



**Department
of Health**

The New York State Health Assessment describes the health of the people who are born, live, learn, work, play, and age in New York State. The assessment provides the public, policy leaders, and critical partners, and other groups with valuable information on health needs, trends, priorities, and community resources.

New York State 2024 Health Assessment

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New York State 2024 Health Assessment

SECTION I: INTRODUCTION

What is the State Health Assessment?

The New York State Health Assessment (SHA) provides an overview of the health of the people who are born, live, learn, work, play, and age in New York State. The State Health Assessment is a process that identifies and describes:

- The health of the population and areas for health improvement
- Contributing factors that affect health outcomes
- Existing state assets and resources that can be used to address health needs

The assessment provides the public, policy leaders, and contributors with information on health needs, trends, priorities, and community resources. It also identifies key health issues and disparities. The assessment serves as a guide for local public health agencies, policy leaders, community partners, and other groups to guide informed decision-making that promotes the health of the State.

The 2024 SHA is a retrospective review that informs the prospective priorities and goals of the 2025–2030 New York State Prevention Agenda, the State Health Improvement Plan.

Key Findings

Key findings from the New York State Health Assessment include:

- The population in New York is aging and diverse.
- The life expectancy of individuals in New York has declined due to serious health threats, such as COVID-19 and the opioid crisis.
- Chronic diseases, including cancers and asthma, continue to be a major burden.
- Although access to health care in New York State has improved, many individuals still face barriers.
- There are significant disparities in health outcomes and social determinants of health across racial and ethnic categories, education levels, and income levels.
- Lack of social associations, disconnected youth, and single-parent households may contribute to poor mental and physical health.
- Obesity, smoking, and lack of physical activity negatively impact people's health.
- Teen pregnancy has declined and breastfeeding rates have improved, but infant and maternal health disparities remain.
- New York State has made progress in efforts to end acquired immunodeficiency syndrome (AIDS), but there are still relatively high rates of sexually transmitted infections (STIs).

State Health Assessment Process

A cross-disciplinary team of staff from the New York State Department of Health and external partners prioritized a list of health indicators for inclusion in the assessment. In addition, community members contributed to the assessment through a survey and public meetings. **The assessment process included 6 steps:**

1. Collecting and analyzing data
2. Identifying and describing key issues
3. Setting priorities and collecting partner feedback
4. Selecting core indicators that represent the selected priorities
5. Documenting findings in collaboration with contributors
6. Sharing the State Health Assessment report with the public

The 2024 State Health Assessment collected data and input from New York State partners in several ways:

- **New York State Data profiles:** Several data sources, including birth, death and hospital records; program statistics; U.S. Census data; and national survey data were analyzed. Metrics across a comprehensive range of topics were reviewed, including those describing the social, economic, and physical environment. Data was reported by race, ethnicity, disability, geography, education level, and income for some metrics. Historical and current public health data were reviewed to measure progress and identify areas for improvement.
- **Local Health Departments and Hospitals Assessments and Plans:** A document review was conducted on 112 Community Health Assessments, Community Health Improvement Plans, and Community Service Plans submitted by 58 Local Health Departments and 185 nonprofit hospitals and hospital systems.
- **Partner Input:** The New York State Department of Health held 2 data presentations to solicit feedback on the 2024 State Health Assessment development. The meetings were attended by more than 120 participants representing various centers and divisions within the Department of Health, as well as members of the New York State Public Health and Health Planning Council, state government agencies, local health departments, hospitals, and other agencies. A summary of progress on the Prevention Agenda 2019-2024 objectives was also presented.

The 2024 State Health Assessment is divided into several chapters with health outcomes and demographic data presented in graphs, tables, and maps. The “Description of Population Demographics and General Health Status” chapter includes the key findings about who lives in New York State and general health data issues. The chapters, “Contributing Causes of Health Challenges” and “Summary of New York State Department of Health Assets to Address Public Health Issues and Challenges,” highlight the state’s assets and factors contributing to the state’s health challenges, which were informed by collaboration between the New York State Department of Health, Office of Mental Health (OMH), Office of Addiction Services and Supports (OASAS), Department of State, Office of Temporary and Disability Assistance, and Office for the Aging. The development of the 2024 State Health Assessment involved over 18 months of engagement, beginning in March 2023. The findings from the 2024 SHA were used to shape the priorities, goals, equity-focused objectives, and overall vision of the 2025-2030 Prevention Agenda to ensure that New York State is addressing the population’s health needs.

The Prevention Agenda is the guiding framework for collaborative health improvement efforts led by the State Department of Health, local health departments, nonprofit hospitals, and community partners. Progress to date is detailed in the chapter “Progress to Date on Local Collaborative Planning.”

Feedback

Partner engagement and collaborative work is an important element of the State Health Assessment process. The Ad Hoc Committee to Lead the State Health Improvement Plan, established by the New York State Public Health and Health Planning Council, is charged with developing the framework and specifics of the Prevention Agenda. Ad Hoc Committee members represent state agencies, health care, local health departments, health care associations, community organizations, and other entities as representatives of a holistic public health system in New York State. (See Appendix C for a list of Ad Hoc Committee members).

The Ad Hoc Committee supported the assessment phase, identification of priorities, and development of the improvement plan. Members also provided feedback on several cross-cutting principles, including promoting health across all policies and healthy aging approaches. The members met quarterly between March 2023 and July 2024. During 2023, the members met to review and discuss the assessment data to obtain further validation of key themes emerging on public health systems infrastructure and health priority issues. In 2024, the members finalized the priorities and worked on action plan development. A summary of partner feedback is described in the chapter entitled “Partner Feedback.”

Limitations

The 2024 State Health Assessment provides a comprehensive overview of the current health status throughout New York. However, this report has limitations. To maintain a reasonable length and to highlight current trends as well as prioritize intervention opportunities, the assessment focuses on a selected list of indicators and metrics. Many additional indicators and data points can be found on the Department’s various [data dashboards and in program reports](#) focusing on factors such as race, ethnicity, income level, or geography. The most current data was used to develop the State Health Assessment; however, in many cases, the most recent data is 1 or more years old.



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SECTION II: DESCRIPTION OF POPULATION DEMOGRAPHIC AND GENERAL HEALTH STATUS

Executive Summary

This chapter has 3 key sections. The first describes New York State’s **population demographics, health-related social needs, and structural determinants of health**. The second section, **key health-related risk factors and outcome measures**, describes the relevant priority areas of the New York State [Prevention Agenda 2019-2024](#)¹ and other key public health issues for state residents. The last section describes progress on the **Prevention Agenda 2019-2024** by examining the 99 tracking indicators overall as well as performance by specific priority areas.

State Population Demographics, Health-Related Social Needs, and Structural Determinants of Health

New York State’s population is the fourth largest in the United States and was estimated at 19.8 million in 2021, rising slightly from 19.7 million in 2016. Although the state has experienced outmigration, in-migration, immigration from other nations, lower birth rates and deaths due to the opioid crisis and COVID-19 pandemic, the population has remained relatively stable over the last 5 years. The population distribution has shifted over the last 2 decades; the average age is now 39.2, which is an increase of 1.8 years from 2006 and 2021. Population counts have also declined for those under age 10 during the same period.

The largest racial or ethnic subgroup in the state is White non-Hispanics, which accounts for 55% of the population. Hispanics make up 19% of the population, while Black non-Hispanics make up 14%, and Asian non-Hispanics make up 8%. Those who report being 2 or more races, but non-Hispanic, make up 3% of the population. Those in the “other” category, which includes Native Americans, or who don’t specify any category make up 1% of the population.

The percentage of households comprised of married couples and married couples with children declined over time, while the percentage of single-person and single-parent households increased. In 2021, 26% of children in New York State lived in a single-parent household.

During the 2017-2021 period, more than 18% of all children in New York State were living below the poverty line. For Black non-Hispanic children, 28% were living in poverty versus just 12.1% of White non-Hispanics. During the same period, unemployment was 8.3% for Hispanics and 9.2% for Black non-Hispanics.

In 2021, approximately 6.7% of individuals in New York State were living in households that reported English speaking proficiency as less than “very well.”

In 2021, the percentage of the population ages 25 or older with a bachelor’s degree or higher was 38.1%, and the high school dropout rate was 7.3%.

In 2021, 2.6% of children under age 19 were without health insurance compared to 5% nationally. The percentage of children without health insurance in New York State and nationally has been continuously declining over the last decade.

In 2021, the rate of violent crime in New York State was slightly lower than the rate in the United States. The rates of violent crime have steadily declined over the last decade in New York State.

Key Health-Related Risk Factors and Outcome Measures

New York State has made immense progress in improving health in the last decade. According to [America's Health Rankings](#)² New York was ranked 9th in the nation in 2019, a great improvement from the 40th rank in 1990. Despite this progress, significant challenges remain, including those related to the aging population and increases in opioid use disorders. The life expectancy in New York State was 78.2 years for those born in 2020, which represents a decline of 3.3 years from those born in 2019, when the life expectancy was 81.5 years. Contributing factors include the COVID-19 pandemic as well as the opioid epidemic.

The leading causes of death in New York State between 2012 and 2020 were heart disease followed by cancer for all years except 2020, when COVID-19 became the second leading cause of death. In 2020, 186 out of every 100,000 individuals in New York State died from heart disease. The unintentional injury rate increased over the same period, in part, due to opioid overdoses. As of 2020, Pneumonia and Influenza were no longer in the top 7 leading causes of death for the first time in 8 years.

Racial and Ethnic Disparities

Many health outcomes reflect racial and ethnic disparities, particularly the case rate for new Human Immunodeficiency Virus (HIV) diagnoses and the emergency department visit rate for children with asthma ages 0-17.

COVID-19

The COVID-19 pandemic affected many health outcomes. In April 2020, the weekly death count peaked at 6,900, while the 2020 annual death count was 38,511. By November 2023, weekly death count had dropped to 3,803. This decrease in deaths was attributed to the development of natural immunity, vaccination, and the emergence of less virulent strains.

Birth Outcomes

Black non-Hispanics experienced nearly double the rate of low birth weight babies than White non-Hispanics. The same subgroup also had the highest percentage of premature births and a low rate of early prenatal care. Among Black non-Hispanic mothers, 71.8% received early prenatal care, compared to 85.7% of White non-Hispanics. The rate of teen pregnancy among Black non-Hispanics is more than 5 times that of White non-Hispanics and more than 8 times the rate among Asian and Pacific Islanders. The teen pregnancy rate for Hispanics is more than 4 times that of White non-Hispanics and more than 7 times that of Asian and Pacific Islanders.

Use of Smoking and Vaping Products

Cigarette smoking among adults in New York State is 12%, reflecting 14% of males and 10% of females. The highest prevalence of smoking is seen among people 35 to 45 years old. White non-Hispanic cigarette smokers are the largest racial and ethnic subgroup at 12.9%. As education or household income increases, the prevalence of smoking decreases. Regionally, New York City has a lower prevalence of smoking compared to the rest of New York State.

Recent years have seen a surge in vaping, especially among younger people. In New York State, 22.5% of high school students use vaping products. White non-Hispanic students use vaping products at more than double the rate of Black non-Hispanic students. The percentage of students using vaping products increases with each high school grade level.

Physical Activity

In terms of physical activity among high school students, only 19.2% were physically active in 2019. Males were more physically active than females. Among different racial and ethnic subgroups, White non-Hispanics have the highest prevalence of physical activity (23.3%) and Asian non-Hispanics have the lowest prevalence of physical activity (10.7%).

Obesity

Obesity has been on the rise across the United States. As of March 2020, the Centers for Disease Control and Prevention (CDC) reports a national obesity rate of 42%.³ In 2021, New York experienced an adult obesity rate of 29.1%, up from 25.5% in 2016. Physical activity among adults has fluctuated between 72.8% and 76.2% between 2016 and 2021.

Sexually Transmitted Infections

The burden of sexually transmitted infections has increased across the United States. As of 2018, there were 68 million infections, representing 1 in 5 people.⁴ From 2010 to 2020, the case rates per 100,000 for chlamydia in New York State increased from 503.7 to 529.6. The case rates for gonorrhea increased from 92.9 to 228.3, and case rates for early syphilis increased from 13 to 41.7.

Human Immunodeficiency Virus (HIV)

HIV diagnosis is a particular area of concern due to the stark gender, racial, and ethnic disparities. In New York State, males are diagnosed at 4.5 times the rate of females. The highest risk is among men who have sex with men (MSM) and injection drug users. Black non-Hispanics are diagnosed at 7 times the rate of White non-Hispanics and nearly twice that of other Hispanics.

Alzheimer's Disease

The burden of Alzheimer's disease increases every year. As of 2020, there were more than six million Americans with Alzheimer's disease, including 410,000 in New York State alone. By 2025, we expect 460,000 cases among New Yorkers 65 and older, an increase of 12%. By 2050, the cost of caring for those with Alzheimer's disease is estimated to be \$1 trillion nationally.

Childhood Immunization

In New York State, the percentage of children 24- to 35 months old who have had a full (4:3:1:3:3:1:4) immunization series is 63.8%, which is below the 2024 Prevention Agenda objective of 70.5%. A full vaccination series includes at least four doses of diphtheria-tetanus-acellular pertussis (DTaP), three doses of Polio, one dose of measles-containing vaccine, three doses of Hepatitis B, one dose of Varicella, four doses Pneumococcal conjugate (PCV), and the Haemophilus influenzae type b (Hib) full series.

Preventive Dental Care

Preventive dental care is critical for many health outcomes. From 2019-2020, only 51% of children under six years old had at least one preventive care visit, versus 77.2% for all children. The percentage of children receiving dental care increased with the education levels of the adult household members.

Gun Violence

The violent crime rate per 100,000 population in New York State decreased overall from 2011-2020. As of 2020, New York State reported 361.8 violent crimes per 100,000 population and New York State excluding New York City reported 204.1 violent crimes per 100,000 population. The state's firearm assault-related hospitalizations also decreased from 2016 to 2019. As of 2019, there were only 0.29 hospitalizations per 100,000 population.

Marijuana (Cannabis)

Adult cannabis use was legalized in New York State with the passage of the Marijuana and Taxation Act in 2021. The percentage of high school students reporting current marijuana use (i.e., in the last 30 days) declined from 2013 to 2021. In 2013, 21.4% of students reported current use; by 2021, that number had dropped to 14.2%, which is below the national average of 15.8%.

Social Determinants of Health

Social determinants of health include both health-related social needs and structural determinants of health. Health-related social needs are individual-level factors that affect an individual's ability to maintain personal health and well-being. They are shaped by the distribution of money, power, and resources in a community and include things such as housing stability, housing quality, food security, employment, personal safety, transportation, affordable utilities, and other basic needs. Structural determinants of health are the broader social structures and economic systems that include the social environment, physical environment, health services, and other structural and societal factors that impact health.

Prevention Agenda 2019-2024 Progress

There are 99 health indicators being tracked on the State Department of Health's [Prevention Agenda Dashboard](#). As of February 2024, 26.3% of indicators met their target, including:

- decreased combustible cigarette use by high school students
- more homes tested and mitigated for radon
- more preventive medical visits for women aged 45 and older
- fewer reports of abuse or maltreatment per 1,000 children
- decreased rates of gonorrhea, chlamydia, and early syphilis diagnoses per 100,000 population

However, 29% of the indicators remained unchanged, including many in the *Prevent Chronic Disease* priority area. Another 16.2% were not met but did improve. Another 28.3% worsened, including the percentage of obese children and adolescents, the percentage of obese 2- to 4-year-olds participating in the Women, Infants, and Children (WIC) program, and utilization of smoking cessation benefits among Medicaid enrollees.

Description of Population Demographics and Health-Related Social Needs

Economic Stability

Figure 1. Median annual household income, poverty metrics, and unemployment, New York State, by race and ethnicity, 2017-2021

Health Indicator	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Median annual household income in US dollars (2017-2021)~	85,520	53,697	83,399	55,621	75,157
Percentage of families below poverty (2017-2021)~	5.7%	16.5%	11.3%	17.6%	9.8%
Percentage of children under age 18 below poverty (2017-2021)~	12.1%	28.0%	16.7%	25.9%	18.4%
Percentage unemployed among the civilian labor force (2017-2021)~	4.9%	9.2%	5.7%	8.3%	6.2%

Note: ~White non-Hispanic, Black (including Hispanic), Asian (including Hispanic, excluding Pacific Islanders), and Hispanic (of any race).

Source: New York State County Health Indicators by Race and Ethnicity

White non-Hispanic and Asian and Pacific Islanders had the highest median annual gross income, whereas Black non-Hispanics had the lowest. Hispanics and Black non-Hispanics had the highest percentages living below the poverty line at 17.6% and 16.5%, respectively. In New York State from 2017-2021, 18.4% of children under age 18 lived below poverty, with 28.0% of Black non-Hispanic children lived in poverty, versus 12.1% of White non-Hispanic children. Unemployment among Black non-Hispanics was 9.2%, while 8.3% of Hispanics were unemployed during that same period.

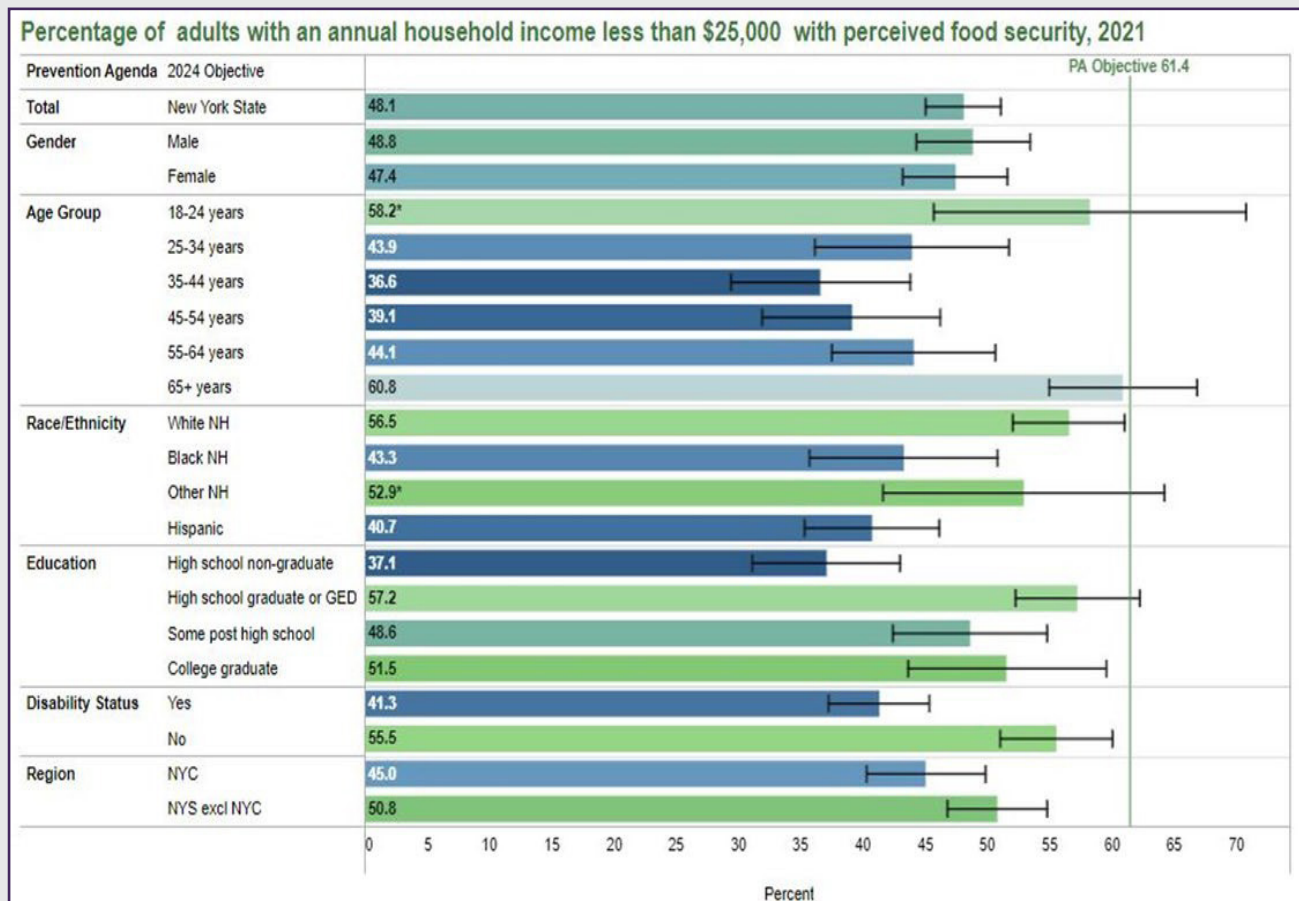
Figure 2. Median gross rent, additional poverty metrics, and public assistance metrics, New York State and United States, 2017-2021

Indicator	New York State	United States
Median gross rent	1390	1697
Percentage of Individuals Living at or below 200% poverty	28.4	29.2
Percentage of Families Living at or below 200% poverty	22.8	23.0
Percentage of household on food stamps	14.3	11.4
Percentage of household receiving public income	3.4	2.6

Source: U.S. Census, American Community Survey. Median gross rent=table DP04; family poverty=table S1702; individual family poverty=table C17002; food stamp/public income=table DP03

New York State had a lower median gross rent compared to the United States in 2017-2021. New York State's percentage of individuals and families living at or below 200% poverty, percentage of household on food stamps, and percentage of household receiving public income was comparable to the United States in 2017-2021.

Figure 3. Percentage of adults with perceived food security, among adults with annual household income less than \$25,000, by gender, age group, race and ethnicity, education, disability status, and region, New York State, 2021



Source: New York State Prevention Agenda Dashboard

Adults with an annual household income of less than \$25,000 are among the most vulnerable, although the data does not account for participation in food assistance programs which this subpopulation is eligible. In 2021, there were differences within this group in reporting perceived food security. The Prevention Agenda objective has not been met with only 48.1% of household incomes less than \$25,000 reporting perceived food security. Comparing race and ethnicity, White non-Hispanics had the most food security at 56.5%. Those reporting a disability had significantly less food security than those without a disability.

Health Care Access and Quality

Figure 4. Percentage of the population uninsured, New York State and the United States, ages less than 19 and ages less than 65, 2021

Indicator	New York State	United States
Percentage uninsured, aged <65 years	6.1	10.2
Percentage uninsured, aged <19 years	2.6	5.3

Source: U.S. Census Bureau, Small Area Health Insurance Estimates

New York State had a lower percentage of uninsured individuals for both age groups <19 years and <65 years compared to the United States in 2021. Still, work remains to be done to ensure every individual in New York is enrolled in health insurance.

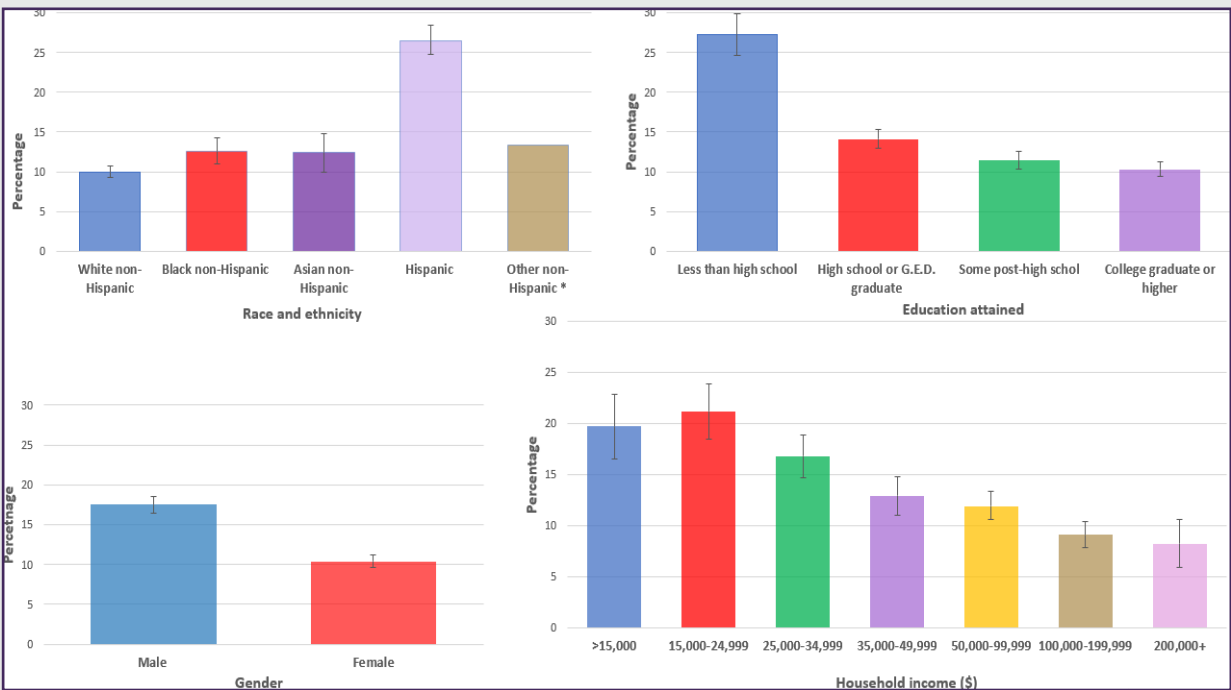
Figure 5. Health care providers per 100,000 population, New York State and United States, 2022

Indicator	New York State	United States	National Rank
Number of active primary care providers (including general practice, family practice, obstetrics and gynecology, pediatrics, geriatrics, internal medicine, physician assistants and nurse practitioners) per 100,000 population	313.2	265.3	9th
Number of psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists and advanced practice nurses specializing in mental health care per 100,000 population	346.7	305	17th
Number of general dentists and advanced practice dental therapists per 100,000 population	68.3	60.6	11th

Source: America’s Health Rankings, 2022

In 2022, New York State ranked in the top 10 for primary care providers, top 20 for mental health providers, and top 15 for dental providers, per 100,000 population, which are all ahead of the national average.

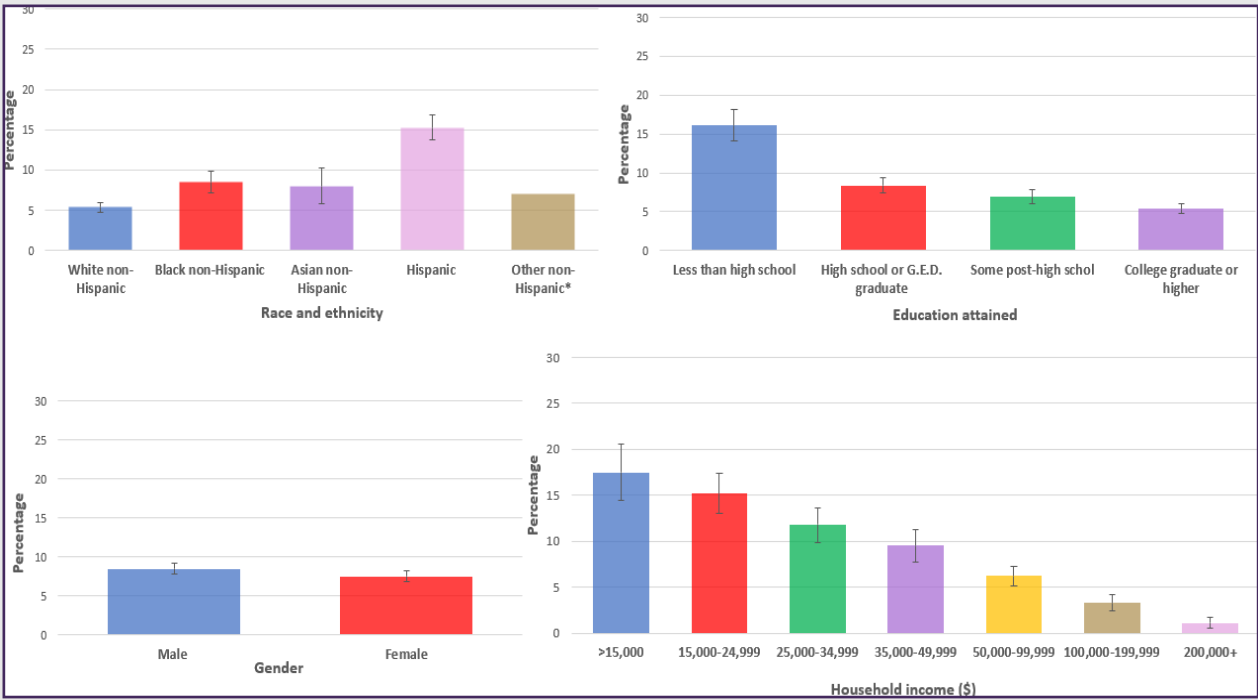
Figure 6. Percentage of residents reporting they lack a regular health care provider, by race and ethnicity, education, gender, and household income, New York State, 2021



Source: New York State Behavioral Risk Factor Surveillance System, data as of October 2022

Having a regular health care provider is a key metric to follow for prevention and routine care. More than 25% of Hispanics reported not having a regular health care provider. As education and household income increased, the lack of a regular health care provider decreased. More males reported not having a regular health care provider compared to females.

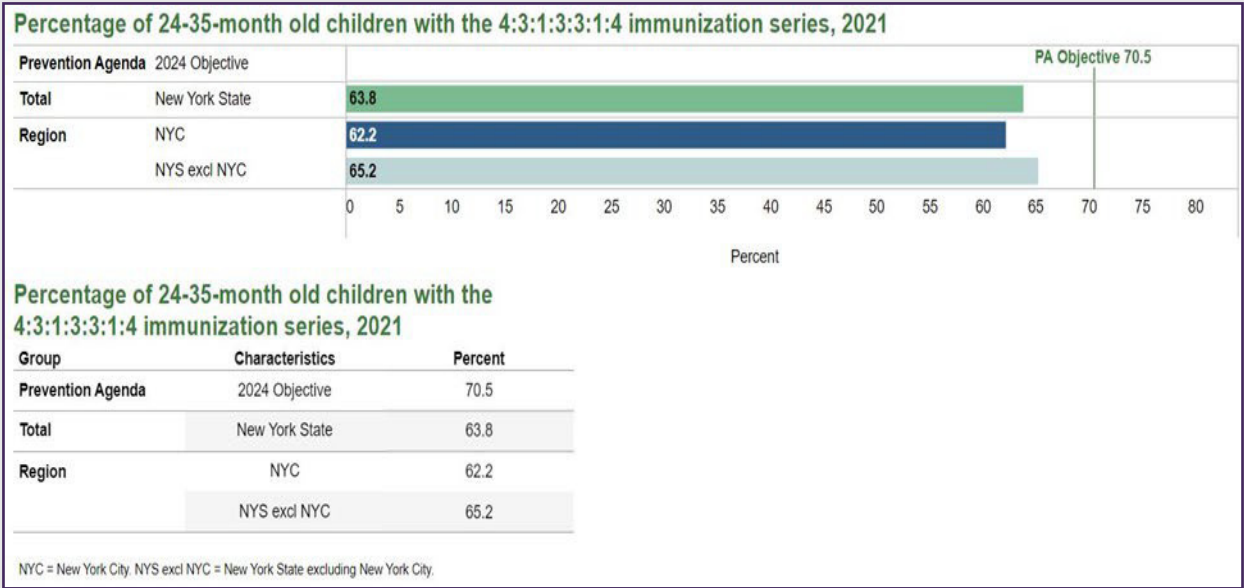
Figure 7. Percentage of residents that reported avoiding seeking health care due to affordability in the last 12 months by race and ethnicity, education, gender, and household income, New York State, 2021



Source: New York State Behavioral Risk Factor Surveillance System, data as of October 2022

As income and education levels increase, the percentage of individuals in New York who reported avoiding health care due to affordability decreased. Hispanics reported avoiding seeking health care due to cost the most out of all race and ethnic subgroups. Males and females were similar in seeking health care behaviors based on affordability.

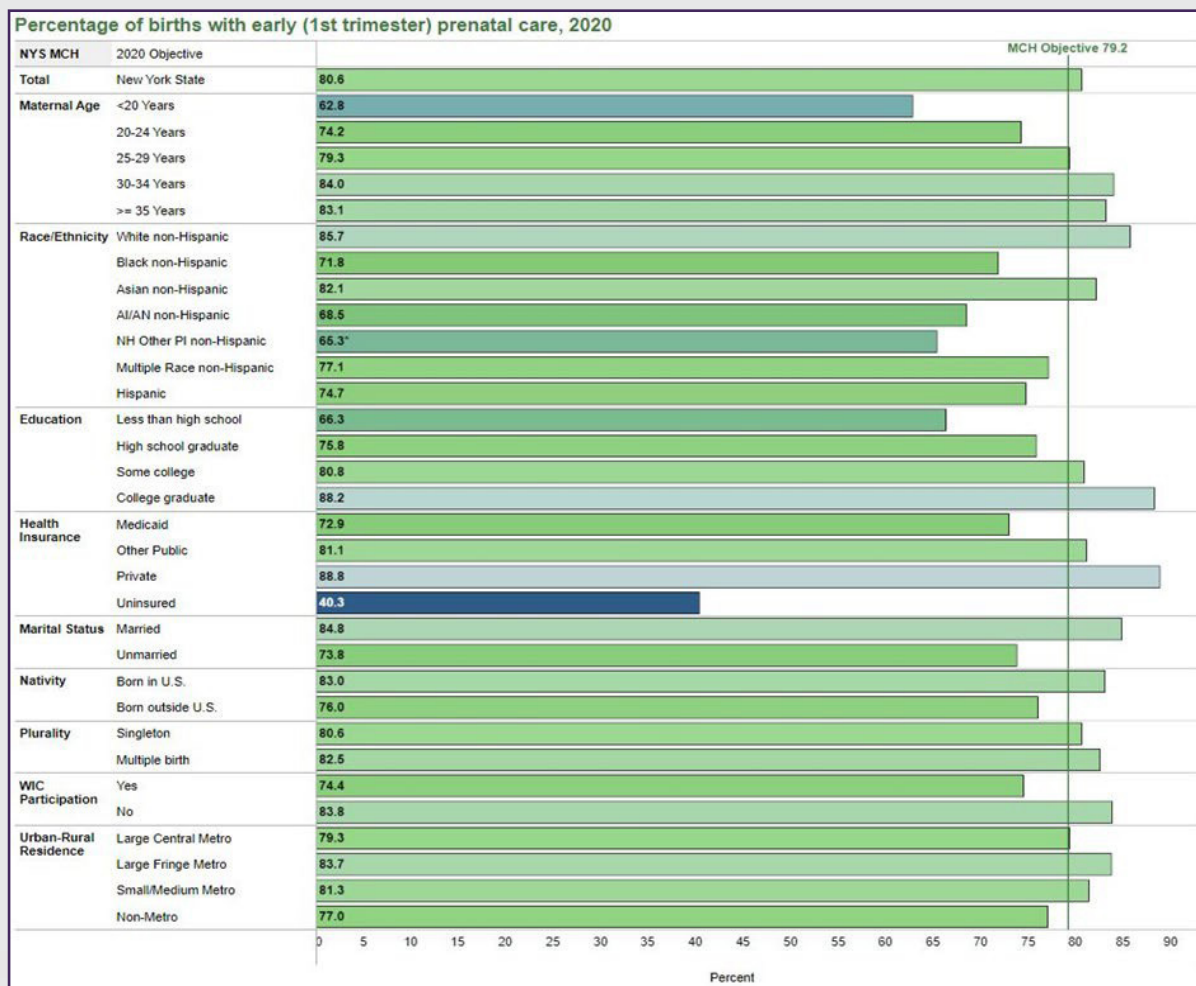
Figure 8. Percentage of children 24 to 35 months with the full 4:3:1:3:3:1:4* immunization series, New York State, 2021



Source: New York State Immunization Information System and Citywide Immunization Registry, data as of October 2022

The percentage of children 24 to 35 months who completed the full immunization series trailed the Prevention Agenda objective of 70.5% of children in 2021. In 2021, only 63.8% of children ages 24 to 35 months old had completed the immunization series. Regionally, 62.2% of children in New York City had completed the immunization series, while 65.2% of children in New York State excluding New York City had completed the immunization series. The full series is the combined seven-vaccine series and includes at least 4 doses of diphtheria, tetanus and acellular pertussis (Tdap) vaccine; 3 doses of the polio vaccine; 1 dose of the measles-containing vaccine; 3 or 4 doses of *Haemophilus influenzae* type b (Hib) vaccine; three; ≥ 3 doses of hepatitis B vaccine; ≥ 1 dose of varicella vaccine; and ≥ 4 doses of pneumococcal conjugate vaccine.

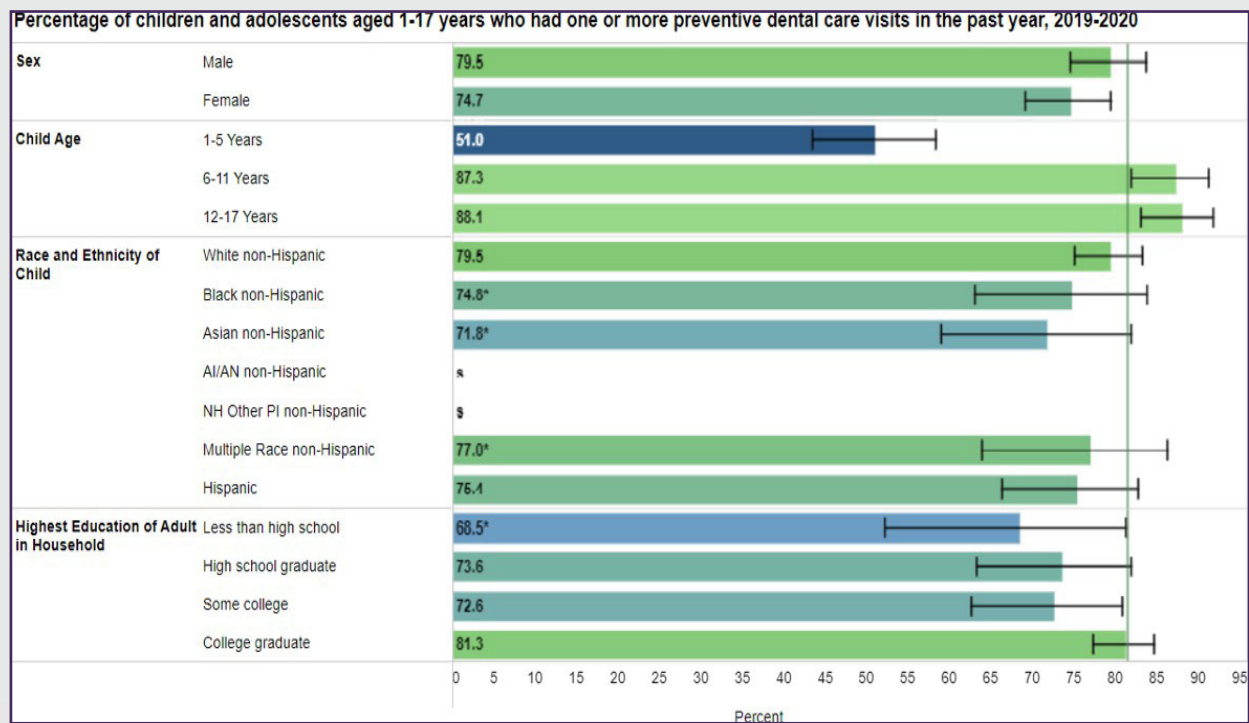
Figure 9. Percentage of births with early prenatal care, by maternal age, race and ethnicity, education, health insurance status, marital status, plurality, WIC participation, and urban-rural residence, New York State, 2020



Source: New York State Maternal and Child Health Dashboard

Early (first trimester) prenatal care is associated with positive birth outcomes. The Prevention Agenda's objective was that 79.2% of births receive early prenatal care. While New York State exceeded the target rate overall, with 80.6% of births receiving early prenatal care as of 2020, only White non-Hispanics and Asian non-Hispanics met the objective. Non-Hispanic Pacific Islanders, American Indian/Alaska Native, and Black non-Hispanic births had the lowest level of early prenatal care at 66.3%, 68.5%, and 71.8%, respectively. As education and maternal age increased, the percentage of births with early prenatal care also increased. Only 40.3% of uninsured individuals received early prenatal care, which was less than half that for individuals with private insurance.

Figure 10. Percentage of children and adolescents ages 1-17 years who had 1 or more preventive dental care visits in the past year, by sex, child age, child race and ethnicity, and adult householder education level, New York State, 2019-2020



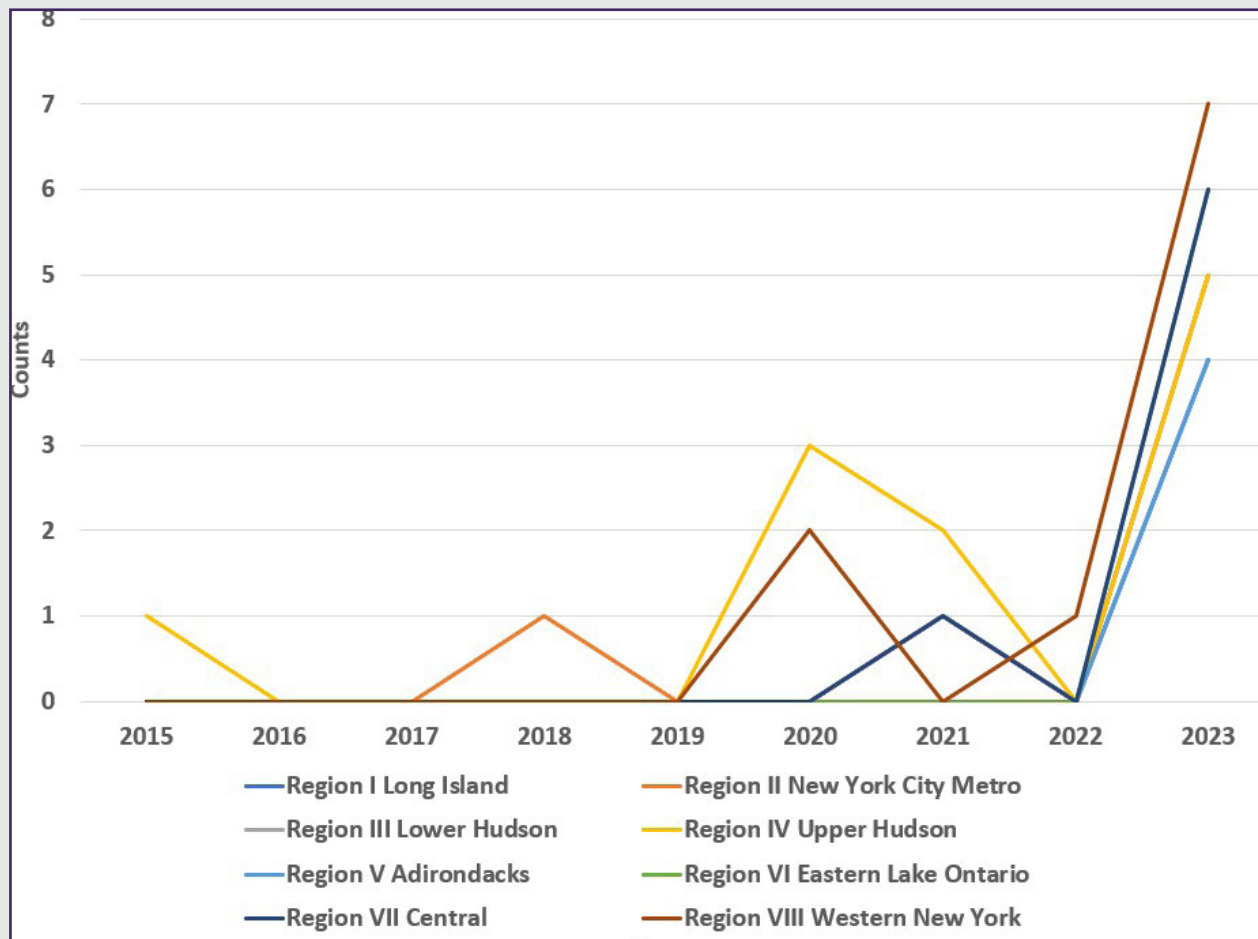
Source: New York State Maternal and Child Health Dashboard

The percentage of children and adolescents in New York State ages 1-17 years who had 1 or more preventive dental care visits in 2019-2020 was 77.2%, trailing the Prevention Agenda's goal of 81.5%. Important trends to note are:

- 51% of children 1-5 years old had preventive dental visits in 2019-2022.
- 81.3% of children had preventative dental visits when an adult in the household held a college degree.
- 68.5% of children had preventive dental visits when the adults in the household had less than a high school education.

