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New York State Epidemiological Profile: Substance Abuse and other Mental, Emotional, and Behavioral (MEB) Disorders

November 2018

Office of Alcoholism and Substance Abuse Services
ACKNOWLEDGEMENTS

The success of the New York State Epidemiological Workgroup (SEW) is in large part due to interagency/community collaborations and data sharing activities. It is worth mentioning that the efforts of this multidisciplinary team of professionals has been integral to the development of data-driven products that inform prevention activities and policies surrounding substance use disorders and mental, emotional, and behavioral (MEB) disorders throughout New York State.

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*New York State Epidemiological Profile: Substance Abuse and other Mental, Emotional, and Behavioral (MEB) Disorders*

November 2018
EXECUTIVE SUMMARY AND KEY FINDINGS

The New York State Epidemiological Workgroup (SEW) is an interagency, multidisciplinary effort to integrate a data-driven approach about the nature and distribution of substance use and related consequences into ongoing assessment, planning, and monitoring decisions at state and local levels. This epidemiological profile examined substance use, including alcohol and tobacco, and mental health prevalence and their associated consequences among the New York State population. Below are key findings:

Consequences from the Use of Illicit Opioids and the Misuse of Prescription Opioids are a Critical Threat to Public Health in New York

- Opioid overdose deaths increased statewide by 192.4% from 2007-2016.¹
  - Total opioid analgesics (excluding fentanyl) overdose deaths increased statewide by 58.3% from 2007-2016. During the same years, opioid analgesics overdose deaths among females increased by 177.8% compared to an 51.8% increase in deaths among males.¹
  - Illicit opioid (including heroin and fentanyl) overdose deaths increased 649% statewide from 2007-2016.¹

- The drug overdose death epidemic in New York is not purely related to opioid use. Polysubstance misuse, including mixing opioids such as heroin, Oxycontin and fentanyl with cocaine, benzodiazepines, and other drugs accounts for a large portion of deaths involving opioids. Opioids in combination with benzodiazepines and cocaine are particularly deadly.¹
  - Between 2007 and 2016 benzodiazepine overdose deaths without opioids increased by 86%, however benzodiazepine overdose deaths including opioids increased by 253%.¹
  - From 2007-2016 opioid overdose deaths involving cocaine increased by 165.6% statewide, and cocaine overdose deaths without opioids decreased by 19.6% during this period.¹

- Reported use of heroin among high school students is decreasing nationally but increasing in New York.²
  - Nationally, reported lifetime heroin use among high school students decreased 36% between 2003 and 2015.²
  - Lifetime heroin use among New York State high school students in grades 9-12 increased 167% from 2003 to 2015.²

- Likely driven by the opioid crisis, the newborn drug-related diagnosis rate increased statewide from 2007 to 2014, particularly outside of New York City where the rate more than doubled (from 64.1 per 10,000 newborns to 155.2).³
EXECUTIVE SUMMARY AND KEY FINDINGS
(CONTINUED)

Adult Problem Alcohol Use in New York is Higher than National Use and is Increasing for Adults Over Age 25

• Binge alcohol use among young adults ages 18 to 25 declined slightly in New York state between 2007 and 2014 but was higher than national use.⁴

• Binge alcohol use among adults ages 26 and older increased slightly in New York state between 2007 and 2014 and was higher than national use.⁴

Youth Alcohol Use is Declining in New York and is Lower than National Use

• New York showed declines in past-30-day (current) alcohol use among high school students and past 30-day binge drinking among persons aged 12 to 20; use declined more rapidly in New York than nationally.⁴

Young Adult and Youth Mental Health Indicators Show Increases in Mental Health Issues Statewide

• For adults ages 18 to 25, data show increases in major depressive episodes, any mental illness and serious mental illness.⁴

• For youth, data show increases in major depressive episodes, feeling sad or hopeless, and attempting suicide.⁴

References

INTRODUCTION

Purpose of the Epidemiological Profile
This epidemiological profile utilizes the most current available data to identify trends in substance use and mental health prevalence and consequences among New York State residents. The information gathered in this report serves as guidance for the implementation and prioritization of prevention and planning strategies aimed at reducing mental, emotional, and behavioral (MEB) disorders, including substance abuse among at-risk populations.

Function of the New York State Epidemiological Workgroup (SEW)
The primary mission of the New York State Epidemiological Workgroup (SEW) is to understand the social and ecological determinants affecting substance abuse, by integrating data about the nature and distribution of substance use and related consequences into ongoing assessment, planning, and monitoring decisions at state and local levels. The SEW is an OASAS-led effort, which includes Workgroup members from state agencies, such as the Department of Health (DOH), Division of Criminal Justice Services (DCJS), Council on Children and Families Kids’ Well-being Indicators Clearinghouse (KWIC), and Office of Mental Health (OMH), as well as the New York City Department of Health and Mental Hygiene (NYC DOHMH)/Bureau of Alcohol and Drug Use Prevention, Care and Treatment, Local Governmental Units (LGUs) and prevention provider representatives. Guided by the Strategic Prevention Framework (SPF), the SEW examines, interprets, and applies data to inform prevention planning and decision-making. The primary objectives of the SEW are to (1) create actionable state and community epidemiological profiles, (2) incorporate a public health approach and capacity-building, (3) disseminate indicators and reports, and (4) use epidemiological data to inform policy and decision-making at the state and local levels.

Partnership for Success
In 2014, the Substance Abuse and Mental Health Services Administration (SAMHSA) awarded New York State a five-year Strategic Prevention Framework Partnership for Success (SPF-PFS) grant. The Governor designated OASAS to lead the PFS to reduce prescription drug misuse and abuse and heroin and opioid abuse among 12-25-year olds through grants to ten sub-recipient community coalitions.

Through a competitive process, ten high-capacity coalitions, in ten high-need communities were selected to implement the Strategic Prevention Framework (SPF) consisting of needs assessment, capacity building, planning, implementation, evaluation, cultural competence and sustainability to meet the goals of the grant. PFS coalitions use environmental prevention strategies such as policy change, policy enforcement, social marketing, and media advocacy to raise local awareness and promote prevention. Additionally, the initiative seeks to address behavioral health disparities by encouraging communities to develop local and targeted approaches to reach their underserved communities.

