The NSDUH collects information on Major Depressive Episodes (MDE)--a period of two weeks or longer during which there is either a depressed mood or loss of interest or pleasure, and at least four other symptoms that reflect a change in functioning, such as problems with sleep, eating, energy, concentration, self-image or recurrent thoughts of death or suicide.⁷ About 16.2 million US adults, or 6.7%, had at least one MDE. Prevalence was higher in women than men; higher in the 18-25 year age group, and higher in multi-race and Native Americans. Of the adults with MDE, 64% had an MDE with serious impairment. About 37% of the population with MDE did not receive treatment in the past year.⁷

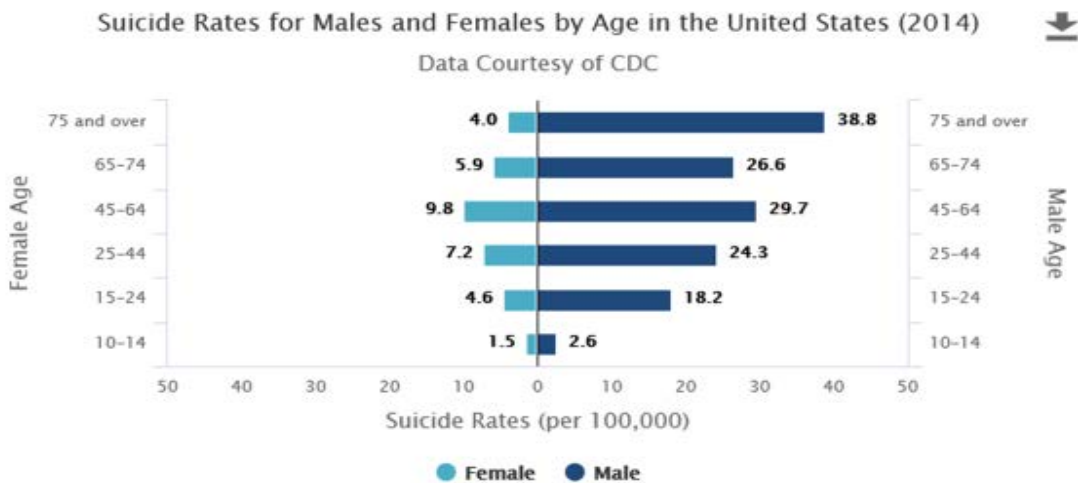


For US adolescents aged 12-17 years, 3.1 million, or 12.8%, had at least one MDE. Females and multi-race and white adolescents had the highest MDE prevalence. About 70% of these adolescents had an MDE with severe impairment. Of the adolescents with MDEs, 60% received no treatment in the past year.⁷