Neighborhood and Built Environment

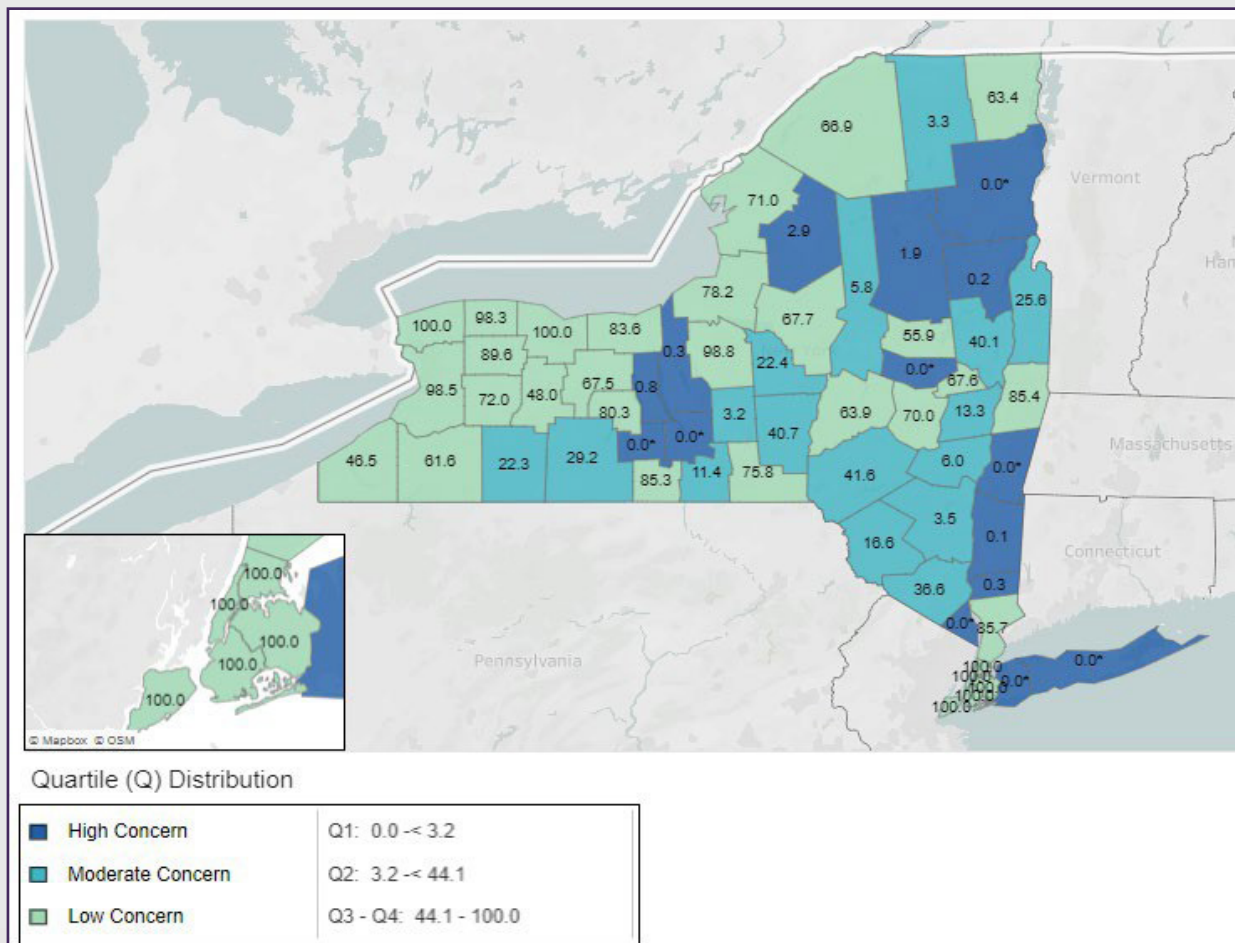
Figure 11. Counts of air quality index (AQI) days above 100 PM by New York State Department of Environmental Conservation forecast region, New York State, 2015 to July 2023



Source: New York State Department of Environmental Conservation / New York State Department of Health Center for Environmental Health

Monitoring the air quality index (AQI), particularly on days when the index is above 100 PM, is important as elevated AQI poses risks for vulnerable groups, such as those with asthma. Typically, there are only 1 or 2 days in each New York State Department of Environmental Conservation forecast region where the air quality index is above 100 PM. New York State had an increase in the AQI in 2023 due to the Canadian wildfires.

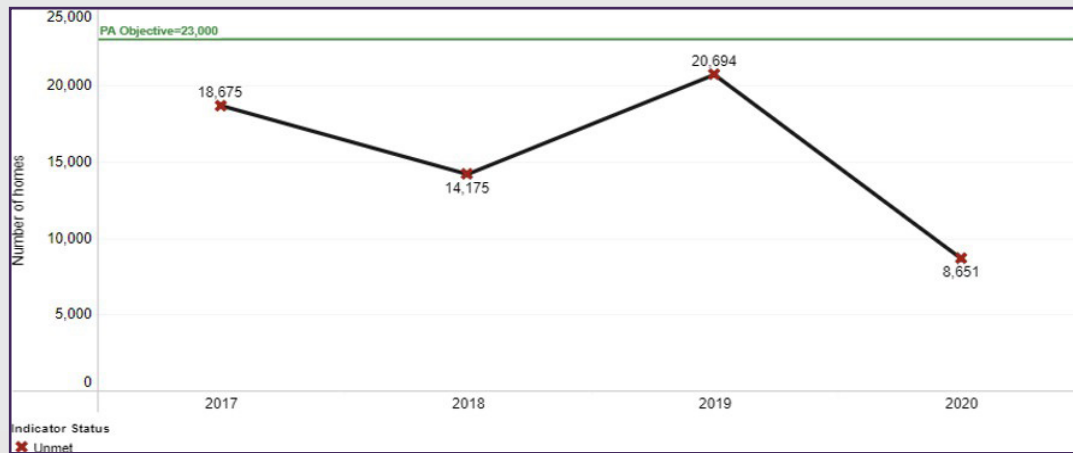
Figure 12. The percentage of residents served by community water systems that have optimally fluoridated water, New York State, 2021



Source: New York State Prevention Agenda Dashboard

Optimally fluoridated water is important for promoting dental health. In 2021 in New York State, 71.2% of residents had optimally fluoridated water. In New York City, 100% of residences had optimally fluoridated water. Water wells are a common source of water in New York State’s rural areas, which can be challenging for public health efforts to increase fluoridation. This is why more rural counties are in the lower quartile distribution of the percentage of residents with optimally fluoridated water.

Figure 13. The number of homes inspected for lead and other health hazards, New York State, 2017-2020



Source: New York State Prevention Agenda Dashboard

Lead can cause neurological and other developmental problems, especially for children, making home inspections a vital part of prevention. The Prevention Agenda's objective was for 23,000 homes to be inspected for lead annually. In 2017-2020, New York State did not meet this objective. There was a 4-year high with around 21,000 homes inspected in 2019, then in 2020 there was a large drop in inspections, most likely due to the COVID-19 pandemic.

Figure 14. The 3-year average number of radon tests performed, New York State, 2015-2017 to 2019-2021

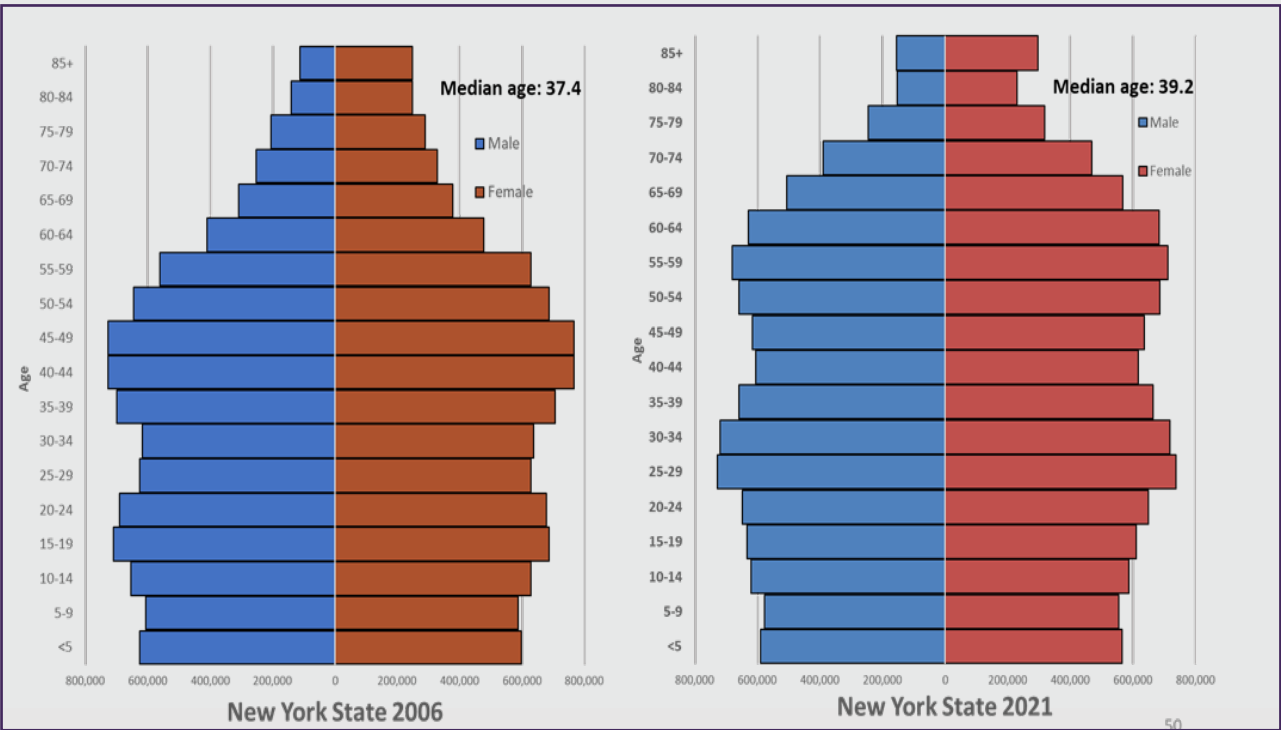


Source: New York State Prevention Agenda Dashboard

Radon is one of the leading causes of lung cancer deaths in the United States, making radon tests an important part of prevention. Between 2016 and 2018, the Prevention Agenda's goal of 50,000 tests over the 3 years was met. As of 2019-2021, almost 96,000 radon tests were performed, nearly double the Prevention Agenda's objective.

Social and Community Context

Figure 15. Population distribution by age and sex, New York State, 2006 and 2021

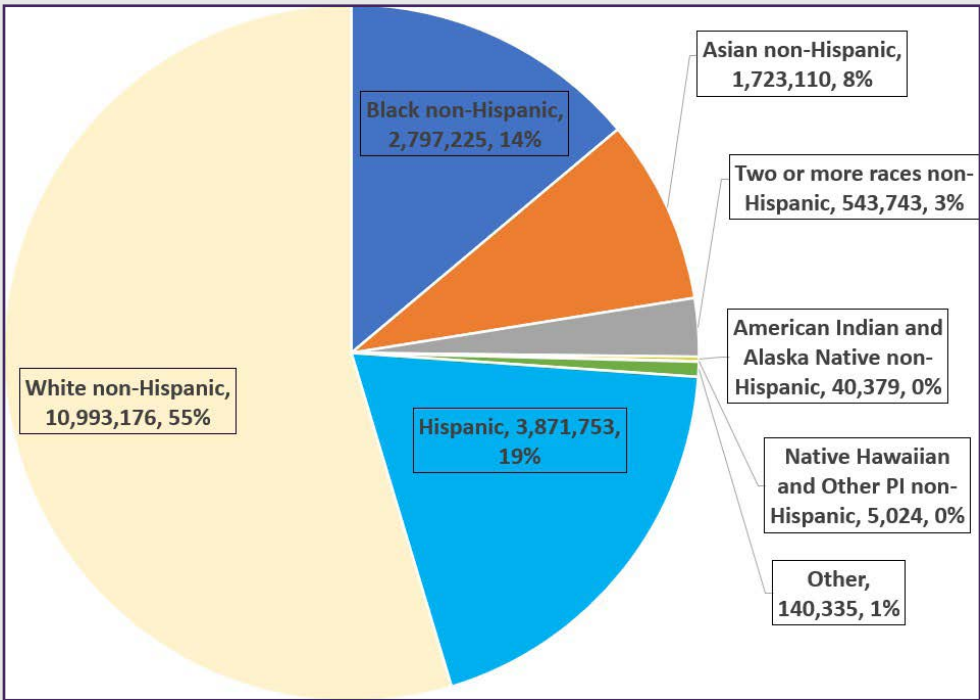


Source: United States Census Bureau, American Community Survey, Table S0101

New York State is one of the largest states in the United States, ranking fourth largest by population. The total population in 2006 was around 19.3 million and increased to 19.8 million as of 2021.

From 2006 to 2021 the median age in New York State increased due to more people being 60 years and older; this aligns with the national trend, which reflects the sizable baby boomer generation growing older. There were fewer individuals under the age of 10 in 2021 than in 2006. There were similar patterns in 2006 and 2021 among both sexes. The percentage of females ages 65 years and older was higher in both years due to their longer life expectancy.

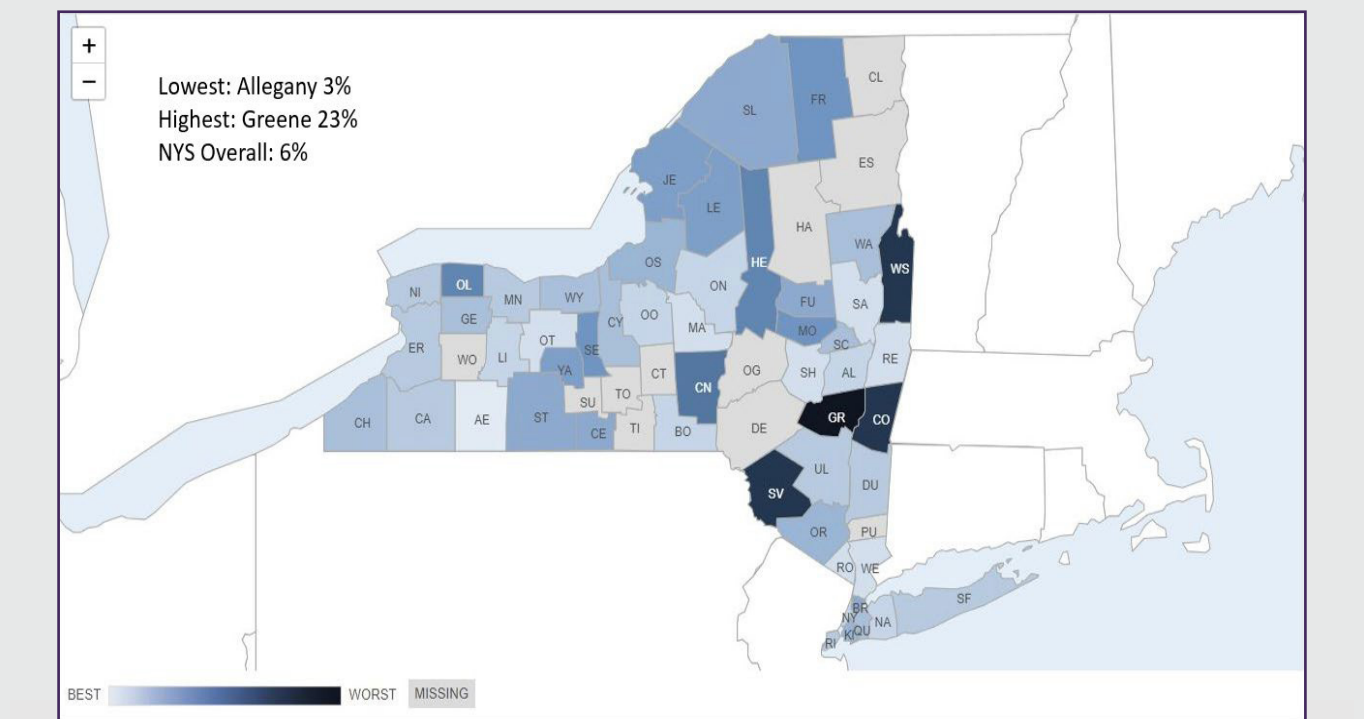
Figure 16. Population by race and Hispanic origin, New York State, 2021



Source: United States Census Bureau, American Community Survey, Table B03002

In 2021, the population of New York was estimated at 19.8 million people. The largest population group in the state is White non-Hispanic, accounting for 55% of the population. Additionally, Hispanics overall make up 19% of the population, Black non-Hispanics make up 14% of the population, and Asian non-Hispanics make up 8% of the population. Those who report being 2 or more races, but non-Hispanic, make up 3% of the population. Those who in the Other category were 1% of the population. American Indian/Alaska Native and Native Hawaiian/Other Pacific Islander non-Hispanic were less than 1% of the population.

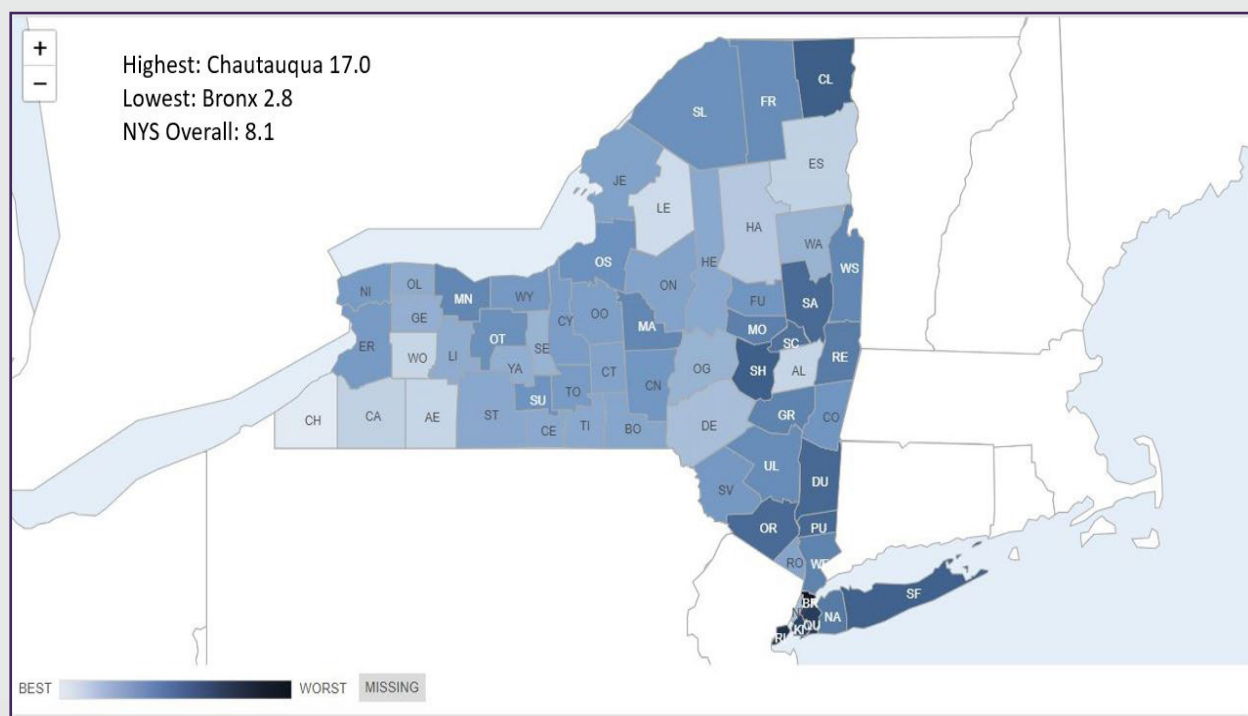
Figure 17. Percentage of disconnected youth, New York State, 2022



Source: County Health Rankings, 2022

Disconnected youth are ages 16- to 19-year-olds who are not employed or attending school. Disconnection is known to increase the risk for poor health outcomes. In 2022, the lowest percentage of disconnected youth was in Allegany County with 3% and the highest was in Greene County with 23%. Overall, New York State had a disconnected youth rate of 6%.

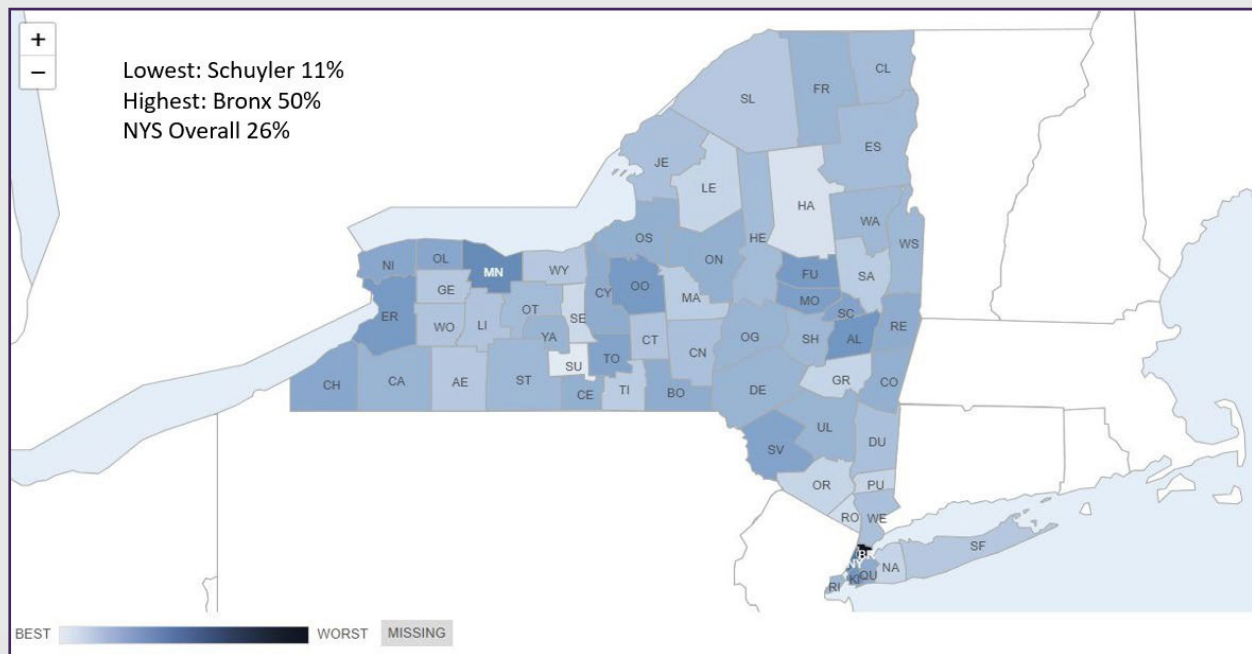
Figure 18. Social associations per 10,000 population, New York State, 2022



Source: County Health Rankings, 2022

Social associations are a measure of the number of organizations per 10,000 population in a county. Social associations include bowling centers, fitness centers, golf clubs, civic organizations, political organizations, religious organizations, sports organizations, or professional organizations. This measure does not include consider all social supports in a county. In 2022, the highest rate was in Chautauqua, which had 17 social associations per 10,000 population. The lowest rate was in the Bronx, with only 2.8 per 10,000 population. The New York State average was 8.1 per 10,000 population.

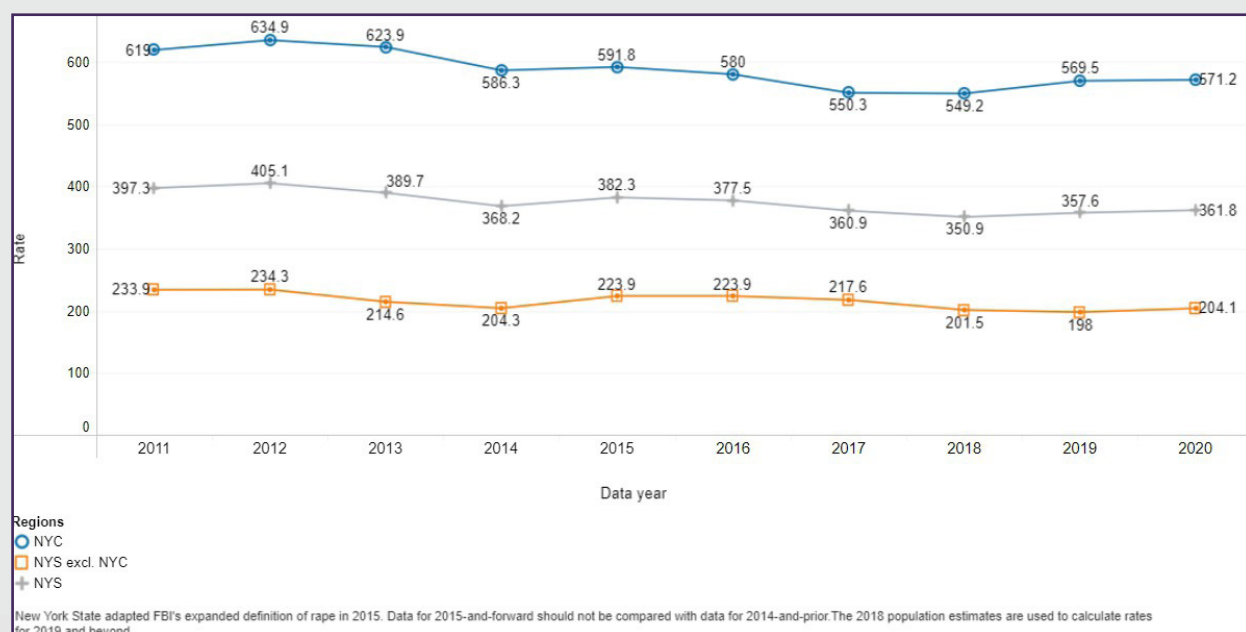
Figure 19. Percentage of children in single-parent households, New York State, 2022



Source: County Health Rankings, 2022

Children in single-parent households includes children under 18 years old in a household headed by a single parent. In 2022, the lowest percentage of children in a single-parent household was in Schuyler County, with 11%, The highest percentage was in the Bronx, with 50%. Overall, 26% of children in New York State lived in single-parent households.

Figure 20. Violent crime rate per 100,000 population, New York State, 2011-2020



Source: New York State Community Health Indicator Reports

The violent crime rate decreased from 2011 to 2020. As of 2020, New York State had 361.8 violent crimes per 100,000 population. New York City had more violent crime compared to the rest of the state, with a violent crime rate of 571.2 per 100,000 population. New York State excluding New York City had a violent crime rate of 204.1 per 100,000 population.

Figure 21. Percentage of population with a disability and arrests per 1,000 population among adults, by race and ethnicity, New York State, 2017-2021

Health Indicator	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Percentage of population with a disability (2017-2021)~	12.1%	12.8%	6.9%	11.4%	11.6%
Arrests per 1,000 population aged 18 years or older (2019-2021)	11.2	49.5	6.7	25.2	19.1

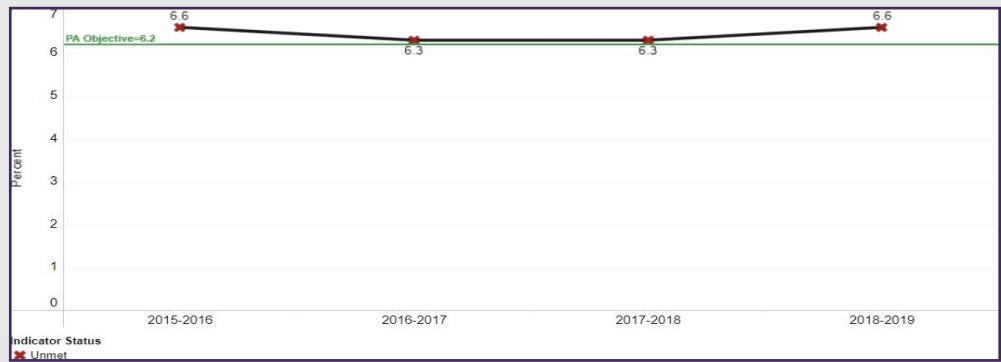
Note: ~White non-Hispanic, Black (including Hispanic), Asian (including Hispanic, excluding Pacific Islanders), and Hispanic (of any race).

Source: New York State County Health Indicators by Race and Ethnicity

From 2017 to 2021, 11.6% of individuals in New York had a disability. While the percentages are mostly comparable across racial and ethnic subgroups, there are much lower percentages of individuals in New York with a disability among the Asian and Pacific Islander subgroup.

The New York State arrest rate was 19.1 per 1,000 population ages 18 or older from 2019 to 2021. White and Asian and Pacific Islander non-Hispanics had lower rates of arrest, 11.2 and 6.7 per 1,000 population respectively, compared to the state average. The Black non-Hispanic and Hispanic subgroups had higher arrest rates, 49.5 and 25.2 per 1,000 population respectively, compared to the state average.

Figure 22. Percentage of adults with major depressive episodes during the past year, New York State, 2015-2016 to 2018-2019



Source: New York State Prevention Agenda Dashboard

Major depressive episodes contribute to poor health outcomes. The Prevention Agenda’s target was no more than 6.2% for adults. Data was reported in the National Survey on Drug Use and Health. A major depressive episode was defined as having at least 5 of the 9 symptoms nearly every day in a two-week period, where at least one of the symptoms was a depressed mood or loss of interest or pleasure in daily activities. New York State failed to meet this goal during the 2015 to 2019 period. As of 2018-2019, the percentage of adults with a major depressive episode was 6.6%.

Education Access

Figure 23. Selected education and language access indicators, New York State, 2017-2022

Health Indicator	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Percentage of high school students who dropped out (2021-2022)	4.0%	9.8%	4.0%	12.2%	7.3%
Percentage of population aged 25 years or older with a bachelor's degree or higher (2017-2021)~	44.7%	25.2%	48.3%	21.0%	38.1%
Percentage of population who speak English less than very well (2017-2021)~	4.5%	6.2%	41.3%	32.9%	6.7%

Note: ~White non-Hispanic, Black (including Hispanic), Asian (including Hispanic, excluding Pacific Islanders), and Hispanic (of any race).

Source: New York State County Health Indicators by Race and Ethnicity

Hispanic high school students had the highest dropout rate compared to other racial and ethnic subgroups in New York State. White non-Hispanic and Asian and Pacific Islander non-Hispanic individuals in New York State had the highest percentage of the population ages 25 or older with a bachelor's degree or higher. Asian and Pacific Islander non-Hispanic individuals had the highest percentage of people who spoke English less than "very well" followed by Hispanic individuals in New York State. Black non-Hispanic students had over double the percentage of high school students who dropped out compared to White and Asian and Pacific Islander non-Hispanic students.

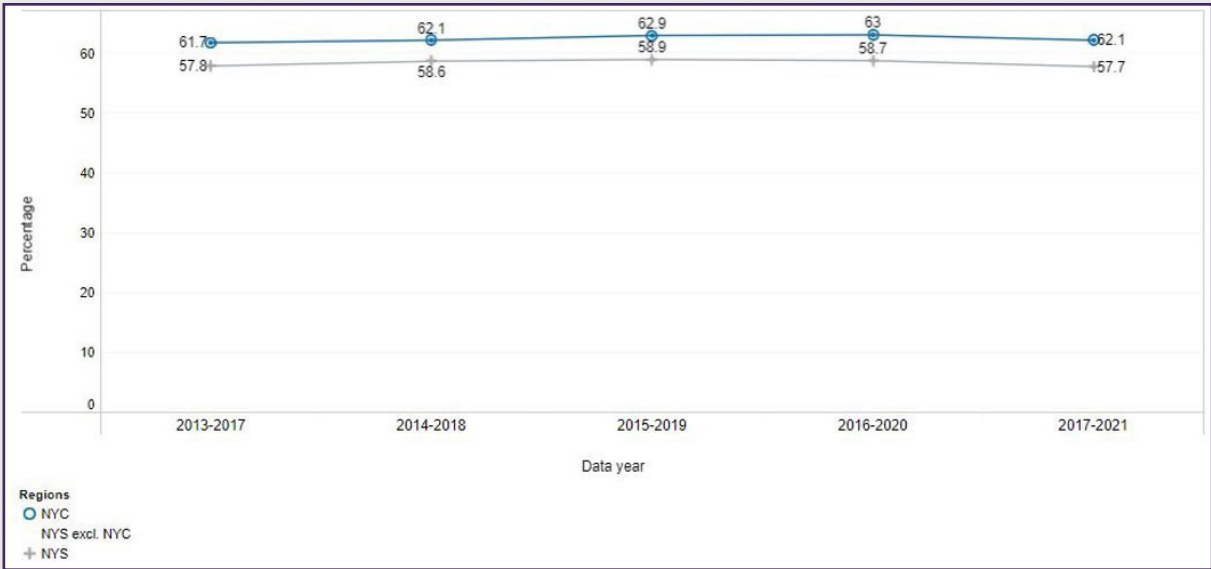
Figure 24. Languages spoken at home among residents ages 5 and older, New York State, 2017-2022

Language	Count (Estimate)	Percentage	Language	Count (Estimate)	Percentage
Only English	13,097,954	69.40%	Hindi	57,233	0.30%
Spanish	2,784,045	14.75%	German	51,471	0.27%
Chinese/Mandarin	602,162	3.19%	Portuguese	50,113	0.27%
Russian	233,818	1.24%	Ukrainian	43,381	0.23%
Yiddish	209,750	1.11%	Punjabi	38,998	0.21%
Haitian	148,357	0.79%	Other unspecified	38,767	0.21%
Bengali	146,287	0.78%	Nepali/Marathi	36,119	0.19%
Italian	134,860	0.71%	Japanese	34,739	0.18%
French	133,405	0.71%	Serbo-Croatian	30,238	0.16%
Arabic	117,917	0.62%	Malayalam/Kannada	29,647	0.16%
Yoruba/Twi/Igbo	96,737	0.51%	Persian	27,759	0.15%
Korean	91,249	0.48%	Vietnamese	22,091	0.12%
Other Indo-European Language	88,546	0.47%	Gujarati	19,827	0.11%
Polish	80,718	0.43%	Tamil	10,766	0.06%
Tagalog/Filipino	78,814	0.42%	Telugu	9,891	0.05%
Urdu	74,982	0.40%	Armenian	7,009	0.04%
Other Asian/Pacific Language	65,966	0.35%	Other Native American Language	3,677	0.02%
Greek	60,333	0.32%			
Hebrew	58,478	0.31%			

Source: American Community Survey, five-year estimates, 2018-2022

In New York State, 69.4% of residents ages 5 and older spoke only English at home. The second most common language spoken at home was Spanish (14.8%), followed by Chinese/Mandarin (3.2%). Russian and Yiddish were the only other 2 languages spoken by more than 1% of the population.

Figure 25. Percentage of children ages 3 to 4 years enrolled in school, New York State and New York City, 2013-2017 to 2017-2021



Source: New York State Community Health Indicator Reports

The percentage of children ages 3 to 4 years old who were enrolled in school in New York State and New York City from 2013 to 2021 was stable. New York City had a slightly higher percentage of children enrolled in school compared to New York State, with more than 62% compared to 57.7% as of 2017-2021.

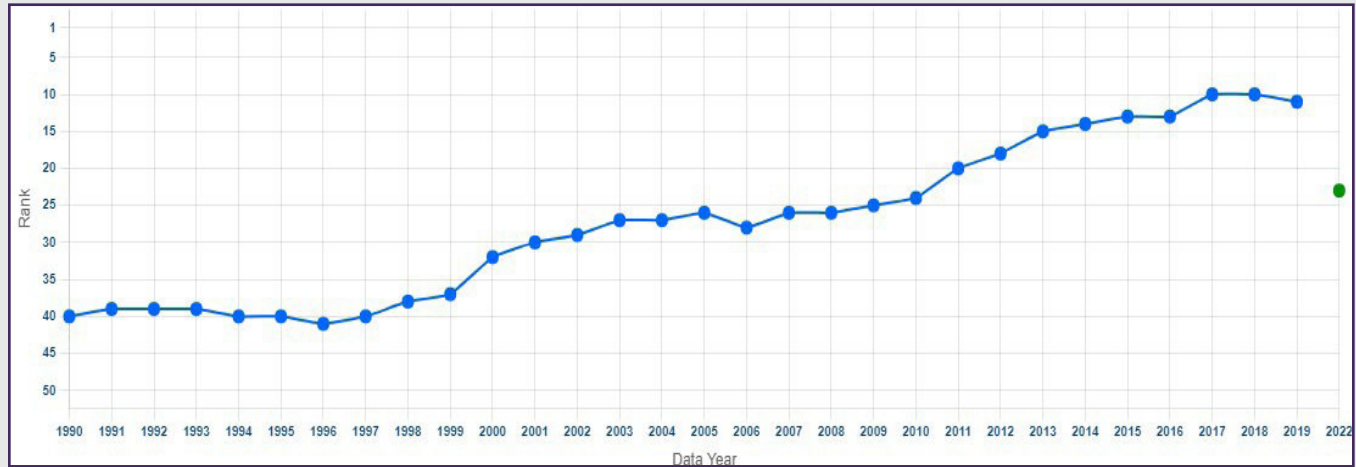
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Key Health-Related Risk Factors and Outcome Measure

Health Rankings

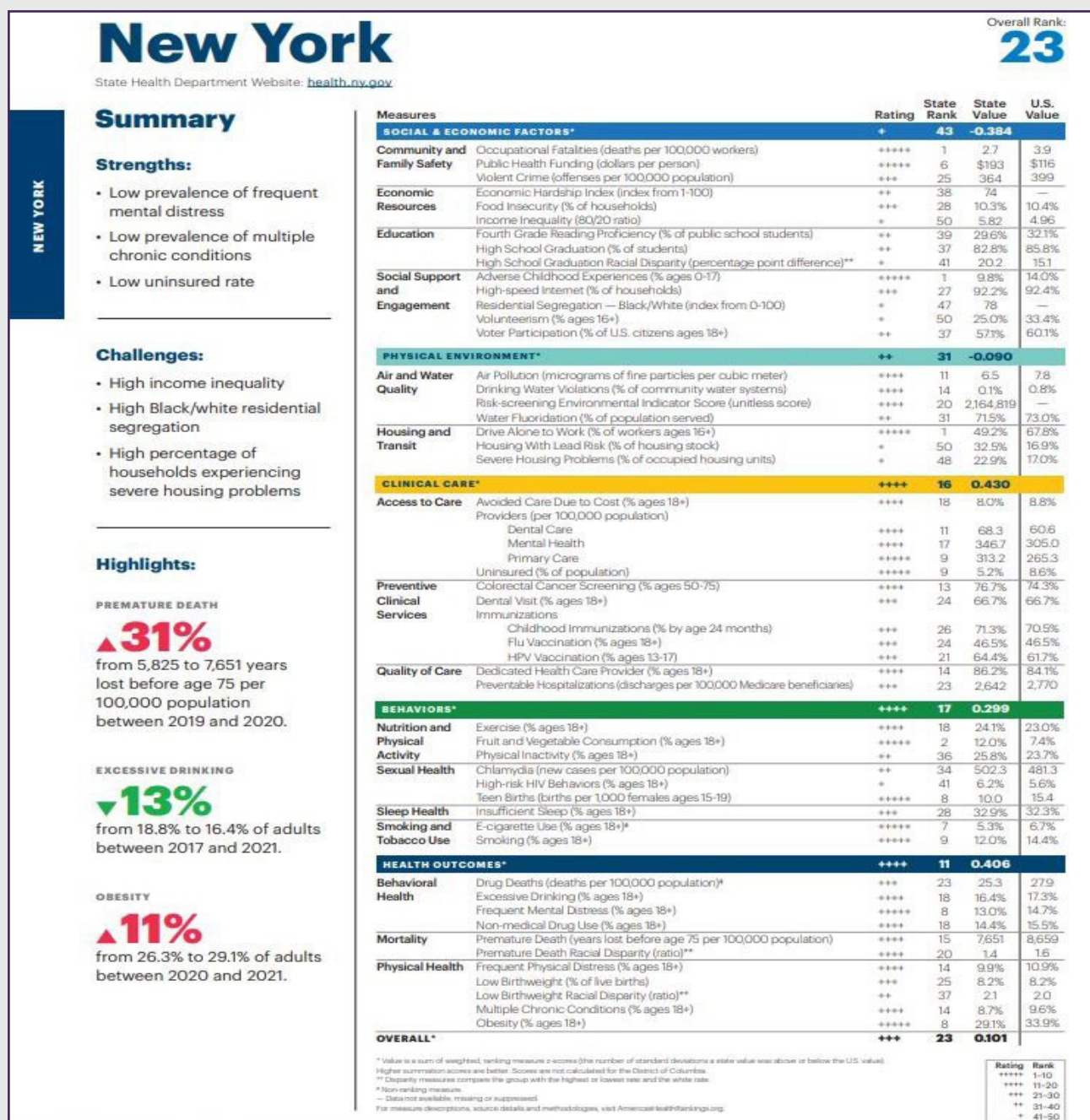
Figure 26. New York State overall ranking, America's Health Rankings, 1990-2022



Source: America's Health Rankings, 2022

For 3 decades, America's Health Rankings has provided an analysis of national health on a state-by-state basis by evaluating a historical and comprehensive set of health, environmental, and socioeconomic data to determine national health benchmarks and state rankings. New York State has improved its rank drastically in the last 2 decades, ranking 9th in the nation in 2019, up from 40th in 1990 and 26th at the start of the first Prevention Agenda cycle in 2008. With an increased focus on social determinants of health and the built environment, modifications were made to the America's Health Ranking calculation, which resulted in New York State's rank dropping to 23rd in 2022. This decline is largely due to methodological changes introduced in 2022. Thirty-one new indicators were added, and 15 were removed. Many of the new measures focus on social and economic factors where New York ranks lower, including income inequality, housing with lead risks, and racial segregation. These changes lowered the overall score, despite New York's strong performance in health outcomes, health behaviors, and clinical care. There is a gap in America's Health Ranking data from 2020 – 2021 because state rankings did not occur during the COVID-19 pandemic.

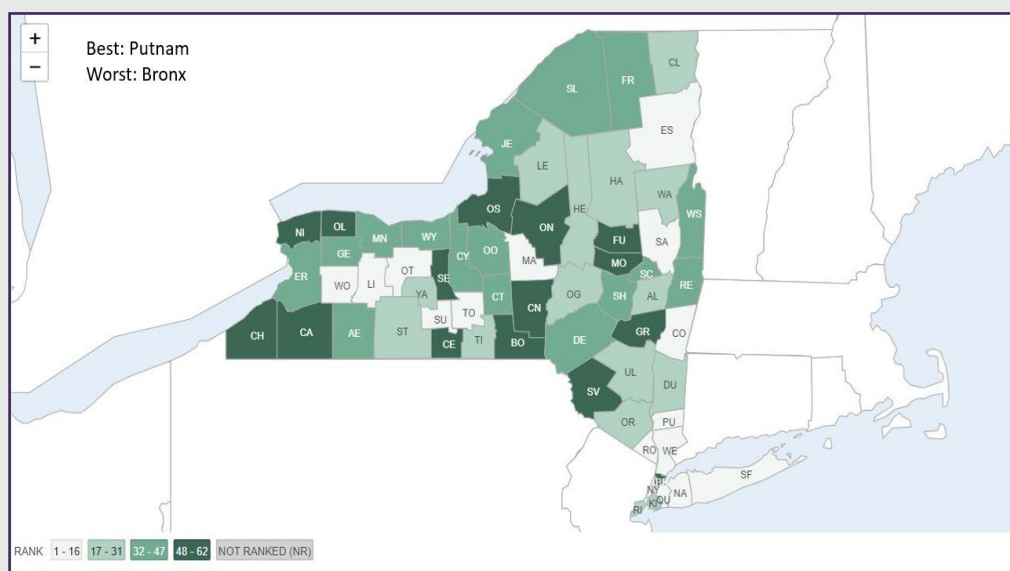
Figure 27. Annual Report Summary of New York State, America's Health Rankings, 2022



Source: America's Health Rankings, 2022

An annual report summary from America's Health Rankings is created for each state and contains measures in key health-related areas. Highlighted challenges in New York State's report include a 31% increase in premature deaths from 2019 to 2022, which can be attributed to the COVID-19 pandemic, the opioid epidemic, an increase in obesity, high-income inequality, high Black/White residential segregation, and a high percentage of households experiencing severe housing problems. Highlighted strengths in New York State's report include a low prevalence of frequent mental distress, a low uninsured rate, and a low prevalence of multiple chronic conditions. New York State also had a 13% decrease in excessive drinking in adults between 2017 and 2021.