The SPF-PFS initiative aims to build a sustainable prevention infrastructure by capitalizing on New York’s evidence-based, risk and protective factor-focused prevention framework, incorporating all five stages of the SPF to reduce prescription drug misuse and abuse and heroin and opioid abuse. These goals will be achieved by 1) assessing prevention needs based on current local data; 2) building prevention capacity; 3) developing a strategic plan; 4) implementing evidence-based community prevention programs, policies; and 5) evaluating efforts for outcomes. Cultural competence and sustainability are incorporated throughout each step of the process.

OASAS recognizes the value of community coalitions to support substance abuse prevention, and their ability to achieve results in targeted communities. The State Epidemiological Workgroup (SEW) currently receives funding from the PFS Initiative, and recommendations generated from the SEW will be used to inform PFS as well as other community coalition efforts across the state.
The Problem
Substance use, misuse, and use disorders are public health concerns that have taken center stage at the national level. In late 2016, The Surgeon General’s Report on Drugs, Alcohol, and Health titled, “Facing Addiction in America” described the severity of substance abuse and its devastating impact upon individuals, families, communities, and health care systems across the nation. Recent data suggests that progress has been made in the tobacco arena; however unique challenges exist in combating alcohol use, the opioid epidemic, and other illicit drug use among specific subpopulations.

National Substance Use
Data from the National Survey on Drug Use and Health (NSDUH) reported an increase in illicit drug use among persons aged 12 or older from 2010-2014, 22.6 million to 27 million, respectively.¹,² In 2014, 22 million Americans reported current marijuana use, a 26.4% increase (17.4 million) since 2010.¹,² Additionally, in 2014, “6.5 million Americans aged 12 or older reported nonmedical use of a psychotherapeutic drug (including 4.3 million nonmedical users of prescription drugs)”, a 79.2% (2.4 million users) increase from 2010.¹,²

From 2010 to 2014, past 30-day alcohol use or current alcohol use among Americans aged 12 or older increased from 131.3 million to 139.7 million, respectively.¹,² In 2014, 66.9 million Americans reported past month use of a tobacco product, a decrease from 69.6 million in 2010.¹,²

Polysubstance Use
Polysubstance use, or the use of multiple substances, is very common among users. Between 2011 and 2013, people who were addicted to alcohol were twice as likely to report being addicted to heroin.³ Those “addicted to marijuana were 3 times more likely to be addicted to heroin”.³ Also, persons addicted to cocaine were “15 times more likely to be addicted to heroin”.³ Further, “people who were addicted to prescription opioid painkillers were 40 times more likely to be addicted to heroin”.³

Substance Use by Demographic Gender
An estimated 12.8% of males and 7.7% of females aged 12 and older reported current illicit drug use in 2014.⁴ Past month alcohol use among males was 57.3% in 2014 compared to 48.4% among females in the same year.² Current use of tobacco products decreased among males and females aged 12 and older. Male current use was 31.1% in 2014 compared to 19.7% for females.²

Age Group
In the 2014 NSDUH, young adults (18 to 25) reported the highest percentage of current illicit drug use, alcohol use, and tobacco products use compared to all other age groups. Among young adults, 22% reported current illicit drug use, compared to youth 12-17 years (9.4%) and adults 26 years and older (8.8%) in 2014.²

In the same year, alcohol use among young adults was 59.6% compared to 11.5% for youth and 56.5% for older adults.² Further, tobacco use was greatest among young adults (35.0%) compared to youth (7.0%) and older adults (25.8%).²

Race/Ethnicity
According to the 2014 NSDUH, people 12 and older who identified as Native Hawaiian or other Pacific Islander reported the highest current illicit drug use (15.6%) compared to all other racial/ethnic groups.² In the same year, 57.7% of Non-Hispanic Whites reported past 30-day alcohol use, the highest percentage reported across all other racial/ethnic groups.² Persons who identified as American Indians or Alaska Natives reported the highest percentage (37.8%) of current use of a tobacco product among all racial/ethnic groups.²

Consequences
Crime, injury, morbidity, and mortality are costly consequences of substance abuse and misuse. Healthcare and criminal justice dollars related to the abuse of tobacco, alcohol, illicit drugs, and prescription opioids in the US exceeds $800 billion dollars annually.⁵

Tobacco
Annually, the overall cost of tobacco use is estimated to be $300 billion.⁵ Tobacco use is responsible for 660,000 cancer-related diagnoses annually.⁶ Cigarette smoking alone is responsible for 480,000 annual deaths, including cancer-related deaths, heart disease, and chronic obstructive pulmonary disease (COPD).⁷
Alcohol
According to the Centers for Disease Control and Prevention (CDC), the overall annual cost of alcohol use, including healthcare is estimated to be $249 billion. Each year, 88,000 people die from alcohol-related causes, including driving fatalities, alcohol-related cirrhosis and other alcohol-related liver diseases. Alcohol-impaired driving accounted for 10,265 fatalities in 2015, a slight increase from 9,967 deaths in 2014.

Illicit Drugs and Nonmedical Use of Prescription Opioids
According to the National Drug Intelligence Center, Birnbaum et al., and Florence et al., combined estimated cost related to illicit and nonmedical use of prescription opioids are $271.5 billion. In 2015, 21,823 deaths were due to illicit drug overdoses, a 25% increase (17,465 deaths) from the previous year. In 2015, prescription drug overdoses including opioid pain relievers and benzodiazepines accounted for 29,728 deaths, a 34% increase from 22,134 deaths in 2010.

Injection Drug Use
People who inject drugs (PWID) and share needles and syringes are at increased risk of contracting the Human Immunodeficiency Virus (HIV) and Hepatitis C virus (HCV). Among PWID, 1 in 10 will be diagnosed with HIV. In 2013, an estimated 171,300 men and women were living with HIV attributed to injection drug use (IDU). Of all new HCV cases, most are among PWID. “After adjusting for under-ascertainment and under-reporting”, new cases of HCV increased by an estimated 85% from 2011 to 2014 (from 16,500 new cases to 30,500 new cases, respectively).

Substance Use Disorders
“Substance use disorders (SUDs) occur when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home.” In 2014, “21.5 million people aged 12 or older had SUDs in the past year”, of these, “4 out of 5 had an alcohol use disorder (AUD)”, 1 out of 3 had an illicit drug use disorder (IDUD), and “1 in 8” had both an AUD and an IDUD. In 2012, SUDs alone accounted for 17% of hospitalization stays with a mental disorder or SUD diagnosis.