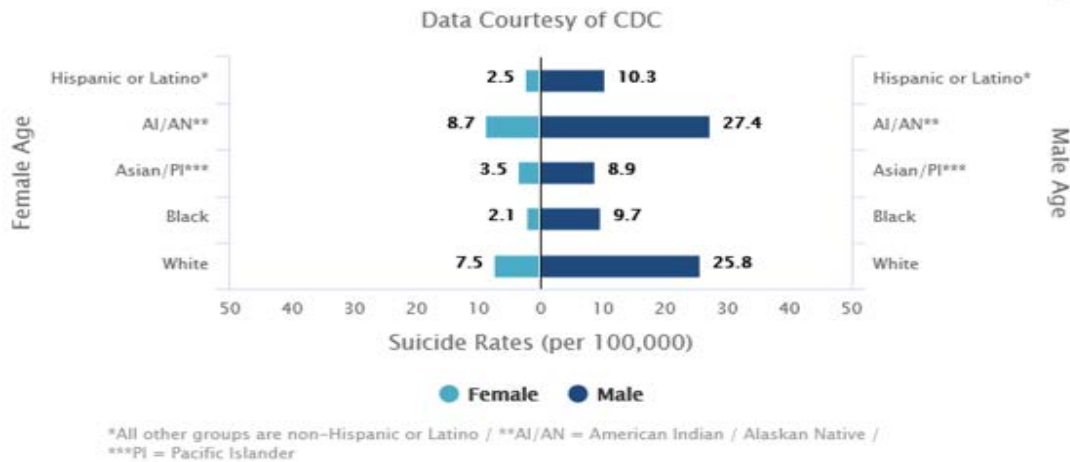


Suicide

Suicide is the 10th leading cause of death in the US, with more than 44,000 deaths a year. The national suicide age-adjusted mortality rate increased by 20% over the last decade, with a 13.3/100,000 rate in 2015. In addition to the emotional loss associated with suicide, there is an economic loss as well. The US medical and work-lost costs were estimated at \$50.8 billion in 2013.⁸ Males have roughly 3.5 times higher suicide mortality rates than females. Suicide rates were highest in the Native American and White populations.⁸

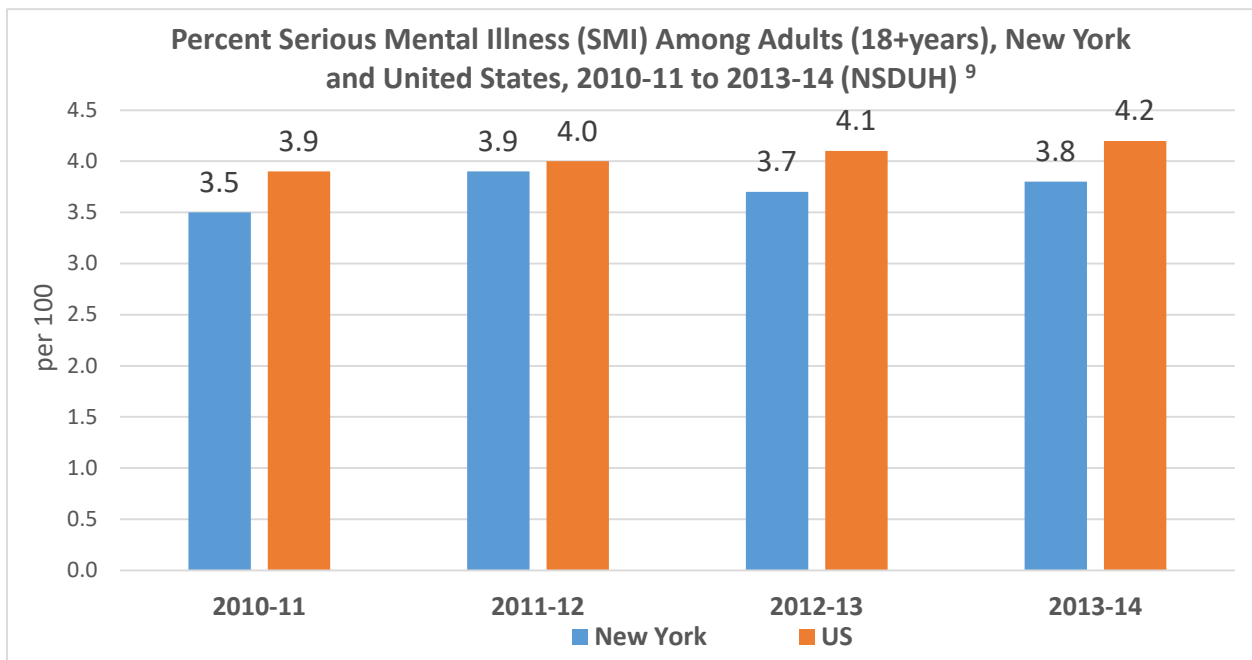


Suicide Rates for Males and Females by Race in the United States (2014)