Figure 28. County Health Rankings, health factor rankings by county – New York State, 2022

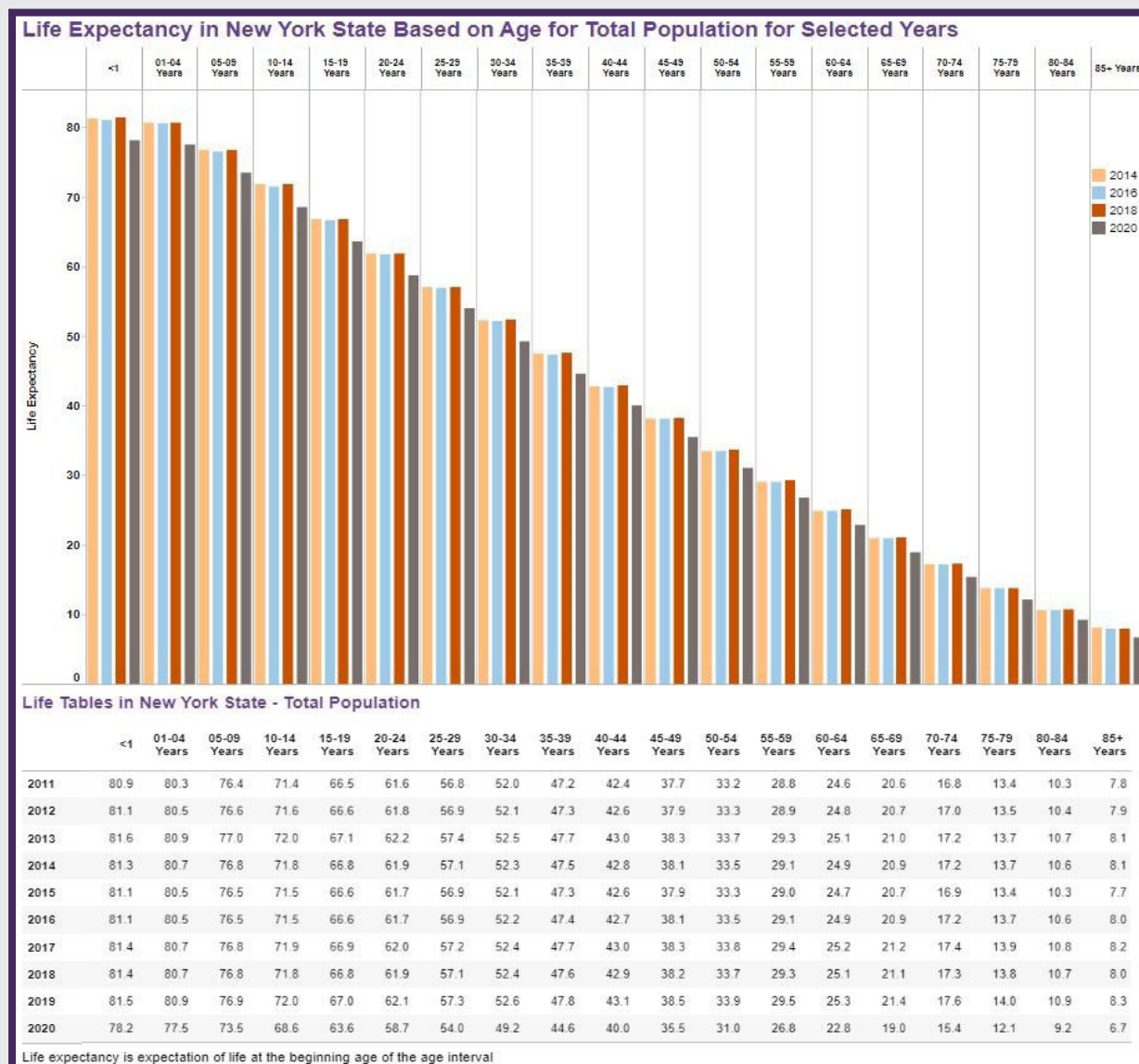


Source: County Health Rankings, 2022

The County Health Rankings and Roadmaps, produced by the University of Wisconsin Population Health Institute, ranks counties in all 50 states based on health outcomes. The goals of the County Health Rankings and Roadmaps include bringing awareness to factors that affect health, improving community engagement, and assisting communities in identifying areas for health improvement. The overall health rank is based on the algorithm from County Health Rankings, which considers both physical and mental health, as well as social issues. Counties with lighter shading indicate a higher ranking, and those with darker shading, represent a lower ranking. In 2022, the New York State county with the highest composite health ranking was Putnam, and the county with the lowest composite health ranking was the Bronx.

Life Expectancy and Leading Causes of Death

Figure 29. Life expectancy in New York State, by age, 2011-2020



Source: New York State Vital Records

Life expectancy for most age groups in New York State increased until 2020, when the first drop in many years occurred due to the COVID-19 pandemic as well as the opioid crisis. Life expectancy dropped for all age groups in 2020 with an average loss of 2.84 years from 2019. There were large drops in life expectancy for those in their 20s and 30s. In addition, declines in life expectancy for those ages 65 and older exceeded 10%, which was attributable to COVID-19.

Figure 30. Leading causes of death, New York State, 2012-2020

	Number of deaths and age-adjusted death rate							
	Total Deaths	#1 Cause of Death	#2 Cause of Death	#3 Cause of Death	#4 Cause of Death	#5 Cause of Death	#6 Cause of Death	#7 Cause of Death
2020	Total Deaths 203,393 811.4 per 100,000	Heart Disease 48,301 186.6 per 100,000	COVID-19 36,337 144.4 per 100,000	Cancer 32,782 131.1 per 100,000	Unintentional Injury 8,637 40.7 per 100,000	CLRD 6,566 25.8 per 100,000	Cerebrovascular Disease 6,433 25.1 per 100,000	Diabetes 5,387 21.6 per 100,000
2019	Total Deaths 156,405 622.4 per 100,000	Heart Disease 43,472 167.1 per 100,000	Cancer 33,418 133.6 per 100,000	Unintentional Injury 7,308 33.8 per 100,000	CLRD 7,065 27.7 per 100,000	Cerebrovascular Disease 6,125 23.9 per 100,000	Diabetes 4,534 18.1 per 100,000	Pneumonia and Influenza 4,241 16.5 per 100,000
2018	Total Deaths 157,176 625.1 per 100,000	Heart Disease 44,182 170.1 per 100,000	Cancer 34,206 136.7 per 100,000	Unintentional Injury 7,323 33.8 per 100,000	CLRD 7,226 28.3 per 100,000	Cerebrovascular Disease 6,183 24.1 per 100,000	Pneumonia and Influenza 4,696 18.2 per 100,000	Diabetes 4,493 18.0 per 100,000
2017	Total Deaths 155,191 626.6 per 100,000	Heart Disease 43,823 171.0 per 100,000	Cancer 34,648 140.7 per 100,000	Unintentional Injury 7,617 35.6 per 100,000	CLRD 7,220 28.8 per 100,000	Cerebrovascular Disease 6,183 24.4 per 100,000	Pneumonia and Influenza 4,436 17.4 per 100,000	Diabetes 4,148 16.8 per 100,000
2016	Total Deaths 153,684 630.1 per 100,000	Heart Disease 43,869 174.3 per 100,000	Cancer 35,170 145.2 per 100,000	Unintentional Injury 7,334 34.3 per 100,000	CLRD 6,808 27.8 per 100,000	Cerebrovascular Disease 6,197 24.9 per 100,000	Pneumonia and Influenza 4,447 17.7 per 100,000	Diabetes 4,006 16.6 per 100,000
2015	Total Deaths 153,623 637.8 per 100,000	Heart Disease 44,141 178.1 per 100,000	Cancer 34,795 146.0 per 100,000	CLRD 7,066 29.3 per 100,000	Unintentional Injury 6,372 29.6 per 100,000	Cerebrovascular Disease 6,216 25.4 per 100,000	Pneumonia and Influenza 4,818 19.5 per 100,000	Diabetes 4,003 16.8 per 100,000
2014	Total Deaths 149,086 628.7 per 100,000	Heart Disease 42,836 175.7 per 100,000	Cancer 35,084 149.6 per 100,000	CLRD 6,738 28.5 per 100,000	Cerebrovascular Disease 6,132 25.6 per 100,000	Unintentional Injury 5,820 27.1 per 100,000	Pneumonia and Influenza 4,625 19.0 per 100,000	Diabetes 4,043 17.2 per 100,000
2013	Total Deaths 147,445 632.4 per 100,000	Heart Disease 43,119 180.3 per 100,000	Cancer 35,078 152.5 per 100,000	CLRD 6,977 30.0 per 100,000	Cerebrovascular Disease 5,961 25.2 per 100,000	Unintentional Injury 5,553 26.0 per 100,000	Pneumonia and Influenza 4,844 20.3 per 100,000	Diabetes 4,035 17.5 per 100,000
2012	Total Deaths 147,390 642.6 per 100,000	Heart Disease 43,262 183.5 per 100,000	Cancer 35,600 157.7 per 100,000	CLRD 6,986 30.7 per 100,000	Cerebrovascular Disease 6,029 26.0 per 100,000	Unintentional Injury 5,455 25.7 per 100,000	Pneumonia and Influenza 4,388 18.7 per 100,000	Diabetes 3,970 17.4 per 100,000

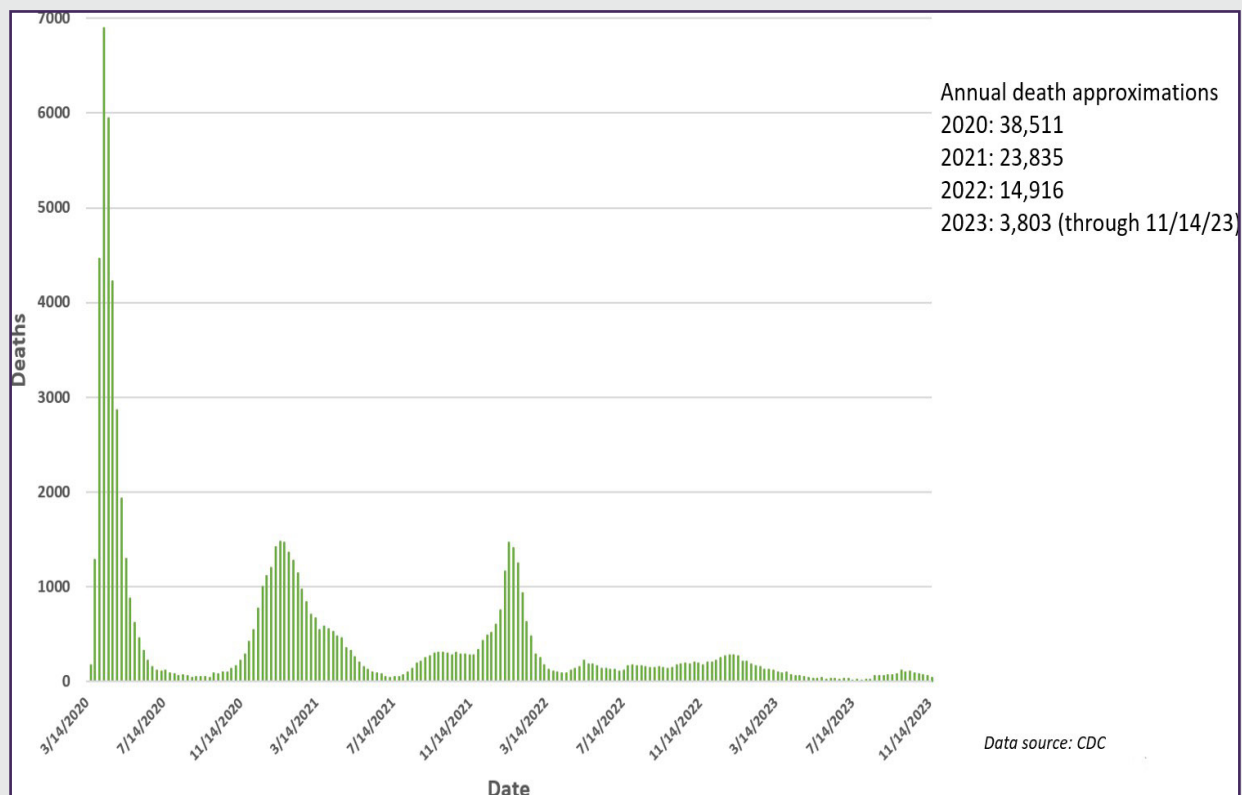
Source: New York State Vital Records

As of 2020, the leading cause of death in New York State continued to be heart disease. The rate spiked in 2020, which may have been due to delayed care-seeking during the pandemic. There was a notable decrease in emergency department visits during the pandemic, and the indicators on the Prevention Agenda Dashboard show declines in visit rates for related indicators for 2020. COVID-19 became the second leading cause of death in 2020, which put cancer deaths in third place.

Unintentional injury, which includes opioid-related deaths, increased from 2012 to 2017 and was the fourth leading cause of death. The rate of 40.7 per 100,000 population was the highest rate since 2012.

As of 2020, pneumonia and influenza are no longer in the top 7 leading causes of death for the first time in 8 years.

Figure 31. Weekly COVID-19 death reports, all facilities, New York State, March 2020- November 2023



Source: Centers for Disease Control and Prevention

Weekly COVID-19 deaths were collected through the Centers for Disease Control and Prevention’s National Vital Statistics systems. COVID-19 deaths included those that had COVID-19 as an underlying or contributing cause on the death certificate. New York State had the most deaths from the COVID-19 pandemic in 2020. The number of COVID-19 deaths has decreased since 2020, which reflects prevention measures such as masking, social distancing, and vaccination. As of November 2023, there were 10 times fewer deaths compared to early 2020. Vaccination, natural immunity, and less infectious strains were contributing factors.

Figure 32. Magnitude of opioid burden, 2020-2021

Indicators	New York State Total	Crude rate per 100,000
Overdose deaths involving any opioid, crude rate per 100,000 population	4,205	21.5
Unique naloxone administrations by EMS agencies, crude rate per 1,000 unique 911 EMS dispatches, 2021	19,140	5.8
All emergency department visits (including outpatients and admitted patients) involving any opioid overdose, crude rate per 100,000 population, 2020	12,232	62.6
Percentage of patients prescribed one or more opioid analgesics with a total daily dose of 90 MME or more on at least one day, 2021	213,950	9.8
Percentage of incidents when patients were opioid naïve and received an opioid prescription of more than seven days, 2021	342,374	14.5
Patients who received at least one buprenorphine prescription for opioid use disorder, crude rate per 100,000 population, 2021	78,718	414.5
Opioid burden (including outpatient ED visits and hospital discharges for non-fatal opioid overdose, abuse, dependence, and unspecified use; and opioid overdose deaths), crude rate per 100,000 population, 2020	343,374	14.5

Source: CDC Wonder database; New York State Office of Alcoholism and Substance Abuse Services. To access New York State opioid-related data: health.ny.gov/statistics/opioid

The number of overdose deaths from opioids in New York State was more than 4,200, roughly 21.5 deaths per 100,000 population from 2020-2021. Emergency Medical Services agencies administered naloxone more than 19,000 times in 2021, roughly 5.8 per 1,000 Emergency Medical Services dispatches. In addition, there were more than 12,000 emergency department visits for opioid overdoses in 2020-2021. The high opioid burden could be explained by the number of opioid prescriptions. From 2020-2021, there were more than 200,000 pain relievers of 90 morphine milligram equivalents or more prescribed for at least 1 day and more than 340,000 seven-day opioid prescriptions for opioid naïve patients. To overcome this high level of opioid usage, there were 414.5 buprenorphine prescriptions written per 100,000 population in 2020-2021.

Figure 33. Total mortality, premature deaths, years of potential life lost, potentially preventable hospitalizations, New York State, 2018-2020

	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
General Health Indicators					
Total mortality per 100,000 population, age-adjusted	678.3	807.8	398.1	609.2	686.3
Percentage of premature deaths (< 75 years)	35.5%	56.2%	42.6%	53.5%	41.3%
Years of potential life lost per 100,000 population, age-adjusted	5,415.3	8,735.1	2,613.9	5,585.4	5,904.5
Potentially preventable hospitalizations among adults, age-adjusted rate per 10,000	90.8	200.1	45.1	124.8	117.6

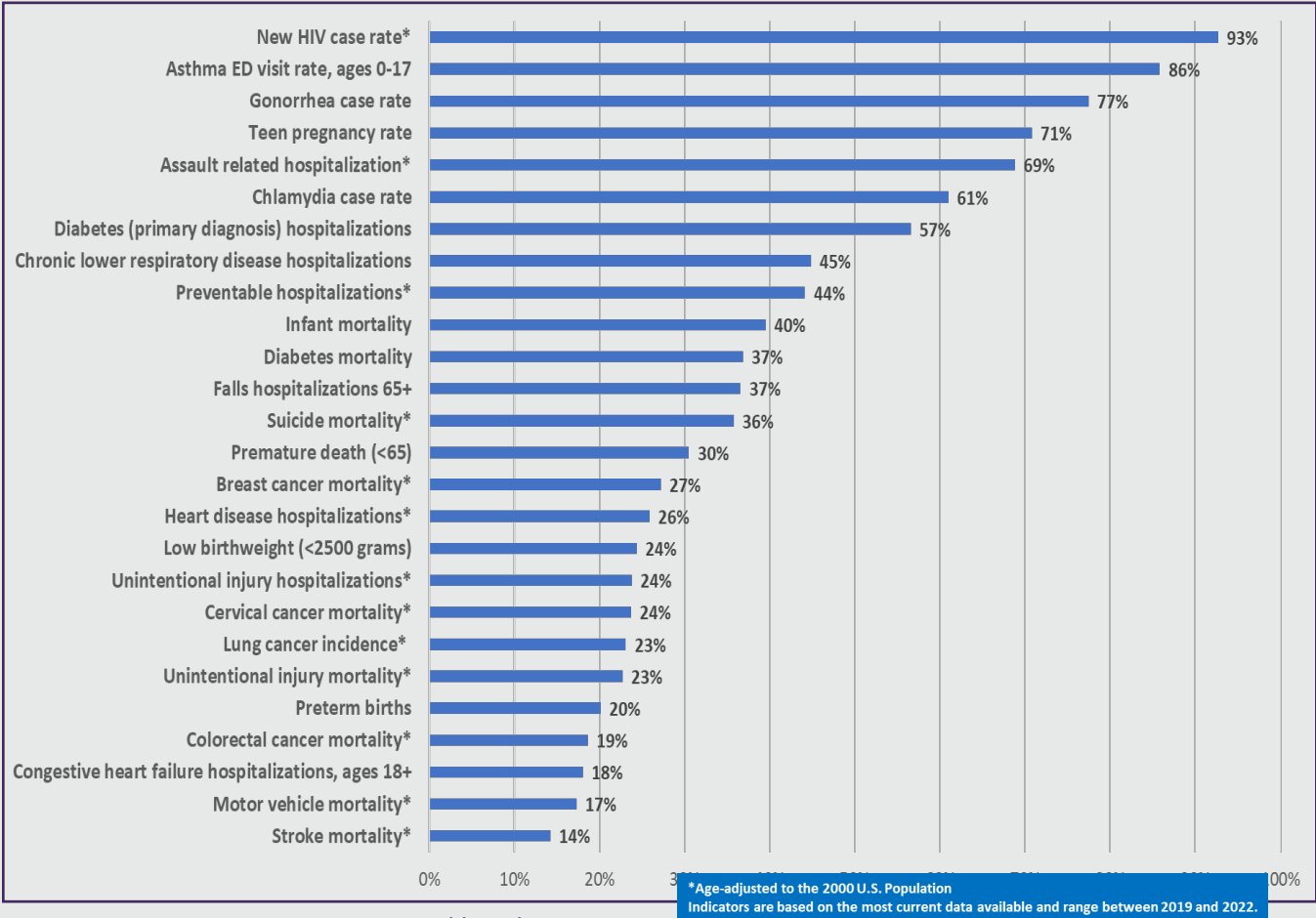
Note: Age-adjusted to U.S. Census 2000 Population

Source: New York State County Health Indicators by Race and Ethnicity

From 2018-2020, Black non-Hispanics had the worst outcomes for total mortality, premature deaths, years of potential life lost, and potentially preventable hospitalizations among adults. Asian and Pacific Islander non-Hispanics had the lowest percentage for total mortality (398.1 per 100,000 population), years of potential life lost (2,613.9 per 100,000 population), and potentially preventable hospitalizations (45.1 per 10,000). White non-Hispanics had the lowest percentage for premature death rate at 35.5%.

Selected Health Outcome Indicators with Disparities between Race and Ethnic Subgroups

Figure 34. Index of race and ethnicity disparity for selected public health outcomes, New York State, 2019-2022



Source: New York State Prevention Agenda Dashboard

The disparity index calculates the differences between racial and ethnic subgroups. The index does not show which subgroups have the greatest or fewest disparities, but it does show where the biggest disparities exist. Lower percentages indicate fewer disparities, while higher percentages indicate greater disparities. The greatest disparities in New York State were the new HIV case rate, asthma emergency department visit rate for children 0-17, gonorrhea case rate, and teen pregnancy rate. The fewest disparities were colorectal cancer mortality, congestive heart failure hospitalizations among those 18 and older, motor vehicle mortality, and stroke mortality.

Figure 35. Selected birth-related indicators, by race and ethnicity, New York State, 2018- 2020

Birth-Related Indicators	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Number of births per year (3 year average)	106,880	31,062	23,143	50,132	217,763
Percentage of births with early (1st trimester) prenatal care	82.0%	65.8%	78.5%	70.0%	76.2%
Percentage of births with adequate prenatal care (APNCU) ^Δ	79.6%	67.7%	77.4%	69.8%	75.1%
Percentage of premature births (< 37 weeks gestation - clinical estimate)	7.6%	13.1%	8.4%	10.0%	9.1%
Percentage of low birthweight births (< 2.5 kg)	6.2%	13.1%	8.7%	8.5%	8.1%
Teen pregnancies per 1,000 females aged under 18 years	1.5	7.7	0.9	6.6	4.2
Pregnancies per 1,000 females aged 15-44 years	62.7	86.2	61.2	82.1	76.3
Fertility per 1,000 females aged 15-44 years	53.5	48.7	55.0	60.4	55.8
Infant mortality per 1,000 live births	3.2	8.4	1.6	3.7	4.2
Percentage of low-risk births delivered by cesarean section	26.8%	33.3%	28.5%	29.2%	28.5%

APNCU: Adequacy of Prenatal Care Utilization Index.

Source: New York State County Health Indicators by Race and Ethnicity

In 2018-2020, Black non-Hispanics had the lowest number of births per year at 31,062 births compared to other racial and ethnic subgroups; however, Black and non-Hispanics had the highest percentage of low birthweight births at 13.1% and the highest infant mortality at 8.4 per 1,000 live births. Teen pregnancies per 1,000 females ages under 18 years had the greatest disparity among the different racial and ethnic subgroups. In 2018-2020, Black non-Hispanic teen pregnancy rate was 7.7 per 1,000 females under 18 years and Hispanic teen pregnancy rate was 6.6 per 1,000 females under 18 years. These rates were much higher compared to the White non-Hispanic rate of 1.5 per 1,000 females under 18 years and Asian and Pacific Islander non-Hispanic rate of 0.9 per 1,000 females under 18 years.

Figure 36. Selected injury-related indicators, by race and ethnicity, New York State, 2018- 2020

Injury-Related Indicators	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Motor vehicle-related mortality per 100,000 population, age-adjusted	5.5	5.1	2.5	4.7	5.2
Unintentional injury mortality per 100,000 population, age-adjusted	39.8	35.0	11.0	33.2	36.1
Unintentional injury hospitalizations per 10,000 population, age-adjusted	61.3	61.2	26.5	52.3	66.0
Fall hospitalizations per 10,000 population, aged 65 years or older	205.0	100.6	87.0	121.0	192.6
Poisoning hospitalizations per 10,000 population, age-adjusted	8.6	13.2	2.3	8.8	10.0
Suicide mortality per 100,000 population, age-adjusted	10.3	4.5	5.3	4.6	8.1
Opioid burden per 100,000 population	247.1	269.4	20.8	253.3	254.0

Age-adjusted to U.S. Census 2000 Population

Source: New York State County Health Indicators by Race and Ethnicity

In 2018 – 2020, for all indicators except suicide mortality, Asian and Pacific Islander non-Hispanics had the lowest rates of injury-related indicators compared to all other racial and ethnic subgroups. Asian and Pacific Islander non-Hispanics also had a drastically lower opioid burden rate compared to the other racial and ethnic subgroups.

Black non-Hispanics and Hispanics had higher rates of injury-related indicators for poisoning hospitalizations per 10,000 population (13.2 and 8.8, respectively) and opioid burden per 100,000 population (269.4 and 253.3, respectively) than other racial and ethnic groups. White non-Hispanics had much higher rates of injury-related indicators for hospitalizations due to falls per 10,000 people aged 65 years or older (205.0) and suicide mortality per 100,000 population (10.3) than other racial and ethnic subgroups.

Figure 37. Selected respiratory disease-related indicators, by race and ethnicity, New York State, 2018-2020

Respiratory Disease Indicators	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Asthma hospitalizations per 10,000 population, age-adjusted	3.0	18.1	3.5	13.4	8.5
Asthma hospitalizations per 10,000 population, aged 0-17 years	5.0	32.8	8.2	19.6	15.9
Chronic lower respiratory disease mortality per 100,000 population, age-adjusted	31.4	21.2	8.8	15.6	27.3
Chronic lower respiratory disease hospitalizations per 10,000 population, age-adjusted	14.1	34.1	6.9	24.0	20.7
Percentage of fee-for-service (FFS) Medicare enrollees who had an annual flu vaccination (2021) ²⁰	52%	33%	50%	36%	49%

Age-adjusted to U.S. Census 2000 Population

Note: ~White non-Hispanic, Black (including Hispanic), Asian and Pacific Islander (including Hispanic), and Hispanic (of any race)

Source: New York State County Health Indicators by Race and Ethnicity

From 2018-2020, asthma continued to be a major burden for Black non-Hispanics and Hispanics, compared to White non-Hispanics and Asian and Pacific Islander non-Hispanics. Black non-Hispanics had an asthma hospitalization rate of 18.1 per 10,000 population while White non-Hispanics and Asian and Pacific Islander non-Hispanics had rates of 3.0 and 3.5 per 10,000 population, respectively. In addition, Hispanics had a rate of 13.4 per 10,000 population, which is also much higher than the rate of White non-Hispanics and Asian and Pacific Islander non-Hispanics. White non-Hispanics had the highest chronic lower respiratory disease mortality rate of 31.4 per 100,000 population. Only about one-third of Black non-Hispanic fee-for-service Medicare enrollees received an annual flu shot, while around half of White non-Hispanic and Asian and Pacific Islander non-Hispanic fee-for-service Medicare enrollees received an annual flu vaccination.

Figure 38. Selected cancer disease-related indicators, by race and ethnicity, New York State, 2017-2019

	Non-Hispanic			Hispanic	Total
	White	Black	Asian/Pacific Islander		
Cancer Indicators					
Lung cancer incidence per 100,000 population, age-adjusted (2017-2019)	64.3	47.1	46.6	31.9	56.9
Colorectal cancer mortality per 100,000 population, age-adjusted (2017-2019)	11.8	14.3	8.0	9.4	11.7
Colorectal cancer incidence per 100,000 population, age-adjusted (2017-2019)	38.0	39.1	33.3	31.5	37.2
Female breast cancer mortality per 100,000 female population, age-adjusted (2017-2019)	18.2	24.8	9.7	13.5	18.2
Female late stage breast cancer incidence per 100,000 female population, age-adjusted (2017-2019)	42.2	51.9	32.4	31.3	41.4
Cervix uteri cancer mortality per 100,000 female population, age-adjusted (2017-2019)	1.6	3.1	1.7	2.0	1.9
Cervical cancer incidence per 100,000 female population, age-adjusted (2017-2019)	6.6	9.8	8.4	8.8	7.7
Percentage of female fee-for-service (FFS) Medicare enrollees aged 65-74 years who received an annual mammography screening (2021) [~]	45%	37%	33%	34%	43%

Age-adjusted to U.S. Census 2000 Population

Note: ~White non-Hispanic, Black (including Hispanic), Asian and Pacific Islander (including Hispanic), and Hispanic (of any race)

Source: New York State County Health Indicators by Race and Ethnicity

From 2017-2019, White non-Hispanics had the highest incidence of lung cancer per 100,000 population, with a rate of 64.3. Black non-Hispanic females had the highest breast cancer mortality (24.8 per 100,000 female population), late-stage breast cancer incidence (51.9 per 100,000 female population), cervix uteri cancer mortality (3.1 per 100,000 female population), and cervical cancer incidence (9.8 per 100,000 female population) across all racial and ethnic subgroups. Less than half of the fee-for-service Medicare enrollees ages 65-74 across all racial and ethnic subgroups received an annual mammography screening.

Figure 39. New diagnoses of HIV by sex at birth, age, race and ethnicity, and risk category, New York State, 2021

NEW YORK STATE: Includes all 62 Counties									
New Diagnoses of HIV 2021 by Sex at Birth, Age, Race/Ethnicity and Risk									
		Non-Concurrent HIV A		Concurrent HIV and AIDS B		All HIV Diagnoses* A+B			% Concurrent B+(A+B)*100
		#	%	#	%	#	%	Case Rate†	%
Total		1,687	100.0	436	100.0	2,123	100.0	10.8	20.5
Sex at Birth	Male	1,386	82.2	354	81.2	1,740	82.0	17.8	20.3
	Female	301	17.8	82	18.8	383	18.0	3.9	21.4
Age at Diagnosis	12 & under	3	0.2	-	-	3	0.1	0.1	-
	13-19	69	4.1	8	1.8	77	3.6	4.6	10.4
	20-24	303	18.0	32	7.3	335	15.8	26.9	9.6
	25-29	330	19.6	44	10.1	374	17.6	27.2	11.8
	30-39	537	31.8	123	28.2	660	31.1	24.0	18.6
	40-49	202	12.0	92	21.1	294	13.8	12.3	31.3
	50-59	162	9.6	89	20.4	251	11.8	9.4	35.5
	60+	81	4.8	48	11.0	129	6.1	2.7	37.2
Race/Ethnicity	Non-Hispanic White	316	18.7	105	24.1	421	19.8	4.1	24.9
	Non-Hispanic Black	736	43.6	166	38.1	902	42.5	30.5	18.4
	Hispanic	537	31.8	136	31.2	673	31.7	16.7	20.2
	Asian	80	4.7	22	5.0	102	4.8	5.2	21.6
	Native Hawaiian/Pacific Islander	3	0.2	1	0.2	4	0.2	40.8	25.0
	Native American	3	0.2	1	0.2	4	0.2	6.6	25.0
	Multi Race	12	0.7	5	1.1	17	0.8	5.1	29.4
Risk	MSM	912	54.1	193	44.3	1,105	52.0	-	17.5
	IDU	39	2.3	3	0.7	42	2.0	-	7.1
	MSM/IDU	37	2.2	7	1.6	44	2.1	-	15.9
	Heterosexual	319	18.9	106	24.3	425	20.0	-	24.9
	Pediatric Risk	3	0.2	-	-	3	0.1	-	-
	Unknown	377	22.3	127	29.1	504	23.7	-	25.2

Source: New York State Department of Health HIV/AIDS annual report 2022

The rate of HIV infection has declined for the last few decades, but new cases are still frequently diagnosed in males, who had more than 4.5 times the diagnosis rate of females in 2021. Black non-Hispanics had a case rate that was more than 7 times that of White non-Hispanic and nearly twice that of Hispanics in 2021. The highest risk factors for new HIV diagnoses included injection drug use and men who have sex with men (MSM). Over half of all new cases diagnosed were in the MSM risk category.

Figure 40. Selected sexually transmitted infection indicators*, rates per 100,000, 2010-2020

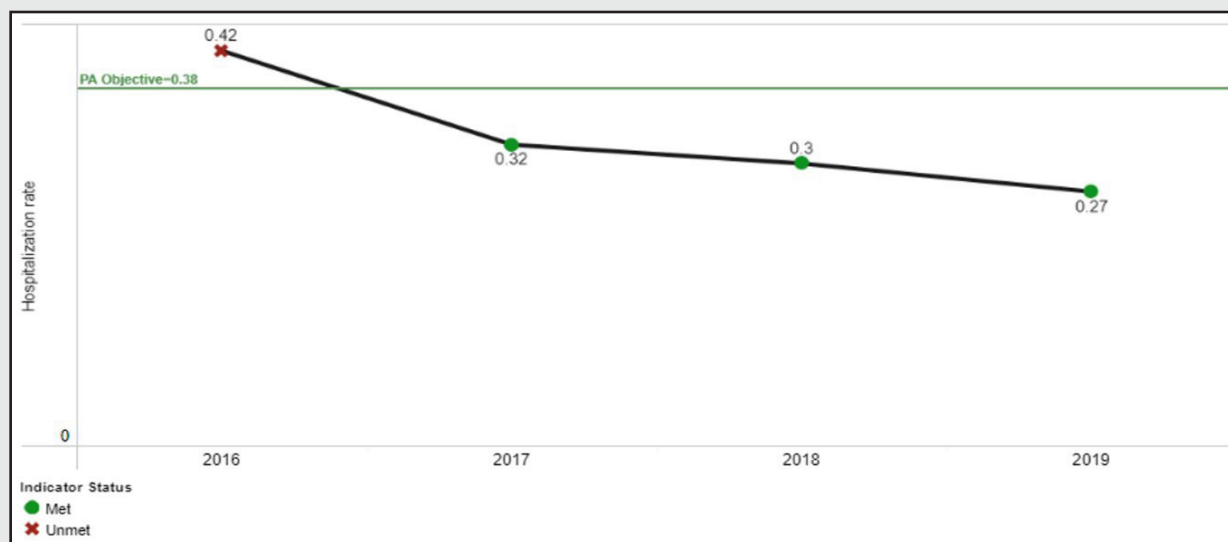
Year	Chlamydia case count	Chlamydia case rate	Gonorrhea case count	Gonorrhea case rate	Early syphilis case count	Early syphilis case rate
2010	99,821	503.7	18,270	92.9	2,461	13.0
2011	102,460	515.4	20,643	104.7	2,348	12.3
2012	100,687	509.6	22,631	115.1	2,666	13.9
2013	96,020	486.0	19,960	101.13	3,411	17.8
2014	98,262	499.4	20,594	104.8	4,000	20.7
2015	103,825	533.4	20,632	131.8	4,837	25.1
2016	109,549	567.6	29,048	150.0	6,087	31.2
2017	116,843	612.6	34,111	177.5	6,252	32.6
2018	119,670	634.4	37,222	196.0	6,758	35.6
2019	124,389	668.3	40,896	217.0	7,247	38.6
2020	97,199	529.6	42,318	228.3	7,752	41.7

*Age-adjusted using Surveillance, Epidemiology, and End Results Program (SEER) data

Source: New York State STI Surveillance System, data as of October 2022

There was a rise in chlamydia, gonorrhea, and early syphilis case counts and rates from 2010-2020 in New York State. The 2020 gonorrhea case rate was nearly 2.5 times that of 2010, while the early syphilis case count and rate rose nearly every year from 2010 to 2020. The early syphilis 2020 case count and rate more than 3 times what it was in 2010. The chlamydia case count and rate did not increase as much from 2010 to 2020 compared to the other sexually transmitted infections, though it was increasing steadily over the last decade.

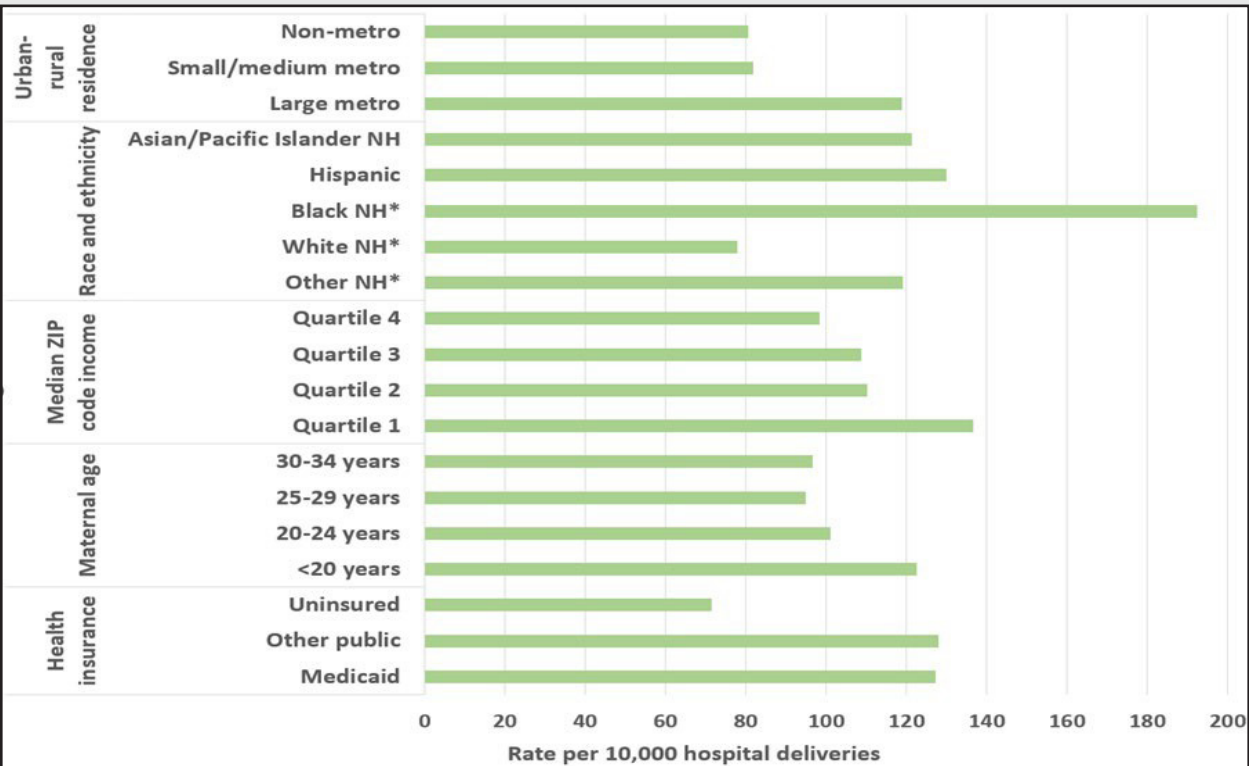
Figure 41. Firearm assault-related hospitalizations, rate per 10,000 population, New York State, 2016-2019



Source: New York State Prevention Agenda Dashboard

The Prevention Agenda's objective for firearm assault-related hospitalizations was no more than 0.38 hospitalizations per 10,000 population. This objective was not met in 2016 but was met in subsequent years. The rate of firearm assault related hospitalizations per 10,000 population decreased every year from 2016 to 2019 and by 2019 the rate was 0.27 hospitalizations per 10,000 population. There were 826 hospitalizations in 2016 compared to 524 hospitalizations in 2019.

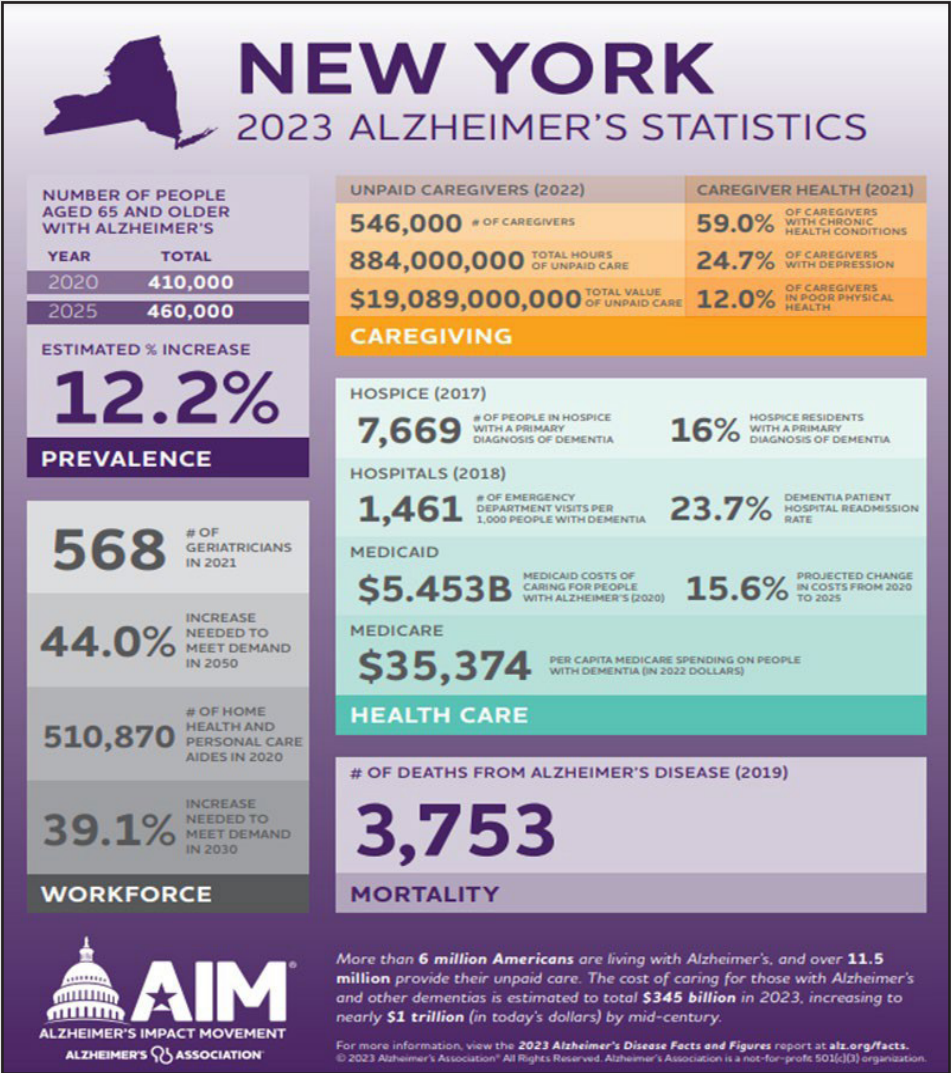
Figure 42. Severe maternal morbidity, rate per 10,000 hospital deliveries, by residence type, race and ethnicity, zip code income quartile, age, and insurance status, New York State, 2021



*NH means non-Hispanic
 Source: New York State Maternal and Child Health Dashboard; the data for this indicator is provided by the Federally Available Data (FAD) Resource Document, from the Health Resources and Services Administration (HRSA). HRSA obtains the data from the Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID)

In 2021, New York State had higher rates of maternal morbidity, nearly 120 per 10,000 deliveries in large metro areas, relative to approximately 80 per 10,000 deliveries in other areas. The highest maternal morbidity was seen in Black non-Hispanic deliveries, nearly 200 per 10,000 deliveries, while White non-Hispanics experienced the lowest rate of maternal morbidity at less than 80 per 10,000 deliveries. Disparities were also noted by income quartile, as there were higher rates of maternal morbidity as income declined. The uninsured category had the lowest maternal morbidity, relative to those on Medicaid or other public insurance.