Risk Factors
Substance use is typically initiated in adolescence. Evidence suggests that early initiation of substances, including marijuana, cigarette, and alcohol use can increase the risk of dependency and increase the “odds of sedative/tranquilizer use initiation, and opioid re-initiation and persistent use.” During adolescence, significant brain development occurs and substance use can negatively affect “memory and learning, decision-making, behavioral control”, and has been linked to other adverse long-term health risks.

Risk and protective factors can influence or prevent problem behaviors, including substance use. Longitudinal studies suggest that risk factors at the community, family, school, and individual/peer levels can predict whether people will misuse substances in young adulthood. Risk factors at the community level include “extreme economic deprivation, availability of drugs, community laws and norms favorable toward drug use, firearms and crime.” School level risk factors that predict substance use in early adulthood include “academic failure beginning in late elementary school and low commitment to school.”

Individual/peer level risk factors include “early initiation of substance use, favorable attitudes toward drug use, depressive symptoms, friends who engage in substance use and peer rewards for substance use.” Unlike risk factors, protective factors at the individual/peer level (“belief in moral order” and “social skills”), community level (“community rewards for prosocial involvement”), family level (“family attachment”), and school level (“school opportunities for prosocial involvement”) can reduce the likelihood of substance use in young adulthood.
This epidemiological profile examined substance use, including alcohol and tobacco, and mental health prevalence and their associated consequences among the New York State population.

State-level drug and alcohol use has declined among youth and tobacco use has declined across all age groups. Adult alcohol and substance use prevalence has remained steady. Many drug and alcohol-related consequences including arrests and drug-related hospitalizations have decreased. Newborn drug hospitalizations, cirrhosis, and drug overdose deaths, however, have increased. Like national drug mortality trends, overdose deaths (especially in combination with cocaine and benzodiazepines) have increased and are being addressed through several statewide prevention and treatment initiatives.

Drugs
New York State findings in this report mirror increased heroin use, abuse, dependence, and heroin-related overdose deaths at the national level. Increased heroin use among NYS youth and increased heroin admissions to OASAS-certified treatment programs for both NYS youth and adults offer insight to the magnitude of prevention and treatment needs facing New York State.

The NSDUH data shows a statewide decline in nonmedical use of prescription drugs among youth, young adults, and older adults, however, all illicit opioid overdose mortality drastically increased from 2007 to 2016. Similarly, illicit opioid overdose mortality at the national level increased during the same years among both males and females. Additionally, adults admitted to an OASAS-certified treatment program for opioids steadily increased from 2007-2016.

Marijuana abuse, and dependency remains a concern for substance abuse prevention in NYS. Nationally, current marijuana use increased among persons 12 or older from 2010 to 2014. In NYS, current marijuana use was higher than national use for most survey years (2007-2008 to 2013-2014) across all age groups. In fact, NYS current marijuana use among adults 26 and older was higher than regional and national use for all survey years (2007-2008 to 2013-2014). Statewide, marijuana treatment admissions decreased among youth and adult residents. However, marijuana-related treatment admissions among NYS adult residents decreased by 7.6% from 2007-2016 compared to marijuana-related treatment admissions among youth (43.4%) during the same period.

Alcohol
New York State findings indicate declines in past-30-day (current) alcohol use among high school students and past 30-day binge drinking among persons 12 to 20. The identification of racial/ethnic and gender distributions of alcohol use is needed to detect possible differences in patterns and consequences of alcohol use among demographic subgroups.

Current alcohol use and past 30-day binge drinking decreased among high school youth and persons 12 to 20; however, research suggests an increase in current alcohol use and binge drinking among adults 26 and older. Academic research indicates that increased prevalence in current alcohol use and binge drinking among older adults may be due to the Baby Boomer generation (persons born between 1946 and 1964). Alcohol use among older adults is a public health concern, as they are disproportionately affected by alcohol use compared to younger adults due to increased health risks and complications associated with aging.

Older adults who drink excessively (including binge drink) are vulnerable to the development of chronic diseases such as cardiovascular diseases (including high blood pressure, heart attack, and stroke), cancers, liver diseases, cognitive impairment, physical impairments (falls), and harmful medication interactions among other negative health outcomes.

Adult admissions to OASAS-certified treatment programs for alcohol between 2007 and 2016 have decreased. From 2010 to 2016, alcohol treatment admissions were highest among persons ages 46 and 55 years, and increased the most among persons aged 56 or older. Like alcohol use prevalence, these age groups include the Baby Boomer generation (1946-1964). Several factors may explain declines in alcohol treatment admissions, including attitudes toward seeking treatment, stigma, inadequate health insurance, and lack of transportation.
METHODS

Alcohol (continued)
Consequences of alcohol use, including DWI arrests and alcohol-related treatment admissions have declined since 2007. However, from 2007 to 2014, age-adjusted cirrhosis mortality rates increased slightly statewide, with the highest increase (22.4%) in NYC. These results reflect increases of liver disease and cirrhosis mortality rates at the national level.¹³

Tobacco Use
Research supports the national decline in past 30-day use (current use) of tobacco products among the general population spanning more than 5 decades.¹⁴,¹⁵ Current use of tobacco in New York State has followed a similar downward trend among the general population for more than a decade. The decline in tobacco use among NYS residents may be attributable to statewide tobacco prevention efforts and tobacco control policies. Statewide tobacco prevention efforts that combat tobacco use have mirrored those at the national level¹⁶ (including strict tobacco control policies/smoke-free laws¹⁷ penalties for tobacco retailer and vendors for illegal tobacco sales to minors, high tobacco excise taxes¹⁷ cessation programs¹⁸ and adolescent tobacco prevention programs.¹⁷,¹⁸

Mental Health
Past year suicide attempts among high school youth increased at both the national and state levels from 2011-2015.¹⁹ Reports suggest that increased suicide attempts among youth are higher among females than males.²⁰,²¹ Future research should consider factors contributing to this phenomenon, while identifying opportunities for mental health screenings among at-risk youth, in both traditional and non-traditional settings (i.e., emergency department waiting rooms, primary care and dental visits, and school clinics).

New York State young adults (18-25) experiencing any mental illness (AMI) in the past year steadily increased during the survey years of 2007-2008 to 2013-2014. Statewide AMI prevalence was lower than national and regional prevalence from 2011-2012 to 2013-2014.

Literature Review Process
This section discusses the data collection, rating, and selection process for presentation in this profile.