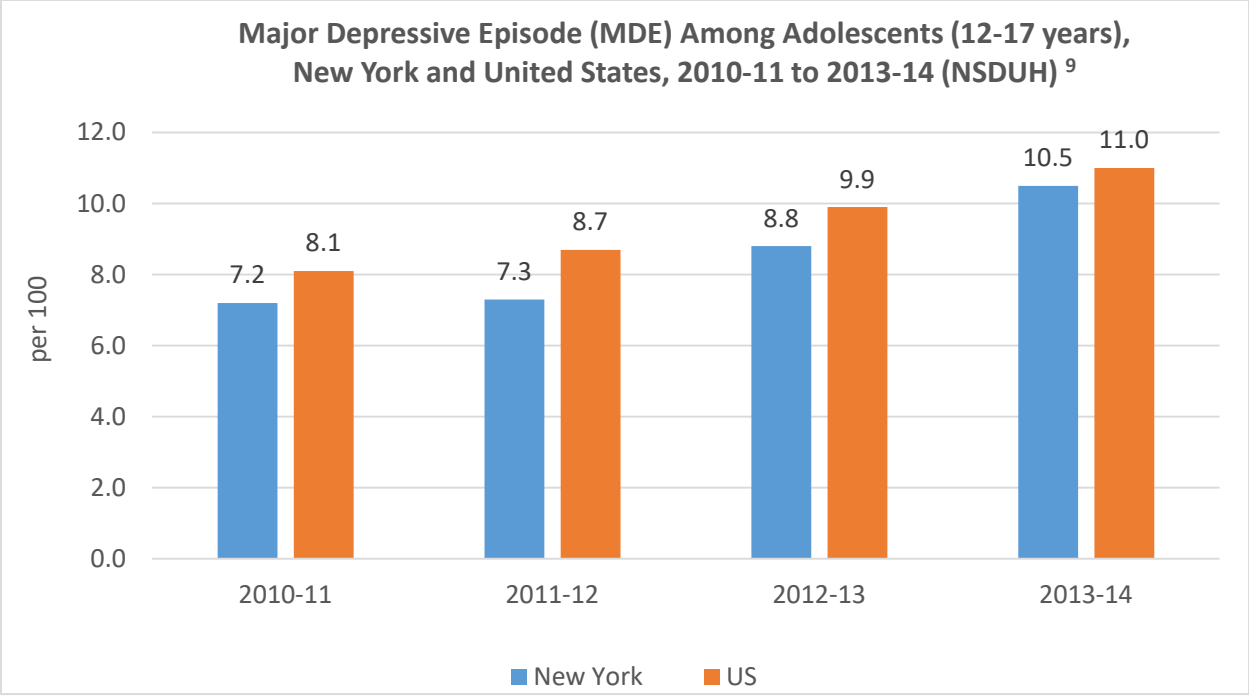


New York State Context

Almost 2.8 million adult New Yorkers, or 18.3%, had AMI in the past year. Of these only 40.1% received mental health treatment or counseling in the last year. Approximately 573,000 NY adults, or 3.8%, had SMI in the past year. The prevalence was slightly lower than the US.⁹



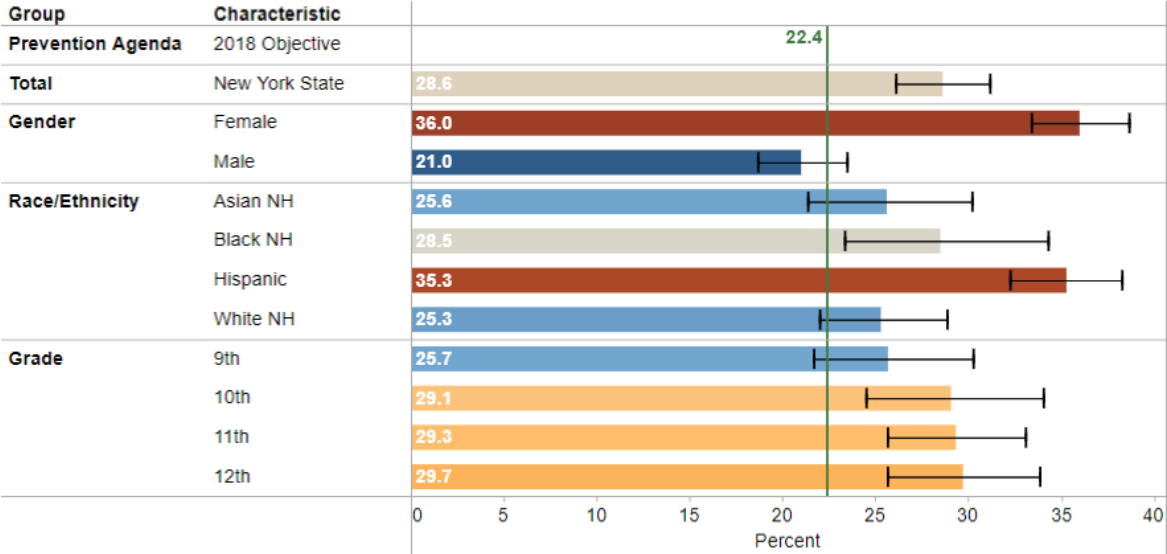
About 151,000 NY adolescents (12-17 years), or 10.5%, had at least one MDE within the prior year. Both NY and the US show increasing trends in MDE, with NY's rates slightly lower than the US.⁹