Figure 43. Alzheimer’s disease key statistics, New York State, 2023

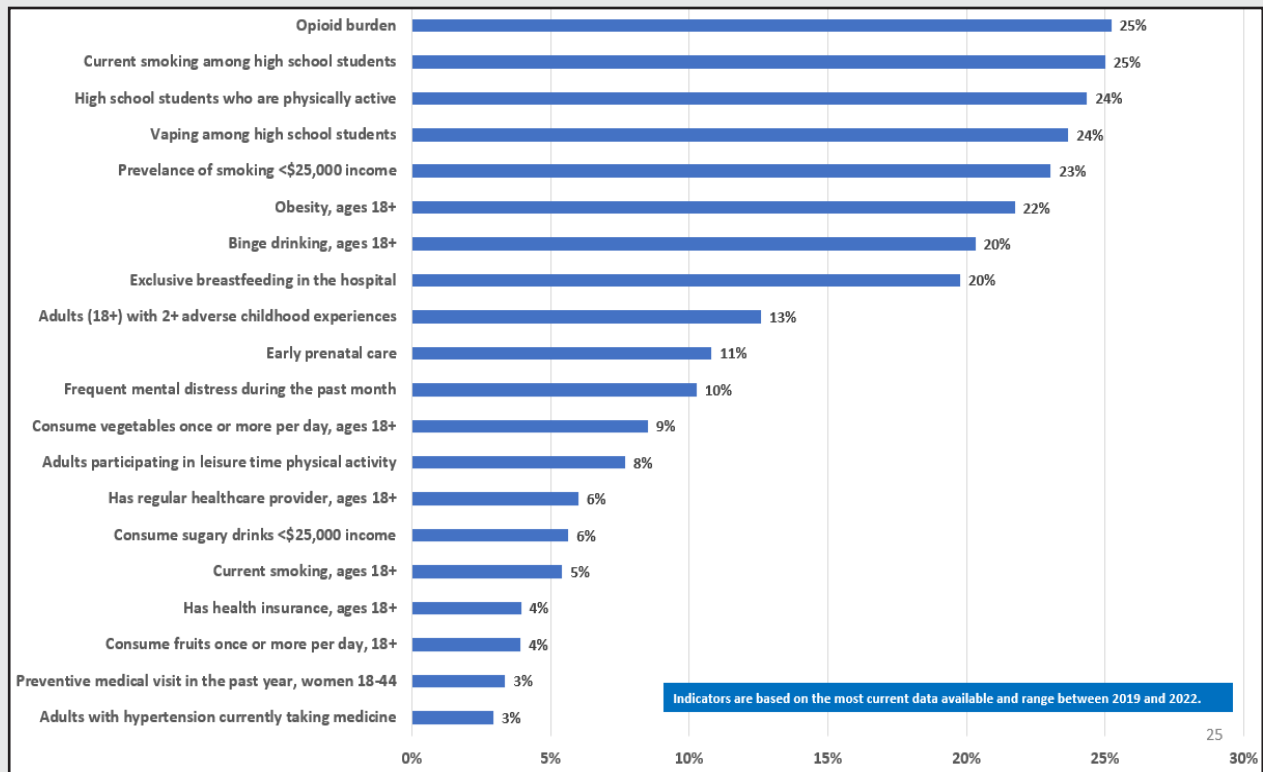


Source: 2023 Alzheimer’s Association

The number of people in New York State with Alzheimer’s disease in 2020 was 410,000 and is projected to increase 12%, to 460,000, by 2025. This high number of people with Alzheimer’s disease has led to more than \$19 billion in unpaid care and \$5.4 billion in Medicare spending in 2020. As of 2019, there were 3,700 deaths from Alzheimer’s disease. According to the Alzheimer’s Association, a 39.1% increase in geriatricians is necessary to meet the demand by 2030.

Selected Health Behavior/Risk Factor Indicators with Disparities between Race and Ethnic Subgroups

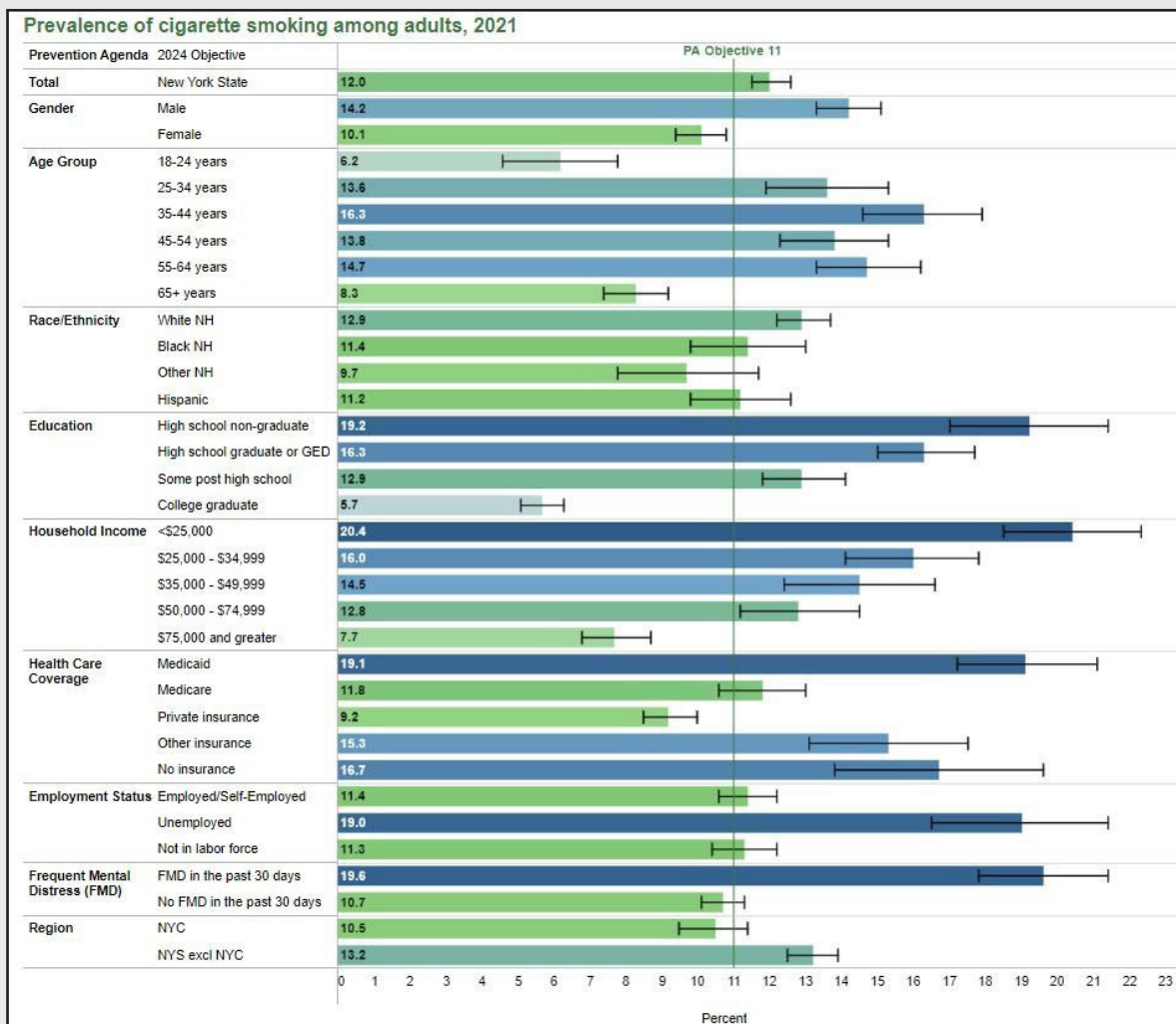
Figure 44. Index of Race and ethnic disparity for Public Health Behaviors/risk factors, New York State, 2019-2022



Source: New York State Prevention Agenda Dashboard

This index illustrates the degree of disparity among racial and ethnic subgroups. A value of zero percent indicates no disparity, while the highest percentage indicates the greatest disparity. Opioid burden, smoking and vaping by high school students, and physical activity level of high school students show the greatest disparities from 2019-2022. Women aged 18-44 years who attended preventive medical visits and adults with hypertension who were taking medication showed the fewest disparities. It is important to note that smoking in adults is relatively low on the disparity index, but when it was stratified by those making less than \$25,000 per year, the disparity index level increased.

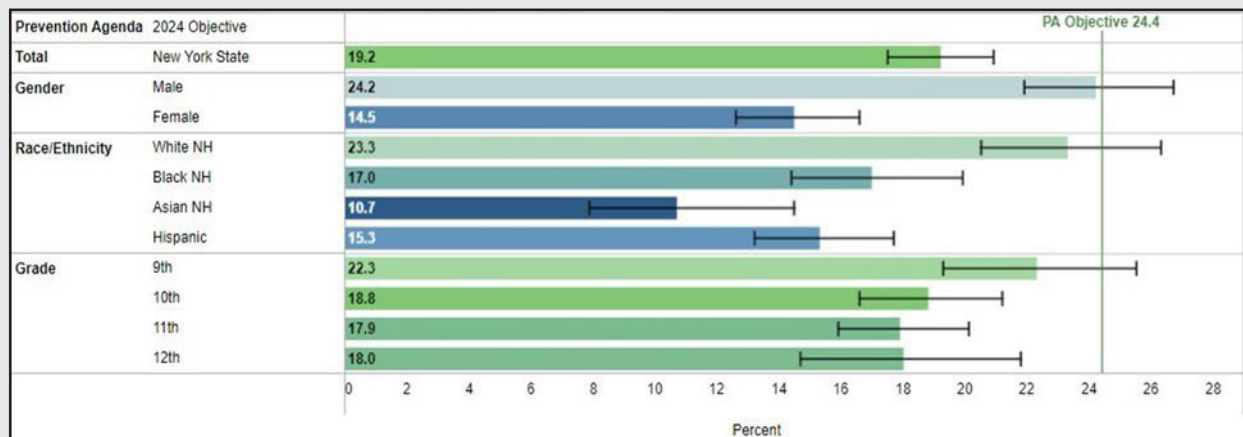
Figure 45. Prevalence of cigarette smoking among adults, by gender, age group, race and ethnicity, education, household income, health care coverage, employment status, frequent mental distress, and region, New York State, 2021



Source: New York State Prevention Agenda Dashboard

In 2021, 12% of New York State adults reported currently smoking cigarettes. About 14% of males smoke compared to only 10% of females. Those individuals ages 35-44 reported the highest prevalence of smoking. Out of the racial and ethnic subgroups, White non-Hispanic males had the highest prevalence of smoking at 12.9%. A trend in education level and smoking is notable, as the education level increased, the prevalence of reported smoking decreased. A similar trend was also identified with household income level; as income levels increased, the prevalence of reported smoking decreased. Also notable was that 19% of those with frequent mental distress reported smoking, nearly double the rate of those who did not have frequent mental distress in the last 30 days. New York City adults reported a lower prevalence of smoking compared to the rest of New York State, with only 10.5% compared to 13.2%.

Figure 46. Percentage of high school students who are physically active, by gender, race and ethnicity, and grade, New York State, 2019



Source: New York State Prevention Agenda Dashboard

In 2019, 19.2% of students in New York State reported being physically active. Males reported a higher prevalence of physical activity (24.2%) than females (14.5%). Asian non-Hispanics had the lowest percentage of physical activity (10.7%), while White non-Hispanics had the highest level of physical activity (23.3%). As student grade level increased, physical activity level decreased, though this was not statistically significant.

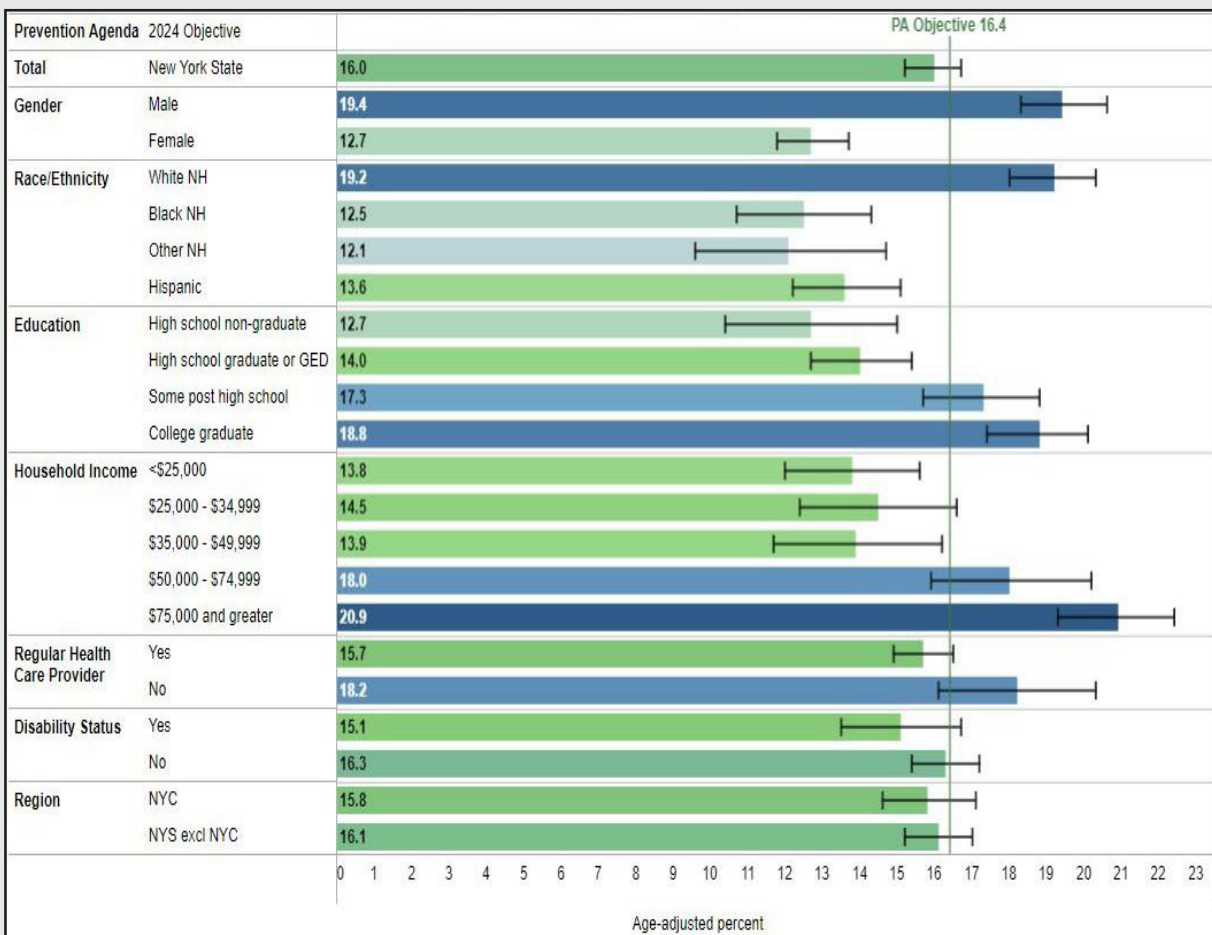
Figure 47. Obesity and leisure time physical activity among adults, New York State, 2016- 2021

Year	Percentage of adults with obesity	Percentage of adults who report leisure time physical activity
2016	25.5	73.7
2017	25.7	72.8
2018	27.6	76.2
2019	27.1	72.8
2020	26.3	74.4
2021	29.1	74.2

Source: New York State Behavioral Risk Factor Surveillance System, data as of October 2022

The percentage of obese adults in New York State steadily increased over the last few decades, and in the most recent 6 years that trend has continued with year-to-year variability. As of 2021, 29.1% of adults in New York State were obese. Leisure time and physical activity fluctuated throughout the years, with 74.2% of adults reporting leisure time physical activity in 2021.

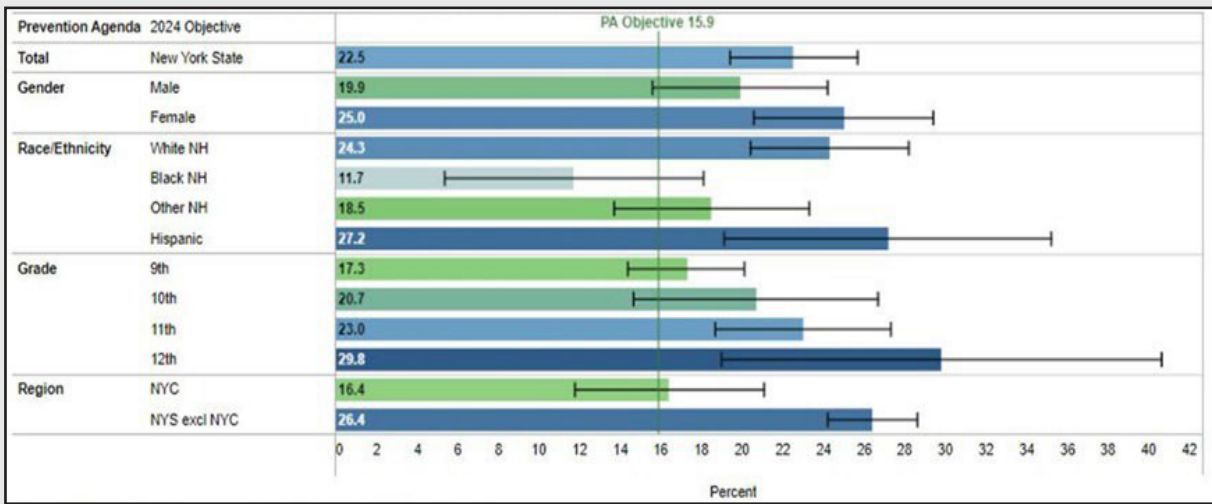
Figure 48. Age-adjusted percentage of binge drinking during the past month among adults, by gender, race and ethnicity, education, household income, regular health care provider, disability status, and region, New York State, 2021



Source: New York State Prevention Agenda Dashboard

In 2021, 16% of adults in New York State reported binge drinking within the past month. Among males, 19.4% reported binge drinking compared to 12.7% of females. White non-Hispanics reported binge drinking at a much higher rate (nearly 20%) than other racial and ethnic subgroups. As education and household income increased, adults were more likely to report binge drinking. New York State and New York City had a similar prevalence of binge drinking among adults.

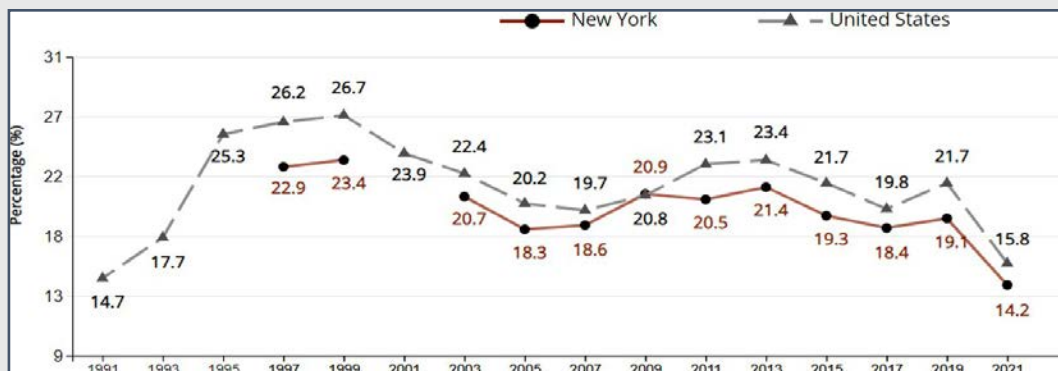
Figure 49. Prevalence of vaping product use by high school age students, by gender, race and ethnicity, grade, and region, New York State, 2020



Source: New York State Prevention Agenda Dashboard

In 2020, 22.5% of high school students in New York State reported using vaping products. Females were more likely to report vaping (25.0%) versus males (19.9%), though the confidence intervals overlap. Black non-Hispanics reported the lowest prevalence of vaping (11.7%), less than half that of White non-Hispanics (24.3%). The prevalence of vaping increased as grade level increased. New York State outside New York City had a higher prevalence of vaping than New York City.

Figure 50. Current use* of marijuana among high school students, New York State and the United States, 1991-2021



*Current use is defined as marijuana use within the last 30 days

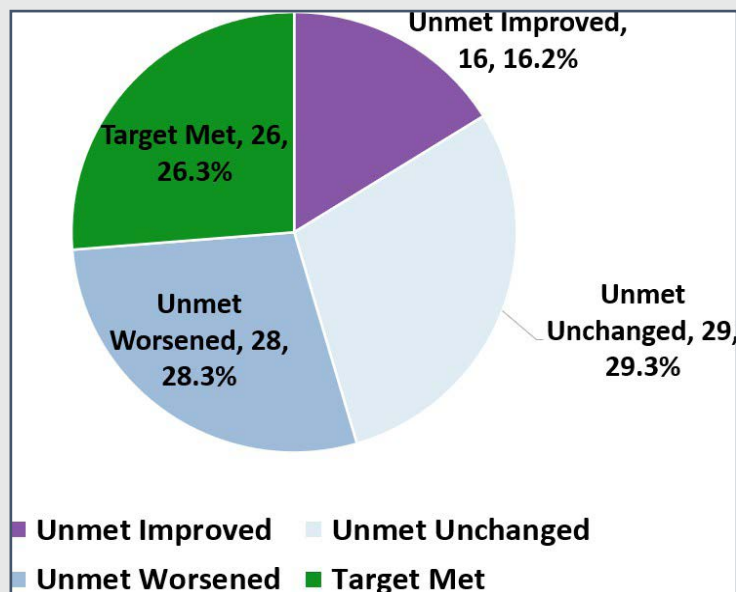
Source: Youth Risk Behavioral Surveillance Survey, data as of October 2021

Since 2013, both the United States and New York State experienced a decline in marijuana use. The largest drop in marijuana use in New York State was seen between 2019 (19.1%) and 2021 (14.2%).

Progress on the New York State Prevention Agenda 2019-2024

Overall Progress

Figure 51. Progress* on all 99 indicators of the New York State Prevention Agenda 2019-2024



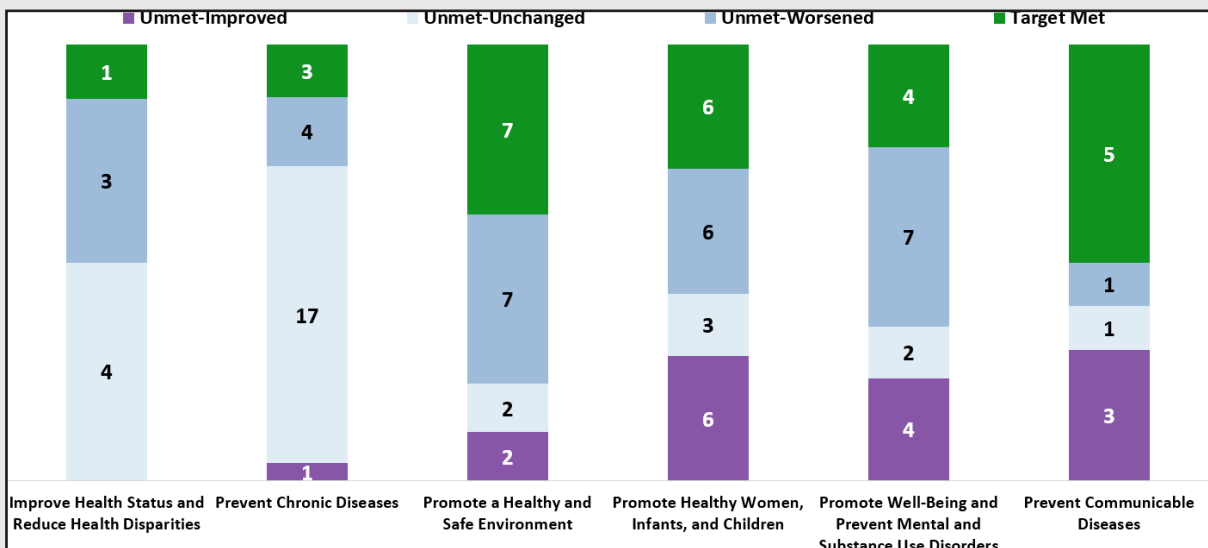
*As of February 2024

Source: New York State Prevention Agenda Dashboard

Of the 99 tracking indicators in the Prevention Agenda, 26 indicators (26.3%) were met, 16 indicators (16.2%) were unmet but improved, 29 indicators (29%) were unmet and remained unchanged, while 28 indicators (28.3%) were unmet and notably worsened.

Progress by Priority Area

Figure 52. New York State Prevention Agenda 2019-2024 progress*, by Priority Area

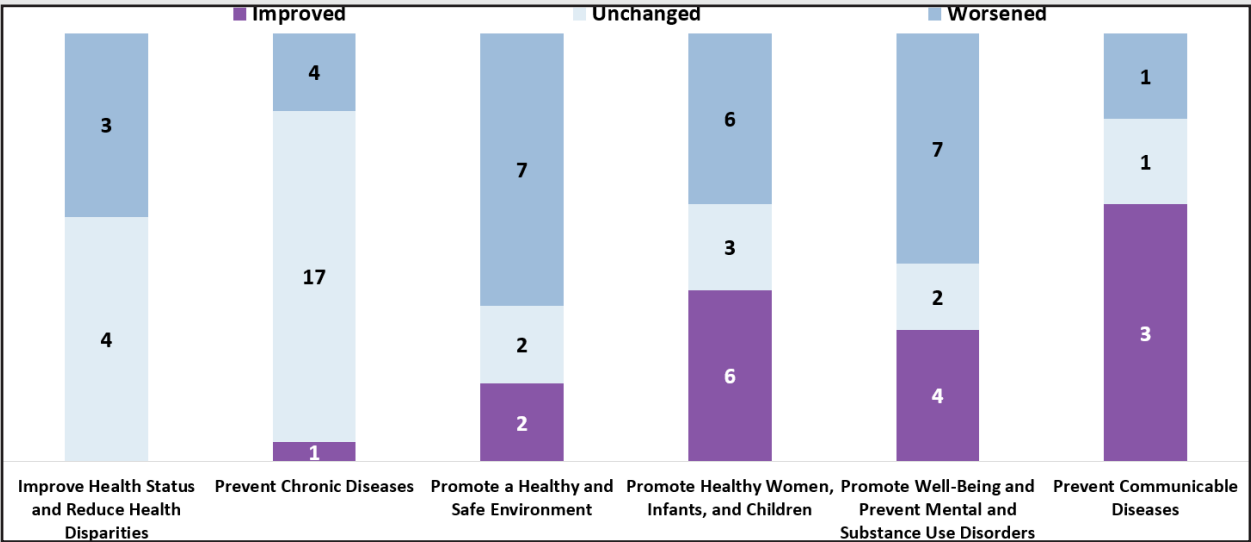


*As of February 2024

Source: New York State Prevention Agenda Dashboard

The Prevention Agenda’s 99 statewide indicators were split into 5 priority areas and one overall category called *Improve Health Status and Reduce Health Disparities*. The progress by priority area shows the number of indicators that were met and unmet. For those that were unmet, a further breakdown illustrates those that worsened, were unchanged, or improved. Many indicators improved or met targets, while 28% of the indicators were not met or worsened. Many of the chronic disease indicators were statistically unchanged. Many indicators were met or improved in the Prevent Communicable Disease and Promote a Healthy and Safe Environment priority areas. Promoting Healthy Women, Infants, and Children and Preventing Mental and Substance Use Disorders were priority areas that did not see much improvement. For detailed information on the indicators, please see the [2019-2024 Prevention Agenda](#). For technical information, see the [summary table of the 2019-2024 dashboard](#).

Figure 53. New York State Prevention Agenda 2019-2024 progress*, by Priority Area, among indicators where target was not met

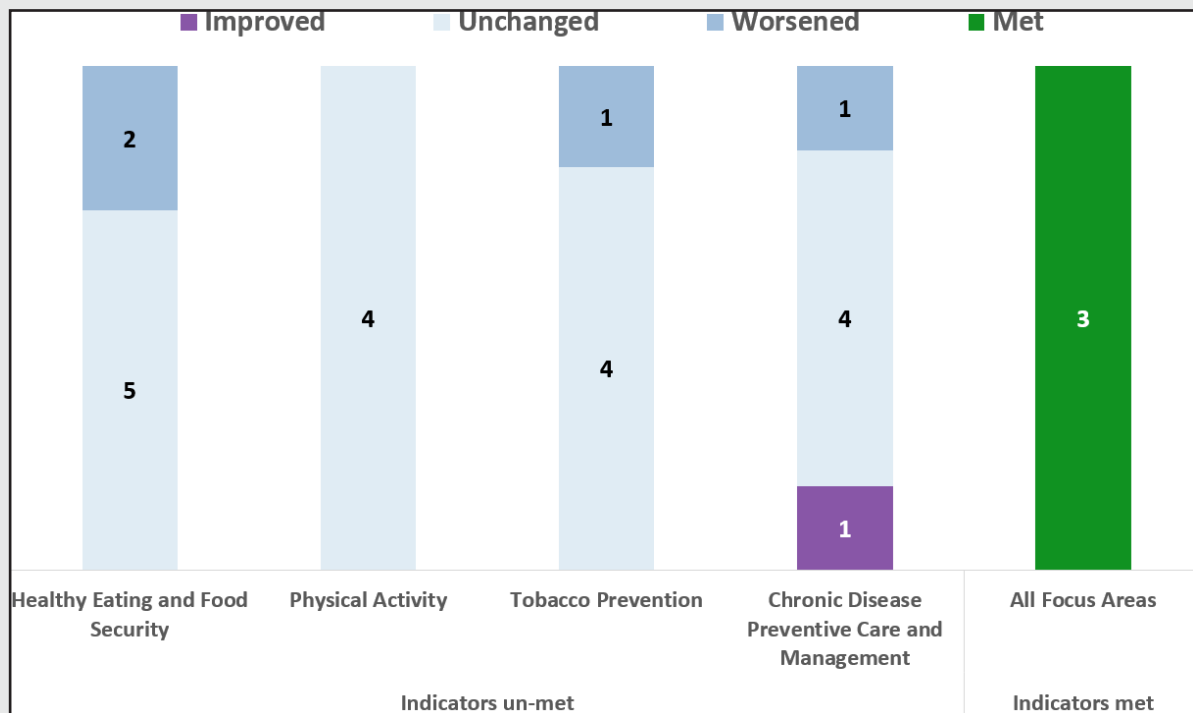


**As of February 2024*
Source: New York State Prevention Agenda Dashboard

Of the 70 Prevention Agenda indicators that were not met, the figure shows whether they improved, remained unchanged, or worsened. Many remained unchanged. Promote Well-Being and Prevent Mental and Substance Use Disorders, and the Promote a Health and Safe Environment priority areas both had seven indicators that worsened in the most recent period. About 23% of the 70 indicators that were not met showed improvement.

Progress within Priority Areas, by Focus Area

Figure 54. New York State Prevention Agenda 2019-2024 progress*, by Focus Area, within the Preventing Chronic Disease Priority Area

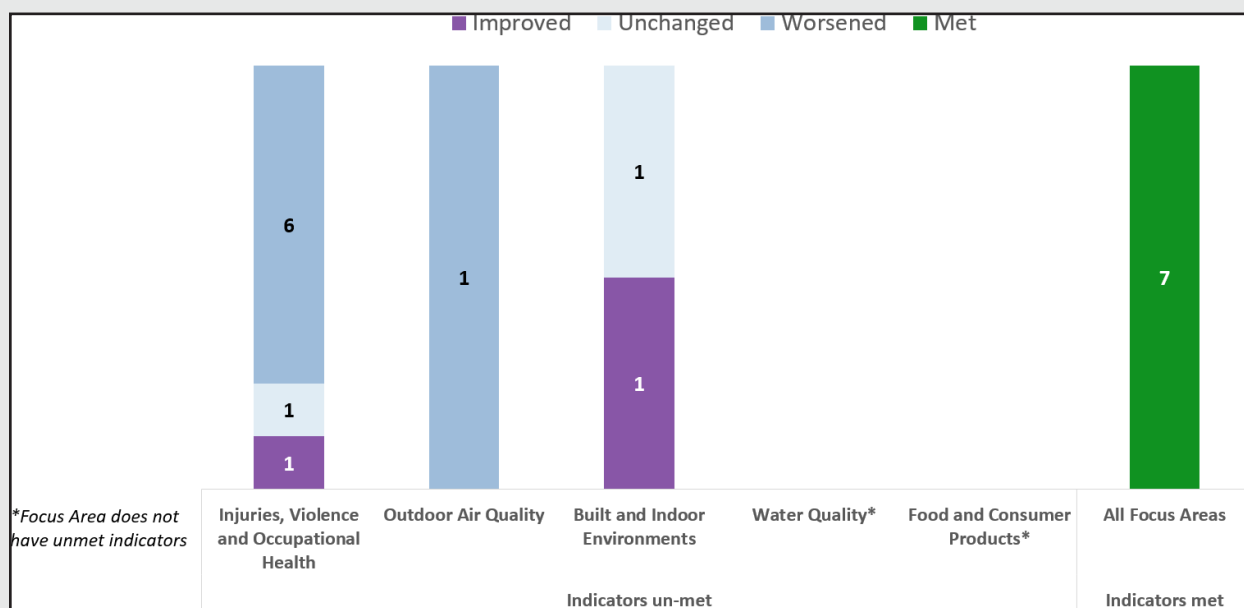


*As of February 2024

Source: New York State Prevention Agenda Dashboard

Of the 25 indicators within the Preventing Chronic Disease priority area, 3 met their 2024 objective. These indicators included a percentage of adults with household income less than \$25,000 who consume 1 or more sugary drinks per day, the prevalence of combustible cigarette used by high school-age students, the percentage of adults ages 50- 64 who received colorectal cancer screening based on the most recent guidelines, and asthma emergency department visits rate per 10,000 for those ages 0-17 years. In the most recent period, 22 indicators were not met. Of these, 17 remained unchanged, 4 worsened, and 1 improved. The Healthy Eating and Food Security category had the most indicators that worsened.

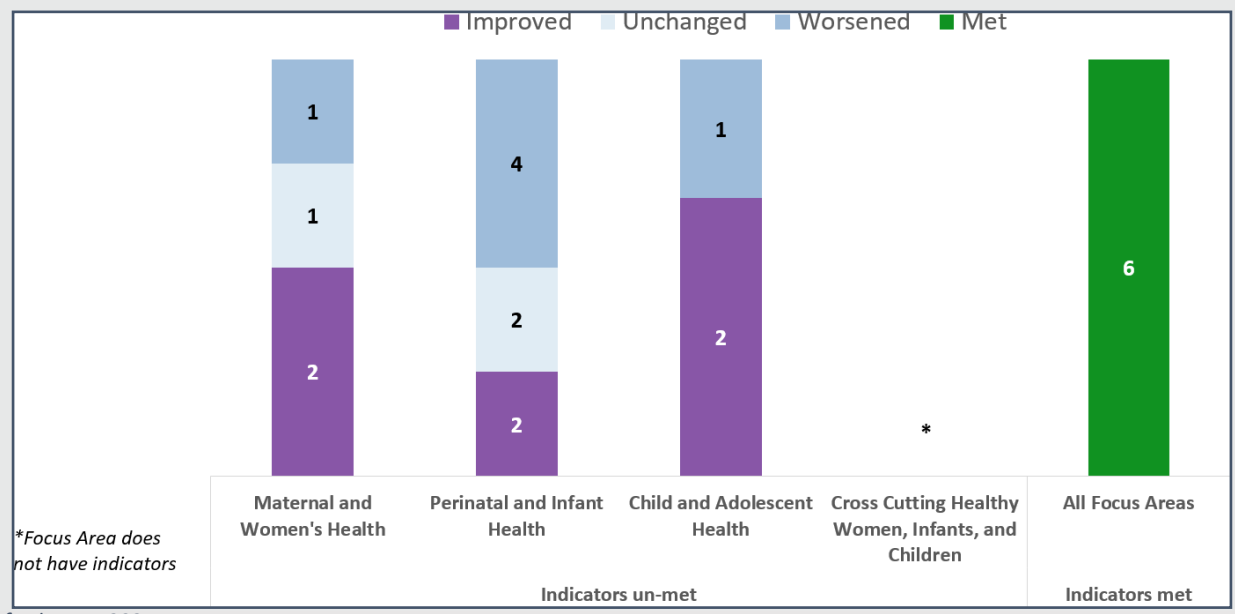
Figure 55. New York State Prevention Agenda 2019-2024 progress*, by Focus Area, within the Promote Healthy and Safe Environment Priority Area



Source: New York State Prevention Agenda Dashboard

Of the 18 tracking indicators within the Promote Healthy and Safe Environment priority area, 7 of those indicators met the 2024 objective in the most recent period. Some indicators that were met included firearm assault-related hospitalization per 10,000 and the number of radon tests performed over a 3-year average. Of the 11 indicators that were not met, 2 remained unchanged, 7 worsened, and 2 improved. The 2 indicators that improved were the number of counties with mapped waterbodies detailing contamination and hospitalizations due to falls per 10,000 of those ages 65 and over. Some unmet indicators that worsened included days of air quality with unhealthy levels of ozone or particulate matter, assault-related hospitalizations, and firearm-related hospitalizations.

Figure 56. New York State Prevention Agenda 2019-2024 progress*, by Focus Area, within the Promote Healthy Women, Infants, and Children Priority Area

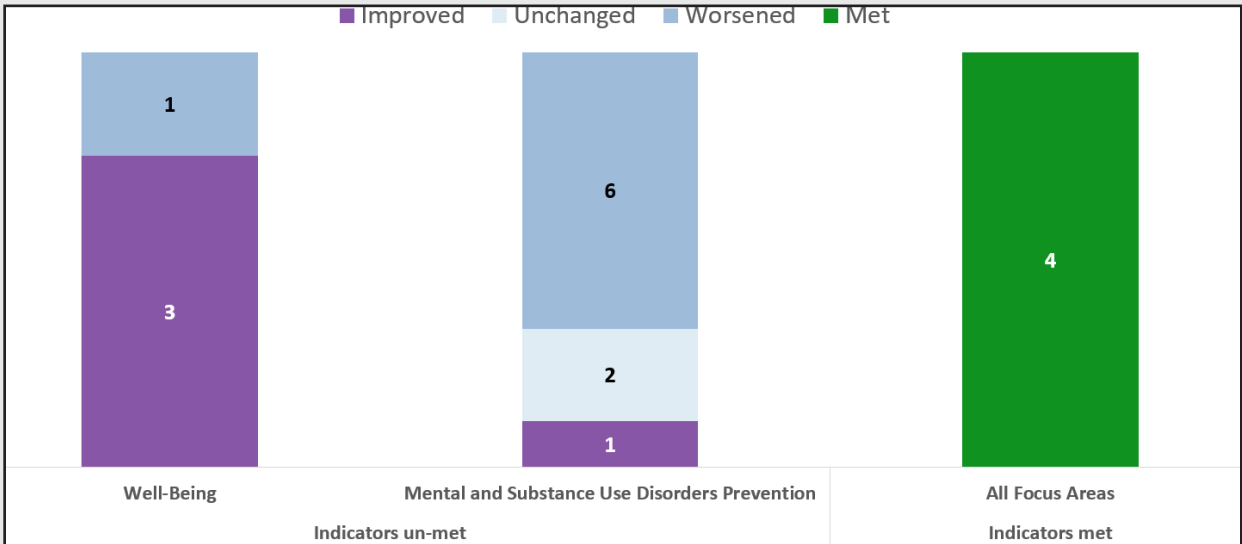


*As of February 2024
 Source: New York State Prevention Agenda Dashboard

Of the 21 tracking indicators within the Promote Healthy Women, Infants, and Children priority area, 6 indicators met the 2024 objective. These indicators included the percentage of women who received preventive medical visits in the past year for those ages 45 and over and the percentage of women who reported that a health care provider asked them about depression symptoms at a postpartum visit.

Of the 15 indicators that did not meet the 2024 objective, 6 improved, 6 worsened, and 3 remained unchanged. Those indicators that improved included maternal mortality, the percentage of women 18 to 44 who reported ever talking to a health provider about ways to prepare for a healthy pregnancy, and the suicide rate per 100,000 teens ages 15-19. The indicators that were statistically unchanged were the infant mortality rate and the percentage of infants exclusively breastfed in the hospital among Black non-Hispanics. The indicators that worsened included maternal mortality per 100,000 live births, the percentage of births that were preterm, and the percentage of newborns that were exclusively breastfed.

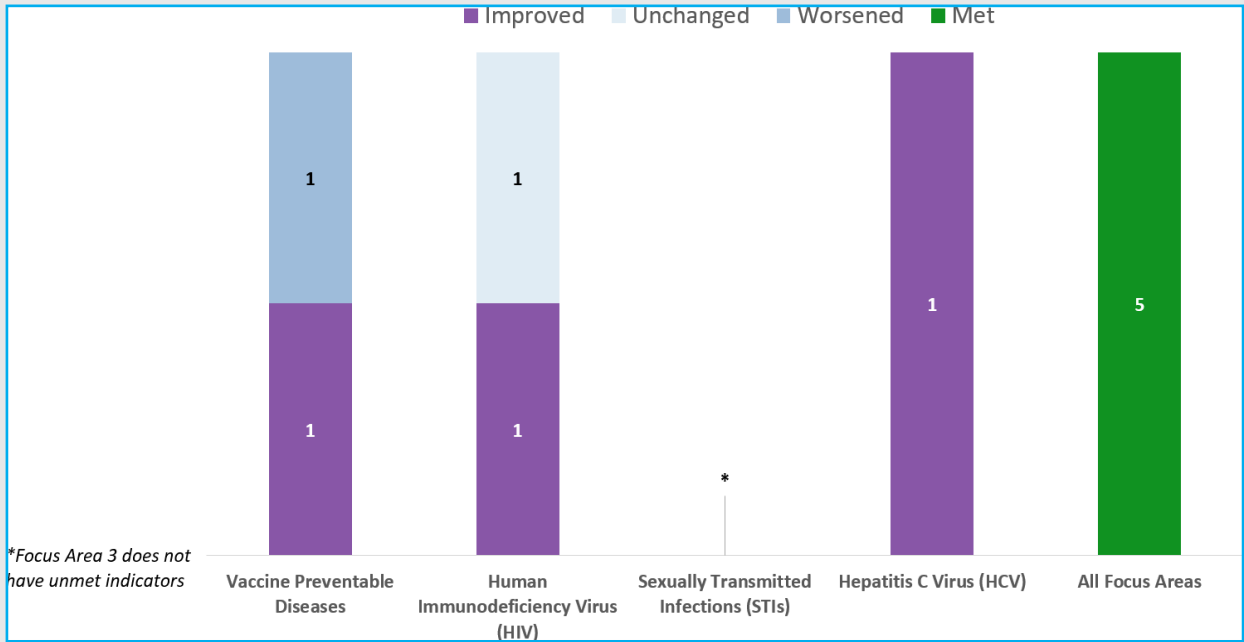
Figure 57. New York State Prevention Agenda 2019-2024 progress*, by Focus Area, within the Promote Well-Being and Prevent Mental and Substance Use Disorders Priority Area



**As of February 2024
Source: New York State Prevention Agenda Dashboard*

Of the 17 tracking indicators within Promote Well-Being and Prevent Mental and Substance Use Disorders priority area, 4 met the 2024 objective, including 3 indicators in the Well-Being focus area and 1 indicator within the Mental and Substance Use Disorders Prevention focus area. The 13 indicators that did not meet the 2024 objective, included overdose deaths involving any opioid per 100,000 population, the percentage of adults who have experienced 2 or more adverse childhood experiences, and the percentage of adolescents (ages 12-17) who experienced a major depressive episode.

Figure 58. New York State Prevention Agenda 2019-2024 progress*, by Focus Area, within the Prevent Communicable Diseases Priority Area



*As of February 2024
Source: New York State Prevention Agenda Dashboard

Of the 10 tracking indicators within the Prevent Communicable Disease priority area, 5 indicators were met and 5 indicators were unmet. Within the unmet indicators, 1 worsened and 3 improved. Two notable unmet indicators that improved included the case rate of newly diagnosed HIV cases per 100,000 population and the cumulative number of Medicaid enrollees treated for Hepatitis C Virus.



Department
of Health

2024

New York State 2024 Health Assessment

SECTION III: CONTRIBUTING CAUSES OF HEALTH CHALLENGES

Chronic Diseases

Chronic diseases such as heart disease, stroke, cancer, and diabetes are the leading causes of disability and death in New York State. They are also the leading drivers of the state's health care costs. Many of these chronic diseases are preventable, as they are linked to poor nutrition, physical inactivity, tobacco use, and excessive alcohol consumption.