The data collection process began with a review of the most current, relevant and publicly available data sources. Several electronic resources were accessed including the New York State Library, Cochrane Library, Google Scholar, and PubMed. The search process included, but was not limited to the following key terms: substance abuse, mental, emotional, and behavioral disorders, mental health, incidence, prevalence, New York State, health burden, epidemiology, public health, evidence-based, criminal justice, trends, alcohol, drugs, tobacco, opioids, marijuana, mortality, hospitalizations, injury, gender, race/ethnicity, LGBT, youth, young adults, older adults, outcomes, studies, research, indicators, policy, legislation, and consequences. This search generated nearly 170 data sources, including reports, queried results, peer-reviewed journal articles, pilot studies, policy papers, guides/guidelines, toolkits, manuals, fact sheets, graphics (maps), epidemiological data briefs, survey data, abstracts, and newspaper articles.

Data Rating
Data sources published from 2005 to 2016 were assessed for relevancy, comparability, study population, and outcomes. Sources published prior to 2010 were excluded from the “Findings” section of the profile, except for data that allowed for trend analyses. All data sources were divided into 4 data-level categories (i.e., national-level, state- and/or county-level, New York City data, and/or other data source). The data assessment included 31 national data sources, 14 State- and/or county-specific data sources, 15 New York City-specific data sources, and 69 data sources categorized as “other”, for a sum of 129 data sources.

An 11-point rating system was created to assign a value to each data source. Ratings were based on the date of publication, population generalizability, geographic level, comparability of the data source to other data sources or estimates from the same source collected at different time points, and results (conclusive or inconclusive). Sources assigned a value between 0 and 3 were ranked as low relevancy, values between 4 and 7 moderate, and values between 8 and 11 were ranked as high relevancy. Data sources ranked from medium to high or scored within a range of 4-11 points were included in the “Findings” section of the profile.
METHODS (CONTINUED)

Data Inclusion
The 7 data sources included in this profile were, CDC Wonder, NYS Division of Criminal Justice Services (DCJS) Computerized Criminal History system, Kids’ Well-being Indicators Clearinghouse (KWIC) Data Tools, National Survey on Drug Use and Health (NSDUH), NYS Department of Motor Vehicles (NYSDMV) Motor Vehicle Crashes, NYS Office of Alcoholism and Substance Abuse Services (OASAS) Data Warehouse, and the Youth Risk Behavior Survey (YRBS).

Glossary of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AMI</td>
<td>Any Mental Illness</td>
</tr>
<tr>
<td>AUD</td>
<td>Alcohol Use Disorder</td>
</tr>
<tr>
<td>BAU</td>
<td>Binge Alcohol Use</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CDS</td>
<td>Client Data System (New York State OASAS)</td>
</tr>
<tr>
<td>CY</td>
<td>Calendar Year</td>
</tr>
<tr>
<td>DCJS</td>
<td>Division of Criminal Justice Services (New York State)</td>
</tr>
<tr>
<td>ED</td>
<td>Emergency Department</td>
</tr>
<tr>
<td>IDUD</td>
<td>Illicit Drug Use Disorder</td>
</tr>
<tr>
<td>KWIC</td>
<td>Kids’ Well-being Indicators Clearinghouse</td>
</tr>
<tr>
<td>MDE</td>
<td>Major Depressive Episode</td>
</tr>
<tr>
<td>NSDUH</td>
<td>National Survey on Drug Use and Health</td>
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<td>New York</td>
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<td>OASAS</td>
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<td>PFS</td>
<td>Partnership for Success (Grant/Cooperative Agreement)</td>
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<td>Rest of State</td>
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<td>Substance Use Disorder</td>
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<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>YRBS</td>
<td>Youth Risk Behavior Survey</td>
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</table>
NEW YORK STATE FINDINGS
DRUG CONSEQUENCES AND USE

* Figures 1-9 include deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision.¹

* Figure 1

New York State: Total Overdose Deaths

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>1,708</td>
<td>577</td>
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<tr>
<td>2016</td>
<td>3,638</td>
<td>1,051</td>
<td>2,587</td>
</tr>
</tbody>
</table>

Data Source: CDC Wonder
Includes intentional, unintentional and undetermined deaths

- Total overdose deaths (intentional, unintentional and undetermined deaths) increased 113.0% statewide from 2007 to 2016, with the highest increase among males (128.7%) compared to females (82.1%) during the same years.¹

* Figure 2

New York State: All Prescription Drug Overdose Deaths

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
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<td>2012</td>
<td>1,430</td>
<td>532</td>
<td>898</td>
</tr>
<tr>
<td>2013</td>
<td>1,466</td>
<td>554</td>
<td>912</td>
</tr>
<tr>
<td>2014</td>
<td>1,477</td>
<td>581</td>
<td>896</td>
</tr>
<tr>
<td>2015</td>
<td>1,875</td>
<td>624</td>
<td>1,251</td>
</tr>
<tr>
<td>2016</td>
<td>2,802</td>
<td>851</td>
<td>1,951</td>
</tr>
</tbody>
</table>

Data Source: CDC Wonder

- All prescription drug overdose deaths increased by 170.2% from 2007-2016 statewide. Female drug overdose deaths increased by 111.7% and male drug overdose deaths by 207.2% over the 10-year period. Includes prescription drugs ICD-10 codes (T36-T39, T40.2-T40.4, T41-T43.5, and T43.8-T50.8).¹
From 2007-2016, all illicit overdose deaths increased by 185.7% statewide. The greatest increase in deaths were among females (190.9% deaths) compared to males (184.1% deaths) during the same years. Includes illicit drugs ICD-10 codes (T40.1, T40.5, T40.7-T40.9, and T43.6).¹

Opioid overdose deaths increased statewide by 192.4% from 2007-2016. Female opioid overdose deaths increased by 158.9% and males increased by 207.3% during the 10-year time frame. Includes opioids ICD-10 codes (T40.1-T40.4 & T40.6).¹
• Total opioid analgesics (excluding fentanyl) overdose deaths increased statewide by 58.3% from 2007-2016. During the same years, opioid analgesics overdose deaths among females increased by 177.8% compared to an 51.8% increase in deaths among males. Includes opioid pain relievers (other than synthetic opioids) ICD-10 codes (T40.2, T40.3, & T40.6) excluding the category predominated by illicit fentanyl.¹

• From 2007-2016, total heroin overdose deaths increased by 570.3% statewide. In the same years, heroin overdose deaths among females increased by 602.6% and males by 562.2%. Heroin ICD-10 codes (T40.1).¹
Illicit opioid (including heroin and fentanyl) overdose deaths increased 649% statewide from 2007-2016. Female overdose deaths in this category increased by 577% and males by 674% over the same period. Illicit Opioids ICD-10 codes (T40.1, T40.4).¹

Between 2007 and 2016, total benzodiazepine overdose deaths increased by 224.3% statewide as illustrated in Figure 8. Benzodiazepine overdose deaths without opioids increased by 86% during this time. However, benzodiazepine overdose deaths including opioids increased by 253%. Benzodiazepines and opioids include ICD codes 40.1-40.4, 40.6 AND 42.4.¹
Total cocaine overdose deaths increased by 70.0% statewide from 2007-2016. Opioid overdose deaths involving cocaine increased by 165.6% statewide, and cocaine overdose deaths without opioids decreased by 19.6% during this period. Cocaine and opioids include ICD codes 40.1-40.4, 40.6 AND 40.5.