Reducing the percent of adolescents (youth grades 9-12) who felt sad or hopeless to 22.4% is one of New York’s Prevention Agenda objectives.² In 2015, 28.6% of NY adolescents felt sad or hopeless, slightly lower than the US rate of 29.9%. Females had higher rates than males and Hispanic adolescents having a higher rate than other race/ethnic groupings.¹⁰

Percentage of adolescents (youth grades 9-12) who felt sad or hopeless, 2015

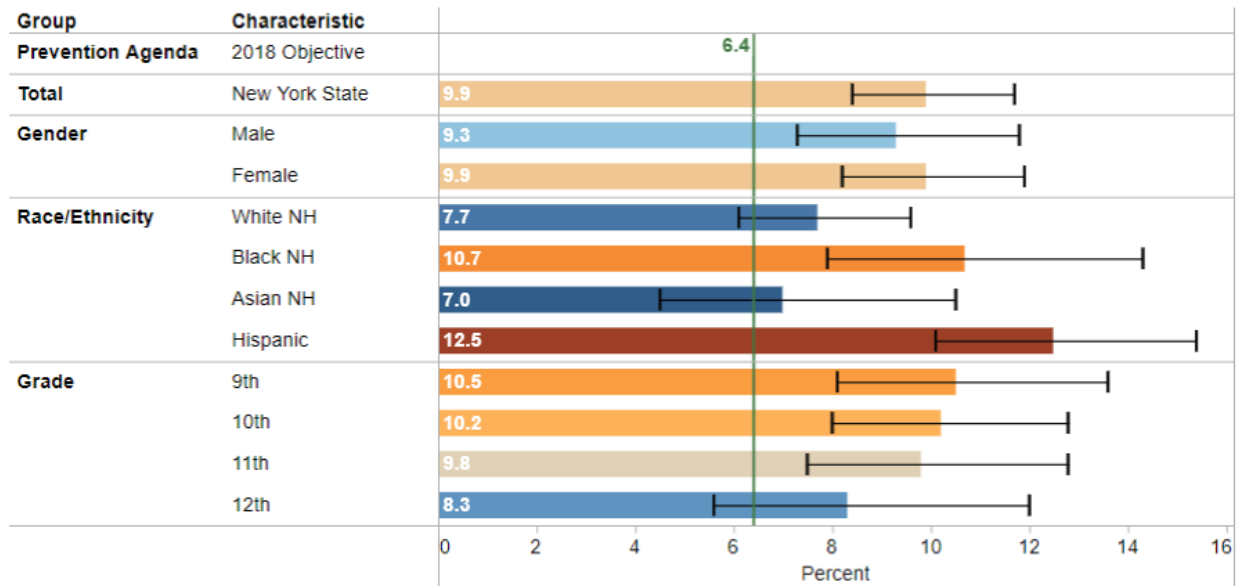
Data Source: Youth Risk Behavior Surveillance System data as of January 2017