This section provides information on chronic diseases and related risk factors in New York State, as well as related trends, disparities, and resources. It includes the following topics: [Data Highlights](#)

- excessive alcohol use
- asthma
- cancer
- cardiovascular disease
- diabetes
- food and nutrition security
- obesity
- physical activity
- tobacco use

[Data Highlights](#)

Chronic diseases are responsible for 6 of every 10 deaths in New York State. In addition, chronic diseases can be disabling and greatly reduce a person's quality of life.

- The prevalence of asthma among adults is estimated at 8%, versus the national average of 9.8%, or approximately 1.6 million adults. More than 250,000 children (6.5%) have asthma.
- Every year, nearly 115,000 individuals learn they have cancer and in 2022, about 32,500 individuals died from cancer, making it the second leading cause of death in the state.
- Cardiovascular disease is the leading cause of death, responsible for 27% of all deaths (n=48,878) in 2021.
- An estimated 1.8 million people, or 11.4% of the adult population, have been diagnosed with diabetes.
- 1 in 4 adults experience food insecurity.
- Exclusive breastfeeding/chestfeeding is lowest among Black non-Hispanics, people with less than high school education, and people enrolled in New York State Medicaid.
- Participation in leisure-time physical activity is lowest among adults who are Hispanic (62.6%), have a household income of less than \$25,000 (62.2%), have less than a high school education (54.4%), or are living with disability (59.4%).
- Around two-thirds of adults are classified as either overweight (36.1%) or obese (28.0%).
- The prevalence of current smoking among adults varies by county, ranging from a high of 28.5% to a low of 5.6%.
- Cigarette smoking and secondhand smoke exposure cause more than 30,000 deaths annually, and 56% of cancer deaths in the state are attributable to smoking.
- Nearly 1 in 5 adults (18.4%) report excessive alcohol use in the form of either binge or heavy drinking, with an estimated 16.6% of adults in reporting binge drinking and 6.1% reporting heavy drinking.

Alcohol Use

Burden and Distribution Across New York State

Excessive alcohol use includes binge drinking, heavy drinking, or any drinking among pregnant people or those under the age of 21. Excessive alcohol use can lead to short-term harms, such as motor vehicle injuries or drowning; violence, including homicide, suicide, sexual assault, and intimate partner violence; alcohol poisoning; and poor birth outcomes. It can also lead to chronic diseases such as heart disease, liver disease, digestive problems, and several types of cancer. Excessive alcohol use can also lead to learning and memory problems, mental health problems, social problems, such as lost productivity or family problems, and alcohol use disorders.¹

Nearly 1 in 5 adults in New York State (18.4%) report excessive alcohol use in the form of either binge or heavy drinking, with an estimated 16.6% of adults in New York State reporting binge drinking and 6.1% reporting heavy drinking.² Binge drinking among adults ranges from 8.0% to 30.4% across New York State counties and heavy drinking ranges from 2.0% to 20.9%.³ Adults who binge drink report an average of 4.3 binge drinking occasions per month (median = 1.7 occasions) and an average of 7.1 drinks per binge drinking episode (median = 5.4 drinks).² 20% of high school students in New York State report current drinking (at least 1 drink in the past 30 days) and 10.2% report binge drinking. These rates increase with grade level from 10% for ninth graders to 33% for twelfth graders who report current drinking and 4% to 19% who report binge drinking.⁴ In New York State, excessive alcohol use causes more than 8,000 deaths annually, resulting in an average of 24 years of potential life lost per death.⁵ Excessive alcohol use costs New York State an estimated \$16.3 billion, or approximately \$2.28 per drink.⁶ Economic costs due to excessive drinking include losses in workplace productivity, health care expenses, criminal justice expenses, and motor vehicle crash costs.

Key Risk Factors

Excessive alcohol use is more likely in environments with lower-cost alcohol products and greater availability. Excessive alcohol use among adults in the form of binge or heavy drinking is highest among males, White non-Hispanics, and younger adults.²

Binge drinking is higher among adults who: are male, less than 35 years old, have an annual household income of \$75,000 or more, are White non-Hispanic, report frequent mental distress, currently smoke, and currently use cannabis.² Heavy drinking is higher among adults who are White non-Hispanic, report frequent mental distress, currently smoke, and currently use cannabis.²

Current and binge drinking are more common among high school students who are female, White or multi-racial, and those who identify as gay, lesbian, bisexual, or transgender.⁴

Health Disparities

Structural racism and commercial determinants of health, such as greater alcohol retailer density, increased availability of alcohol products, and increased marketing of alcohol products to specific population groups, contribute to disparities in the burden of excessive alcohol use and its associated outcomes. To advance health equity in communities, every community should benefit from policies and approaches that reduce excessive alcohol use and prevent the harm that it can cause.²

Chronic Diseases

Alcohol screening and brief intervention is an evidence-based tool for reducing excessive alcohol consumption and is recommended for all adults seen in primary health care settings.⁷ Adults who are 65 and older, have an annual income less than \$50,000, are not in the labor force, are covered by Medicare or Medicaid, are living with a disability, or are living in New York City, were significantly less likely to report being screened for alcohol use.⁸

Despite reporting lower binge and heavy drinking rates than non-Hispanic White adults, non-Hispanic Black adults and Hispanic adults experience greater alcohol-related harms.⁹⁻¹¹ The higher rates of harm among Black, Indigenous, and people of color (BIPOC) communities may be explained by: the collective impact of stress, stigma, and discrimination, unresolved trauma at the individual or community level, disproportionately greater exposure to alcohol marketing and alcohol environments, and inadequate access to substance use disorder treatment programs.¹²

Excessive alcohol use is associated with increased risks for several chronic diseases and conditions including heart disease, liver disease, digestive problems, and several types of cancer, most of which are more prevalent among older adults. Older adults may experience higher blood alcohol concentrations after drinking the same amount as younger adults due to changes in total body water volume and slower rates of elimination of alcohol from the body. Eyesight and hearing may deteriorate, and reflexes may be slower, resulting in a higher likelihood of falls, automobile crashes, and other accidents. Drinking can worsen many medical conditions common among older people, such as high blood pressure and ulcers. Finally, mixing alcohol with over the counter and prescription medicines commonly taken by older adults may have dangerous effects.¹³

Importance of Prevention

Excessive alcohol use has harmful effects on the people who drink and those around them. Prioritizing population-level strategies is key to addressing the harms associated with excessive alcohol use across populations and locations.¹⁴ Policies that make alcohol less available, harder to access, and higher in price are evidence-based strategies to prevent excessive drinking and related harms. Implementing and enforcing effective alcohol use prevention policies can help communities improve their health and well-being and save lives.

New York State's Approach to Modifying Risk Factors

The New York State Department of Health Alcohol Surveillance and Epidemiology Program aims to reduce excessive alcohol use and related harms through:

- Monitoring and sharing data on excessive alcohol use and its related harms to inform prevention efforts
- Developing partnerships with state and local entities to collaborate on prevention efforts
- Increasing awareness about the public health impact of excessive alcohol use among partners and the public
- Building support for population-based policy and environmental changes to reduce excessive alcohol use¹

In addition, the New York State Office of Addiction Services and Supports funds prevention providers who deliver evidence-based education programs to prevent addiction. These providers offer workshops, and training sessions in local communities, help create and enforce policies to reduce underage drinking and create positive alternative activities for youth.¹⁵

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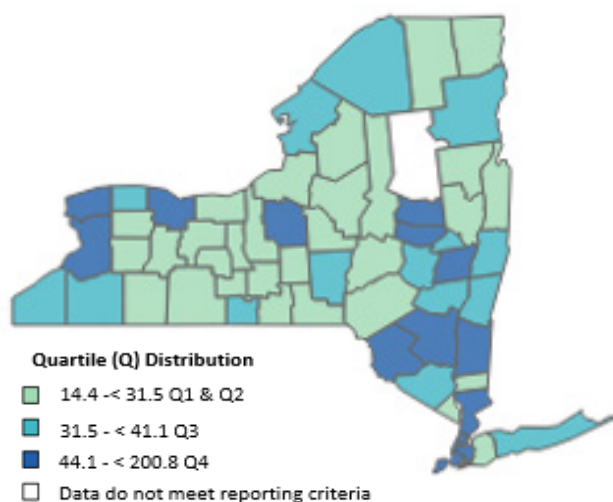
Chronic Diseases

Asthma

Burden and Distribution Across New York State

Asthma is a chronic disease of the lungs that causes wheezing, breathlessness, chest tightness, and coughing. When not well controlled, asthma can greatly limit quality of life. While not curable, asthma can be controlled. Clinical guidelines to control asthma include medical care with assessment of asthma severity and control status, asthma self-management education (ASME), and identification and management of environmental triggers.¹ The New York State Department of Health maintains a surveillance system accessible via the New York State [Asthma Dashboard](#) to track asthma burden data for indicators such as prevalence, health care utilization, and costs. The dashboard also provides a breakdown of socio-economic factors to guide the implementation of evidence-based interventions. The number of people with asthma continues to increase. In 2021, the prevalence of current asthma among NY adults was higher than the national average 8.0% (95% CI: 7.6-8.4) at an estimated 9.8% (95% CI, 9.3-10.4), or approximately 1.6 million adults. More than 250,000 New York State children (6.5%; 95% CI: 5.0-8.4) had asthma in 2021. In 2021, asthma-related emergency department (ED) and hospitalization rates for children ages 0-17 were 60.6 and 13.8 per 10,000, respectively, compared to those 18 and older (33.3 and 4.2 per 10,000 respectively). Per Figures 1 and 2, the highest county-level rates for ages 0-17 (2019-2021) were found in counties shaded dark blue, and more than 60% of these visits occurred in the Bronx, New York, Kings, and Queens Counties.

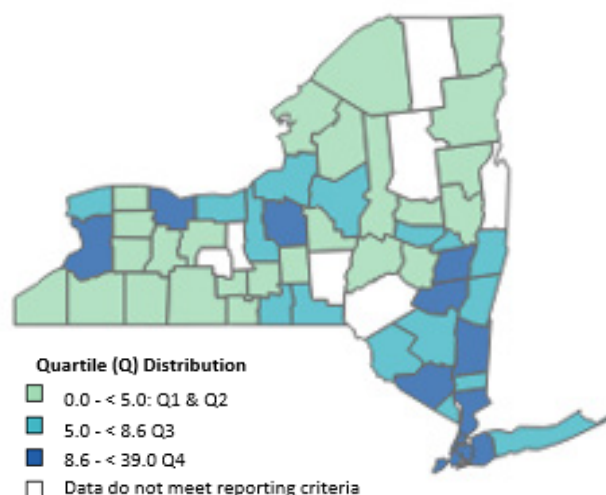
Figure 1. Asthma ED visit rate per 10,000, ages 0-17, 2019-2021



Data Source: SPARCS data as of March 2024

- The highest asthma-related ED visit rates among children were in Albany, Bronx, Dutchess, Erie, Fulton, Kings, Monroe, Montgomery, New York, Niagara, Onondaga, Queens, Richmond, Sullivan, Ulster, and Westchester counties.
- The highest asthma-related hospitalization rates among children were in Albany, Bronx, Dutchess, Erie, Greene, Kings, Monroe, Nassau, New York, Onondaga, Orange, Queens, Richmond, and Westchester counties.

Figure 2. Asthma hospitalization rate per 10,000, ages 0-17, 2019-2021



Data Source: SPARCS data as of March 2024

Key Risk Factors

Both genetic and environmental factors can affect asthma prevalence.² Asthma exacerbations can be impacted by multiple factors, including asthma severity and control status, access to care, medication adherence, and environmental triggers. Asthma has been linked with exposure to many pollutants from

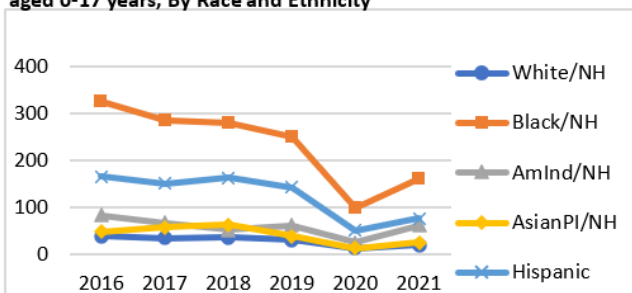
Chronic Diseases

both outdoor and indoor sources.^{3,4} Potential asthma triggers that can exacerbate symptoms include:

- environmental tobacco smoke;
- allergens produced by pets, dust mites, rodents, and cockroaches;
- irritant chemicals;
- pollen and mold allergens;
- damp indoor environments;
- nitrogen dioxide emissions from unvented natural-gas appliances;
- and ambient air pollutants, including ozone, sulfur dioxide, and fine particles.

Indoor environmental tobacco smoke and allergens from dust mites, cats, dogs, and cockroaches, have been associated with the development or onset of asthma.⁵ Asthma is also correlated with conditions such as influenza and allergies resulting in seasonal fluctuations in asthma-related ED and hospitalization rates.

Figure 3. Asthma emergency department visit rate per 10,000 - aged 0-17 years, By Race and Ethnicity**



White NH = White non-Hispanic. Black NH = Black or African American non-Hispanic. AmInd NH = American Indian non-Hispanic. AsianPI NH = Asian American or Pacific Islander non-Hispanic.

**Excludes enrollees with missing race and ethnicity

Data Source: SPARCS data as of March 2024

In New York State, asthma morbidity and mortality rates among non-Hispanic Black and Hispanic communities have been consistently higher. In 2021, asthma emergency department visit rates for Black non-Hispanic children ages 0-17 (160.2 per 10,000) were 5 times higher than rates for White non-Hispanic children (18.1 per 10,000) (Figure 3). 2021 ED visit rates for children 0-17 living in low-income neighborhoods (114.2 per 10,000) were nearly 3 times that of children living in non-low-income neighborhoods (42.8 per 10,000) (Figure 4).

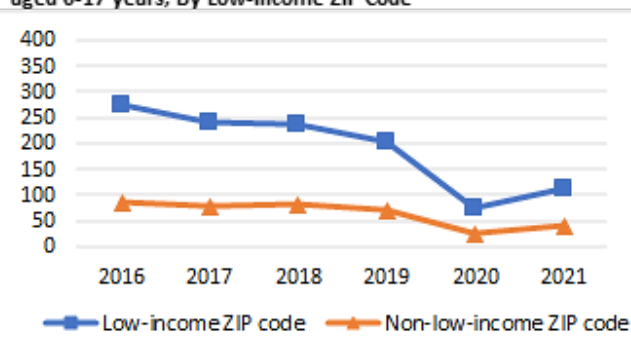
In older adults with asthma, an increased risk of mortality due to asthma and a higher incidence of chronic comorbidities have been observed,⁹ making continued medication management and asthma self-management education critically important.

Health Disparities

Stark inequities exist in asthma-related health outcomes among persons and communities of color and populations with lower socio-economic status. Structural racism contributes to higher poverty rates among Black and Hispanic residents, impacting these disparities. Living in sub-standard housing can worsen asthma control due to exposure to pests, leaks and mold. Those with lower socio-economic status are also more likely to smoke or to be exposed to second-hand smoke.^{6, 7}

In addition to exposure to environmental triggers, asthma morbidity and mortality rates are correlated with income and insurance coverage, which may impact health care quality and access.⁸

Figure 4. Asthma emergency department visit rate per 10,000 - aged 0-17 years, By Low-Income ZIP Code



Data Source: SPARCS data as of March 2024

Chronic Diseases

Importance of Prevention

The [New York State Children's Asthma Initiative](#), a joint effort of the New York State Asthma Control Program and the American Lung Association, engages multi-sector partners statewide to address health equity. It advances the CDC's evidence-based [EXHALE](#) strategies, which are shown to reduce the burden of childhood asthma.

New York State Approach to Modifying Risk Factors

The New York State Children's Asthma Initiative partners with organizations that support communities where children face higher asthma rates and other challenges. It aims to improve outcomes and quality of life for children and their families by addressing:

- disparities in economic stability;
- limited access to quality education and health care;
- unsafe neighborhoods; and
- increased risks from climate change.

Resources support four key interventions serving the focus population across home, school, health system, and community-based settings, including:

- Project BREATHE NY, a quality improvement framework to expand guidelines-based asthma care
- Workforce development, training, and resources for the multidisciplinary asthma care team
- Asthma management programming and policy support for schools and school-based health centers
- Home-based asthma services expansion

The New York State Children's Asthma Initiative also convenes a statewide Asthma Partnership of NY consisting of clinical advisors and a steering committee to progress efforts to reduce the burden of asthma.

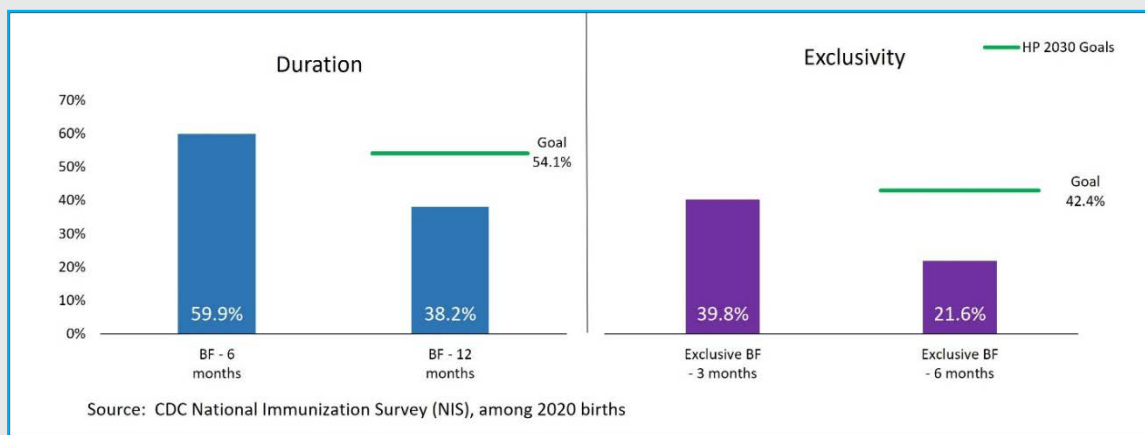
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Breastfeeding, Chestfeeding, and Infant Human Milk Feeding

Burden and Distribution Across New York State Human milk is the best source of nutrition for most babies. Breastfeeding, chestfeeding, and any human milk feeding provide health benefits to lactating parents and their children.¹ The American Academy of Pediatrics and the World Health Organization recommend that infants be fed human milk exclusively for the first 6 months, support continued human milk feeding, and introduce appropriate complementary foods for children two years of age or beyond.² In 2021 in New York State, 87.4% of parents initiated breastfeeding or human milk feeding with their newborn infants. Still, nearly half (47.8%) of infants fed human milk received formula supplementation by the time they left the hospital.³ At the federal level, [Healthy People 2030](#) objectives were established to increase the proportion of infants who are breastfed through one year to 54.1% and to increase the proportion of infants who are exclusively breastfed at 6 months to 42.4%.⁴ Figure 1 shows that New York State falls below both national goals, based on data from 2020 births.

Figure 1. Percent of infants breastfed or fed human milk post-hospital discharge, by exclusivity and duration, at 3, 6 and 12 months, New York State



Key Risk Factors

There are several key overlapping barriers to the initiation and continuation of human milk feeding for families including:

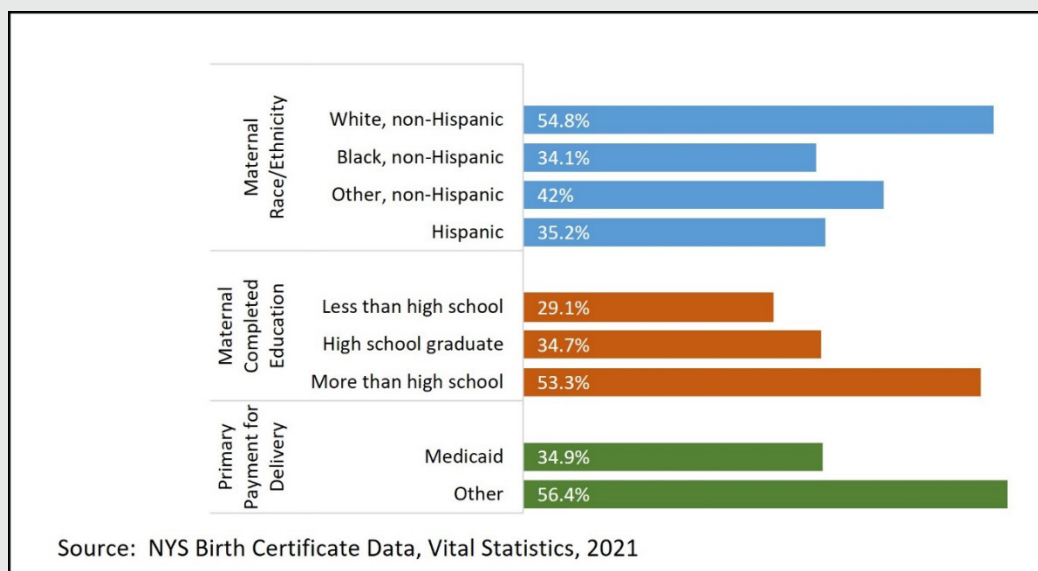
- a return to work or school;
- lack of education of the birthing individual;
- unsupportive personal network;
- community-level factors (such as public unacceptance or lack of access to community-based support after birth);
- lack of support from the health care sector; and
- social determinants of health (such as unmet housing needs, lack of transportation, food, and nutrition insecurity).⁵

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Health Disparities

Unjust disparities in initiation, exclusivity, and duration of infant human milk feeding persist among mothers and birthing people due to factors such as structural racism, poor living conditions, lack of access to health resources, and social norms. Such factors limit opportunities for members of some groups to meet their human milk feeding goals or public health recommendations. As shown in Figure 2, exclusive human milk feeding is lowest among Black non-Hispanic birthing people, people with less than high school education, and people enrolled in New York State Medicaid.

Figure 2. Percent of infants exclusively fed human milk in the hospital, by maternal characteristics, 2021



Importance of Prevention

Human milk provides a baby with ideal nutrition, supports growth and development, and can protect against certain illnesses and diseases. There are also short- and long-term health benefits for lactating parents. It is important to make it easy to start and continue feeding human milk to babies. It is the shared responsibility of governments, policymakers, hospitals, health care providers, employers, and communities to promote, protect, and support families feeding infants and children human milk.

New York State's Approach to Modifying Risk Factors

The New York State Department of Health works with state and local partners to improve the continuity of care for breastfeeding and chestfeeding families through the consistent and collaborative delivery of high-quality services from pregnancy until families are no longer feeding infants and children human milk.⁶ The Department leads the [NYS Breastfeeding, Chestfeeding, and Lactation Friendly New York \(BFFNY\) program](#) with 9 grantees to implement policy, system, and environmental changes across community settings to promote, protect, and support breastfeeding and chestfeeding in priority communities. Through the BFFNY, the Department supports outpatient health care practices with implementing recommended steps to support breastfeeding and chestfeeding families. The Department partners with the University at Albany Center for Public Health Continuing Education to

Chronic Diseases

[deliver breastfeeding and chestfeeding continuing education](#) for health care, public health, lactation, and WIC professionals, including the annual [Breastfeeding Grand Rounds](#). New York State Medicaid covers lactation counseling services and breast/chest pumps. The Department provides the public with information about [coverage for breast pumps](#) and coverage for [lactation counseling services](#).

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Cancer

Burden and Distribution Across New York State

Nearly 115,000 individuals in New York learn they have cancer each year. While cancer can affect any part of the body, the most common types of cancer diagnosed in New York State include breast, prostate, lung, colorectal, and bladder. In 2022, about 32,500 individuals in New York died from cancer, making it the second leading cause of death in the state. The most common cancer deaths in New York State are from lung, colorectal, pancreas, breast, and prostate cancer. While cancer is rare in children, it is one of the leading causes of death among those ages 0-19 years. The top causes of cancer deaths in children are brain cancer and leukemia. A cancer survivor is a person who has cancer or who has had it in the past. More than 1.1 million cancer survivors live in New York State.

Differences in the cancer burden are seen across various regions of New York State. For example, those living in small towns and rural areas are more likely to be diagnosed with regional or distant stage lung (72.4% of cases) or colorectal cancers (66.1% of cases) than those living in metropolitan (67.0% and 62.9%, respectively) or micropolitan (69.0% and 63.4%, respectively) statistical areas. Individuals living in metropolitan areas are more likely to be diagnosed with regional or distant stage female breast (30.6% of cases) or cervical cancers (53.8% of cases) than those living in micropolitan (28.3% and 46.8%, respectively) or small town and rural areas (30.2% and 49.1%, respectively).¹

Key Risk Factors

While age and family history are key risk factors for cancer, nearly half of all cancer cases are due to several preventable risk factors such as smoking, excess body weight, and drinking alcohol.² Each year between 2016 and 2020, approximately 46,000 cases of tobacco-related cancers, nearly 45,000 cases of overweight- and obesity-related cancers, and more than 30,000 cases of alcohol-related cancers were diagnosed. Although these cases may have had other causes or multiple causes working together, current evidence suggests that nearly 60,000 cancers per year in New York State residents could be prevented.

Human papillomavirus (HPV), the most common sexually transmitted infection, causes:

- almost all cases of cervical cancers, more than;
- over 90% of anal cancers;
- 70% of oropharyngeal cancers;
- 75% of vaginal cancers;
- 70% of vulvar cancers; and more than
- over 60% of penile cancers.

The HPV vaccine can prevent more than 90% of cancer caused by HPV.

Cancer survivors are at a greater risk of developing cancer than people who have never had cancer. This may be due to treatment effects, genetics, or health.³

Health Disparities

Cancer does not affect everyone equally. The legacy of racism, which assigns value and determines opportunity based on the way people look, or the color of their skin, has entrenched belief systems and built structures, policies, and norms that unfairly advantage some and disadvantage others. These factors lead to differences in the risk of getting cancer and dying from cancer among different groups of people.

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Social conditions, or social determinants of health, are upstream factors that increase the risk of cancer and disproportionately impact certain populations compared to others. Social determinants of health include:

- poverty;
- lack of affordable housing;
- limited access to quality health care;
- inequitable educational opportunities; and
- unhealthy environments.

These factors lead to disparities in access to health resources by making health care difficult to access, navigate, and pay for.

For example, in New York State, females ages 21 to 65, those without health insurance, those without a regular health care provider, those without a college degree, and those with incomes lower than \$50,000, are all less likely to report receiving a cervical cancer screening within the time frame currently recommended. Disparities in reported breast cancer screening are seen among those with the lowest household income, without health insurance, without a regular health care provider, and among those with a disability. Reported screening for colorectal cancer is much less likely to be reported among Hispanic individuals, those with low income, those with less than a high school education, and those without health insurance.

While White non-Hispanic individuals in New Yorker are more likely to be diagnosed with cancer than all other racial and ethnic groups, Black non-Hispanic individuals are more likely to die from cancer. Cancer death rates for Hispanic, Asian or Pacific Islander, and American Indian or Alaska Native peoples are below the state average. Disparities in the incidence of regional and distant-stage cancer parallel disparities in cancer mortality. For example, Black non-Hispanic individuals are more likely to be diagnosed with regional and distant-stage female breast cancers as well as colorectal cancers. Black non-Hispanic and Hispanic individuals in New York are more likely to be diagnosed with and die from cervical cancer than White, non-Hispanic individuals.

Cancer can affect people at any age. For most cancers, increasing age is the biggest risk factor. 6 in 10 cancer cases and seven in 10 cancer deaths occur among individuals in New York 65 and older. In addition, the number of cancer survivors is expected to grow as our population ages and advances in cancer detection and treatment continue. ^{5,6}

Importance of Prevention

Organizational decision-makers and policymakers across New York promote healthy lifestyles by implementing local, regional and/or statewide policies, systems, and environments. Examples include supporting healthy food choices, safe and accessible physical activity opportunities, and reducing availability and marketing of alcohol and tobacco products in communities. Individuals in New York can lower their risk of some cancers by avoiding tobacco, protecting their skin, drinking less or no alcohol, maintaining a healthy weight, exercising, eating a plant-based diet, avoiding highly processed foods, and getting the HPV vaccine.

Cancer screening tests detect cancer, or conditions that may lead to cancer, before symptoms appear. Treatment can be more effective when cancer is found at an early stage. Screening for breast, cervical, colorectal, and lung cancer is beneficial in reducing the number of cancer-related deaths among the general population and those at high risk for these cancers. Adults should discuss their risk of cancer and any known family history of cancer with their health care provider to determine age-appropriate

Chronic Diseases

cancer screenings.. Men ages 55-69 should talk to their health care provider about their risk for prostate cancer and whether screening is the best choice for them.⁴

New York State's Approach to Modifying Risk Factors

Cancer is a disease that impacts some populations more than others. Changes in policies and systems are needed to support everyone in New York, regardless of race, ethnicity, sexual orientation, gender identity, and other personal factors. By supporting healthy choices, we can advance health equity across the state.

The New York State Department of Health [Community Cancer Prevention in Action](#) program promotes local policy and system change strategies to support HPV vaccination, skin cancer prevention, and paid time off for cancer screening policies in communities and worksites. The Department is an active member of the [New York State Cancer Consortium](#), a network of more than 300 organizations working to reduce the burden of cancer through strategies outlined in the [New York State Comprehensive Cancer Control Plan](#). The Department administers the [Tobacco Control Program](#) to reduce illness, disability, and death related to commercial tobacco use and secondhand smoke exposure. The Department also recommends starting HPV vaccination for children at age 9 to prevent HPV-related cancer.

The Department implements the [New York State Cancer Services Program](#), a network of contractors who navigate individuals without health insurance to free breast, cervical, and colorectal cancer screening and diagnostic services. The Program focuses on reaching individuals from rural, LGBTQIA+, and Black populations. Eligible individuals can enroll in the [New York State Medicaid Cancer Treatment Program](#). The Department also funds programs focused on [community outreach and peer education](#). The Department works with primary care clinics to implement evidence-based interventions and quality improvement activities that increase cancer screening rates.

The Department works with the [New York State Cancer Consortium's Survivorship Action Team](#) to provide educational programs among networks of primary care and oncology providers and funds the [Post-Treatment Supportive Services for Breast Cancer Survivors Who Are Black](#) program.

Finally, the Department contributes to the [Centers for Disease Control and Prevention's National Program of Cancer Registries](#) and the [National Cancer Institute's Surveillance, End Results, and Epidemiology program](#) to collect standardized information on all cancer cases in New York. The New York State Cancer Registry also actively collaborates on research studies including the [Virtual Pooled Registry- Cancer Linkage System \(VPR-CLS\)](#) allowing researchers to conduct data linkage studies with multiple central cancer registries.

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Cardiovascular Disease

Burden and Distribution Across New York State

The burden of cardiovascular disease (CVD) in New York State is significant. Approximately 1.12 million adults in New York State report having had a heart attack, angina, or stroke.¹ CVD is also the leading cause of death in New York State, responsible for 27% of all deaths (n=48,878) in 2021.² Many cases of CVD are preventable. There are several modifiable risk factors, such as high blood pressure and elevated cholesterol, that can be controlled through health behavior changes and medication. In New York State, nearly one-third of adults (30.5%) have been diagnosed with high blood pressure, and more than one-third (36.2%) have been diagnosed with high cholesterol.¹

Key Risk Factors

The risk for cardiovascular disease can be increased by several health conditions, age and family history, and certain behaviors. Conditions that increase the risk for heart disease include high blood pressure, unhealthy blood cholesterol levels, diabetes, and excess body fat. Behaviors that can increase risk include not getting enough physical activity; drinking too much alcohol; using tobacco products; and eating a diet high in sodium, saturated fats, trans fats, and cholesterol. It is also likely that genetic factors play a role, as people with a family history of heart disease have an increased risk for heart disease. Heart disease can happen at any age; however, the risk increases with age.

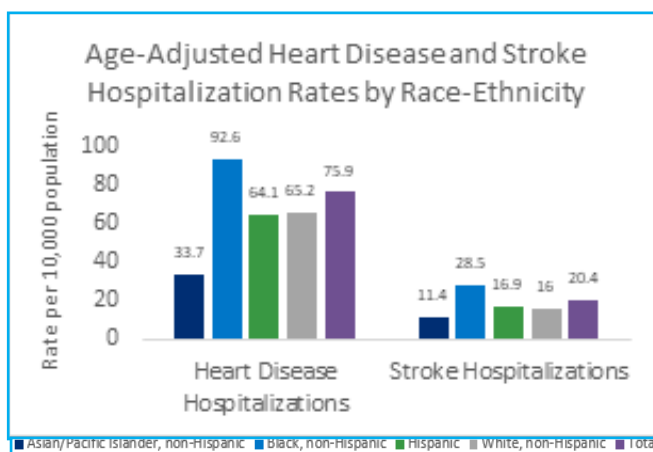
Health Disparities

Despite decades of efforts to reduce health disparities in CVD, they persist. Health disparities are rooted in long-standing social and structural issues. Some populations have less access, opportunities, and resources related to the social determinants of health, including:

- economic stability, educational attainment, health care
- education
- built environments
- social/community context (i.e., power dynamics)

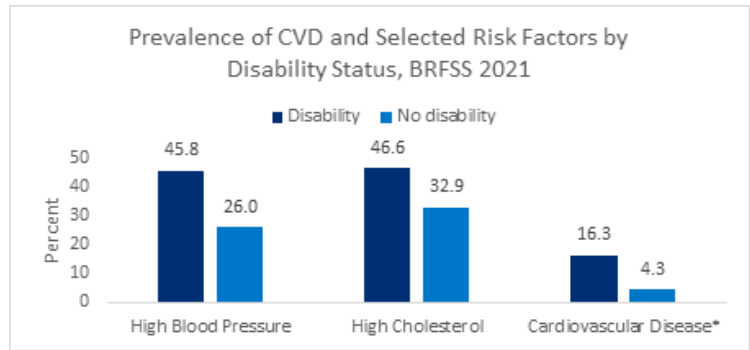
Racial and ethnic minority groups, minoritized groups, and underserved and underrepresented populations, such as people living with disability, bear the greatest burden of CVD in New York State.

As shown in Figure 1, hospitalization and mortality rates for both heart disease and stroke are highest among Black non-Hispanic individuals in New York.³



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Disparities in risk factors for CVD also exist. The prevalence of high blood pressure is significantly higher among Black non-Hispanic adults (37.7%) and non-Hispanic American Indian or Alaskan Native adults (41.3%) when compared to White non-Hispanic adults (31.3%).⁴ High blood pressure is also more common among adults with lower educational attainment and annual household incomes less than \$25,000 annually. According to Figure 2, individuals living with a disability are also more likely to be diagnosed with CVD, high blood pressure, and high cholesterol.



*CVD= ever had a heart attack (myocardial infarction), angina/coronary heart disease, or stroke

Source: Behavioral Risk Factor Surveillance System (BRFSS)

Socioeconomic inequalities are strong predictors of cardiovascular risk. Many inequalities are caused and perpetuated by structural factors such as laws, policies, institutional practices and social norms that disproportionately impact people of color, people with disabilities and other historically underserved, underrepresented, and marginalized communities.

Importance of Prevention

The modifiable risk factors for CVD are elevated blood pressure, elevated cholesterol, uncontrolled diabetes, smoking, obesity, lack of physical activity, and poor diet. Some nonmodifiable risks for CVD are related to genetics, medical history, age, gender, and race. Many risk factors do not have any signs or symptoms, so it is important to see a doctor regularly. Controlling these risk factors through healthy behavior change and appropriate medication could reduce the risk of CVD.

New York State's Approach to Modifying Risk Factors

New York State has several programs that address risk factors to reduce [cardiovascular disease](#) and stroke. The federally funded National Cardiovascular Health Program and New York State Innovative Cardiovascular Health Program work to address social and economic risk factors by supporting communities and health systems to screen for social drivers of health and refer patients to social support services and lifestyle change programs. The federal program focuses on communities in East and Central Harlem, while the New York State program focuses on the East Side of Buffalo. The Coverdell Stroke Program focuses on statewide and regional quality improvement initiatives to prevent and reduce strokes. They work to improve stroke systems of care and reduce risks factors in New York State by partnering with primary care providers, Emergency Medical Services, stroke hospitals, and post-discharge partners.

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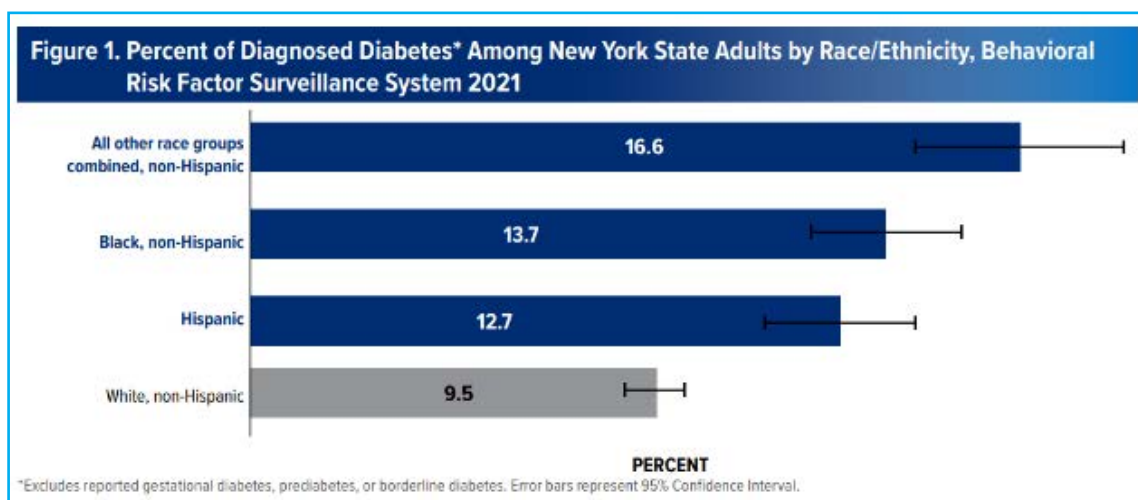
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Diabetes

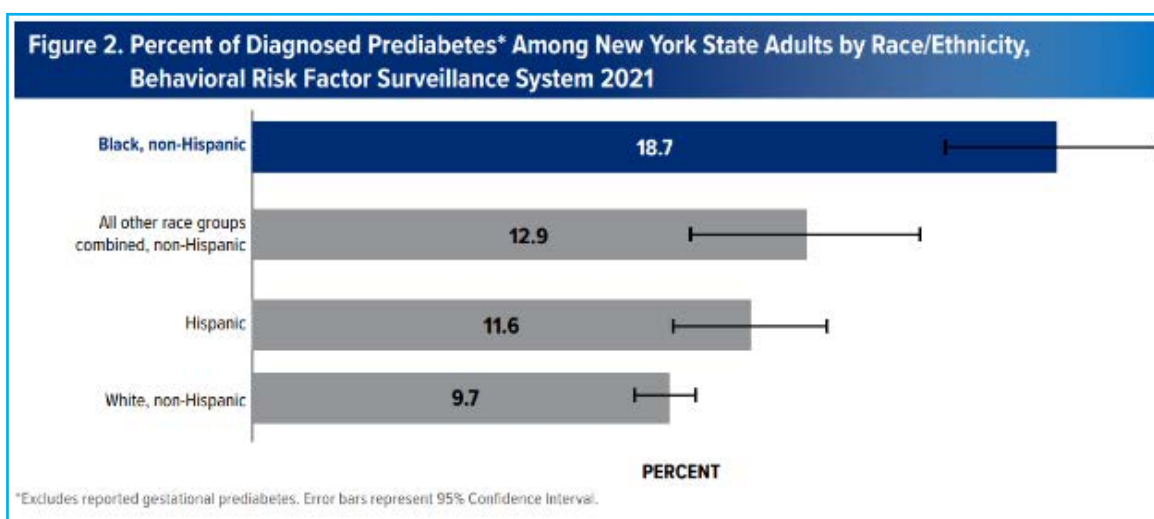
Burden and Distribution Across New York State



The burden of diabetes in New York State is significant. An estimated 1.8 million people, or 11.4% of the adult population, have been diagnosed with diabetes.¹ The prevalence of diagnosed diabetes varies by county across the state, from 6.2% to 16.8%. Another 1.7 million people, or 11.5% of adults in New York State, have been diagnosed with prediabetes. The prevalence of diagnosed prediabetes varies by county across the state, from 4.3% to 15.7%.² An estimated 6.8 million adults in New York (50.5%) report being tested for high blood sugar within the past 3 years.³

Key Risk Factors

Key risk factors for type 2 diabetes and prediabetes include obesity, advancing age (over 45), family history, low physical activity, gestational diabetes, and race or ethnicity, including African American, Hispanic or Latino, American Indian, Alaska Native, Pacific Islander, or Asian American.



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Health Disparities

Many people with diabetes and prediabetes experience disparities in health. Diabetes is more common among Black non-Hispanic adults, Hispanic adults, adults with lower income, those with less educational attainment, and adults living with disability. Prediabetes is more common among Black non-Hispanic adults and adults living with a disability. Social inequities and structural racism are key drivers that create barriers and limit available resources for Black and Hispanic communities. These inequities manifest as provider shortages, unemployment and underemployment, poverty, food deserts, poorly resourced schools, lack of affordable housing, poorly maintained built environments, and a lack of green space and safe areas for physical activity.

People with disabilities (especially people of color with disabilities) experience similar disparities driven by structural inequities. Beyond those mentioned above, other barriers and forms of institutionalized prejudice include stigma, negative attitudes toward people with disabilities from the health care industry, lack of accommodations for effective communication, lack of physically accessible health care facilities, physically inaccessible neighborhoods and housing, and social isolation.

There are significant associations between structural racism and health metrics for ethnic and minority populations with diabetes. These include higher blood pressure and A1C values; poorer diet; lower engagement in physical activity; and lower likelihood of meeting standards of care for dental health, blood pressure, total cholesterol, and pneumococcal vaccination; as well as higher mortality for adults with diabetes.⁵

As the general population continues to age, the number of adults 65 or older affected by diabetes is also increasing.⁴ An estimated 33% of adults 65 or older have diabetes. This population is more at risk of developing diabetes-related complications like low blood sugar, kidney failure, and heart disease than younger people living with diabetes,⁴ making medication management and diabetes self-management education and support critically important.

Importance of Prevention

Managing diabetes is critical for preventing and delaying complications. Participating in a diabetes self-management education and support program (DSMES) is proven to reduce hospitalizations and complications, improve A1C, blood pressure, and cholesterol, and enhance quality of life.⁶ DSMES helps people with diabetes follow a healthy eating plan, make time for physical activity, manage stress, use healthy coping skills, take medications as directed, check blood sugar, and receive recommended screenings during regular health care provider visits.

Early detection and treatment of prediabetes is critical. The American Diabetes Association recommends testing for prediabetes for all adults older than 35 and for younger adults who are overweight or obese who also have 1 or more risk factors such as hypertension, elevated blood cholesterol, or a family history of type 2 diabetes.³ Prediabetes can be reversed to prevent or delay type 2 diabetes by participating in a National Diabetes Prevention Program lifestyle change program to learn how to lose a modest amount of weight and become more physically active.

New York State's Approach to Modifying Risk Factors

To help prevent and manage diabetes, New York State focuses on creating clinical and community environments that support the prevention, early detection, and management of diabetes, especially for populations at greatest risk due to social determinants of health. New York State promotes

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participation in the CDC's [Diabetes Self-Management Education and Support \(DSMES\) Toolkit | Diabetes Self-Management Education and Support \(DSMES\) Toolkit | CDC](#) Diabetes Self-Management Education and Support (DSMES) Toolkit, which helps people build the confidence to manage their diabetes, prevent or delay complications, and live longer and healthier lives. New York State also promotes participation in the evidence-based [National Diabetes Prevention Program | National Diabetes Prevention Program | CDC](#) National Diabetes Prevention Program aimed at increasing physical activity and reducing body weight by 5-7%. Both programs are covered by Medicare and New York State Medicaid. Certain pharmacological agents have also been demonstrated to prevent or delay the development of type 2 diabetes in those living with prediabetes.