Newborn drug-related rates (involving any drug) increased across all geographic levels from 2007 to 2014. The most dramatic increases occurred in the Rest of the State (excluding NYC).
Drug arrests in New York State decreased significantly between 2007 and 2016. Although drug arrests increased slightly in the Rest of State, there was a 52% decline in New York City.³

New York State current use of any illicit drug among young adults 18 to 25 was higher than national use for all survey years.

Note: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription drugs used nonmedically.⁴
Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription drugs used nonmedically.¹

- **New York State**: Current use of any illicit drug among adults 26 or older was higher than national use for all survey years and continued to increase from 2007-2008 to 2013-2014.

Current use of marijuana is defined as those who reported use of marijuana within 30 days preceding the date of interview.¹

- **New York State**: State use was highest in survey years 2008-2009 and lowest in years 2013-2014.
- **National, regional and State**: Current use of marijuana among young adults 18-25 in New York State was higher than national use for all survey years and lower than regional use for 2012-2013 and 2013-2014.
Figure 15

**Current Use of Marijuana: Adults Ages 26 or Older**

<table>
<thead>
<tr>
<th>Year</th>
<th>New York State</th>
<th>Northeast</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2008</td>
<td>4.3</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>2008-2009</td>
<td>4.9</td>
<td>4.6</td>
<td>4.4</td>
</tr>
<tr>
<td>2009-2010</td>
<td>5.2</td>
<td>5.0</td>
<td>4.7</td>
</tr>
<tr>
<td>2010-2011</td>
<td>5.2</td>
<td>5.0</td>
<td>4.8</td>
</tr>
<tr>
<td>2011-2012</td>
<td>6.0</td>
<td>5.4</td>
<td>5.1</td>
</tr>
<tr>
<td>2012-2013</td>
<td>6.2</td>
<td>5.7</td>
<td>5.5</td>
</tr>
<tr>
<td>2013-2014</td>
<td>6.7</td>
<td>6.6</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Data Source: National Survey on Drug Use and Health

**Note:** Current use of marijuana is defined as those who reported use of marijuana within 30 days preceding the date of interview.

- **New York State:** Current use of marijuana among older adults 26 or older increased for all survey years except 2010-2011.
- **National, regional, and State:** New York State use was higher than regional and national use for all survey years, with the highest use reported in 2013-2014.

Figure 16

**Past Year Nonmedical Prescription Opioid Use:**

<table>
<thead>
<tr>
<th>Year</th>
<th>New York State</th>
<th>Northeast</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2008</td>
<td>10.5</td>
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<tr>
<td>2008-2009</td>
<td>12.1</td>
<td>12.2</td>
<td>12.0</td>
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<tr>
<td>2009-2010</td>
<td>11.6</td>
<td>12.0</td>
<td>11.5</td>
</tr>
<tr>
<td>2010-2011</td>
<td>8.9</td>
<td>10.2</td>
<td>10.4</td>
</tr>
<tr>
<td>2011-2012</td>
<td>8.3</td>
<td>9.3</td>
<td>10.0</td>
</tr>
<tr>
<td>2012-2013</td>
<td>7.8</td>
<td>8.6</td>
<td>9.5</td>
</tr>
<tr>
<td>2013-2014</td>
<td>7.2</td>
<td>7.8</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Data Source: National Survey on Drug Use and Health

**Note:** Estimates of past year nonmedical use of prescription pain relievers does not include over-the-counter use or legitimate use of prescription pain relievers.

- **New York State:** Past year nonmedical use of prescription opiates among young adults 18-25 was highest (12.1%) in survey cycle 2008-2009 and lowest (7.2%) in 2013-2014.
- **National, regional, and State:** Past year nonmedical use of prescription opiates declined at all levels from 2010-2011 to 2013-2014.
Figure 17

**Past Year Nonmedical Prescription Opioid Use:**

**Adults Ages 26 or Older**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>New York State</td>
<td>2.8</td>
<td>2.9</td>
<td>3.1</td>
<td>3.0</td>
<td>3.3</td>
<td>3.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Northeast</td>
<td>2.9</td>
<td>3.0</td>
<td>3.1</td>
<td>3.0</td>
<td>3.2</td>
<td>3.1</td>
<td>2.9</td>
</tr>
<tr>
<td>United States</td>
<td>3.5</td>
<td>3.4</td>
<td>3.5</td>
<td>3.4</td>
<td>3.5</td>
<td>3.6</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Data Source: National Survey on Drug Use and Health

**Note:** Estimates of past year nonmedical use of prescription pain relievers does not include over-the-counter use or legitimate use of prescription pain relievers.⁴

- **New York State:** Past year nonmedical use of prescription opiates among adults 26 or older, declined in the last two survey cycles from 3.2% to 2.9%.
- **National, regional and State:** State past year nonmedical use of prescription opiates among adults 26 or older was lower than national use for all survey years and higher than regional use from 2011-2012 to 2012-2013.