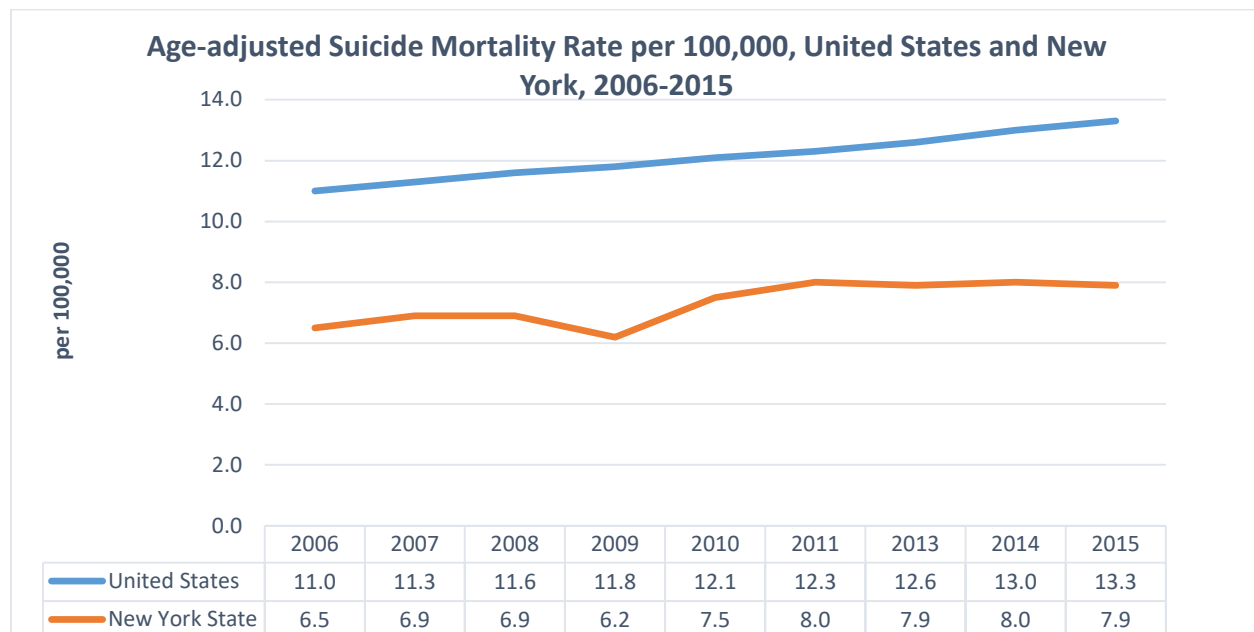
Reducing the percentage of adolescents who attempted suicide in the past year to 6.4% is another Prevention Agenda objective.² In 2015, 9.9% of NY adolescents attempted suicide, higher than the US rate of 8.6%. Females had slightly higher rates than males; Hispanic and Black non-Hispanic adolescents having a higher rate than other race/ethnic groupings.¹⁰

Percentage of adolescents (youth grades 9-12) who attempted suicide one or more times in the past year, 2015

Data Source: Youth Risk Behavior Surveillance System data as of January 2017



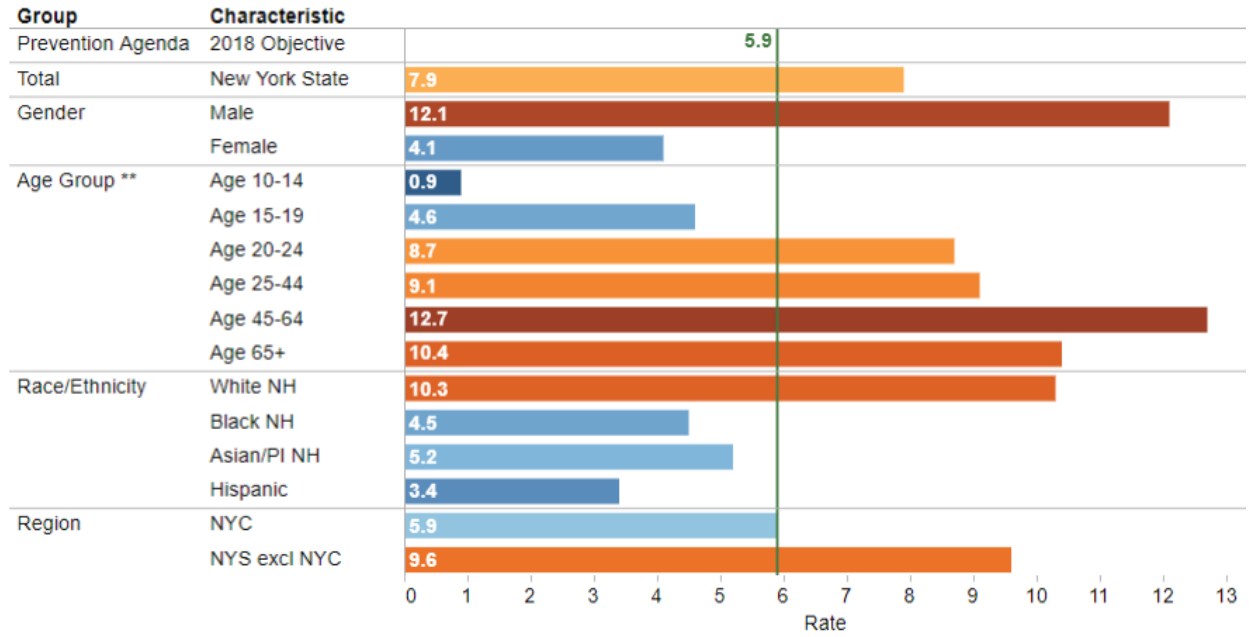
New York’s age-adjusted suicide rate increased over 20% over the last decade with rates leveling off after 2011. NY rates were consistently lower than the US rates.^{8,11} The Prevention Agenda’s objective is to reduce suicide mortality 5.9/100,000.² New York’s 2015 age-adjusted suicide rate was 7.9/100,000.