New York State also supports partners to assess, develop, implement, and evaluate evidence-based strategies to increase access to safe and inclusive physical activity opportunities and healthy food choices using a policy, system, and environmental change approach across multiple sectors and levels of influence.

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Food and Nutrition Security

Burden and Distribution Across New York State and Key Risk Factors

A healthy diet can reduce the risk of many chronic diseases, such as cardiovascular disease, diabetes, osteoporosis, some cancers, and conditions associated with weight gain. Poor nutrition, on the other hand, can negatively affect growth, development, and health status. Food and nutrition security mean having reliable access to enough high-quality food to avoid hunger and stay healthy. Improving access to nutritious food supports overall health, reduces chronic diseases, and helps people avoid unnecessary health care.¹ Food insecurity is a household-level economic and social condition of limited or uncertain access to nutritionally adequate food.² The Behavioral Risk Factor Surveillance System (BRFSS) shows that in New York State, 1 in 4 adults experience food insecurity (Figure 1).

The Dietary Guidelines for Americans recommend a healthy eating pattern that includes a variety of fruits and vegetables and limits foods and beverages that contain added sugars, like sugar-sweetened beverages.³ Many adults in New York State do not meet the recommendations in the Dietary Guidelines for Americans. About 1 in 5 adults consumes sugar-sweetened beverages daily and less than 1 vegetable daily (Table 1). Even more adults, more than one-third, consume less than 1 fruit daily (Table 1).

Health Disparities

Food access has been driven by racial and class discrimination resulting in food apartheid.⁴ Unfair and unjust differences in food and nutrition security, and other social determinants of health, contribute to the disproportionate burden of chronic diseases among racial, ethnic, and socioeconomic groups. Across the U.S., the groups disproportionately impacted by food and nutrition insecurity and diet-related diseases are communities of color, people living in rural areas, people with disabilities, older adults, LGBTQIA+, military families, and Veterans.⁵

Figure 1. New York State Adults Experiencing the Highest Prevalence of Food Insecurity, NYS BRFSS 2021

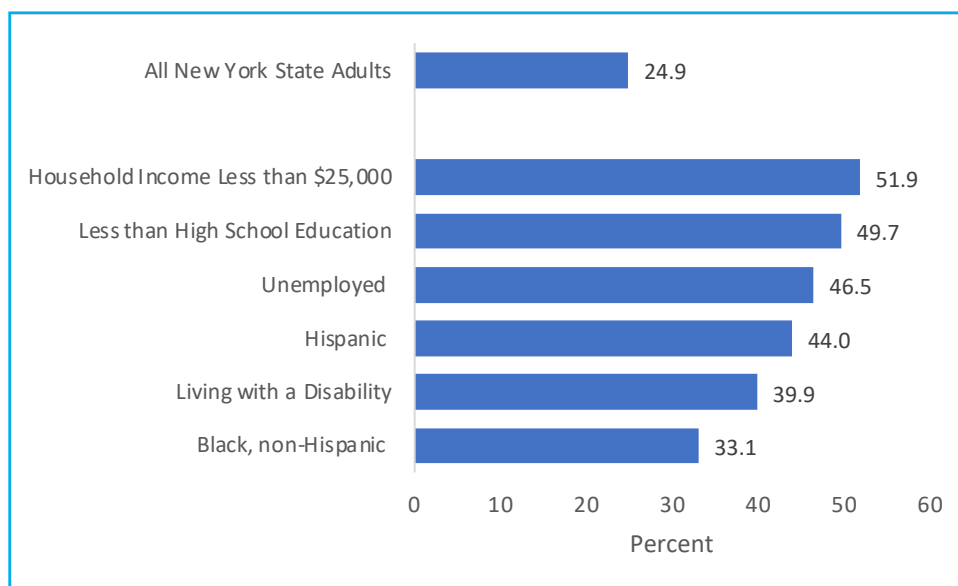


Figure 1 shows the demographic groups of New York State adults experiencing the highest prevalence of food insecurity. Food insecurity is highest among New York State adults with a household income of less than \$25,000, adults with less than a high school education, unemployed adults, Hispanic adults, adults living with a disability, and adults who are Black and non-Hispanic. Table 1 shows the disparities by race, ethnicity, and educational attainment in priority unhealthy nutrition behaviors: daily consumption of sugars, including sugar-sweetened beverages, and consuming less than 1 fruit

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or vegetable each day. In New York, daily sugar-sweetened beverage consumption is highest among adults who are Black, non-Hispanic, adults who are Hispanic, and adults with a high school diploma or GED or less than high school education. These same groups are also most likely to consume less than 1 vegetable daily.

Table 1. Disparities in prevalence of unhealthy nutrition behaviors, New York State BRFSS 2021

	Daily Sugar-Sweetened Beverage	<1 Fruit/day	<1 Vegetable/day
	%	%	%
ALL NEW YORK STATE ADULTS	19.0	35.7	20.7
RACE/ETHNICITY			
WHITE, NON-HISPANIC	17.6	35.6	16.6
BLACK, NON-HISPANIC	23.3	36.1	28.2
HISPANIC	23.7	37.3	32.7
EDUCATIONAL ATTAINMENT			
LESS THAN HIGH SCHOOL	29.3	35.0	34.1
HIGH SCHOOL OR GED	24.5	40.8	25.1
SOME POST-HIGH SCHOOL	19.8	36.6	20.7
COLLEGE GRADUATE	10.4	31.5	13.2

Importance of Prevention

Choosing beverages with no added sugars and consuming more vegetables and fruits can help individuals achieve a healthy diet. Adopting healthy behaviors like these requires a supportive environment. People need easy access to affordable healthy foods and beverages, and limited access to less healthy foods and beverages, to support nutritious diets.

New York State's Approach to Modifying Risk Factors

The New York State Department of Health works with state and local partners to implement evidence-based policy, systems, and environmental change strategies to address disparities in access to healthy foods and increase health equity for groups that experience the greatest structural inequities. The Department's [Creating Healthy Schools and Communities Program](#) works with 25 local grantees to improve healthy food access in community, worksite, school, and early care and education settings. The Department's State Physical Activity and Nutrition Program works with state partners to [expand and enhance fruit and vegetable incentive programs](#), which are proven to increase access to fruits and vegetables for low-income households.⁶ The Department's [Division of Nutrition programs](#) help individuals throughout New York access healthy foods and beverages.

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Overweight and Obesity

Burden and Distribution Across New York State

Obesity is a clinically diagnosed condition that results from an increase in both the number and size of fat cells in the body. These fat cells form adipose tissue located under the skin, around internal organs, and within muscle tissue. Excess adipose tissue can lead to negative health outcomes by altering the functions of various organ systems.¹ For example, abdominal fat releases various proteins that can cause inflammation, which may lead to adverse health outcomes such as type 2 diabetes and hypertension.¹ Moreover, fat deposits in the liver can lead to fatty liver disease.¹

Overweight in adults is defined as having a Body Mass Index (BMI) ranging from 25 to 29, while obesity in adults is defined as a BMI of 30 or higher. Around two-thirds of adults in New York are classified as either overweight (36.1%) or obese (28.0%), affecting more than 8.8 million adults in New York State.²

BMI is also used to define overweight and obesity in children. A child is considered overweight if their BMI is between the 85th and 95th percentile for their age and sex, and obese if their BMI is at or above the 95th percentile for their age and sex.³ Rates of obesity among students enrolled in public school districts in New York State, excluding New York City, have increased by more than 10% in the past 5 years, from approximately 18.2% (2019-2020 and 2020-2021 school years) to 20.2% (2022-2023 and 2023-2024 school years).⁴

Body Mass Index (BMI) has strengths and limitations as a measure of obesity.⁵ It relies on a calculation based on a person's height and weight not body fat. BMI is also correlated with factors that do not reflect individual health or metabolic function, including race, ethnicity, age and body shape. Despite its limitations, BMI remains a simple, non-invasive, objective tool for screening for obesity and overweight. Measuring obesity and overweight in the population using BMI remains a useful tool for describing differences in weight status among groups in the population and monitoring changes over time.

Key Risk Factors

The risk factors related to obesity are complex. Among these are economic stability, access to quality education, availability of nutritious food options, opportunities for safe physical activity, health behaviors, sleep routines, genetics, certain health conditions, and certain medications. For children, adverse childhood experiences, including poverty and racism, may also increase the risk for developing childhood obesity through mechanisms such as social disruption, negative health behaviors, and chronic stress response.³

Ultra-processed foods (UPF), hyper-palatable foods (HPF), and high energy density (HED) foods may also play a role in elevating obesity risk. A 2023 [study](#) explored the distribution of UPF, HPF, and HED foods in the U.S. food system from 1988 to 2018.⁶ The research indicated that the U.S. food system predominantly consisted of UPF, HPF, and HED foods, showing a significant increase in these food categories from 1988 to 2018.⁶

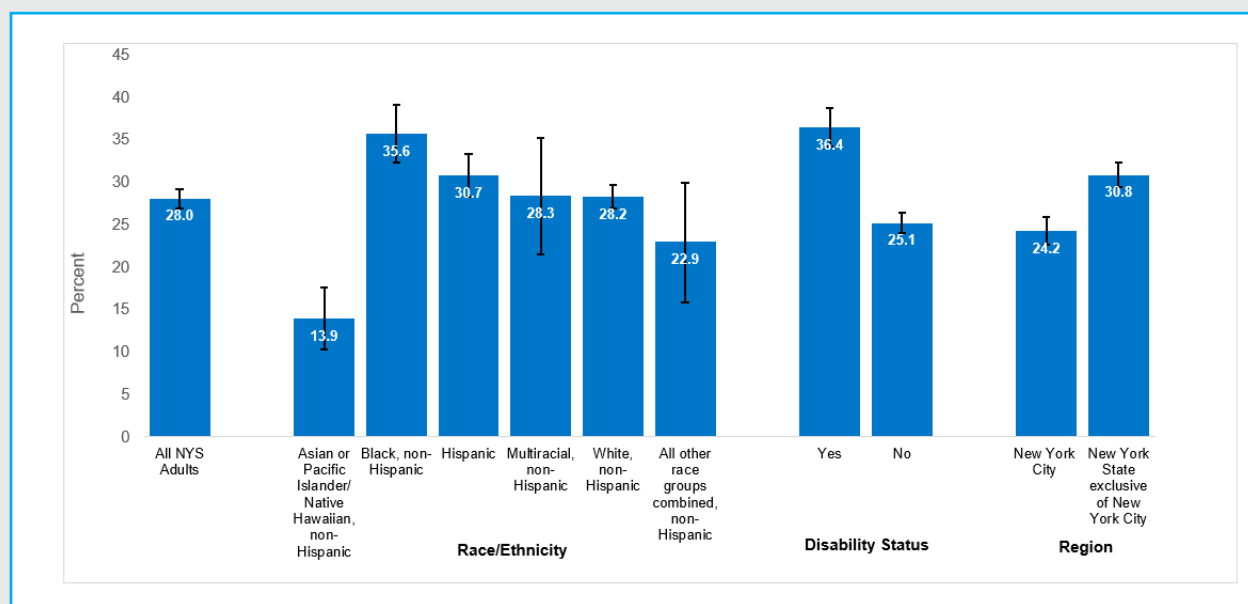
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Health Disparities

In both the United States and New York, obesity disproportionately affects Black, Indigenous, and People of Color (BIPOC) populations, individuals with disabilities, and those with lower educational and income levels. These groups face persistent disparities influenced by social determinants of health, such as racism, ableism, ([discrimination](#) and social [prejudice](#) against physically or mentally [disabled](#) people) and insufficient access to quality education.

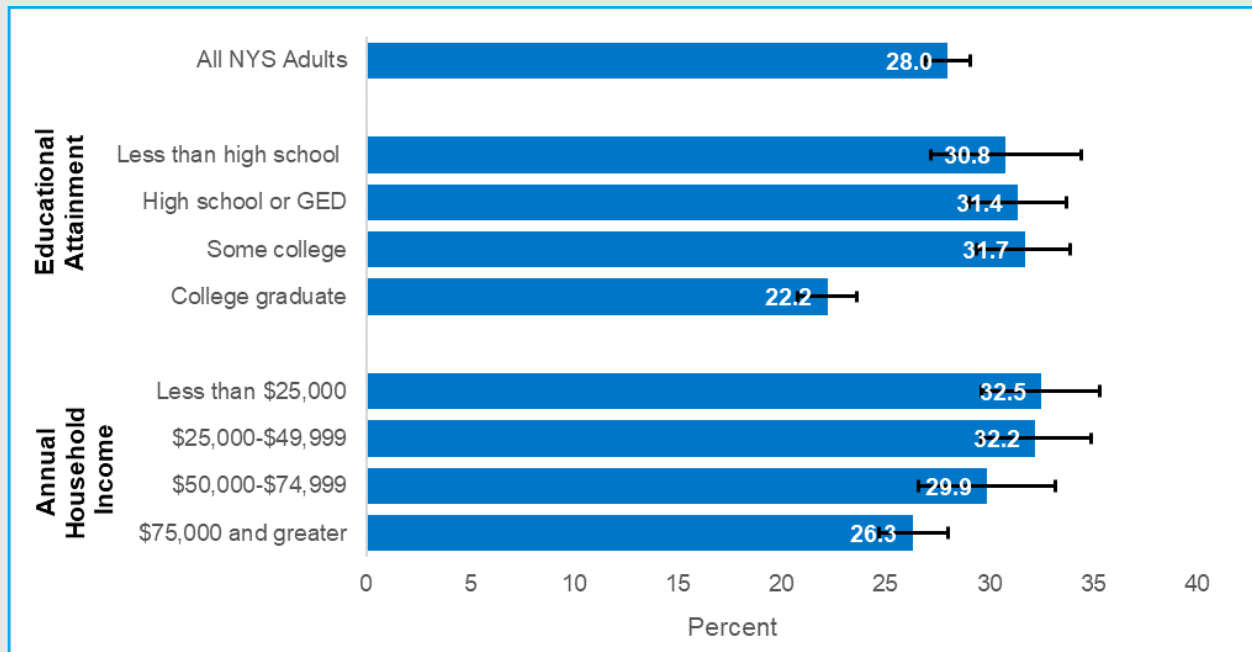
Specifically in New York, as illustrated in Figure 1, non-Hispanic Black adults exhibit the highest obesity rate at 35.6%, followed by Hispanic adults at 30.7%, and adults with disabilities at 36.4%. Figure 2 further reveals obesity rates of 31.7% for those who have completed some college, 31.4% for high school graduates or General Educational Development (GED) holders, and 30.8% for those with less than a high school education. Additionally, individuals with incomes ranging from \$25,000 to \$49,000, as well as those earning below \$25,000, show obesity rates of 32.2% and 32.5%, respectively.

Figure 1: Prevalence of Obesity among New York Adults, by Race/Ethnicity, Disability Status, and Region, Behavioral Risk Factor Surveillance System, 2023



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Figure 2: Prevalence of Obesity among New York Adults, by Educational Attainment and Annual Household Income, Behavioral Risk Factor Surveillance System, 2023

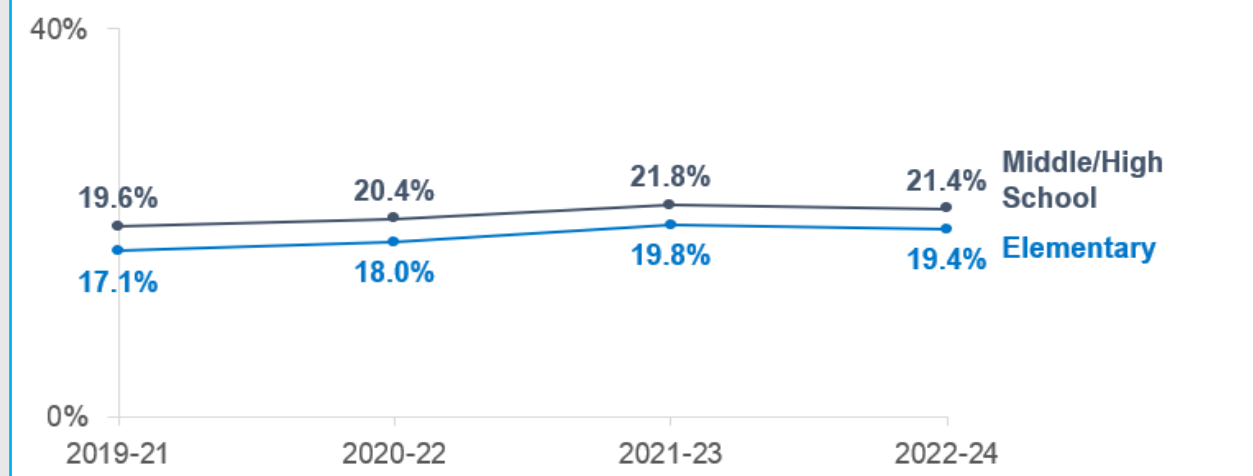


In the United States, the obesity prevalence among older adults 60 and older was 38.9% during the time frame from August 2021 to August 2023.⁷ Obesity in older adults may be associated with increased chronic disease risk. Chronic obesity and age-related inflammation may serve as precursors to serious health issues, including hypertension, dyslipidemia, type 2 diabetes, stroke, coronary artery disease, and multiple types of cancer.⁸

Childhood obesity does not affect all populations equally. A greater burden of childhood obesity is observed among children of parents with lower levels of education, families with lower income, and those having greater number of adverse childhood experiences.³ As seen in Figure 3, obesity rates have also been persistently higher among middle/high school students compared to elementary school children.⁴ Obesity prevalence is also higher among children and youth with special health care needs compared with children undergoing typical growth and development.³ Disparities in childhood obesity rates are also evident based on race and ethnicity, with Hispanic (24.3%) and Black non-Hispanic (21.0%) children experiencing a greater burden compared with White non-Hispanic (14.0%) and Asian non-Hispanic (9.7%) children.⁹

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Figure 3: Obesity rates are on the rise among elementary, middle & high school students.



As noted earlier, BMI does not reflect racial and ethnic variation in body composition. This can lead to disparities in the under- or over-diagnosis of obesity and its comorbidities, especially for members of the BIPOC community.¹⁰ Use of the terms “overweight” and “obesity” often contributes to the stigmatization of individuals with larger body sizes, leading to detrimental social, economic, physical, and emotional consequences.¹¹ In the context of other stigmatized identities (e.g., race, sexual orientation), weight stigma can have additional health consequences for populations already experiencing health disparities.¹² Despite substantial evidence documenting the consequences of weight stigma, it remains overlooked in public health efforts, with individuals in larger bodies unjustly blamed for their weight.

Importance of Prevention

Prevention and management of obesity are critical to decreasing the burden of chronic diseases and conditions, including type 2 diabetes, cardiovascular disease, stroke, cancer, and asthma. Benefits of prevention include improved psychosocial well-being, improved workforce productivity, decreased health care costs, and an overall improved quality of life.

Efforts focused on prevention of childhood obesity are critical as children with obesity are more likely to become adults with obesity and are at a greater risk of developing associated metabolic comorbidities and experiencing poor psychological and emotional health.³

New York State’s Approach to Modifying Risk Factors

Through the Department’s [State Physical Activity and Nutrition](#) program, New York State works with its partners to assess, develop, implement, and evaluate evidence-based strategies to increase access to safe, accessible, and inclusive physical activity opportunities using a Policy, Systems, and Environmental change approach across multiple sectors and levels of influence. The Department’s [Creating Healthy Schools and Communities](#) (CHSC) program funds 25 local grantees to partner with municipalities, schools, and early care and education settings to advance evidence-based strategies in priority communities. The project is intended to increase options for healthy, affordable foods and

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opportunities for daily physical activity for youth and adults. Grantees work in schools, worksites, and community settings to implement food service guidelines; improve policies, practices, and environments for physical activity in early care and education settings; and implement community planning and active transportation interventions in municipalities to increase safe and accessible physical activity. Grantees also implement components of Local School Wellness Policies for [Comprehensive School Physical Activity Programs](#) and a [Healthy Nutrition Environment](#) as found in the [CDC Whole School, Whole Community, Whole Child model](#). A Physical Activity and Nutrition Center of Excellence provides training, technical assistance, and implementation support to Creating Healthy Schools and Communities (CHSC) grantees.

The [Child and Adult Care Food Program \(CACFP\)](#) provides reimbursement for qualifying nutritious meals and snacks served in child and adult day care settings. Approximately 1,250 sponsoring organizations representing 11,250 licensed or registered center-based or family day care sites participate statewide, serving approximately 198,000 children and adults each day. [Eat Well Play Hard in Child Care Settings](#) is funded by the United States Department of Agriculture (USDA) Supplemental Nutrition Assistance Program Education (SNAP-Ed) and is included as a research-tested intervention in the [SNAP-Ed Library](#). This program offers a 16-week intervention that focuses on improving the nutrition and physical activity behaviors of preschool-aged children and their parents and caregivers by using educational strategies and skill-building activities to promote healthy behavior change. The program also builds social support within the childcare environment by including teachers in lessons and encouraging positive role modeling and classroom reinforcement of nutrition and physical activity messages.

The Department also supports 9 grantees through its [Breastfeeding, Chestfeeding, and Lactation Friendly New York](#) (BFFNY) initiative. Breastfeeding has been associated with healthier weight status for both the mother and the baby, among many other health benefits. BFFNY is a coordinated, multi-sector initiative designed to improve breastfeeding/chestfeeding continuity of care through policy, system, and environmental changes in community settings to promote, protect, and support breastfeeding/chestfeeding. The initiative also seeks to reduce the racial, ethnic, and community disparities in the prevalence of breastfeeding/chestfeeding in New York State.

Further support during this critical period of growth and development is provided through [the Special Supplemental Nutrition Program for Women, Infants, and Children \(WIC\)](#) which currently serves more than 450,000 participants in New York State. WIC improves the health and nutrition of parents and their children during the critical periods of pregnancy and early childhood. Studies show that prenatal individuals enrolled in the WIC program are more likely to have babies with a healthy birth weight, and children enrolled in WIC are more likely to do better in school. The WIC program provides nutritious foods, nutrition education, breastfeeding/chestfeeding support, and referrals to eligible pregnant, breastfeeding, and postpartum individuals, infants, and children up to age five.

WIC participants are also eligible to receive coupons for the WIC Farmers Market Nutrition Program (WIC FMNP). WIC FMNP works to improve the nutrition of families enrolled in WIC by promoting eating fresh and local fruits and vegetables. The coupons can be used at participating farmers markets, farm stands, and mobile markets in New York State during the designated farmers market season.

The [Just Say Yes to Fruits and Vegetables Program \(JSY\)](#), a U.S. Department of Agriculture (USDA) supplemental nutrition education program (SNAP-Ed), provides nutrition education for low-income individuals in New York and those participating in the Supplemental Nutrition Assistance Program

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(SNAP). JSY aims to increase consumption of fresh fruits and vegetables by offering nutrition education workshops, cooking demonstrations and other educational activities at food pantries, shelters, farmers markets, and other community settings. These initiatives reach nearly 40,000 eligible persons and their families annually.

As a nutrition education program, JSY provides lower income families with practical, cost-effective tips and recipes for incorporating fruits and vegetables into the daily diet. Increasing self-efficacy and highlighting the dietary importance of fruits and vegetables among New York State residents is a key strategy for reducing the risk of several chronic diseases, including heart disease, diabetes, stroke, and some cancers.

Two main JSY initiatives are actively working to improve the health and nutritional status of low-income families in New York State. The first is a collaboration between the New York State Department of Health and the Regional Food Banks. A network of JSY-funded nutrition educators in each regional food bank delivers JSY programming across New York State, focusing their efforts on food pantries, shelters, and community agencies. The second initiative is a collaboration between the New York State Department of Health and the New York City Department of Health and Mental Hygiene, called JSY Stellar Farmers' Markets Program (SFM). It operates at 20 farmers markets in low-income neighborhoods and their surrounding communities to provide free nutrition education and cooking demonstrations to SNAP-eligible New York City adults.

SFM's multipronged approach aims to improve nutrition knowledge and meal preparation skills while increasing access to locally grown produce. Each workshop provides resources for planning, purchasing, and preparing healthy meals with ingredients that can be found in the local community. Although SFM workshops run from July through mid-November, SFM activities are year-round and are not limited to workshops at farmers' markets. The second initiative is a collaboration between NYS DOH and the New York City Department of Health and Mental Hygiene, called JSY Stellar Farmers' Markets Program (SFM). It operates at 20 farmers' markets in low-income neighborhoods and their surrounding communities to provide free nutrition education and cooking demonstrations to SNAP-eligible New York City adults.

For more than 30 years, the [Hunger Prevention and Nutrition Assistance Program \(HPNAP\)](#) has provided state funds to improve the quality of food distributed to an estimated 2,700 Emergency Food Relief Organizations (EFRO) in New York State. The HPNAP pantry packaging guide highlights the importance of a nutritionally complete pantry package, with meal categories that include 2 servings of vegetables/fruits and a serving each of protein, dairy, and grains. The EFROs include [food banks](#), [food pantries](#), [soup kitchens](#), and [emergency shelters](#) which have provided more than 400 million meals each year to people who are in need.

HPNAP resources are used to:

- increase the availability of nutritious food to people in need;
- assist in gathering, processing, and distributing fresh produce;
- provide nutrition education and health resources and guidance through workshops, handouts, and site visits; and
- support for staffing, rent, utilities, food service disposables, food transportation, and food service equipment.

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Additional funding through the [Nourish New York \(NNY\)](#) program increases the availability of foods grown and produced in New York State through the food banks and EFROs and improves access to fruits, vegetables, dairy products, and meat.

Additional support for adults 60 and older is available in the New York City and Long Island areas through the Commodity Supplemental Food Program. Approximately 36,000 older adults participate in the Commodity Supplemental Food Program monthly, supplementing their diets with nutritious foods from the United States Department of Agriculture. During the summer months, participants also receive additional benefits to purchase fresh fruits and vegetables at farmers markets through the [Senior Farmers Market Nutrition Program](#).

These approaches support and align with the [New York State Department of Health Prevention Agenda \(2019-2024\)](#) and the [Centers for Disease Control and Prevention, State Physical Activity and Nutrition Program \(2023-2028\)](#).

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Physical Activity

Burden and Distribution Across New York State

Evidence shows a strong relationship between physical activity and reductions in the risk for health problems, including many of the most common and costly chronic diseases and conditions. However, many New York State adults are not reaping the benefits of this risk reduction strategy. The burden of physical inactivity in New York State is significant. Approximately 5.5 million adults do not meet national guidelines and more than 4 million do not participate in any leisure-time physical activity. Physical activity indicators demonstrate disparities by race, ethnicity, income, education, and ability. Participation in any physical activity is lowest among adults who are Hispanic (63.7%), have a household income of less than \$25,000 (56.7%), have less than a high school education (52.3%), or are living with disability (58.4%). The percentage of New York State adults who reported healthy physical activity behaviors by demographic characteristics is shown in Table 1.

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Table 1. Percentage of New York State adults who report healthy physical activity behaviors, by demographic characteristics. [Source: Behavioral Risk Factor Surveillance System, 2023]

	Participating in physical activity during the past month ^a		Met both aerobic activity and muscle strengthening guidelines ^b	
	% ^c	95% CI ^c	%	95% CI
Total New York State [n=17,349]	73.9	72.9-74.9	30.8	29.6-32.0
Sex^d				
Female	71.2	69.7-72.7	27.8	26.2-29.4
Male	76.8	75.4-78.2	34.0	32.3-35.8
Age (Years)				
18-24	81.8	78.8-84.7	34.5	30.4-38.6
25-34	76.6	74.3-79.0	29.1	26.4-31.8
35-44	73.7	71.2-76.3	30.9	28.1-33.7
45-54	74.1	71.3-77.0	28.2	25.5-31.0
55-64	73.0	70.5-75.5	32.3	29.1-35.5
65+	68.2	65.9-70.5	31.4	29.1-33.7
Race/Ethnicity				
Asian or Pacific Islander/Native Hawaiian, non-Hispanic	73.3	69.3-77.4	31.2	26.5-35.9
Black non-Hispanic	69.0	65.6-72.3	29.5	26.1-33.0
Hispanic	63.7	61.2-66.1	25.3	22.8-27.9
White non-Hispanic	78.7	77.5-80.0	32.8	31.3-34.4
All other race groups combined, non-Hispanic ^e	77.1	72.3-82.0	32.8	26.7-39.0
Annual Household Income				
Less than \$25,000	56.7	53.9-59.6	21.0	18.3-23.7
\$25,000-\$49,999	68.0	65.4-70.7	28.4	25.5-31.3
\$50,000-\$74,999	75.2	71.9-78.6	32.4	28.7-36.0
\$75,000 and greater	85.9	84.6-87.3	37.6	35.6-39.6
Missing ^f	69.8	67.4-72.2	26.5	24.0-29.0
Educational Attainment				
Less than high school (HS)	52.3	48.7-55.9	16.6	13.7-19.6
High school or GED	67.4	65.2-69.7	27.0	24.5-29.6
Some college	75.8	73.8-77.8	31.4	28.9-33.9
College graduate	84.8	83.5-86.0	37.3	35.6-39.0
Disability^g				
Yes	58.4	56.1-60.7	23.6	21.4-25.8
No	80.0	78.9-81.2	34.0	32.6-35.4
Weight Status^h				
Neither overweight nor obese	78.6	76.9-80.4	35.5	33.3-37.6
Overweight	76.7	74.9-78.5	33.7	31.4-35.9
Obese	67.3	65.2-69.4	23.5	21.5-25.5
Region				
New York City	71.7	70.1-73.4	30.1	28.2-31.9
NYS exclusive of New York City	75.5	74.2-76.8	31.3	29.8-32.8

Notes

^aPrevalence of respondents who report, other than their regular job, participation during the past month in any physical activities such as running, calisthenics, golf, gardening, or walking for exercise.

^bMet both the aerobic and muscle strengthening guidelines, as described in the Physical Activity Guidelines for Americans.

^c% = weighted percentage; CI = confidence interval.

^dBased on the respondent's sex at birth. If sex at birth is missing, then the respondent's sex is based on gender identity at time of the interview.

^eAll other race groups combined, non-Hispanic includes: American Indian or Alaska Native, multiracial, and other race.

^fMissing category included because more than 10% of the sample did not report income.

^gAll respondents who reported having at least one type of disability (cognitive, mobility, vision, self-care, or independent living, or deafness).

^hBased on categories of body mass index (BMI), calculated as weight in kilograms divided by the square of height in meters.

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Key Risk Factors

Physical inactivity can increase the risk factors for cardiovascular diseases. These include high cholesterol and triglyceride levels, high blood pressure, obesity, and insulin resistance and glucose intolerance. Physical inactivity can also increase the risk for developing type 2 diabetes; increase the risk for developing breast, colon, endometrial, and lung cancers; and can lead to low bone density, which, in turn, leads to osteoporosis.

Health Disparities

Not all people have the same access to or ability for physical activity. Disparities are often attributable to structural inequities, such as lack of opportunities or built environments that are unsafe or designed without regard for inclusivity. Average life expectancy varies by community. Communities with higher life expectancy tend to have higher average incomes, higher levels of educational attainment, fewer racial and ethnic minority residents, and more opportunities for physical activity or active transportation.

In New York State, physical activity is more prevalent among people with higher incomes and among people who are White or non-Hispanic (Table 1). People live longer, healthier lives when they have easy and safe access to daily needs, health care, transportation, and recreation. The inequities in life expectancy make this a community issue, not just one of individual health.

The opportunity to engage in physical activity is most often directly influenced by factors in the social and physical environments. This may include income and education inequality and community traits such as social cohesion and perceived benefits and attitudes towards physical activity. Determinants in the built environment may include access to public green spaces, provision of safe walking routes, and residential design that can promote walkable, accessible neighborhood routes.⁴

Importance of Prevention

Participating in regular physical activity has significant benefits across the lifespan. It lowers the risk of chronic diseases and conditions such as heart disease, stroke, high blood pressure, high cholesterol, type 2 diabetes, obesity, and certain cancers. It can also contribute to an increased life expectancy, better weight control, stronger muscles and bones, and improved mental health.² Studies suggest that moderate to high levels of physical activity substantially reduce, or even eliminate, the health risks associated with obesity.³

The Physical Activity Guidelines for Americans² was released in 2018 and provides recommendations for how everyone can improve their health through regular physical activity. These guidelines recommend that adults of all ages and abilities engage in moderate-intensity physical activity for at least 150 minutes per week or vigorous-intensity physical activity for 75 minutes per week. Additional guidelines for muscle and bone-strengthening activities are also provided. Children and adolescents ages 6 through 17 years should do 60 minutes or more of moderate-to-vigorous physical activity daily, including muscle and bone-strengthening activities. Preschool-aged children ages 3 through 5 years should be physically active throughout the day to enhance growth and development.

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New York State's Approach to Modifying Risk Factors

Through the Department's [State Physical Activity and Nutrition](#) program, New York State works with its partners to assess, develop, implement, and evaluate evidence-based strategies to increase access to safe, accessible, and inclusive physical activity opportunities using a Policy, Systems, and Environmental change approach across multiple sectors and levels of influence. The Department's [Creating Healthy Schools and Communities](#) program funds 25 local grantees to partner with municipalities, schools, and early care and education settings to advance strategies in priority communities including:

- Community design for physical activity to implement state and community level policies and plans to connect pedestrian, bicycle, or transit transportation networks (e.g., activity-friendly routes) to everyday destinations
- Working with school districts to implement comprehensive school physical activity programs
- Implementing state-level policies and practices that integrate national standards for physical activity in early care and education settings.

We encourage partners to consider the community voice of those with lived experience and who have been most impacted by lacking access to living an active lifestyle through societal and health inequities. Communities must engage and include those individuals in coalitions, planning processes, and walkability/moveability audits. Community stability, safety, and other community concerns and priorities should inform the development and implementation process, including conversations around potential gentrification and displacement; violence, vigilance, and discrimination; and traffic safety.

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Tobacco Use

Burden and Distribution Across New York State

Commercial tobacco use remains a leading preventable cause of morbidity and mortality in New York State. Smoking harms nearly every organ of the body and is a major risk factor for many chronic diseases. Secondhand smoke exposure can also increase the risk for several of the same diseases. Cigarette smoking and secondhand smoke exposure cause more than 30,000 deaths annually in New York State and 56% of cancer deaths in the state are attributable to smoking.^{1,2} In 2017, the smoking-attributable health care expenditures for New York State were \$9.7 billion.³

Approximately 1.6 million New York State adults currently smoke cigarettes and nearly a quarter (24.3%) report current tobacco use (Figure 1). The percentage of adults who currently smoke varies by county ranging from 5.6% to 28.5%.^{4,5}

Tobacco use is almost always initiated and established during adolescence when the developing brain is most vulnerable to nicotine addiction.⁶ About 1 in 50 New York State youth (2.1%) currently smoke cigarettes, and nearly 1 in 5 (18.7%) report use of e-cigarettes, making e-cigarettes the most used tobacco product among youth (Figure 2).⁷

Key Risk Factors

Tobacco use is influenced by several risk factors including commercial and social factors. Tobacco companies spend billions annually on promotions, targeted marketing, and other tactics to increase the appeal of tobacco products. Exposure to tobacco marketing is a known risk factor for youth smoking initiation and likely contributes to continued smoking among adults.

Additionally, a high density of retail outlets selling tobacco products in certain areas increases access, promotes use, and, creates environments where tobacco use is more common and harder to avoid.⁸ The price of commercial tobacco products also directly affects consumer sales and use, particularly among young adults and minors.⁹ Social factors, like discrimination, low socioeconomic status, mental health conditions, and substance use disorders also contribute to higher tobacco use rates and can make quitting more difficult.^{5,10}

Health Disparities

The commercial tobacco industry's long-standing discriminatory practice of targeting communities of color with aggressive advertising and promotions has contributed to tobacco-related inequities.¹⁰

Figure 1. Percentage of New York Adults Who Currently Use Any Tobacco Products, NYS Adult Tobacco Survey

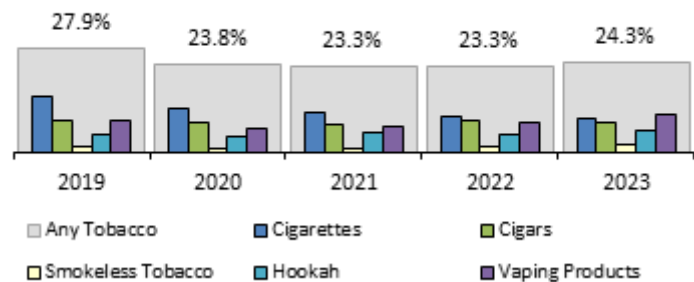
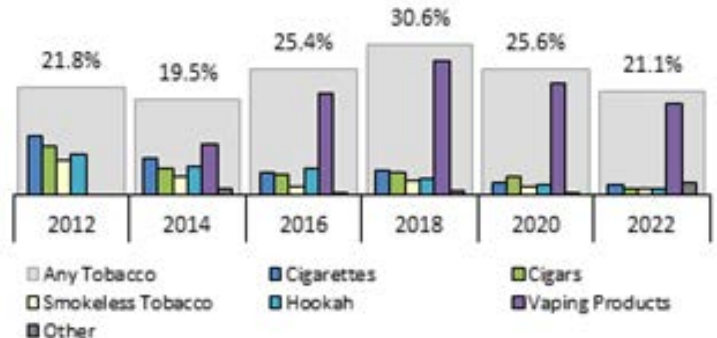


Figure 2. Percentage of New York High School Students Who Currently Use Any Tobacco Products, NYS Youth Tobacco Survey



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Tobacco companies also aggressively promote flavored products, especially menthol, in neighborhoods where Black and African American people live. Additionally, neighborhoods with higher proportions of racial and ethnic minorities and people of lower socioeconomic status have higher densities of tobacco retailers, compared with other neighborhoods.¹¹

Limited access to health resources influences tobacco use behaviors and presents barriers to tobacco use treatment and medical care for tobacco-related illness. Socioeconomic factors further compound these disparities. In New York State, groups that smoke at higher rates than others are also more likely to experience limited access to health resources. For example, cigarette smoking is more common among New York State adults without health insurance--and more than double among adults enrolled in Medicaid as compared to those with private health insurance.⁵ Regional disparities further affect health care access and contribute to tobacco-related inequities.

There are persistent disparities in the use of tobacco products and related health outcomes within minority communities which are most apparent with the use of menthol-flavored tobacco products. Among New York State adults who smoke cigarettes, 49% report that they usually smoke menthols while 88% of those who identify as Black or African American and 70% of those who identify as Hispanic report smoking menthols. These disparities are caused by the tobacco industry's aggressive marketing practices and contribute to inequities in health outcomes.¹²

Tobacco use impacts health, quality of life, and health care needs across the lifespan yet as individuals age these impacts become more pronounced. Older adults who smoke are at an increased risk of smoking-related illnesses such as chronic obstructive pulmonary disease (COPD) and cancer and most deaths from smoking occur in older populations.³ While cigarette use has declined overall in New York State over the past 10 years, there has been no significant change in smoking rates among adults ages 65 and older suggesting a persistent risk for smoking-related illnesses and deaths in older adults.¹³

Importance of Prevention

Prevention efforts to reduce tobacco use initiation, especially among youth and other vulnerable populations, can significantly lower the prevalence of smoking and its associated health outcomes. Prevention is also cost-effective; it reduces the financial burden on the health care system by decreasing smoking-related illnesses. Additionally, effective prevention strategies can address disparities in tobacco use by focusing on at-risk populations and mitigating the influence of targeted tobacco marketing.

New York State's Approach to Modifying Risk Factors

Since 2000, the [New York State Tobacco Control Program](#) has worked to reduce illness, disability, and death caused by commercial tobacco use and secondhand smoke exposure, and to alleviate inequities caused by predatory tobacco marketing. New York has implemented a range of evidence-based tobacco control policies to reduce tobacco use initiation and establish tobacco-free norms, including raising the price of tobacco products, implementing a comprehensive smoke-free air policy, and restricting sales of flavored e-cigarette products.¹⁴ The Program's comprehensive approach complements these policies with health communications, cessation-focused health systems change, and statewide and community action interventions.

The Tobacco Control Program comprises several key components. The [Advancing Tobacco-Free Communities](#) program fosters local environments supportive of tobacco-free norms through a two-pronged approach of strategic community engagement and youth action to educate and mobilize the

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public and community leaders about the dangers and social injustice of tobacco industry. [Reality Check](#) is the youth-led, adult-supported movement that empowers young people, ages 13 to 18, to become leaders in their communities and expose the manipulative and deceptive marketing tactics of the tobacco industry.

The [Health Systems for a Tobacco-Free New York](#) program works with medical and mental health systems to enhance access to evidence-based tobacco use treatment, especially for disproportionately affected populations.

The [Public Health Law Center](#), as the Center of Excellence in Tobacco Policy, provides expert guidance and resources to support commercial tobacco control professionals in New York State. These resources, developed under contract with the New York State Department of Health, address state-specific and national tobacco policy efforts to help advance the goal of ending the commercial tobacco epidemic.

The Tobacco Control Program also provides free cessation resources to help individuals in New York quit smoking, e-cigarettes/vaping, or using any tobacco product. The [New York State Quitline](#) offers free and confidential quit coaching via telephone, internet, and text nicotine replacement therapy. Youth and young adults can access a free, anonymous text message service designed specifically for young people 13-24 that delivers tailored messages to aid in quitting vaping.

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Communicable Diseases

This section provides information on select communicable diseases in New York State, related trends, disparities, and resources. It includes the following topics: 1) antimicrobial resistance, 2) hospital-acquired infections, and 3) tuberculosis.

Data Highlights

- From 2017-2022, 7,035 carbapenem-resistant *Enterobacterales* specimens submitted from New York to the Centers for Disease Control and Prevention's Antimicrobial Resistance Lab Network (ARLN); 4,348 (61.8%) were positive for at least 1 carbapenem resistance gene.¹
- *Candida auris* cases have increased in New York State since it was first detected in 2016, with 2,024 clinical and 2591 surveillance cases reported as of July 19, 2024.²
- In 2022, the National Healthcare Safety Network (NHSN) stated that in New York State, there were 1636 central line-associated bloodstream infections (CLABSIs). The predicted number of infections, based on Centers for Disease Control and Prevention (CDC) 2015 national data baseline, was 1745.42, for a standardized infection ratio of 0.94 (i.e., fewer infections than predicted).³
- In 2022, 88.4% of tuberculosis (TB) cases reported in the United States, and 93% of those reported in New York State (exclusive of New York City) occurred among racial and ethnic minority groups.

Antimicrobial Resistance

Burden and Distribution Across New York State

Antimicrobial resistance (AR) is a global concern. In the United States, national efforts and goals to combat antimicrobial resistance are cross-cutting and include actions across human and animal health, laboratory science, and the development of new antimicrobial drugs.⁴

In 2019, the CDC estimated there were more than 2.8 million infections from antimicrobial-resistant organisms each year.⁵ Since 2019, antimicrobial-resistant pathogens, such as *Candida auris*, have increased, both in New York State and nationally.^{2,6,7}

Factors contributing to increasing antimicrobial resistance in health care settings include, but are not limited to, inappropriate use of antibiotics and challenging conditions for implementing infection prevention and control practices during the COVID-19 pandemic.^{6,7}

Key Risk Factors

- Broad spectrum and/or inappropriate antimicrobial usage
- Organisms sharing resistance genes and mechanisms
- Suboptimal infection prevention and control practices in health care settings
- Prolonged lengths of stay in overnight health care settings
- Use of medical devices

Health Disparities

Disparities in antimicrobial-resistant threats exist across all social determinants of health, including health care, the food supply and the community. A disproportionate number of antimicrobial-resistant infections negatively impact people who are at higher risk for health disparities and inequities. Data on health care-associated infections (HAIs) show disparities particularly among people of color, pregnant women, older adults and people with weakened immune systems or certain medical conditions, such as diabetes. Antimicrobial-resistant infections disproportionately impact young children, men who have sex with men (MSM) and groups that have historically experienced greater obstacles based on their racial or ethnic group.