**Adult Alcohol Consequences and Use**

Figure 18

**New York State: Age Adjusted Cirrhosis Mortality Rate per 100,000, 2007-2014**

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
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<td>New York City</td>
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<td>5.4</td>
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<td>5.7</td>
<td>6.1</td>
<td>6.0</td>
</tr>
<tr>
<td>Rest of State</td>
<td>6.9</td>
<td>6.6</td>
<td>6.1</td>
<td>7.0</td>
<td>7.2</td>
<td>7.2</td>
<td>7.2</td>
<td>7.0</td>
</tr>
<tr>
<td>New York State</td>
<td>6.1</td>
<td>5.3</td>
<td>5.8</td>
<td>6.5</td>
<td>6.8</td>
<td>6.6</td>
<td>6.7</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Data Source: New York State Department of Health, Vital Statistics

**Note:** The number of deaths due to cirrhosis per 100,000 population. The codes used for the Cirrhosis mortality are ICD-10 codes K70, K73-K74.⁵

- Statewide, the cirrhosis mortality rate was highest in 2011 and remained steady between 2011 and 2014. Similar trends were displayed for New York City (NYC) and the Rest of the State (excluding NYC) during the same period. The ROS had the highest rate of cirrhosis mortality for all years (2007-2014) compared to NYC and all NYS during the same years.
Overall, a 27% statewide decrease in adult DWI arrests occurred over a 10-year period, with the lowest number of arrests (39,005) in 2016.³

Unique client admissions for primary alcohol treatment to an OASAS-certified treatment program declined among all adult age groups except those 56 and older (44% increase). Among those of legal drinking age (21 or older), alcohol-related treatment admissions declined by 19.7% between 2007 and 2016.⁶
Binge Alcohol Use (BAU) is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days.⁴

- **New York State**: Current BAU was highest (43.7%) in 2008-2009 and lowest (38.0%) in 2013-2014.
- **National, regional and State**: Current BAU among young adults 18 to 25 in New York State was higher than national use and lower than regional use for all survey years.

**Figure 22**

Note: Binge Alcohol Use (BAU) is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days.⁴

- **New York State**: Current BAU was highest (23.9%) in 2012-2013 and lowest (21.4%) in 2007-2008.
- **National, regional and State**: Current BAU among adults 26 and older in New York State was slightly lower than national use from 2007-2008 to 2008-2009. State use was lower than regional use from 2007-2008 to 2011-2012.
Adult Mental Health

Figure 23

Major Depressive Episode: Adults 18 to 25

Note: Major depressive episode (MDE), as defined in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), is a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms.⁴

- **New York State**: State MDE prevalence increased from 2009-2010 to 2013-2014.
- **National, regional and State**: The percent of young adults reporting a MDE within the past year increased statewide, regionally, and nationally during the 2012-2013 and 2013-2014 survey years.

Figure 24

Major Depressive Episode: Adults 26 and Older

Note: Major depressive episode (MDE), as defined in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), is a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms.⁴

- **New York State**: State MDE prevalence decreased over 4 survey cycles (2010-2011 to 2013-2014).
- **National, regional and State**: The percentage of NYS adults 26 or older who reported a MDE was lower than national MDE prevalence for all years except 2009-2010. Regional and national MDE prevalence was higher than state MDE prevalence from 2011-2012 to 2013-2014.
Figure 25

Any Mental Illness: Adults 18 to 25

Note: Any mental illness (AMI) is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a developmental or substance use disorder, that met the criteria found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).⁴

- **New York State**: One in five young adults reported having AMI in the past year. AMI among young adults steadily increased across all survey years.
- **National, regional and State**: New York State prevalence surpassed national AMI prevalence in 2013-2014.

Figure 26

Any Mental Illness: Adults 26 or Older

Note: Any mental illness (AMI) is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a developmental or substance use disorder, that met the criteria found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).⁴

- **New York State**: AMI among adults 26 or older was higher than regional and national AMI prevalence for all survey years except for 2013-2014.
- **National, regional and State**: AMI prevalence declined at all geographic levels in the last survey cycle.
Serious mental illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder, other than a developmental or substance use disorder, that met the criteria found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and resulted in serious functional impairment.

- **New York State**: SMI among young adults 18 to 25 increased from 2009-2010 to 2013-2014.
- **National, regional, and State**: New York State SMI prevalence was lower than regional and national SMI prevalence for most survey years, except 2008-2009. Regional and national SMI prevalence continued to increase from 2009-2010 to 2013-2014.

### Youth Drug Consequences

- **NYC arrest rate for drug use, possession and sales**
  - In 2007, the NYC arrest rate for drug use, possession and sales was 417.3 per 10,000 population.
  - By 2014, the arrest rate had declined to 179.9 per 10,000 population.
  - Overall, all arrests declined between 2011 and 2015.
  - The NYC arrest rate declined by 57%.

Note: The New York State total includes arrests from out-of-state that are not displayed separately.
Primary marijuana-related treatment admissions among NYS residents 17 or younger admitted to an OASAS-certified treatment program were higher than all drug admissions for all years reported (2007-2016). However, marijuana treatment admissions declined by 43% during this 9-year period. Heroin-related treatment admissions increased by 15% between 2007 and 2016.⁶

Note: Illicit Drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription drugs used nonmedically.⁴

- **New York State**: Current use of any illicit drug among youth 12-17 were reportedly highest (10.9%) in 2009-2010 and lowest (9.4%) in 2011-2012 and 2013-2014.
- **National, regional and State**: New York State use was higher than national and regional use for most survey years.
Figure 31

Current Marijuana Use: Youth 12 to 17

<table>
<thead>
<tr>
<th>Year</th>
<th>New York State</th>
<th>Northeast</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2008</td>
<td>7.8</td>
<td>7.5</td>
<td>6.7</td>
</tr>
<tr>
<td>2008-2009</td>
<td>8.5</td>
<td>7.9</td>
<td>7.0</td>
</tr>
<tr>
<td>2009-2010</td>
<td>8.6</td>
<td>8.4</td>
<td>7.4</td>
</tr>
<tr>
<td>2010-2011</td>
<td>8.1</td>
<td>8.5</td>
<td>7.5</td>
</tr>
<tr>
<td>2011-2012</td>
<td>7.9</td>
<td>8.1</td>
<td>7.6</td>
</tr>
<tr>
<td>2012-2013</td>
<td>8.1</td>
<td>7.7</td>
<td>7.2</td>
</tr>
<tr>
<td>2013-2014</td>
<td>7.8</td>
<td>7.7</td>
<td>7.2</td>
</tr>
</tbody>
</table>

Data Source: National Survey on Drug Use and Health

Note: Current use of marijuana is defined as those who reported use of marijuana within 30 days preceding the date of interview.⁴

- **New York State**: Current marijuana use among youth 12-17 was highest (8.6%) in 2009-2010 and lowest (7.8%) in 2007-2008 and 2013-2014.
- **National, regional, and State**: New York State use was higher than national and regional use for most survey years.