Suicide rates are 3 times higher for males than females. Rates are also higher for older New Yorkers and much higher for the White non-Hispanic population.¹⁰

Age-adjusted suicide death rate per 100,000 population, 2015

Data Source: Vital Records data as of April 2017



Mental Health Data Summary for the Capital Region

Highlights:

About 13% of Capital Region adults (n=97,400) indicated that they had poor mental health for 14 or more days in the past month, higher than the NYS prevalence.

Over 110 Capital Region residents died of **suicide** each year, a rate higher than Upstate and an increase of 44% over the last decade. Males have 3.5 times the suicide rate compared to females. White non-Hispanic residents have the highest rates.

About 930 Capital Region residents visited the ED and 690 were hospitalized for **self-inflicted injury** each year. The ED visit and hospitalization rates were both higher than Upstate. Females had 1.5 to 1.8 higher hospitalization and ED visit rates than male residents. The highest rates were in the 15-24 year age group. Black non-Hispanic residents had the highest hospitalization and ED visit rates; Hispanic residents had the lowest. Lowest SES neighborhoods had 2 to 3 times the hospitalization and ED visit rates compared to highest SES neighborhoods.

For people with mental and behavioral disorders, psychoactive substance use was the leading diagnosis for both hospitalizations (39.0%) and ED visits (46.4%). Mood disorders (e.g. depression, bi-polar) were the second leading diagnosis for hospitalizations (33.1%) while stress-related disorders were the second leading diagnosis for ED visits (21.1%).

Over 13,000 Capital Region residents had an ED visit, and over 5,000 were hospitalized for a **mental disease and disorder** diagnosis each year. Both rates were slightly higher than Upstate, with the ED visit rate increasing 50% over the last decade. Males had slightly higher rates than female residents, while Black non-Hispanic residents had the highest, and Hispanic residents the lowest rates. Low SES neighborhoods had over 4 times the ED visit and hospitalization rates compared to High SES neighborhoods.

Almost 2,000 Capital Region residents had an ED visit, and over 1,600 were hospitalized for a **depression** each year; both were similar to Upstate and decreased over the last decade. Females had 1.2 to 1.4 times higher depression rates compared to male residents. Black non-Hispanic residents had the highest, and Hispanic residents the lowest depression rates. Low SES neighborhoods had over 3 to 3.5 higher depression ED visit and hospitalization rates compared to High SES neighborhoods.

Poor Mental Health Days

- About 13% of Capital Region adults (n=97,400) indicated that they had poor mental health for 14 or more days in the past month, higher than the NYS prevalence. (*Appendix I, p. 3*)
- Poor mental health day prevalence were highest in younger adults. (*Appendix I, p. 3*)
- Capital Region females had slightly higher prevalence rates compared to males. (*Appendix I, p. 3*)
- Black non-Hispanic residents had the highest prevalence followed by Hispanic and White non-Hispanic residents. (*Appendix I, p. 3*)
- All Capital Region Counties, except Columbia, had age-adjusted poor mental health day prevalence higher than NYS. (*Appendix I, p. 2*)