Disparities related to antimicrobial resistance are impacted by structural inequities and socioeconomic factors such as household income, type of housing (crowding, persons experiencing homelessness), immigration, type of health insurance, access to health care and education level. Geography and the built environment (buildings, neighborhoods, parks, roads) also play a role in health disparities related to antimicrobial resistance, leading to higher rates of infection among people experiencing homelessness or people facing housing insecurity, travelers to countries with unsafe water and inadequate sanitation and people living in certain metropolitan cities.¹¹

Further research and enhanced surveillance are necessary to increase our understanding of age as it relates to antimicrobial resistance in New York State.

Communicable Diseases

Importance of Prevention

Antimicrobial resistance has the potential to affect people at any stage of life, as well as the health care, veterinary and agriculture industries. This makes it one of the world's most urgent public health problems.

Bacteria and fungi do not have to be resistant to every antibiotic or antifungal to be dangerous. Resistance to even 1 antibiotic or antifungal treatment can mean serious problems. For example:

- Antimicrobial-resistant infections that require the use of second- and third-line treatments can harm patients by causing serious side effects, such as organ failure, and prolong care and recovery, sometimes for months.
- Many medical advances are dependent on the ability to fight infections using antibiotics, including joint replacements, organ transplants, cancer therapy, and the treatment of chronic diseases like diabetes, asthma, and rheumatoid arthritis.
- In some cases, antimicrobial-resistant infections have no treatment options.

If antibiotics and antifungals lose their effectiveness, then we lose the ability to treat infections and control these public health threats.¹⁰

New York State's Approach to Modifying Risk Factors

The New York State Department of Health conducts various response, surveillance, and prevention activities to address antimicrobial resistance including, but not limited to:

- Responding to reports of novel antimicrobial resistant pathogens and conducting prevention-based activities to combat the spread of resistant organisms in health care facilities through education and enhanced surveillance.
- Wadsworth Center, the New York State Public Health Laboratory, supports New York State efforts to detect, respond, and prevent the spread of novel antimicrobial resistant pathogens and AR resistance mechanisms as both a public health reference laboratory and as the Northeastern Regional Laboratory for the CDC's Antimicrobial Resistance Laboratory Network.⁸ Additionally, Wadsworth Center has multiple surveillance and research projects designed to identify and advance knowledge of novel systems to detect antimicrobial resistant pathogens across the state.⁹
- The New York State Emerging Infections Program (EIP), in collaboration with the CDC and the University of Rochester, performs enhanced, population-based surveillance and special studies of select pathogens, including pathogens with antibiotic resistance.
- New York State supports the appropriate use of antibiotics by health care providers by analyzing antibiotic prescribing in outpatient settings and participation in the CDC's Be Antibiotics Aware Program. This public health outreach campaign sponsored by the CDC provides education and supportive tools to enhance optimal antibiotic use.
- The National Antimicrobial Resistance Monitoring System (NARMS) for Enteric Bacteria, a collaboration among state and local health departments, CDC, the U.S. Food and Drug Administration, and the U.S. Department of Agriculture, tracks changes in the antimicrobial susceptibility of certain enteric (intestinal) bacteria found in ill people, retail meats, and food animals.

Communicable Diseases

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Hospital-Acquired Infections

Burden and Distribution Across New York State

Hospital-acquired infections (HAIs) of concern at the national level include multidrug-resistant organisms (MDROs), central line-associated bloodstream infections (CLABSI), catheter-associated urinary tract infections (CAUTIs), surgical site infections (SSIs), and ventilator-associated conditions.

According to the U.S.CDC, approximately 1 of every 31 hospital inpatients had at least 1 hospital-acquired infection in 2015, and approximately 11% of those patients died during their hospitalization.¹ Many HAIs are preventable. According to the most recent CDC progress reports², between 2015 and 2022, national central line-associated bloodstream infections rates decreased 8%, surgical site infections rates associated with colon surgery and abdominal hysterectomies decreased 16% and 5%, respectively, methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia rates decreased 10%, and *Clostridioides difficile* infection rates decreased 52%. Despite these positive trends, efforts are still necessary to prevent HAIs and decrease the risk of infection from MDROs in health care settings.

Since 2005, New York State Public Health Law § 2819 has required acute care hospitals to report selected HAIs to the New York State Department of Health. Reporting these infections allows New York State Department of Health to determine which hospitals need assistance in implementing practices to decrease infection rates, and it enables hospitals themselves to identify potential areas for improvement. Additionally, people can use [publicly reported infection rates](#) and information about hospital acquired [infections](#) to help them make decisions about where to seek medical care.

Key Risk Factors

Factors that impact an individual's risk of developing an HAI vary by the type of infection. However, common factors include:

- Immunologic immaturity or immunosuppression
- Older age
- Multiple underlying comorbidities
- Frequent and/or long lengths of inpatient care
- Invasive procedures/indwelling devices
- Need for mechanical ventilation
- Inadequacy of infection control practices in the facility
- Prevalence of pathogens circulating in the community

Health Disparities

Both the very old and the very young are at increased risk of developing an HAI if they are hospitalized because they often have several of the risk factors listed above.

Further research and enhanced surveillance are necessary to increase our understanding of geographic disparities related to HAIs in New York State.

Rates of HAIs including MDROs are not tracked by race or ethnicity. HAIs affect hospitalized persons; therefore, populations with less access to quality outpatient health care that would help them avoid hospitalization might be at greater risk. Further research and enhanced surveillance are required to improve our understanding of racial, ethnic, income, and education disparities as they relate to HAIs in New York State.

Communicable Diseases

Importance of Prevention

Preventing HAIs has a significant impact on the health and safety of patients. Prevention can reduce mortality and improve safety in hospitals. It also can save millions of dollars in unnecessary health care expenditures. In a 2020 study, research showed that although hospitals pay approximately \$25,000 for each HAI, preventing 1 HAI can increase a hospital's profit by more than \$500,000.⁴

New York State's Approach to Modifying Risk Factors

New York State was among the first in the nation to implement a strong HAI reporting program, which continues to:

- Track select HAI indicators utilizing the National Healthcare Safety Network (NHSN),
- Audit hospital records to ensure complete and accurate data reporting,
- Assist hospitals as they work to improve HAI rates, and
- Publish an annual report with hospital-specific rates to allow consumers to compare hospital infection rates when making health care decisions.³

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Communicable Diseases

Tuberculosis

Burden and Distribution Across New York State

Tuberculosis cases are increasing in New York State. There were 894 cases of active tuberculosis (TB) reported statewide in 2023, an increase of 25.2% from 714 in 2022. Also in 2023, there were 1,299 patients with latent TB infection (LTBI) in New York State (exclusive of New York City, which reports LTBI data directly to the CDC, so we are unable to report New York City data at this time).

Key Risk Factors

Individuals with specific comorbid conditions are at increased risk, including but not limited to, HIV and diabetes. In 2023, 44 (4.9%) cases statewide also had HIV, and 186 (20.8%) cases statewide had diabetes at diagnosis. People who are also at an increased risk of tuberculosis are:

- those born in and/or with travel to countries with high tuberculosis case rates;
- those who have been in contact with a person with infectious tuberculosis; and
- those where radiology indicates prior tuberculosis infection or disease.¹

Health Disparities

In 2022, 88.4% of tuberculosis cases reported in the United States, and 93% of those reported in New York State (exclusive of New York City) occurred among racial and ethnic minority groups.¹ Poor access to quality, affordable care in neighborhoods with Black, Indigenous, and people of color, compared to predominantly white neighborhoods, contributes to health disparities. Residential racial segregation contributes to vastly different living environments between racial and ethnic minority groups. In 2023, 87.1% of tuberculosis cases in New York were among non-U.S.-born persons. The concentration of low-income populations and overcrowding can spread infection, particularly in Asian, Hispanic, and Black non-Hispanic populations. Cultural norms for some non-U.S.-born populations result in multi-generational households, which can lead to cramped living conditions.²

Local Health Departments are required to ensure tuberculosis treatment and cover the cost of care. However, disparities exist in the coverage for and access to care for comorbid conditions. Uninsured/underinsured individuals rely on Federally Qualified Health Centers (FQHCs), statewide programs, and/or community programs to assist with the treatment of comorbid conditions which, left untreated, can negatively impact tuberculosis treatment. Overburdened local health departments rely on federal, community, and state programs to link their patients with tuberculosis to the necessary medical care beyond the actual treatment of tuberculosis disease.³

Tuberculosis treatment can involve periods of isolation in which the patient cannot see family members or go to work. This isolation is particularly harmful for people who cannot work remotely and people who rely on every paycheck to maintain financial stability. Minority communities are overrepresented in these groups. In addition, tuberculosis can be a stigmatizing condition, especially for newcomers with origins in countries where the disease is already stigmatized. Furthermore, racial and ethnic minority groups are known to carry a disproportionate burden of tuberculosis deaths (e.g., from 1990-2006 Black Americans represented 12% of the national population but nearly 30% of national tuberculosis-related deaths).⁴

Communicable Diseases

TB mortality rates increase as age increases, showing consistent increases across all age groups older than 5-14 years (0.01 deaths per 100,000 person-years). 55- to 64-year-olds are the youngest age group with a mortality rate above 1 per 100,000 person-years (1.63), and rates continue to increase with advancing age; the highest TB mortality rates are found among those older than 85 years (10.59 per 100,000 person-years). ⁴

Importance of Prevention

Most people newly infected with TB will initially have a latent infection (not infectious, no symptoms, no radiographic changes). It is estimated that up to 13 million people in the U.S. are living with latent tuberculosis infection; 5%-10% of those with latent infection will develop active disease during their lifetime if untreated. ¹⁰ Preventive treatment stops TB infection from progressing to disease. Early detection and prevention of active TB cases help to prevent the spread of the disease and can protect the community.

New York State's Approach to Modifying Risk Factors

- Education of Primary Care Providers: Development of a Latent Tuberculosis Infection Toolkit for use by providers to assess, test, and treat patients.
- Early Case Detection: New cases of infectious TB should be diagnosed and reported as early as possible in the course of illness so appropriate treatment can be initiated, transmission interrupted, and public health responses promptly initiated.
- Contact Investigation: Persons exposed to someone with infectious TB disease are identified and evaluated for TB disease and latent TB infection. Contacts are at high risk for infection and for developing TB disease. ⁵ Preventative treatments can be given to reduce the risk of developing active TB. ⁶
- Targeted Testing and Treatment of Latent TB Infection: Targeted testing identifies those at the highest risk for progression from latent infection to active TB. Priorities include persons at risk due to certain medical conditions, those who live in congregate settings, or those who have immigrated from countries where TB is more prevalent. ¹
- Prevention of TB transmission in Health Care Settings: Comprehensive infection control includes administrative controls (procedures for detecting and managing persons with possible active tuberculosis disease and for education and baseline screening and annual assessment of health care workers), environmental controls (appropriate use and maintenance of airborne infection and isolation rooms and other ventilation measures), and respiratory-protection controls (appropriate use of respirators in settings with increased risk for TB exposure). ⁹

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Women, Infants, and Children

This section provides information on maternal and women's health, child and adolescent health, and perinatal and infant health. Promoting the health of women, infants, children, and their families as a Prevention Agenda priority aligns with the Maternal and Child Health Services Block Grant (Title V) Program, the core federal and state public health program for promoting maternal and child health. Reducing persistent disparities in health outcomes requires a focus on addressing social determinants of health, including support for safe and nurturing home and community environments, and achieving health equity.

Data Highlights

- The overall pregnancy-related mortality ratio in New York State was 18.5 deaths per 100,000 live births from 2018 to 2020.
- In 2021, 91.4% of birthing individuals in New York State reported receiving a postpartum visit.
- The infant mortality rate in New York State has declined steadily since 2005 to 4.2 deaths per 1,000 in 2021.
- 23% percent of New York State children ages 0-17 years had 1 Adverse Childhood Experience (ACE) and 15% had 2 or more ACEs.
- 19% of New York State children ages 0-17 years have 1 or more special health care needs, ranging from 11% for children ages 0-5 years to 25% for children ages 6-17 years.
- Nearly 76% of children ages 1-17 years had at least 1 preventive dental visit in the past year.

Women, Infants, and Children

Women and Maternal Health

Burden and Distribution Across New York State

Over half (51.4%) of New York State residents are female, including more than 4 million women of reproductive age.⁴ In 2021, 279,030 pregnancies were documented in New York State.⁵

Key Risk Factors

- **Contraception Use:** Effective contraceptive use overall among New York State Family Planning Program clients was 60.1% in 2021, and the percentage of clients using highly effective contraceptive methods (IUDs or implants) was 21%.⁶ The percent of closely-spaced births (i.e., second or subsequent births occurring within 24 months of a previous pregnancy) was 21.7% in 2021.² Short interpregnancy intervals are associated with a higher risk for adverse birth outcomes, such as preterm birth.⁷
- **Maternal Mortality and Morbidity:** Maternal mortality, defined as the death of a woman while pregnant or within 6 weeks of the end of pregnancy from causes related to or aggravated by her pregnancy, is a devastating outcome with a dramatic impact on families and communities. The overall pregnancy-related mortality ratio in New York State was 18.5 deaths per 100,000 live births from 2018 to 2020. Also based on data from 2018-2020, the leading causes of pregnancy-related deaths in New York State are hemorrhage, embolism–thrombotic (non-cerebral), mental health conditions, cardiovascular and coronary conditions, and infection.⁹ Severe or “near miss” maternal morbidity – defined as serious complications of pregnancy that are potentially life-threatening for the mother if not identified, monitored, or treated efficiently and appropriately – occurs approximately 100 times more frequently than maternal deaths.¹⁵ The rate of severe maternal morbidity increased by more than 32 points from 2016 to 112.1 per 10,000 delivery hospitalizations in 2020.³
- **Postpartum checkup:** In 2021, 91.4% of birthing individuals in New York State reported receiving a postpartum checkup.
- **Maternal Depression:** Maternal depression is the most common morbidity among postpartum women, affecting 10-20% of women during or within 12 months of pregnancy, with implications for the well-being of the entire family.¹⁰ PRAMS data show that approximately 84% of women report being asked by a health care provider about depression symptoms at a postpartum checkup in 2021.⁸

Health Disparities

The Department continues to focus on the life course and social determinants of health, which is supported by input received from families (including parents and youth) and service providers as part of the 2020 needs assessment for the New York State Maternal and Child Health State Action Plan (SAP), as well as the input received for the 2020-2025 Title V Maternal and Child Health State Action Plan. Contributors continue to identify many factors that influence their use of health care: health insurance coverage, accessibility of health care, provider diversity and cultural competence, transportation, stigma and confidentiality concerns, language barriers, cost, inability to take time

Women, Infants, and Children

off from work, and competing life responsibilities.^{1,11,13} In addition, contributors noted lack of social support, unsafe neighborhoods, lack of affordable housing, limited access to affordable, healthy food, and lack of opportunities for physical activity as key barriers to good health.

They identified opportunity areas including mental health and substance abuse treatment, home visiting, and breastfeeding classes and support groups. Contributors also emphasized involving community partners to better understand gaps and barriers on the local level, as communities need to “own” the process and solutions to facilitate realistic, sustainable improvements.¹ Strong collaborative community partnerships are at the heart of Title V, as well as the Prevention Agenda, and are key to success in improving the health and well-being of everyone in New York.

Two rural counties, Schuyler in the Finger Lakes region and Hamilton in the Northeast region, qualify as maternity care deserts where there are no maternity hospitals or birthing centers. Further, Allegany, Yates, Lewis, Chenango, Clinton, Columbia, Essex, and Greene counties have moderate access to maternity care, defined as having fewer than 2 hospitals, fewer than 60 obstetricians per 10,000 births, and fewer than 10% of women ages 18-64 uninsured. Additionally, of New York State’s 62 counties, 21 have fewer than 6 obstetricians/gynecologists per 100,000 population and 47 have fewer than 10 per 100,000 population.

Non-Hispanic Black and Hispanic women using New York State-funded Family Planning services in 2021 were less likely than non-Hispanic women to report the use of effective contraception.⁶ White women are more likely to start prenatal care early and to receive an adequate number of prenatal care visits, compared to Black and Hispanic women.^{3,12} In 2021, only 71.5% of Black women received early prenatal care compared to nearly 85.8% of non-Hispanic White women. Between 2019 and 2021, preterm birth rates in New York State were 1.74 times higher among Black non-Hispanic women and 1.32 times higher among Hispanic women compared to White non-Hispanic women, a slight increase over 2015 rates.¹²

From 2018 to 2020, Black non-Hispanic women in New York State were nearly 5 times as likely to experience a pregnancy-related death than White women.⁹ The statewide Black-to-White mortality ratio was 4.8 to 1 in 2005-2007 and 4.4 to 1 in 2019-2021.² Similar disparities exist for severe maternal morbidity, with Black non-Hispanic and American Indian or Alaska Native women experiencing the highest rates for severe maternal morbidity at delivery.¹⁶

Increased risk for maternal mortality among Black women persists even when controlling for socioeconomic status.¹⁴ The Black-to-White ratio in maternal mortality in New York City increased from 3.4 in 2013-2015 to 4.1 in 2019-2021. Outside New York City, the Black-to-White ratio peaked in 2014-2016 at 4.1 to 1 and fell in 2019-2021 at 3.8 to 1.

Importance of Prevention

Women’s and maternal wellness are key indicators of the health of a society and are of major public health importance. Understanding the risk factors that contribute to health inequities is essential to the development of strategies aimed at improving access to care and outcomes for women and birthing people. The New York State Department of Health remains committed to addressing systemic inequities and improving women and maternal health outcomes through a wide range of initiatives and partnerships focused on individuals disproportionately affected by disparities.

Women, Infants, and Children

New York State's Approach to Modifying Risk Factors

The New York State Department of Health currently oversees several initiatives to improve the health of women and birthing people in New York State. These initiatives include:

- Regionalized Perinatal Care
- New York State Perinatal Quality Collaborative (PQC) Birth Equity Project
- Alliance For Innovation for Maternal Health (AIM) Low-Risk Cesarean Delivery Improvement Project
- Maternal, Infant, and Early Childhood Home Visiting (MIECHV) and Perinatal and Infant Community Health Collaboratives (PICHC) Home Visiting Programs and Equity and Inclusion Quality Improvement initiatives
- Maternal Mortality Review
- State Maternal Health Innovation (SMHI) Grant focusing on:
 - Severe Maternal Morbidity
 - Low-Risk Cesarean Deliveries
 - Universal Virtual Home Visiting
 - Maternal Fetal Medicine Project Extension for Community Healthcare Outcomes (ECHO)

Women, Infants, and Children

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Perinatal and Infant Health

Burden and Distribution Across New York State

Perinatal health refers to the period immediately before and after birth. Most experts define the perinatal period as starting in the 20th or 28th week of gestation (pregnancy), depending on which definition is referenced, and continuing through 7-28 days after birth. These early weeks are an important period for addressing the health of both mothers and infants. In 2021, 209,947 infants were born in New York State.²

Key Risk Factors

- **Infant Mortality:** New York's infant mortality rate has declined steadily since 2005 to 4.2 deaths per 1,000 in 2021, surpassing the Healthy People 2020 goal of 6.0 per 1,000.^{1,3} The leading causes of infant deaths nationally and in New York State are preterm birth and other conditions or complications related to pregnancy, congenital anomalies (birth defects), unintentional injuries, sudden unexpected infant death (SUID), and heart disease; these accounted for nearly 74% of infant deaths in 2021 in New York State.³ Neonatal mortality (death of an infant within the first 28 days of life) declined to 3.2 deaths in 2015 and returned to 4.2 per 1,000 live births in 2021, mirroring trends in preterm birth rates and preterm-related mortality.¹ Post-neonatal mortality (death from age 28 days to 1 year of life) in New York State rates have remained steady at about 1.6 per 1,000 through 2021, although Sudden Unexplained Infant Death (SUID)-related mortality rates, including Sudden Infant Death Syndrome (SIDS) increased through 2020.¹
- **Congenital anomalies/malformations:** Birth defects remain among the leading causes of death for infants. Babies born with birth defects have a greater chance of illnesses and long-term disabilities than those who do not. Between 2018 and 2020, approximately 8,142 infants with birth defects were reported annually, representing 3.5% of births, a 46% drop in reported anomalies in 2020.⁴
- **Newborn Screening:** Virtually all infants born in New York State are screened for heritable disorders, and 97% of those with positive screening results received timely follow-up.⁵ Among babies born in New York State in 2022, 96.5% were screened for hearing--which has increased markedly from 90.4% of infants born in 2014 and 84.4% of infants born in 2013.⁶
- **Well-child Visits:** Among babies in New York State enrolled in Medicaid, 80% received the recommended number of well-baby visits in the first year of life, compared to 93% of commercially insured infants. In 2022, the percentage of well-child visits in the first 15 months of life declined to 67% for Medicaid-enrolled babies and 90% for commercially insured infants.⁷
- **Neonatal Abstinence Syndrome:** As noted above, the nationwide epidemic of opioid use has adversely impacted perinatal and infant health. One measure of harm is the dramatic increase in cases of neonatal abstinence syndrome (NAS)—a drug withdrawal syndrome that occurs in infants exposed to opioids in utero.⁸ From 2012 to 2014, an average of nearly 230,000 infants, nearly 4.5 per 1,000 infants in New York State were diagnosed with neonatal abstinence syndrome annually.⁹

Women, Infants, and Children

Health Disparities

The factors driving disparities in infant health are multifactorial and complex. These factors include employment status, income, housing, transportation, food security, access to healthy foods, stress, social support, health care coverage, and quality of medical care received which negatively affect the birthing person. Historic and persistent racism and discrimination also play a role in driving racial disparities in infant health. Even controlling for insurance status, income, age, and severity of conditions, people of color are less likely to receive routine medical procedures and experience a lower quality of care overall. Prioritizing equity in health care will be paramount in preventing the widening of disparities and advancing infant health.

Infant mortality is higher in the less populous region of New York State outside of New York City. In 2021, the overall rate was 4.5 per 1000 live births upstate vs. 3.7 in New York City, with neonatal rates of 2.8 vs. 2.3 and post-neonatal rates of 1.7 vs. 1.4 per 1000 live births upstate vs. New York City respectively. Between 2019 and 2021, the preterm birth rates remained the same between New York City and upstate, but the late or no prenatal care rate was higher in New York City (6.6 vs. 4.3 per 1,000 live births) as was the teen pregnancy rate (24.4 vs. 16.6 per 1,000 live births). The infant mortality rate was lower in New York City (3.8 vs. 4.6 per 1,000 livebirth).¹³ The rate of neonatal abstinence syndrome was higher outside of New York City and in non-metropolitan areas.¹¹

The ratio of non-Hispanic Black-to- non-Hispanic White low birth weight percentages increased from 2.10 to 2.15 between 2019 and 2021. Despite ongoing efforts to address this disparity, between 2019 and 2021 New York State infant mortality rates rose from about 2 times higher to nearly 3 times higher (2.9) among Black infants compared to White infants.¹⁰ Black infants are less likely to be breastfed and be placed on their backs to sleep.¹¹ In contrast, rates of neonatal abstinence syndrome are highest among non-Hispanic White infants.¹¹ Rates of drug-related discharges for newborns have increased across all racial and ethnic groups, declining slightly in 2021.¹¹ Birth indicators for Asian and Pacific Islander women and infants continue to vary. While selected indicators (early prenatal care and low birth weight rates) for Asian and Pacific Islanders remain somewhere between White and Black or Hispanic rates, other key indicators including preterm birth, infant mortality, and teen pregnancy rates remain similar to or better than rates for White women and infants.¹⁰ Preterm birth rates are higher for women on Medicaid and for those who are teens or greater than age 35.¹¹

Infant mortality rates historically have been higher among women with lower educational attainment, Medicaid or no insurance, unmarried status, and maternal age either under 20 as well as those between the ages of 20 and 24, or over 40 years.¹² Infant mortality rates are also higher for male infants. Infants born to women who have lower income and fewer years of educational attainment are less likely to be breastfed and be placed on their backs to sleep.¹¹

Importance of Prevention

Perinatal and infant health are important markers of the overall health of a society and give us key information about the wellbeing of birthing people and infants. The factors driving disparities in perinatal and infant health are multifactorial and complex, and despite national and state efforts to reduce racial and ethnic inequities in poor perinatal and infant outcomes, disparities continue to persist. Many of the social determinants of health contributing to poor outcomes such as employment status, income, housing, transportation, food security, access to healthy foods, stress, and social supports are preventable and can be addressed through prevention strategies focused on policy changes, community partnerships, and focused programs aimed at eliminating inequities.

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Prioritizing equity in health care will be paramount in preventing the widening of disparities and advancing infant health. In collaboration with a variety of partners, the Department is involved in a statewide effort to reduce the instances of infant mortality and decrease disparities, and the agency has implemented several initiatives to reduce infant deaths and improve birth outcomes.

New York State's Approach to Modifying Risk Factors

Current New York State efforts aimed at improving perinatal and infant health include:

- Regionalized Perinatal Care
- New York State Perinatal Quality Collaborative Neonatal Abstinence Syndrome and Neonatal Intensive Care Unit Equity Projects
- Maternal, Infant, and Early Childhood Home Visiting (MIECHV) and Perinatal and Infant Community Health Collaboratives (PICHC) Home Visiting Programs, and Equity and Inclusion Quality Improvement (QI) initiatives
- Statewide Maternal Health Innovation Grant (SMHI) Grant focusing on Universal Virtual Home Visiting and Neonatal Project ECHO
- New York State Breastfeeding Initiative

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Child and Adolescent Health

Burden and Distribution Across New York State

Making health a priority for children and youth lays the groundwork for optimal health across their lifespan and for future generations. During this critical time of rapid growth and development, children can build a strong foundation for healthy behaviors and relationships. Health promotion and prevention are the cornerstone of efforts to support Children's health. In 2021, New York State was home to 4,069,680 children ages 0-17 years, representing approximately 20.5% of the population in New York State.²

Key Risk Factors

- **Child Mortality:** The mortality rate for children ages 1-9 years declined from 15.9 per 100,000 population in 2009 to 13.5 in 2021, a drop of nearly 15%.^{1,6} Leading causes of death among children in this age group include injuries and accidents, cancer, congenital malformations, homicide, and heart disease, together accounting for nearly 57% of all deaths in 2021. Over the same period, the mortality rate for youth ages 10-19 years declined from 30 per 100,000 in 2009 to 20 per 100,000 in 2021.⁶ Leading causes of death among this age group include injuries and accidents, suicide, homicide, cancer, and congenital malformations, together accounting for 69% of all deaths in 2021.⁶ The suicide mortality rate for youth ages 15-19 years increased from 3.7 per 100,000 population in 2006 to 5.4 per 100,000 in 2021, with consistently higher rates outside of New York City.⁷
- **Preventive Medical Visit:** According to the National Survey of Children's Health, parents reported that 87% of children ages 0-5 years, 83% of children ages 6-11 years, and 76% of teens ages 12-17 years, respectively, had a preventive medical visit (checkup) in the past year.⁸
- **Children/Youth with Special Health Care Needs:** An estimated 19% of New York State children ages 0-17 years have 1 or more special health care needs, ranging from 11% for children ages 0-5 years to 25% for children ages 6-17 years.⁸ Among children with any health condition, 9.4% reported that the condition(s) consistently affected their daily activities a great deal, and another 32.2% reported that their conditions affected their daily activities moderately and some of the time.⁸ In 2022, only 23.8% of parents of children in New York State ages 9 months to 35 months reported that they received a standardized developmental screening using a parent-completed screening tool, compared to 34.4% nationally.⁸ Additionally, only 28.2% of parents in New York State reported that their child's doctor or health care provider asked if they had any concerns about their child's learning, development, or behavior for children ages 0-5 years, compared to 34% nationally.⁸ Approximately 6% of children in New York State ages 3-17 years currently have a developmental delay, with 3.8% reporting a current diagnosis of Autism or Autism Spectrum Disorder.^{1,8}
- **Oral Health:** National Health and Nutrition Examination Survey (NHANES) data for 2017–2018 found that 13.2% of children ages 2–11 years had untreated dental caries in their primary teeth. Prevalence increased with age, from 12.0% of children ages 2–5 years to 14.0% of children ages 6–11 years.⁹ Nearly 76% reported that their child ages 1-17 years had at least 1 preventive dental visit in the past year.^{1,8} Only 71.5% of New York State residents served by community water systems have optimally fluoridated water.¹
- **Childhood Obesity:** In New York State, 13.9% of children ages 2-4 years enrolled in the WIC program are obese based on their age- and sex-specific body mass index (BMI) percentile.^{1,10} Estimates for older children vary from 16.1% of teens in grades 9-12 to 16.3% of children and

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teens ages 10-17 years, respectively, meeting the definition of obesity based on BMI-for-age percentiles.^{1,8,11}

- **Adverse Childhood Experiences:** The National Survey of Children's Health indicates that 23% of children in New York State ages 0-17 years had 1 adverse child event (ACE) and 15% had 2 or more adverse child events (ACEs), such as the death or incarceration of a parent, witnessing or being a victim of violence, or living with someone with mental health, drug, or alcohol problems. The prevalence of having 1 or more adverse child events increased with age, from 25.3% of children ages 0-5 years to 49.2% of those ages 12-17 years.⁸
- **Mental Health:** Parents report that 10.4% of children in New York State ages 3-17 years have current anxiety problems, 4% have depression, and 6.2% have behavioral or conduct problems.⁸ Parents report that 32.4% of children ages 6-17 years have been bullied by other children, while 11.1% say their child has bullied others.⁸ Approximately 12% of all children in New York State ages 3-17 years have received treatment or counseling from a mental health professional during the past year.⁸

Health Disparities

While individual and demographic risk factors are important in addressing maternal and child health (MCH) outcomes, they do not fully explain or account for observed disparities. The focus within maternal and child health and overall public health increasingly is on addressing social determinants of health – the conditions in which people are born, grow, live, work, and age.¹³ Social factors such as food insecurity, homelessness, employment conditions, poverty, adverse neighborhood environments, inadequate health care, lack of educational opportunities, social exclusion, racism, and gender-based inequities are important forces that influence maternal and child health outcomes, both directly and through their impact on other individual risk factors.^{4,5,13,14}

Mortality for children ages 1 to 4 years was highest among non-Hispanic Black male children. Among adolescents, mortality rates were lowest for Hispanic teens and highest for Black teens. However, suicide rates, specifically, were highest among non-Hispanic White teens and lowest among non-Hispanic Asian and Pacific Islanders.⁷ Children from families in the lowest income bracket (<100% federal poverty level) are more likely to report having special health care needs than those at the highest income levels.⁸ Significant disparities exist in oral health as well. In the 2017-18 National Health and Nutrition Examination Survey (NHANES) surveys, the prevalence of untreated dental caries in primary teeth for children ages 2-11 years in the U.S was higher in non-Hispanic Asian (20.6%), Hispanic (17.8%) and non-Hispanic Black children (13.2%) compared with non-Hispanic White children (9.7%).⁹

Mortality rates for children ages 0-9 and 10-19 years, respectively, were the same in New York City and the rest of the state.³ Over 2 million people in New York State reside in a federally designated dental health professional shortage area (DHPSA).¹² 20 counties in New York State are designated entirely as low-income or Medicaid-Eligible DHPSA, with another 9 counties having a portion of the county designated. While 71.5% of people on public water systems receive optimally fluoridated water, a disparity exists between New York City (100%) and the rest of the State (47.8%).¹

Importance of Prevention

Child and adolescent health have long-term and lasting effects on the health and wellness of individuals in New York for generations. Promoting healthy development, behaviors, and relationships early in life and during critical periods lays the groundwork for health promotion and disease prevention throughout the lifespan.

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Guided by a life course framework, interventions must focus on mitigating risk factors, strengthening support for individuals and families, building resiliency, and addressing the broad social, economic, and environmental determinants of health. Interventions need to focus on critical periods of development (such as fetal development and early childhood), as well as the cumulative impact of exposures and adverse experiences over the life course and across generations. Public health efforts must include strategies that engage and support individuals, families, and providers across different settings and sectors and over time. The health of children and adolescents is central to the framework of the New York State Prevention Agenda and is a priority area of the New York State Title V Program.

New York State's Approach to Modifying Risk Factors

The New York State Title V Program has developed interventions to support and enhance children and adolescents' health and social-emotional development. This Program works to engage families in planning and systems work to improve family-centered services and effective practices for supporting Children and Youth with Special Health Care Needs (CYSHCN) and their families. The program also engages health care providers and other partners in efforts to improve newborn hearing screening and follow up, including reporting of results into the New York Early Hearing Detection and Intervention Information System.

The New York State Department of Health also maintains the Newborn Bloodspot Screening Program, which is a population-based program and public health system that identifies infants who may have a rare, but treatable disease through bloodspot screening shortly after birth. Within the Department, the Newborn Screening program is housed and administered by the Wadsworth Center, New York State's public health laboratory, with direct support from Title V and several other state and federal funding sources.

The New York State Title V program also supports the Department's School-based Health Center Program intended to increase the accessibility and availability of quality primary and preventive physical and mental health care services to preschool, elementary, middle and secondary school students in high-risk areas of New York State. This program was established in recognition of the need to improve primary and preventive health care for children in low-income, high-risk communities.

Since 1981, state, federal and private foundation funds have been used to develop and implement projects to provide these expanded school health services for pre-school and school-age children through health teams composed of nurse practitioners, physician assistants, community health aides, collaborating physicians, social workers, psychologists, collaborating psychiatrists, health educators, nutritionists, dentists and dental hygienists.

The Department also oversees the Pediatric Mental Health Care Access Program, which is a mental and behavioral health teleconsultation resource intended to enhance primary care provider capacity to provide mental health services. In collaboration with the Office of Mental Health's Project TEACH (Training and Education for the Advancement of Children's Health) Program, the Department provides resources needed to meet Children's behavioral health needs by leveraging in-kind Title V resources to make the Pediatric Mental Health Care Access Program accessible within School-based Health Centers across New York State.

The Department also oversees the New York State Early Intervention program designed to provide support for children ages 0-3 with disabilities and/or developmental delays in 1 or more of the following areas of development: physical, cognitive, communication, social-emotional, and/or adaptive.

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The Early Intervention Program offers a variety of therapeutic and support services to eligible infants and toddlers with disabilities and their families.

The New York State Title V program also provides support to the following programs serving children 1 through 21 years of age: the Child Lead Poisoning Prevention Program, Community Water Fluoridation, the Sickle Cell Disease Program, Comprehensive Adolescent Pregnancy Prevention and ACT for Youth Center for Community Action, the Family Planning Program, the Nurse Family Partnership, the Healthy Families New York Program, and the Migrant Health Program.

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Vaccine-Preventable Diseases

This section provides information on the public health response to vaccine-preventable diseases.

Individuals in New York continue to be vaccinated at low and variable rates. Though, in general, vaccination rates are high in New York State for school-age children, there are pockets of under-vaccination that allow for outbreaks to occur. Additionally, in an increasingly mobile world, diseases that have been eliminated in the United States are imported when people travel to and return from countries where they continue to circulate—as illustrated by a large measles outbreak that occurred in New York State in 2018 and 2019, with more than 1,000 cases of measles. In contrast, from 2020-2024, measles rates ranged from 0 to 1. Further, there was a single case of paralytic polio in New York State in 2022. Until a disease is eliminated globally, such as smallpox was, vaccination will be essential for the prevention of these harmful and potentially deadly diseases.

According to the State's immunization information system, 61.0% of 2-year-olds in the state (excluding New York City) received the combined 7 recommended vaccines in 2024, compared to 69.7% nationally. Similarly, data from the 2023-2024 New York State Respiratory Virus Survey reveal low vaccination coverage estimates among eligible adults for seasonal influenza, updated COVID-19, and respiratory syncytial virus—53.2%, 38.2%, and 26.0% respectively.

Worry about side effects and vaccine safety, doubts regarding vaccine effectiveness, and mistrust in government or pharmaceutical companies were reported more commonly than issues of vaccine access among those who did not vaccinate. Important work remains to increase vaccination coverage, build confidence and demand, and advance equitable access and uptake across the lifespan. For this reason, the Division of Vaccine Excellence was established January 1, 2024. It continues and builds upon the ongoing work of the State's immunization program.

Vaccine-Preventable Diseases

Vaccine-Preventable Disease Outbreaks

Burden and Distribution Across New York State (Excluding New York City)

Vaccine-Preventable Disease Surveillance Data for 2023; to date for 2024

Disease	2023	2024*
Diphtheria	0	1
Haemophilus influenzae type b (Hib)	5	5
Measles	0	1
Mumps	8	5
Pertussis	593	1759
Rubella	0	0
Polio	0	0
Streptococcal pneumoniae (infections in children <5 years of age)	66	41
Tetanus	0	0
Varicella	6	147

**Preliminary as of 1/28/2025*

Key Risk Factors

Under-vaccinated persons and under-vaccinated communities are vulnerable to vaccine-preventable diseases. Until a vaccine-preventable disease is eliminated throughout the globe, people will need to be vaccinated to be safe. This is illustrated by a case of paralytic polio that occurred in New York State in 2022. An unvaccinated young adult was infected with the polio virus and became paralyzed. It was because this person was not vaccinated against polio that the virus was able to cause infection and paralysis. Poliovirus continued to circulate throughout the close-knit community this person belonged to as determined by testing wastewater in New York City and 4 counties. For every paralytic case of polio, there are up to thousands of cases that present as a viral illness. For this reason, the virus continued to circulate in the community.

Vaccine hesitancy is a key factor resulting in under-vaccination of individuals and communities. Vaccine hesitancy often rests on misinformation that spreads through social media or among like-minded groups of people who may avoid traditional medicine. It may also result from a lack of science education and a willingness to accept theories without careful investigation.

Being part of certain communities that have large numbers of vaccine-hesitant or refusing individuals

- an affluent group that is vaccine-hesitant
- a group that is distrustful of conventional medicine
- a group that is distrustful of government
- a group that embraces alternative medical theories, increases one's vaccine-preventable disease risk

Individuals who are part of minority communities may have a distrust of medical care due to the history of racism within medical practice and the legacy of experimentation that was performed on them, such as the sterilization of women without their permission.³ The COVID-19 pandemic and the disparate rates of disease and death in minority communities fueled medical mistrust and vaccine hesitancy.

Vaccine-Preventable Diseases

Unfortunately, the antivaccine movement has increasingly focused on minority communities where distrust of conventional medicine and government is already high.

Antivaccination or vaccine-hesitant sentiment also exists in less well-defined communities, including affluent families throughout the state. Further data analyses are needed to identify and address those individuals as well.

Additionally, those who live in areas not served by medical providers who are part of their community (i.e., trusted) and those who live in rural areas without access to medical providers, hospitals, or pharmacies, have limited to no access to vaccines. As a result, disparate vaccination rates among adults by geographic area and racial or ethnic group persist.

Increasingly, medical providers who care for adults, especially specialists and subspecialists, don't consider themselves to be providers of vaccinations. Therefore, a person with chronic medical conditions who sees their specialist most often, may not have access to vaccinations despite a high level of care.

Global travel is a key culprit in vaccine-preventable disease outbreaks. While providing enriching experiences, travel can also expose travelers to diseases they are not immune to. This is especially true for those who are not vaccinated.

Crowded living conditions is yet another contributing factor. Measles, a vaccine-preventable disease, is spread in situations where unvaccinated persons are in close quarters. Close quarters limit one's ability to quarantine or isolate, key public health interventions for many vaccine-preventable diseases.

Health Disparities

Census Bureau data for New York show persistent disparities in insurance rates by race and Hispanic origin.¹ Individuals without health insurance are at risk for being under or unvaccinated leaving them more susceptible to vaccine-preventable diseases. Plans to analyze insurance status and vaccination rate by minority subgroups are underway.

There are several identifiable locations across New York State that have low immunization rates. Some of these areas are related to identifiable close-knit communities that have a collective ideology of not vaccinating or of hesitancy to vaccinate. Several outbreaks have occurred within those communities, including an outbreak of mumps in 2008, measles in 2018-2019, and polio in 2022. These communities remain at risk for further outbreaks as new generations of infants and young children remain unvaccinated until they enroll in school or after.

Structural racism toward American Indians and Alaska Natives is found in nearly every policy regarding, and action taken toward, that population since non-Natives made first contact with the Indigenous peoples of the United States. The intergenerational effect has left American Indians and Alaska Natives at the margins of health and the health care system. For this reason, American Indians and Alaska Natives are a community of focus for the State's immunization program.

Adults often refuse vaccinations, such as those for influenza, COVID-19, and pneumococcal disease, that would be protective against diseases that occur at higher rates among older adults, or that exacerbate chronic diseases such as asthma. This can be more pronounced among older adults who are in minority communities due to mistrust of conventional medicine and government.

Vaccine-Preventable Diseases

Importance of Prevention

Attaining and maintaining high vaccination rates throughout New York is a key prevention strategy. One of the most important methods of achieving high vaccination rates is through school entry requirements. In addition, having access to quality primary care providers is key as they are the preferred venue to obtain vaccine information and vaccinations indicated by age. Pharmacies have increasingly become a site where immunizations are easily and economically obtained.

Measles has been increasing in many locations around the world.² There have been recent cases in New York State, New York City, Pennsylvania, and New Jersey. There is concern about the continued spread leading to more cases here in New York State. The Department is raising awareness about the importance of vaccination and the signs and symptoms of measles to quickly identify the disease and prevent transmission.

New York State's Approach to Modifying Risk Factors

The Department strives to increase and maintain vaccination rates, recognizing that New York State communities with low vaccination coverage are at a higher risk for outbreaks, disease, disability, and death. New York State's immunization program systematically reviews reports and analyses generated using New York State Immunization Information System (NYSIIS) data for awareness of sub-populations or pockets of lower rates of vaccination—specifically, close-knit communities with persistently low vaccination rates and prior vaccine-preventable disease outbreaks. For example, see measles, mumps, and rubella immunization by 2 years of age by zip code.³ Focused and customized efforts are implemented to facilitate vaccine coverage for these individuals who may not get vaccinated otherwise.

Similarly, vaccine-preventable disease cases and trends are systematically monitored, both globally and domestically. The data and outbreak potential influence the level of public health concern; the intensity and breadth of the Department's response align accordingly.

New York needs to address the factors that lead to vaccine hesitancy and under-vaccination using all the methods available that are evidence-based and shown to be effective. Education on vaccine-preventable diseases and travel-associated risks are key approaches to modifying behavior that can lead to the importation of diseases. Keeping trained staff who can respond to vaccine-preventable disease outbreaks is also essential to mitigate the effects of an outbreak or to prevent and attenuate a potential outbreak.

The Division of Vaccine Excellence will include a Bureau of Vaccine Confidence and Demand tasked with customizing vaccine education and engaging the community to understand and address vaccine hesitancy using science and evidence-based approaches. It will also include a data analytic group that will use, create, and analyze data, allowing for a data-to-action approach. The Division will collaborate with Bureau of Surveillance and Data Systems (BSDS) and other units across the Department to plan and implement these activities.

The Vaccines for Children Program and the Vaccines for Adults Program enable the purchasing of vaccines for Medicaid-eligible, underinsured, or American Indian or Alaskan Native children; for programs serving adults who are medically vulnerable; and for public health emergencies. Vaccine purchase and usage amounts vary from year to year due to multiple factors including patient eligibility status, seasonal demand (influenza season, back-to-school), communities of focus, and provider-reported patient profile information.

Vaccine-Preventable Diseases

All schools (defined as public, private, or parochial child caring centers, day nurseries, day care agencies, nursery schools, kindergartens, elementary, intermediate, or secondary schools) must maintain an accessible database of current immunization records for each student. These records must show proof of immunization compliance and be easily accessible upon request or in the event of a vaccine-preventable disease outbreak. New York State eliminated the ability to claim a religious exemption to school immunization entry requirements. This has resulted in higher immunization rates in school-age children.

The Department maintains a school immunizations team that conducts several key activities to maintain high immunization rates in schools. The annual school survey is the primary method for ascertaining age-appropriate immunization rates and the rate of medical exemptions. Activities include preparation and administration of the survey, follow-up with non-responders, data analysis, and posting of results. Assessment of school survey data helps identify and prioritize locations needing further education, as well as vaccine confidence and demand building.

Schools are visited to ascertain that the actual records are reflected in the survey results, that children who don't comply with school requirements are excluded, that a list of susceptible students is kept by the school, and that schools comply with school entry requirements. Schools are selected based on several factors including nonresponse to the school survey, low immunization rates, concern about false reports, or random selection.