Figure 32

Past Year Nonmedical Prescription Opioid Use: Youth 12 to 17

<table>
<thead>
<tr>
<th>Year</th>
<th>New York State</th>
<th>Northeast</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2008</td>
<td>5.0</td>
<td>5.4</td>
<td>6.6</td>
</tr>
<tr>
<td>2008-2009</td>
<td>5.2</td>
<td>5.4</td>
<td>6.6</td>
</tr>
<tr>
<td>2009-2010</td>
<td>5.3</td>
<td>5.4</td>
<td>6.4</td>
</tr>
<tr>
<td>2010-2011</td>
<td>4.7</td>
<td>5.2</td>
<td>6.1</td>
</tr>
<tr>
<td>2011-2012</td>
<td>4.1</td>
<td>4.8</td>
<td>5.6</td>
</tr>
<tr>
<td>2012-2013</td>
<td>3.5</td>
<td>4.1</td>
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</tr>
<tr>
<td>2013-2014</td>
<td>3.9</td>
<td>4.0</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Data Source: National Survey on Drug Use and Health

Note: Estimates of past year nonmedical use of prescription pain relievers does not include over-the-counter use or legitimate use of prescription pain relievers.⁴

- **New York State**: Past year nonmedical use of prescription opiates was highest in 2009-2010 and lowest in 2012-2013.
- **National, regional, and State**: New York State past year nonmedical use of prescription opiates among youth 12-17 was lower than national and regional use for all survey years.
• **New York State**: Lifetime heroin use among New York State high school students in grades 9-12, increased 167% from 2003 to 2015. NYS students reported lowest lifetime use in 2003 and 2005 and highest use in 2015.⁸

• **National**: Lifetime heroin use among high school students decreased 36% between 2003 and 2015 with the lowest use reported in 2015.

### Youth Alcohol Consequences and Use

• Unique clients 20 or younger admitted to an OASAS-certified program primarily for alcohol treatment declined by 66% from 2007-2016.⁶
Overall, arrests for DWI among persons 16 to 21 declined at the state level, in New York City, and the Rest of the State (excluding New York City) between 2007-2015.¹⁷

Alcohol use among high school students remained relatively steady from 2003 to 2007 both nationally and statewide. From 2009 to 2015, current alcohol use declined significantly both statewide and nationally. In 2015, New York State high school students drank alcohol less frequently during the past 30 days compared to national estimates. The New York State Department of Health Prevention Agenda Objective 2.1.1: for December 2018 is to reduce the percentage of youth in grades 9-12 reporting the use of alcohol on at least one day for the past 30 days to no more than 34.6%. (Baseline: 38.4 per 100, 2011 YRBS). The 2015 YRBS estimates indicate this objective may be achieved.⁸
• Current binge alcohol use among New York State high school students in grades 9-12 declined 38% from 2003 to 2015. NYS high school students reported the highest use in 2003 and the lowest in 2015. Nationally, current binge alcohol use followed a similar pattern of decreased use between 2003 and 2015.⁸

• New York State: State binge alcohol use was higher than national use for all years except survey year 2013-2014. State use declined from 20.1% in 2007-2008 to 14.0% in 2013-2014.

• National, regional and State: Current New York State binge alcohol use among persons 12 to 20 was lower than regional use for all years.

Note: Underage drinking is defined for persons 12 to 20.⁴
Youth Mental Health

Figure 39

Major Depressive Episode: Youth 12 to 17

<table>
<thead>
<tr>
<th>Year</th>
<th>New York State</th>
<th>Northeast</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007-2008</td>
<td>8.0</td>
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<td>2008-2009</td>
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<td>2009-2010</td>
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<tr>
<td>2013-2014</td>
<td>10.5</td>
<td>10.6</td>
<td>11.0</td>
</tr>
</tbody>
</table>

Data Source: National Survey on Drug Use and Health

Note: Major depressive episode (MDE) is defined as in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), which specifies a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had a majority of specified depression symptoms.

- **New York State**: The percentage of youth reporting a MDE within the past year increased during the 2012-2013 and 2013-2014 survey years, supporting the recent trends observed among high school students in the YRBS.
- **National, regional, and State**: Like state MDE prevalence, regional and national prevalence also increased during the 2012-2013 and 2013-2014 survey years.

Figure 40

Felt Sad or Hopeless: 9th-12th Grade Students

<table>
<thead>
<tr>
<th>Year</th>
<th>New York State</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>27.8</td>
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<tr>
<td>2005</td>
<td>27.3</td>
<td>28.5</td>
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<td>2007</td>
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<td>2009</td>
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<td>29.9</td>
</tr>
<tr>
<td>2015</td>
<td>28.6</td>
<td>29.9</td>
</tr>
</tbody>
</table>

Data Source: Youth Risk Behavior Survey, Youth Online

The percent of New York State high school students reporting feeling sad or hopeless almost every day for at least two or more weeks during the past year significantly increased, from 23.8% in 2013 to 28.6% in 2015. Females are much more likely than males to report feeling sad or hopeless during all survey years across all grades levels both nationally and in New York State. In 2015, the New York State rate of 28.6 was not significantly different from the national rate of 29.9.
The percent of New York State 9th-12th grade students reporting at least one suicide attempt during the past year increased significantly from 7.1% in 2013 to 9.9% in 2015. Although females are more likely to report attempting suicide, the recent increase is attributed to the significant increase among males, from 5.5% in 2013 to 9.3% in 2015, compared to the smaller increase in females, from 8.6% in 2013 to 9.9% in 2015. The percent of NYS high school students in 2015 attempting suicide within the past year (9.9%), was higher than the national rate of 8.6%.

Tobacco Use

New York State: Young adults 18-25 reported greater current tobacco consumption than youth and adults over 25.

National, regional and State: New York State use of tobacco products among young adults was less than regional and national use. Tobacco use decreased at all geographic levels from 2007-2008 to 2013-2014.
Figure 43

**Current Use of Any Tobacco Product: Adults 26 or Older**

| Percent of Adults Ages 26 or Older Using Any Tobacco Product in the Past 30 Days |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| New York State                  | 23.7                            | 23.6                            | 23.8                            | 23.7                            | 24.0                            | 24.0                            |
| Northeast                       | 26.0                            | 25.8                            | 25.6                            | 25.4                            | 25.4                            | 24.5                            |
| United States                   | 28.5                            | 27.9                            | 27.3                            | 26.8                            | 26.7                            | 26.3                            |

**Data Source:** National Survey on Drug Use and Health

**Note:** Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco; excludes vaping.⁴

- **New York State:** State use was lowest in 2008-2009 and remained the same from 2010-2011 to 2013-2014.
- **National, regional, and State:** New York State use was higher than regional use in 2013-2014. National and regional use declined between 2007-2008 and 2013-2014.