Suicide and Self-inflicted Injury

- About 111 Capital Region residents died from suicide; 930 residents had an ED visit, and 690 were hospitalized for self-inflicted injury each year. (*Appendix II, p. 5, 7*)
- The Region had higher age-adjusted suicide mortality (18%), self-inflicted injury hospitalization (23%) and ED rates (43%) than Upstate. Suicide mortality (44%) and self-inflicted ED visits (26%) increased while self-inflicted hospitalization rates decreased (11%) over the last decade. (*Appendix I, p. 6, 7*)
- Capital Region males had 3.5 times higher age-adjusted suicide mortality rates than females. However, females had higher self-inflicted injury hospitalization rates (1.5 times) and ED rates (1.8 times) compared to male residents. (*Appendix I, p. 10, 11*)
- Suicide mortality increased with age until the 65-74 year age, while self-inflicted injury hospitalization and ED visits were highest in the 15-24 year age group. (*Appendix I, p. 9, 10*)
- White non-Hispanic residents had the highest age-adjusted suicide mortality rates in the Capital Region. Black non-Hispanic residents had the highest self-inflicted injury hospitalization and ED visit rates, followed by White non-Hispanic and Hispanic residents (*Appendix I, p. 12, 13*)
- There was no socioeconomic trend for suicide mortality. Residents in low socioeconomic neighborhoods in the Capital Region (SES 1) had approximately 2.3 times higher age-adjusted self-inflicted injury hospitalization rate and 2.8 times higher ED visit rates compared to residents from high socioeconomic areas (SES 5). (*Appendix I, p. 13, 14*)

Mental Disease and Disorders

- An average of 5,200 Capital Region residents were hospitalized, and 13,200 had an ED visit for a mental disease and disorder each year. (*Appendix II, p. 9*)
- The Region's age-adjusted mental disease and disorder hospitalization and ED visit rates were slightly higher than Upstate. While the mental disease and disorder hospitalization rate increased only 4% over the last decade, the ED visit rate increased 50%. (*Appendix I, p. 16*)
- Capital Region males had a slightly higher age-adjusted mental disease and disorder hospitalization (1.04 times) and ED visit rate (1.2 times) compared to female residents. (*Appendix I, p. 19*)
- Age-adjusted mental disease and disorder hospitalization and ED visit rates were highest in younger adults (*Appendix I, p. 18*)
- Black non-Hispanic residents had 1.7 times higher age-adjusted mental disease and disorder hospitalization rate, and 1.9 times higher ED visit rate than the White non-Hispanic population. Hispanic residents had the lowest rates. (*Appendix I, p. 20*)
- Residents in low socioeconomic neighborhoods in the Capital Region (SES 1) had 4 times higher age-adjusted mental disease and disorder hospitalization, and 4.2 times higher ED visit rates compared to residents from low socioeconomic areas (SES 1). (*Appendix I, p. 21*)

Depression

- An average of 1,640 Capital Region residents were hospitalized, and 1,970 visited the ED for depression each year. (*Appendix II, p. 11*)
- The Region's age-adjusted depression hospitalization were similar to, and ED visit rates slightly higher than Upstate. The depression hospitalization rate decreased 25%, and the ED visit rate decreased 5% over the last decade. (*Appendix I, p. 23*)
- Capital Region females had a higher age-adjusted depression hospitalization (1.2 times) and ED visit rate (1.4 times) compared to male residents. (*Appendix I, p. 26*)
- Age-adjusted depression hospitalization rates were high in residents aged 15-64 years while ED visit rates were highest in the 15-24 year age group. (*Appendix I, p. 25*)
- Black non-Hispanic residents had 1.3 times higher age-adjusted depression hospitalization rate, and 1.4 times higher ED visit rate. Hispanic residents had the lowest rates. (*Appendix I, p. 27*)
- Residents in low socioeconomic neighborhoods in the Capital Region (SES 1) had 3.5 times higher age-adjusted depression hospitalization, and 2.9 times the ED visit rates compared to residents from low socioeconomic areas (SES 1). (*Appendix I, p. 28*)

Data and Methods

This Health Equity Report on Mental Disease and Disorders presents national, state, county, and neighborhood (Zip code aggregate) level information by health equity for suicide, self-inflicted injury, mental disease and disorders, and depression. State, Regional, and County data on “poor mental health days” (14 or more days in the last month) is also available. The mental illness indicators utilized in the bulk of the Report utilize International Classification of Disease (ICD) codes. Both ICD-9-CM and ICD-10-CM codes were used as ICD-10-CM was implemented by SPARCS in September 2015. National and New York State (NYS) data from the National Survey on Drug Use and Health (NSDUH) utilize diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

ICD-9-CM:

Self-inflicted Injury—E95;

Mental Disease and Disorders—290, 293-302, 305-319;

Depression—296.20-296.25, 296.30-296.35, 298.0, 300.4, 309.0, 309.1, 311.

ICD-10-CM:

Suicide—X60-X84, or Y870;

Self-inflicted Injury—X71-X83;

Mental Disease and Disorders—F01-F99, or G442.09, H932.5, R451, R457, R480, Z878.90;

Depression—F320-F324, F329, F330-F334.1, F339, F341, F432.1.

Hospitalization and Emergency Department (ED) visit data were generated from the State Planning and Research Cooperative System (SPARCS). Mortality data were generated from NYS Vital Statistics. The Common Grounds Health’s SPARCS and Vital Statistics Data Portals were used to generate mortality and hospitalization and ED visit data.

The Report takes a broad definition of equity that includes gender, race/ethnicity, age, and socioeconomic status. Where available, the mental disease and disorder indicators were generated by the following groupings:

Region-- Albany, Columbia, Greene, Rensselaer, Saratoga, Schenectady, Capital Region, Upstate;

Gender—Male, Female;

Age—0-14 yrs., 15-24 yrs., 25-44 yrs., 45-64 yrs., 65-74 yrs., 75+ yrs.;

Race/Ethnicity—White non-Hispanic, Black non-Hispanic, Hispanic.

Socioeconomic status—SES 1 (low), SES 2, SES 3, SES 4, SES 5 (high).

When reviewing Race/Ethnicity, the graphs present rates by “Other” categories. Because these categories include a mix of racial groups (e.g. Asian, Native American, Multi-race) and were generally low in number, these categories were not discussed in the narrative.

When analyzing the data for this Report, a 2012 undercount of hospitalizations and ED visits, and 2013 undercount for ED visits for a number of counties was identified. Therefore, 2012 was omitted for all trend graphs using hospitalization-based indicators and 2012-2013 for ED visit-bases trend graphs.

The Common Ground Health Data Portal included a SES query with analysis available at the Zip code level or by Zip Code aggregate, including county. SES was based on average income, level of education, value of housing stock, age of housing stock, population crowding, percent of persons paying more than 35% of their income on housing, and percent of children living in single parent households. The Common Ground Health Data Portal only had SES scores available for counties north and west of Westchester County. Each Zip code was assigned a value of SES 1 through SES 5, with SES 1 being the lowest and SES 5 being the highest. SES 1 and SES 5 each contain 15% of the population, SES 2 and SES 4 each contain 20% of the population, and SES 3 contains 30% of the population. Since the SES categories are Zip-code based, data generated by SES might vary from data generated by county.

National data sources included NSDUH-based data from the Substance Abuse and Mental Health Administration (SAMHSA), and the National Institute of Mental Health. New York State NSDUH-based data were from SAMHSA's Behavioral Health Barometer, NYS. Capital Region and County prevalence of "poor mental health days" were from the Expanded BRFSS, April 2013-March 2014, NYSDOH.

A series of county-specific maps, presenting data at the neighborhood (Zip code aggregate), is contained in the Appendix III- Neighborhood Atlas. The Zip Code neighborhood groupings used for the sub-county maps are available in the HCDI 2016 Community Health Needs Assessment, pages 177-189

http://www.hcdiny.org/content/sites/hcdi/2016_chna/2016_HCDI_community_health_needs_assessment.pdf.

Appendices

[Appendix I- Indicator comparisons by Capital Region County, Capital Region, and New York State, excl. NYC.](#)

[Appendix II- County-specific mental illness indicator data.](#)

[Appendix III Neighborhood Atlas-indicator maps and data at the neighborhood \(Zip code-aggregate\) level.](#)

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