Figure 44

**Current Use of Any Tobacco Product: Youth 12 to 17**

| Percent of Youth Ages 12-17 Using any Tobacco Product During the Past 30 Days |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| New York State                  | 10.4                            | 10.7                            | 10.0                            | 8.7                             | 8.0                             | 7.2                             |
| Northeast                       | 11.5                            | 11.4                            | 10.9                            | 10.4                            | 9.5                             | 8.1                             |
| United States                   | 12.0                            | 11.6                            | 11.3                            | 10.3                            | 9.3                             | 8.2                             |

**Data Source:** National Survey on Drug Use and Health

**Note:** Tobacco Products include cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco; excludes vaping.⁴

- **New York State:** Youth 12 to 17 reported using any tobacco product (cigarettes, cigars, chewing tobacco and snuff) less frequently during the past 30 days compared to regional and national estimates.
- **National, regional, and State:** Tobacco use among youth steadily declined from 2007-2008 to 2013-2014. Youth reported using tobacco products less often than adults during all survey years and across all regions.
NEW YORK STATE: ANTI-TOBACCO EFFORTS

New York State has been successful in reducing initiation of youth tobacco use. To reduce the sale of cigarettes, NYS has enacted the highest state cigarette tax in the nation. Additional restrictions aimed at reducing the influence of tobacco media and marketing have been successful at reducing initiation of youth tobacco use, prohibiting the sale of tobacco products to persons under the age of 18 years. The New York Youth Tobacco Survey (YTS) reported an 84% decrease in cigarette smoking among high school students from 2000 to 2016.³

New York State tobacco control policies have reduced public and occupational exposures to secondhand or environmental smoke. The State has enacted multiple control policies, including prohibiting the sale of tobacco products to persons under the age of 18 and outdoor smoking within 15 feet of entrances or exits of hospitals and residential health care facilities, including the expansion of the New York State Clean Indoor Act (CIAA) in 2003.¹² The CIAA prohibits smoking of tobacco products in most public and work spaces, such as all school grounds, places of employment, restaurants, bars, and playgrounds to name a few.²

Studies conducted by the NYS Department of Health suggest that since the implementation of the CIAA, the state has seen significant reductions in hospital admissions for acute heart attacks in the first 3½ years of the law, which translates into a 15% reduction compared to years prior to the smoking ban.² Further, a “cost savings of $56 million” was estimated due to “fewer hospital admissions for heart attacks”.²

DATA GAPS & LIMITATIONS

There are several limitations to the data reported in this profile. First, most estimates reported in the findings were compiled from archival or secondary data sources. Secondary data sources rely upon information collected from prior research inquiries, whereas primary data is tailored to answer specific research questions designed by the investigator(s).

Additionally, there are certain caveats to using survey data. Survey data are subject to recall and response biases. Respondents may not recall past information and respond incorrectly to survey questions. Also, depending upon the nature of the survey questions, some respondents may want to answer in ways that are “socially acceptable”, but inaccurate nonetheless. Second, when using cross-sectional or prevalence data, temporal relationships between risk factors and behaviors cannot be determined. Lastly, several breaks in trends from the NSDUH and BRFSS will not allow for comparison of data measures for years prior to 2015 (NSDUH) and prior to 2011 for data published as of 2016 (BRFSS).

Although there are limitations to the data provided in this report, the use of survey data allows for the observation of multiple data points over several years. Multiple data points are important in providing useful trends for substance abuse planning and prevention. Additionally, the data sources in this report provide substance use and mental health prevalence, and consequences of use, at the state level, by age group, gender, and/or high school grade level.

Future profiles should include substance abuse and mental health prevalence data at various geographic levels for more meaningful data utilization among communities and their respective municipalities.
Drug prevention research has produced substantial evidence that certain programs and evidence-based prevention strategies (EBPS) can improve youth and families’ risk and protective factors. Risk factors increase the likelihood of the development of substance abuse while protective factors reduce the likelihood of the development of problem behavior. EBPS include educational prevention services, environmental prevention strategies, and some early intervention activities. Selecting appropriate EBPS (culturally relevant to their target populations and based on identified local need) helps to ensure that programs and/or practices that work are being utilized.

Communities and populations have different levels of risk, protection, and substance use. Scientific evidence indicate that communities are an important organizing force for implementing effective EBPS. To build effective, sustainable prevention across age groups and populations, communities should continue to develop coalitions which assess and prioritize local levels of risk and protective factors and substance misuse problems and select and implement evidence-based interventions matched to local priorities. Additionally, program sustainability can occur when programs are implemented with quality, which includes scheduled need assessments, ongoing program planning and adaption, staff training, and evaluation.

New York State PFS communities implement environmental-level strategies to substance abuse prevention. Environmental strategies are used to “change the conditions within a community, including physical, social, or cultural factors that may lead to substance use.” These strategies include “communication and education strategies, which seek to influence community norms by raising awareness and creating community support for prevention.” They are primarily aimed at influencing behavior through the establishment and enforcement of laws, policies, and regulations regarding access to and availability of alcohol and other substances and gambling for underage youth. Environmental strategies are combined with the use of media to increase community awareness and support. Environmental prevention strategies have been used to enforce underage drinking laws by implementing enforcement checks against the selling or serving of alcohol to underage youth, visible police enforcement, and social norms campaigns complement the direct services targeting youth and families.

**CONCLUSIONS**

Mental, emotional, and behavioral (MEB) disorders, including substance abuse are a major public health concern for the reasons discussed in this profile. This report sought to identify statewide trends in substance abuse and mental health prevalence among NYS residents. OASAS prevention efforts have been successful at sustaining low substance use and misuse prevalence among youth. The application of population-based approaches to a public health problem can aide in the reduction of substance use/misuse statewide, namely among young adult populations aged 18-25 and older adults in the Baby Boomer generation. OASAS continues to address challenge areas through multiple statewide prevention efforts, treatment services, and interagency collaborations like the SEW. The NY SEW will continue to use data to monitor and report substance use and misuse prevalence across New York State. A comprehensive surveillance system can allow for the identification of emerging substance use/misuse issues and timely responses to address future substance abuse epidemics.
A National Perspective


REFERENCES
(CONTINUED)


REFERENCES

A State Perspective


New York State Findings

(CONTINUED)

REFERENCES

New York State Anti-Tobacco Efforts


Substance Abuse Prevention and Practice


Conclusions