There have been increasing concerns about immunization record fraud. Several providers have been identified who have provided false records in exchange for payment. The School Immunizations team works with the Division of Legal Affairs and the Office of Professional Medical Conduct to disallow false records and ensure that children are vaccinated.

Further, contracts with local health departments and other trusted entities support evidence-based childhood and adult immunization strategies. These partnerships are particularly important as the Department emphasizes meaningful engagement with population subgroups to address persistent disparities in immunization rates.

Non-patient-specific standing orders are another evidence-based approach employed to increase vaccination rates throughout New York. The Commissioner of Health executes standing orders to allow vaccinators to give immunizations per a specified protocol to eligible persons without a prescription or order from their health care provider. [New York State Standing Orders are accessible here.](#)

The New York State Department of Health (the Department) and its partner Health Research, Inc., [received a \\$33 million grant \(OT21 2103\)](#) from the Centers for Disease Control and Prevention (CDC) to address health disparities exacerbated by the COVID-19 pandemic in underserved, marginalized, under-resourced, and rural communities across New York State excluding New York City.

The Department used a significant portion of this historic investment to fund 181 small, grassroots, community-based organizations across the state (excluding New York City, which received its own grant) to expand or enhance chronic disease management and preventive care or social determinants of health programs to include COVID-19 health literacy.

These community-based organizations are trusted voices in underserved and marginalized populations, including racial and ethnic minority groups and rural communities. Each organization received one-time funding valued at just under \$50,000. Along with the funding, the organizations received extensive technical assistance and training about public health, and support through the process of applying for

Vaccine-Preventable Diseases

funding from the Department with the goal that they would be better able to access future funding opportunities. The Department also took steps to transform the way it partners with the community. In this way, the Department has made a commitment to be more equitable in the process of distributing funds and to codesign and authentically partner with community organizations that know their communities best.

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2023

ENGAGING CREDIBLE MESSENGERS

Cohort 1, Small Wellness Mini Bid Awardees

Bureau of Health Equity and Community Engagement



2024

ENGAGING CREDIBLE MESSENGERS

Cohort 2, Small Wellness Mini-Bid Awardees

Bureau of Health Equity and Community Engagement



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Mental Health and Substance Use

This section highlights information and data related to key mental health and substance use issues in New York State. The 3 identified mental health issues are: suicide prevention, maternal mental health, and collective/community trauma. The 3 identified substance use issues are: overdose mortality, underage alcohol use and excessive alcohol consumption by adults, and cannabis use among youth and young adults.

The information and data in this section also directly illustrate the extent and impact of these mental health and substance use issues. This section includes the intersection between mental health and substance use issues and reflects the active coordination of the Office of Mental Health (OMH) and Office of Addiction Services and Supports (OASAS) in addressing these key health issues.

Data Highlights

- Data from 2022 show that overdose mortality remains high in New York State with significant increases in deaths involving fentanyl, cocaine, and psychostimulants between 2018 and 2022.
- In 2022 an estimated 1.8 million adults or 11% of individuals in New York ages 12 and older have an alcohol use disorder.¹ This percentage is slightly higher than the national rate of 10.5%.
- Perceived risk of great harm from smoking cannabis once a month among 12- to 17-year-olds in New York State is 20.3% which is lower than the national percentage of 23.3%.
- In 2022, 1,765 individuals in New York died by suicide and the crude suicide death rate in NY was 9.0 per 100,000 population.
- Among pregnancy-associated deaths, mental health conditions were the leading cause of death (48.7%), and substance use disorder (SUD) played a role in 86.5% of pregnancy-associated deaths due to mental health conditions.
- Each year, there are more than 2,700 violent deaths in New York State that contribute to community trauma including homicides, suicides, unintentional firearm injury deaths, legal intervention deaths (when individuals are killed by law enforcement in the line of duty, and terrorism-related deaths).

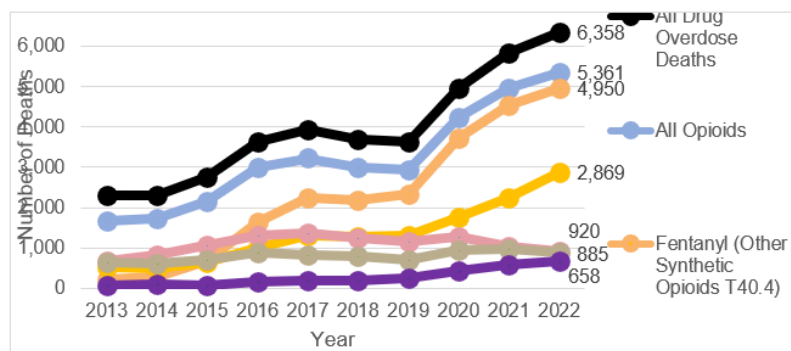
Mental Health and Substance Use

Overdose Mortality

Burden and Distribution Across New York State New York State

Overdose mortality both nationally and in New York State is largely driven by illegally manufactured fentanyl and its analogues (to be termed fentanyl) that are found in the unregulated opioid drug supply and in other illegal substances such as cocaine psychostimulants including methamphetamine, MDMA (ecstasy/Molly), and counterfeit prescription pills.

Figure 1. Number of NY Overdose Deaths by Drug or Drug Class, 2018-2022



Source: CDC Wonder Provisional Mortality Statistics
Data extracted as of 7/3/2024.

Based on data from the CDC, there were 107,942 drug overdose deaths in the United States in 2022.¹ Of these deaths, 69% involved fentanyl and 62% involved psychostimulants including methamphetamine, and cocaine.

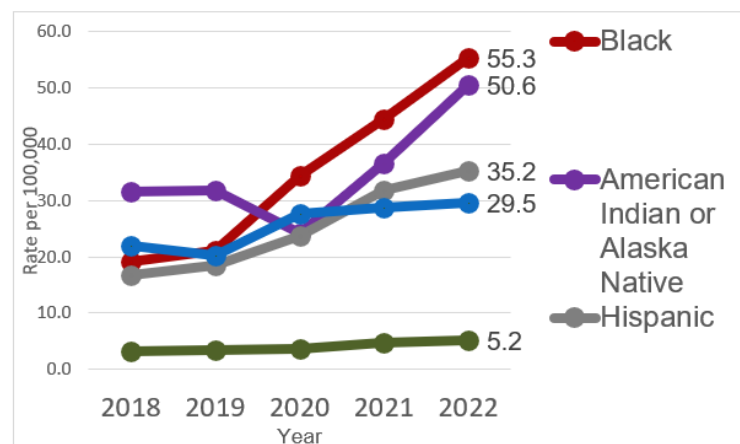
In New York State, there were 6,358 drug overdose deaths in 2022. Of these deaths, 78% (4,950) involved fentanyl, and 55% (3,527) involved cocaine or psychostimulants (Figure 1).²

Health Disparities

Inequities in social determinants of health such as stable housing, education, employment, and incarceration rates as well as access to medications for opioid use disorder and harm reduction services likely play a role in the rising numbers of fatal overdoses among Native America/Alaska Natives (NA/AN) when compared to White individuals.³

Nationally, overdose mortality rates were higher in counties with more opioid treatment programs (OTPs) and buprenorphine availability, especially among Black and NA/AN individuals, indicating that disproportionate access to lifesaving opioid use disorder (OUD) treatment by race and ethnicity persists even if resources are available in a given area.⁴ New York State counties with poorer geographic access to OTPs and federally qualified health centers (FQHCs) had a significant correlation with higher opioid overdose-related ED visits and opioid-related mortality rates. These counties also had a higher proportion of Latino and non-Hispanic Black residents, adults without a high school diploma, and residents living in poverty.⁵

Figure 2. Crude Rate of NY Overdose Deaths, 2018-2022



Source: CDC Wonder Provisional Mortality Statistics
Data extracted as of 7/3/2024.

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Disparities in national and state-level overdose death rates illustrate the differences in health outcomes associated with the overdose epidemic. In the United States, overdose deaths for Native Americans/ Alaska Natives (NA/AN) and Black individuals in 2022 were 30% and 16% higher, respectively, than for White individuals.⁶ In New York State, overdose death rates are highest among Black individuals (55.3 per 100,000 population) and American Indian or Alaska Native individuals (50.6 per 100,000) (Figure 2).²

Although drug overdose deaths for adults 65 and older in the United States are lower than any other age group, the number of overdose deaths increased between 2000 and 2020 from 2.4 to 8.8 deaths per 100,00 population.⁶ In this same age group, the rate of drug overdose deaths from synthetic opioids such as fentanyl increased 53% between 2019 and 2020.

Importance of Prevention

The most effective interventions for the New York State overdose crisis are prevention, harm reduction, and treatment. Increasing the public's knowledge about the dangers of fentanyl and its presence in illegal substances such as cocaine, methamphetamine, MDMA, and counterfeit prescription pills can help people make better-informed choices about substance use.

New York State's Approach to Modifying Risk Factors

With the availability of free naloxone in New York State, anyone can save a life when an opioid overdose is suspected. Additionally, individuals who use substances can obtain free fentanyl test strips so they can determine if fentanyl is in their drugs. Information about obtaining free naloxone and fentanyl test strips can be found on the [OASAS website](#).

Because many individuals with substance use disorders have experienced trauma, particularly adverse childhood experiences (ACEs), treatment programs that have a trauma-informed, resilience-informed approach that also promotes recovery and stronger connections to family and community play an important role in decreasing overdose mortality.

Mental Health and Substance Use

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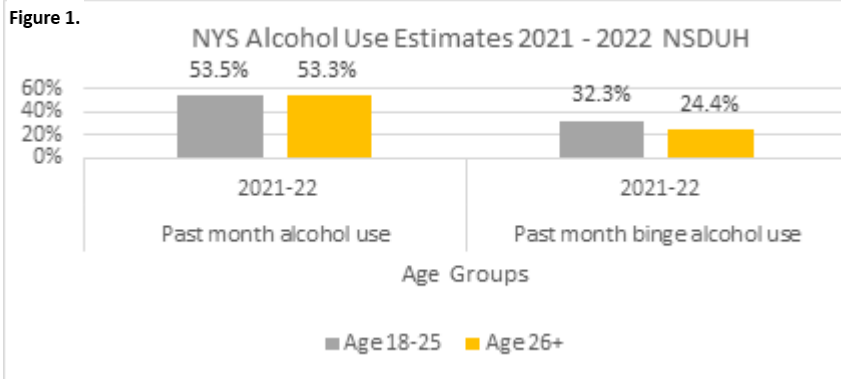
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Mental Health and Substance Use

Underage Alcohol Use and Excessive Alcohol Consumption by Adults

Burden and Distribution Across New York State

Figure 1.

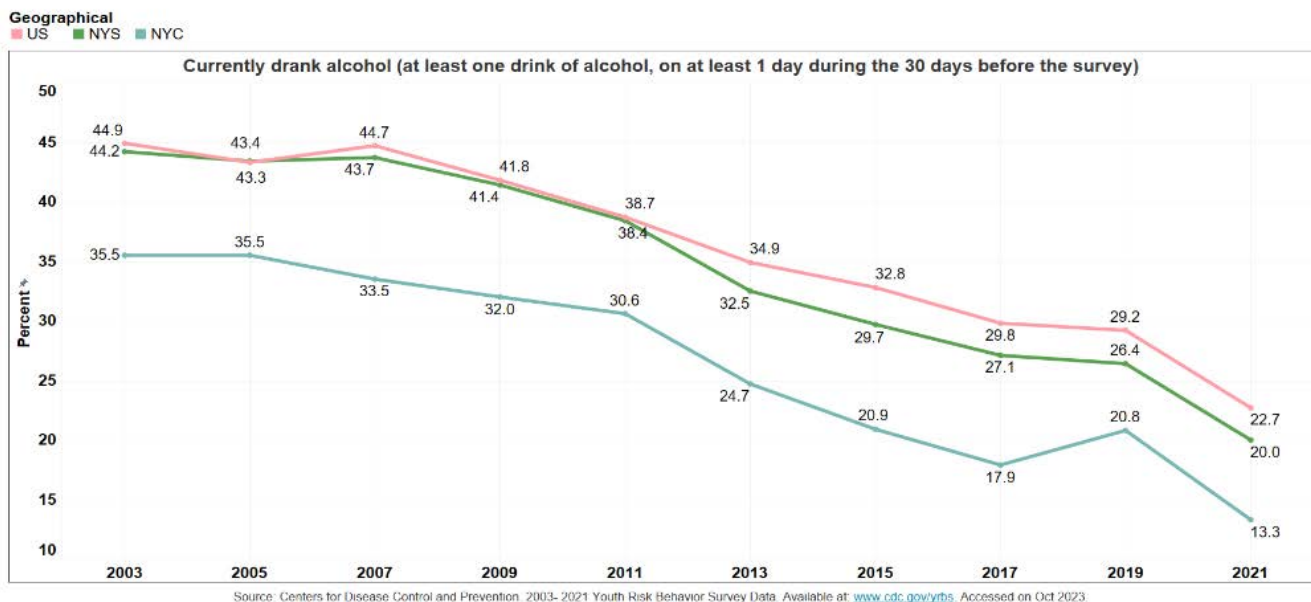


In the United States, 48.7% of the population 12 and older reported alcohol use in the past month. Among those, 44.5% reported binge alcohol use and 11.7% reported heavy alcohol use (8 or more drinks for women, 15 or more drinks for men per week) in the past month. Heavy alcohol use was highest among young adults 18 to 25, followed by adults 26 or

older.¹ For young adults, the availability of alcohol, particularly through social interactions, contributes to increased use when compared to adolescents, even for those young adults under age 21 for whom drinking is illegal. Substance Abuse and Mental Health Services Administration (SAMHSA) estimates about 50% of young adults drank alcohol in the past month and of them, about 29.7% also had a past-month binge drinking episode.¹ Compared to the national data, Figure 1 shows that a higher percentage of young adults in New York State used alcohol in the past month (53.5%) and had a binge drinking episode (32.3%) in 2022. The rates of past-month alcohol use in New York State were similar between young adults and adults over the age of 26 but binge drinking in the past month was highest among young adults compared to other age groups.¹

Figure 2.

High School Alcohol Use Trend Over Time (2003- 2021)



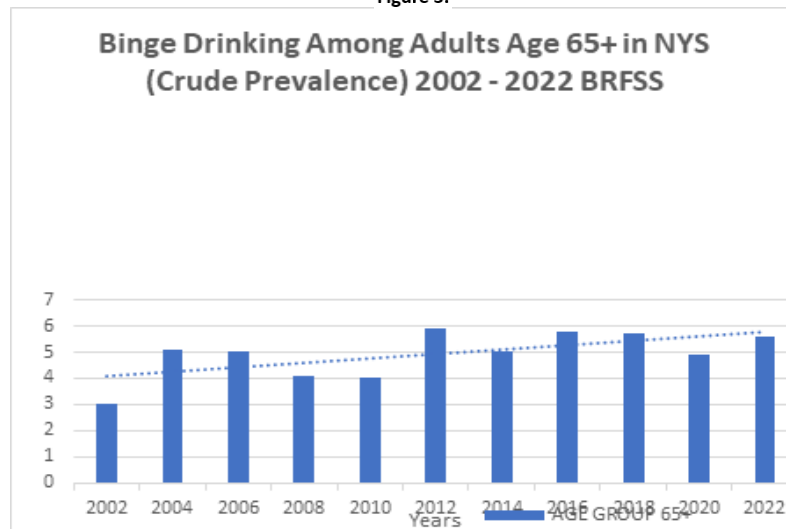
Mental Health and Substance Use

Data from the Youth Risk Behavior Surveillance System (YRBSS), however, shows that high school-age adolescents decreased their alcohol use between 2003 and 2021. The national percentage of high schoolers reporting past-month alcohol use decreased significantly from 44.9% in 2003 to 22.7% in 2021. In New York State, the percentage of youth reporting alcohol use decreased from 44.2% in 2003 to 20.0% in 2021 (Figure 2).²

The prevalence of binge drinking among adults in New York State significantly increased from 14.9% in 2021 to 16.6% in 2022 and 18.4% of individuals in New York reported past month binge alcohol use or heavy drinking in 2022.³ Additionally, excessive alcohol use among older adults is increasing nationally. An estimated 10% of adults ages 65 and older had 5 or more drinks (men) or 4 or more drinks (women) on at least one occasion in the past month, and an estimated 4% had alcohol use disorder (AUD) in the past year.¹⁵

State-level data demonstrate an increase in binge drinking over time among people 65 and older (Figure 3). Older adults have additional risks for drinking alcohol at any level because older adults are more likely than other age groups to take medications, many of which have the potential to interact negatively with alcohol.

Figure 3.



Key Risk Factors

Risk factors for substance use/misuse occur in different domains including individual, family, environmental, and societal. Early initiation of substance use, favorable attitudes, social norms favorable to substance use, and family conflict are well documented risk factors for the development of substance use/misuse problem behaviors later in life.^{4,5} Research demonstrates alcohol use (before the age of 13 years) and heavy drinking in adolescence predict future AUD, with the earlier the onset of drinking, the greater the alcohol use

disorder risk.⁶ Recent guidance from National Institute on Alcohol Abuse and Alcoholism (NIAAA) affirms heavy or binge drinking during adolescence as a risk factor for other unsafe behaviors, including tobacco and other substance use/misuse, unprotected sex, poor school performance, conduct problems, impaired driving, and suicide.⁷

Environmental risk factors for excessive alcohol use include access and availability of alcohol for both underage and adult excessive alcohol. Increased alcohol outlet density is related with increased alcohol sales and consumption.⁸ Greater alcohol outlet density is associated with higher rates of social and health problems related to drinking, vehicular accidents, and emergency department injuries.

Health Disparities

The density of alcohol outlets, defined as establishments where alcohol can be purchased for on-site or off-site consumption, has been shown to be greater in high poverty neighborhoods where more Black, Indigenous, and other residents of color reside.⁹

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Studies have shown lower utilization of specialty alcohol treatment among Latino compared to White individuals. This disparity in treatment utilization may be result of cultural and linguistic barriers to care, lower health literacy, lack of transportation, lack of insurance coverage, and/or competing health and lifestyle priorities.¹⁰

Alcohol outlet density has been associated with several negative health outcomes associated with alcohol use including intentional and unintentional injuries, sexually transmitted infections, interpersonal violence, and homicide^{11,12} that may disproportionately affect minority populations.

Excessive alcohol consumption by older adults may increase the risk of adverse medication interactions, sleep disturbances, cardiovascular disease, cancer, injuries, and death due to falls.¹³

Importance of Prevention

Underage and excessive alcohol use can result in immediate and lasting negative health outcomes including injuries, accidents, and death. Research shows there are significant long-term adverse health effects from excessive alcohol use including liver disease and cirrhosis, cardiovascular disease, cancer, and alcohol use disorder.¹⁴ From a substance use/misuse prevention lens, age-specific alcohol-related harms for youth, young adults, and older adults underline the importance of implementing responsive prevention strategies across the lifespan.

New York State's Approach to Modifying Risk Factors

The approach of the New York State Office of Addiction Services and Supports (OASAS) delivers for delaying substance use initiation, is to optimize the delivery of data-driven and data-informed, evidence-based substance use prevention programs, practices, and strategies for youth across the state. By using innovative coaching models for service delivery and early intervention, our funded prevention providers coach teachers to use effective strategies diffused in the classroom throughout the school year.

OASAS continues to expand the delivery of family-focused programs in underserved communities such as families connected to foster care, the criminal justice system, or in substance use treatment. Evidence-based strategies and programs focused on families increase protective factors such as attachment and decrease family conflict for health disparate and vulnerable communities.

OASAS continues to fund essential training and technical assistance services through the Regional Prevention Resource Centers to build the State's capacity for culturally responsive community-level prevention and to disseminate prevention science to practice. Strengthening data-driven decision-making processes at the community level is crucial for addressing favorable social norms and reducing access/availability to substances at the local level.

Preventing substance use/misuse requires a multipronged approach to be effective. In addition to primary prevention programs and practices, successful strategies should include early intervention screenings to detect the presence of mental health conditions or disorders in both adolescents and adults.

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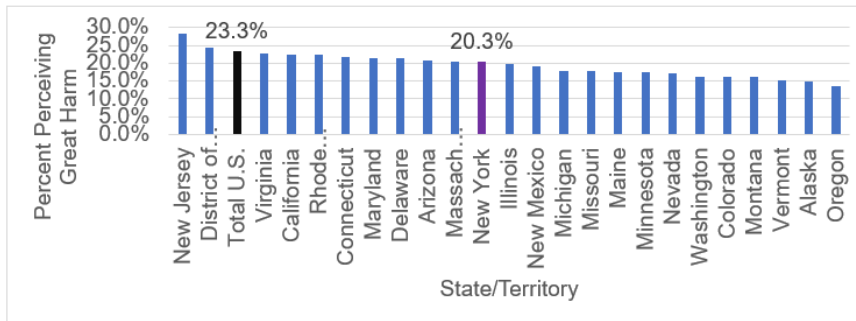
Mental Health and Substance Use

Cannabis Use Among Youth and Young Adults

Burden and Distribution Across New York State

Nationally, cannabis was the most illicit drug used in 2022, and alcohol was the most used substance. Cannabis use was highest among young adults ages 18 to 25.¹ Among the 38% of young adults reporting cannabis use in the last year, 26% used it in the last month. While adolescents ages 12 to 17 were less likely to report cannabis use in the last year, 7% reported using it within the past month.

Figure 1: Perceived risk of great harm from smoking cannabis once a month among 12–17-year-olds



Data Source: National Survey on Drug Use and Health, 2021

At the state level, the 2021 Behavioral Risk Factor Surveillance System (BRFSS) found 12.6% of adults in New York State reported using cannabis in the past 30 days with 6.7% of all adults using it less than 20 days per month. An estimated 5.9% of adults reported cannabis use daily or near daily (20 or more days per month). The most common mode of cannabis consumption by New York State adults ages

18 and older is smoking (73.3%). Among those who use cannabis half (49%) report using cannabis for nonmedical reasons only, 38% for medical and nonmedical reasons, and the remaining 13% consume for medical reasons only.²



Source: Centers for Disease Control and Prevention 2003–2021 Youth Risk Behavioral Survey Data. Available at www.cdc.gov/ybys. Accessed in October 2023.

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Perceived risk of great harm from smoking cannabis once a month among 12- to 17-year-olds in New York State (20.3%) is depicted in **Figure 1** for states and territories with legal adult recreational cannabis use. The Youth Risk Behavior Study (YRBS) data, shown in **Figure 2**, display a decrease over time in the percentage of New York State high school students who used cannabis before the age of 13 years and **Figure 3** demonstrates a similar trend in the data for past 30-day cannabis use among students in grades 9-12 during the same years.³

Figure 3. Current use of marijuana (Cannabis) one or more times during 30 days before survey



Source: Centers for Disease Control and Prevention 2003–2021 Youth Risk Behavioral Survey Data. Available at www.cdc.gov/ybrs. Accessed in October 2023.

The full impact of legalization of adult recreational cannabis on consumption patterns and consequences in New York State is not yet clear. However, OASAS is looking at research conducted in other states in preparation for changes in usage. In a study conducted by Kerr and colleagues, the trend of a decreased perceived risk was observed in states where adult recreational cannabis use was legalized.⁴ Additional studies on consumption patterns found that after state legalization, problematic cannabis use among youth increased, and young adults not enrolled in college were more likely to meet the criteria for cannabis use disorder.⁵ In 2023, OASAS commissioned the University at Buffalo to survey young adults across the state on substance use/misuse and other problem behaviors. The estimate for cannabis use in the past month was 44.3% among those ages 18-24 years living in New York State. Data from this survey point to a rate of 15.9% for problematic use of cannabis in New York State .⁶

Key Risk Factors

OASAS's Risk and Protective Factor Framework includes perceived risk of harm and early initiation of substance use (before the age of 13 years) as important influences in the development of substance use/misuse problem behavior. Monitoring these 2 trends as New York State acclimates to legalized adult recreational cannabis use is essential for planning effective prevention, treatment, recovery, and harm reduction strategies to delay or reduce underage and adult excessive cannabis use.

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Health Disparities

According to a 2017 report by the Drug Policy Alliance, 80% of people arrested for cannabis possession in New York State were Black or Hispanic, even though they made up less than one-third of the population combined and used cannabis at the same rates as White people.⁷ The report also found that most arrests occurred in the poorest neighborhoods in New York State and most people who were arrested were adolescents and young adults between the ages of 16 and 26.⁷

Research studies examining disparities in access to treatment for cannabis use disorder for youth and young adults are currently lacking. One study of adolescents and young adults ages 12 to 24 years admitted for primary cannabis use treatment between 1992 and 2016 found that the most referrals came from the criminal justice system (56%) when compared to other sources such as health care providers (4%).⁸ The lack of referrals from health care providers indicates increased need for education and interventions with health care providers to implement or enhance screening of all adolescents and young adults for cannabis use.

As a result of an arrest or incarceration for cannabis or other drug possession, an individual's ability to access education, employment, housing, and appropriate health care may be negatively impacted for many years afterward.⁹

Studies of older adults have shown an association between cannabis use and emergency department visits for injuries,¹⁰ cannabis poisoning,^{11,12} and impaired driving performance.¹³ The increased availability and access to cannabis for youth, young adults, and vulnerable older adults pose both social and health concerns for individuals throughout New York.

Importance of Prevention

Cannabis use in youth and young adults can have negative effects on mental health and the developing brain. Research shows that cannabis may negatively impact short-term memory, problem-solving, motivation, learning, and attention; and may increase the risk of serious mental health disorders, such as schizophrenia.¹⁴ From a substance use/misuse prevention lens, cannabis-related harms for youth and young adults underline the importance of implementing responsive prevention strategies that may lower the prevalence of cannabis use/misuse in youth and young adults.

New York State's Approach to Modifying Risk Factors

New York State continues to provide targeted culturally appropriate prevention interventions and strategies for individuals, families, and communities to delay or reduce underage and excessive cannabis use. These strategies are data-driven, evidence-based, and culturally responsive. OASAS continues to work closely with the New York State Office of Cannabis Management to distribute relevant educational materials and promote information awareness for safe legal cannabis consumption. Resources are available on the OASAS website for talking with youth, Cannabis 101, The Cannabis Tool Kit, and additional fact sheets.¹⁵

Mental Health and Substance Use

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Suicide Prevention

Burden and Distribution Across New York State

In 2022, 1,765 individuals in New York died by suicide and the crude suicide death rate in New York State was 9.0 per 100,000 population.¹ The age-adjusted suicide death rate in 2022 was the 3rd lowest among U.S. states and was 3.6 times the rate among females. In 2022 suicide was the 14th leading cause of death in New York State among all ages but was the 3rd leading cause of death among 10- to 24-year-olds and the 2nd leading cause of death among 25- to 34-year-olds.¹

Similar to the U.S., New York State's suicide rate in recent years (2020-2022) was 31% higher than 2 decades prior (2000-2002). The prevalence of self-reported suicidal thoughts in the past year was 4.3% among adults² and 16.8% among high school students³ in 2021. In 2022 there were 13,139 emergency department claims, and 9,505 inpatient hospitalization claims for intentional self-harm visits at New York State hospitals.⁴

Key Risk Factors

The strongest risk factors for suicide are a history of suicide attempts and the presence of mental health problems. Access to quality mental health care including suicide safer care practices is important for those at high risk.^{5,6} Other important risk factors include access to lethal means, social isolation, media reporting practices, stressful events such as job loss, early life adversity, and social marginalization.⁷ In New York State, the prevalence of suicidal thoughts was higher among adults who reported more adverse childhood experiences (ACEs).² Among New York State high school students, being bullied at school and being cyberbullied were associated with 3.86- and 4.85-fold increased odds of past-year suicide attempts.³

Health Disparities

Suicide rates in New York State tend to be higher in more rural counties and lower in more urban counties. People living in more rural areas tend to face greater barriers to health and mental health care, lower income and higher poverty rates, and other health-related disadvantages that influence mental health and suicide risk.⁸ In addition, firearm ownership is more common in rural areas⁹, and non-firearm suicides show less of an urban-rural gradient.⁹

Furthermore, structural racism is increasingly being recognized as a key contributor to health disparities. In the case of suicide, structural racism may be especially influential on youth suicide.¹⁰ Structural racism can harm youth mental health and increase suicide risk, create inequities in access to and quality of youth mental health care, and cause inequalities in the effects of suicide prevention practices.¹⁰

Access to mental health care is a key factor in suicide risk. One indicator of this is the prevalence of mental health providers. In New York State counties, the number of mental health providers per 100,000 population ranges from 59 to 461, except for New York County, which has 1,063 mental health providers per 100,000 population.¹¹ On average, suicide rates are lower in New York State counties where the number of mental health providers per population is higher.¹¹

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Although suicide death rates in New York are higher among non-Hispanic White persons, there is increasing concern about suicide-related burden among racial and ethnic minorities, especially youth. In 2021³, reported suicide attempts were more common among Black/African American and Hispanic/Latino students than among White students, and suicidal thoughts were more common among students identifying as another race or ethnicity (combining multiple non-Hispanic, American Indian/Alaskan Native, and Native Hawaiian/Other Pacific Islander).

Suicide risk is also elevated among sexual and gender minorities. Compared to those identifying as straight, individuals in New York identifying as lesbian or gay, bisexual, questioning, or something else were more likely to report suicidal thoughts, among both adults ² and high school students.³

Suicidal ideation and attempts are also more common among high school students in New York State identifying as transgender (41.6% and 47.5%, respectively) than among those who do not (14.7% and 7.0%, respectively).³

Between 2020 and 2022 in New York State, the distribution of suicide rates by age group had 2 peaks, one at ages 45-54 and one at age 85 and older, both at the rate of 12 deaths per 100,000 population.² In addition, firearm suicide rates were highest among those 85 and older (6.4 per 100,000). Suicide rates were lower among 65- to 84-year-olds (9.5 per 100,000). In contrast, rates of emergency department and inpatient hospital claims for intentional self-harm in 2022 tended to decrease with age after young adulthood and were lowest among those age 65+;⁴ reports of suicidal thoughts follow a similar pattern.³

Importance of Prevention

The mission of suicide prevention in New York State, and all such efforts as coordinated through the Suicide Prevention Center of New York, is to promote, coordinate, and strategically advance suicide prevention across the state with the aim of reducing suicide attempts and deaths throughout New York. Prevention saves lives.

New York State's Approach to Modifying Risk Factors

New York State combines a clinical and public health approach to modifying risk factors for suicide by focusing on four areas. Across these four domains, New York State is:

- Offering high-quality evidence-based training and technical assistance. For health care, training is created and disseminated through OMH's partners at Columbia University Center for Practice Innovations, Suicide Prevention - Training, Implementation and Evaluation (SP-TIE). These trainings are made available to clinical professionals statewide. For communities, evidence-based, and evidence-informed trainings are offered and provided by OMH's statewide training network. In some cases, training can be customized based on the audience and needs of the requesting group. For colleges and universities, New York State has made available evidence-based training for college and university students and staff. For schools, New York State has created evidence-informed training and offers them as professional development to New York State schools. In 2022, the New York State training "Creating Suicide Safety in Schools (CS3)" was recognized in the CDC's Suicide Prevention Resources for Action guide as a "promising method for improving schools' suicide safety."
- Providing technical assistance and implementation support. From health care to community and school, New York State offers funding opportunities, support, technical assistance, and recommendations on implementing promising or evidence-based interventions or practices.

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- Piloting evidence-based interventions and promising practices, including data-informed suicide prevention practices.

In addition, New York state offers the 988 Suicide and Crisis Lifeline. The Lifeline connects you to trained crisis counselors 24/7. They can help anyone thinking about suicide, struggling with substance use, experiencing a mental health crisis, or any other kind of emotional distress. You can also call, text or chat 988 if you are worried about someone you care about who may need crisis support.

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Maternal Mental Health

Burden and Distribution Across New York State

In 2018, mental health conditions were the leading cause of death (48.7%), and substance use disorder (SUD) played a role in 86.5% of pregnancy-associated deaths due to mental health conditions in New York State.¹

Key Risk Factors

- Clinical Risk Factors for Perinatal Mental Health Disorders:¹
 - Fertility challenges
 - Pregnancy complications
 - Pregestational or gestational diabetes
 - Previous sexual trauma or traumatic birth
 - Person (pre-pregnancy) or family history of mental health disorders
 - Mental health conditions during pregnancy, such as anxiety or depression
 - Preterm birth/infant admission to neonatal intensive care
 - Breastfeeding challenges
 - Unintended pregnancy
- Social Risk Factors for Perinatal Mental Health Disorders:¹
 - Parents living in poverty
 - Individuals who have been incarcerated
 - Military birthing parent (active duty, dependent, veterans)
 - Low social support, especially from partner
 - Subject to weathering (erosion by chronic exposure to stress - i.e., minoritized groups)
 - Stressful life events during pregnancy or the early postpartum period
 - Domestic violence
 - Low income
 - Low education attainment
 - Medicaid insurance
 - Smoking
 - Single status
 - Lack of social (financial) support
 - Adolescent parenthood

Health Disparities

Discrimination contributes to nearly half of the pregnancy-related deaths experienced on multiple levels, beyond the individual (e.g., system, community, and provider levels):¹

- Inadequate mental health care for patients on Medicaid (*system*)
- Slower emergency medical services (EMS) response in disadvantaged communities (*community*)
- Patient concerns dismissed due to patient race/gender/weight (*provider*)
- Inaccurate assumptions regarding mental health by class, and race (*provider*)

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Disparities in Access to Health Resources:

- **Maternity care deserts in rural New York State:** 2 rural counties in New York State (Hamilton and Seneca) have been designated as “maternity care deserts”—without access to hospitals/birth centers providing obstetric care or obstetric providers. 5 rural counties in New York State (Herkimer, Montgomery, Oswego, Tioga, and Yates) have moderate access to maternity care (under 2 hospitals/birthing centers providing obstetric care, and fewer than 60 obstetric providers per 10 thousand births, and the proportion of women without health insurance is less than 10 percent).²
- **Disparities in access to routine postpartum care:** White individuals in New York are more likely to have received a postpartum checkup compared to individuals of color. Access to postpartum care is also lower for individuals with New York State Medicaid insurance, and those with low educational attainment.¹
- **Disparities in access to screening services:** Postpartum people in New York City are less likely than their Rest-of-State counterparts to report being asked about depression by a health care provider.¹
- **Disparities in access to diagnostic services:** Postpartum individuals in New York of color self-reporting depressive symptoms are less likely than their White counterparts to have been diagnosed with depression by a health care provider.¹
- **Black Maternal Mental Health Disparities:** Compared to White birthing persons, Black birthing persons may be twice as likely to experience a perinatal mental health disorder, but only half as likely to receive treatment.¹
- **Rural Maternal Mental Health Disparities:** People in rural communities have a higher prevalence of postpartum depression but often live in “maternity care deserts” without access to care.¹
- **Disparities in access to treatment services:** Hispanic individuals in New York with a postpartum depression diagnosis are less likely than their White counterparts to report taking depression medication.¹

Effects on Minority Communities:

- **Impact on Black communities:** New York State’s maternal mental health crisis is driving an alarming racial disparity in maternal mortality that Black birthing persons in New York shoulder disproportionately.¹ Black communities are at greater risk for poor maternal mental health outcomes due to the concept of “weathering” or the deterioration of wellness from chronic exposure to stress.³ For example, Black birthing persons experienced higher rates of COVID-related anxiety and depression and reported more concerns about childbirth and childcare.⁴ The maternal mortality disparity increased for Black birthing persons during the pandemic.⁴
- **Impact on Indigenous and American Indian communities:** Birthing people from tribal communities are more likely to experience postpartum depression compared to the general population⁵ and have a higher maternal mortality rate that is driven in part by mental health challenges.⁶ Additionally, birthing people from Indigenous groups are significantly more likely to die by suicide compared to all other racial and ethnic groups,⁷ and more research is needed to assess the specific impact of maternal mental health challenges on these high rates of suicide mortality.

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Importance of Prevention

Prevention strategies are critical to the formulation of a comprehensive public health approach to combat maternal mental health. These include:

- Providing birthing people and their families with access to robust social supports⁸ by screening for their social needs and providing referrals to services,⁸
- Promoting maternal mental health public education and awareness to mitigate the shame and stigma associated with behavioral health challenges during the perinatal period and normalize help seeking behaviors,⁸
- Ensuring equitable access to maternal mental health services, including routine postpartum care visits and screenings to facilitate the early detection and treatment of perinatal mood and anxiety disorders.¹

New York State's Approach to Modifying Risk Factors

New York State relies on a comprehensive prevention strategy to reduce maternal mental health risk factors ranging from system-level to provider-level interventions.

- **Early intervention in infants and young children:** Having a history of mental health illnesses is a clinical risk factor for maternal mental health. Additionally, some evidence suggests that Adverse Childhood Events (ACEs), including abuse, increase risk of maternal mental health challenges during the reproductive period.^{9,10} The New York State Office of Mental Health is actively disseminating the HealthySteps model to promote dyadic wellness for families with infants ages 0-3 to prevent the development of behavioral health challenges later in life. This evidence-based program pairs behavioral health professionals with pediatric teams to promote positive early childhood mental and physical health. HealthySteps is on track to reach an estimated 59 thousand youth through 60 sites statewide. The long-term goal is to grow the program to serve roughly 354,000 children at 224 sites statewide by 2027.
- **Strengthening provider capacity to support behavioral health in the perinatal population:** Project TEACH Maternal Mental Health program strengthens the capacity of providers to identify and address the mental health concerns of their pregnant and postpartum patients, so that those at risk or already suffering from maternal mental health conditions will have better health and access to care. OB/GYNs, nurse practitioners, and pediatric primary care providers may contact a Project Teach warm line operated 40 hours per week to receive a phone consultation with a reproductive psychiatrist. The Office of Mental Health is expanding Project TEACH to include a wider range of front-line practitioners to provide mental health support to the pregnant and postpartum individuals in New York they assist.
- **Specialized maternal mental health trainings for crisis counselors:** The 988 Suicide and Crisis Lifeline is a 24-hour service available to individuals in New York in immediate need of supportive counseling. To strengthen 988 crisis counseling for pregnant individuals and new parents, the Office of Mental Health is developing specialized maternal mental health training to ensure Lifeline staff can better provide compassionate care, support, and necessary resources to mothers and birthing parents who experience mental health distress.
- **Leveraging nontraditional providers, including Community Health Workers, to outreach and engage high risk birthing persons:** Research suggests that Community Health Workers (CHWs) can meaningfully promote maternal mental health equity in minority communities.¹¹ Due to their shared lived experience and understanding of cultural norms around mental health and help seeking, CHWs are poised to establish credibility and trust with vulnerable community

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members and connect them to services. The NYHER Medicaid 1115 Waiver will expand CHW services to Medicaid enrollees, with birthing persons up to 1 year postpartum eligible for enhanced services including case management, housing, transportation, and nutrition support.¹²

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Collective and Community Trauma

Burden and Distribution Across New York State

In 2014, the U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration (SAMHSA) published the report [“SAMHSA’s Concept of Trauma and Guidance for a Trauma-Informed Approach.”](#)¹ The report focuses on developing a working concept of trauma and a trauma-informed approach. Additionally in this report, SAMHSA identifies “Trauma in the Context of Community” as its next area for research and provides 2 perspectives on the topic: *first*, that the way a community reacts to an individual’s trauma can either facilitate or hinder the process of recovery, and *second*, that, if communities experience trauma as a whole, trauma histories can be built into cultural norms, values, and beliefs, and it can be passed from generation to generation.

This expansion from understanding trauma solely at the individual level to including collective trauma demonstrates the growing understanding of trauma as an epidemic at the population level. Researchers have conceptualized collective trauma either as an aggregate of trauma experienced by community members or an event that impacts a few people but has structural and social traumatic consequences.² Examples of community/collective trauma include natural disasters, health emergencies, and mass violence/terrorism.²

Each year, there are more than 2,700 violent deaths in New York State that contribute to community trauma including homicides, suicides, unintentional firearm injury deaths, legal intervention deaths (when individuals are killed by law enforcement in the line of duty, and terrorism-related deaths.³ Additionally, between 2016 and 2020 in New York State, annually there were an average of 55,956 trauma incidents with a 2.6% fatality rate.⁴

Key Risk Factors

Trauma is a significant public health issue, negatively impacting a range of health outcomes that disproportionately impact vulnerable populations including individuals and families with low incomes, those who come from racial, ethnic, immigrant, or sexual minority backgrounds, and those who are homeless⁵, a clear link to trauma and the social determinants of health.

Consistent with other countries, a large percentage of the United States population has experienced significant adversity, including stressors such as life-threatening trauma (interpersonal violence, natural disasters), potentially traumatic events (emotional abuse, non-violent loss), or exposure to poverty, historical trauma, systemic racism, discrimination (racial, gender identity, sexual orientation) or disenfranchisement (lack of opportunities, power, or political representation).⁵

Particularly for individuals in Black, Indigenous, and people of color (BIPOC) communities, there is an increased risk of post-traumatic stress disorder (PTSD), depression, and substance use due to chronic experiences of stress, threats, and violent events that occur in direct relation to race and aspects of identity.⁶

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Health Disparities

Structural inequalities and disparities contribute to intergenerational poverty and unequal distribution of resources in marginalized communities (i.e., Black, Indigenous, and people of color (BIPOC), refugees/immigrants, and rural communities). This inequality is a driver of health disparities in communities that experience increased community trauma. Additionally, the link between the social determinants of health and impact on mental health in such communities has been evidenced. For example, in 2022, an estimated 858,000 (14%) of New York City (NYC) adults reported serious psychological distress (SPD).⁸

The prevalence of SPD in adults was lower among those living in New York City who regarded their neighborhood to be very or somewhat safe (12%) compared with not very safe or not at all safe (22%).⁸ The prevalence of SPD among NYC adults who were unable to pay their rent or mortgage in the past 12 months was double that of those who could pay (20% vs. 10%) and nearly triple among NYC adults who experienced food insecurity in the past 12 months compared with those who did not (23% vs. 8%).⁸

Trauma amplifies health disparities, particularly in communities with increased prevalence of community trauma, taxing already scarce or strained individual, social, and community resources.⁵ Racial trauma and discrimination contribute to economic and educational disadvantages and lack of access to and trust in health care systems due to historical lack of access.⁶ Thus, protective factors such as access to quality health care, education, and social connectedness are scarce in communities who experience increased trauma.

People of color experience higher levels of trauma and adverse life experiences compared to their White counterparts and racism and race-based violence are fundamental causes of health and mental health inequities and poorer outcomes.⁸ As a result, people of color are at increased risk of PTSD, depression, and substance use due to chronic experiences of stress, threats, and violent events that occur in direct relation to race and aspects of identity.⁶ Moreover, this impact may be exacerbated by economic and educational disadvantages and lack of access to and trust for health care systems due to historical lack of access.⁸

Older adults tend to experience increased rates of social isolation and loneliness. The COVID-19 pandemic disproportionately impacted older adults in New York and comprised most of the fatalities, resulting in increased trauma for this population.⁷

Importance of Prevention

Building trauma-resilient families and communities requires proactive outreach and engagement to individuals and communities who have experienced trauma and/or are at risk for trauma. Activities that are essential in this endeavor include enhancing the caregiver-child relationship, creating a connection with the community, and increasing knowledge about the impact of trauma on development and available community resources and services.⁵

Trauma-informed psychoeducation and support, particularly for school communities, need to focus on developing training curriculums for staff and school personnel to increase knowledge of behaviors and symptoms of stress and trauma, as well as trauma-informed coping techniques.⁵

Training in trauma-informed practices is core to capacity-building, particularly in the community context, designed to offset the impact of trauma. Trauma-informed practices arise from a strengths-based framework that emphasizes that all system responses should be grounded in a fundamental

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understanding of the impact of traumatic events on brain development, cognitive capacities, emotions, behaviors, and health outcomes.⁵

New York State's Approach to Modifying Risk Factors

The New York State Office of Mental Health (OMH) has a Community Mental Health Promotion and Support program that dispatches teams of paraprofessional mental health outreach workers to high-need, underserved communities. They provide community engagement, wellness promotion, screenings for mental health conditions, emotional support, and referrals, to licensed mental health professionals. The program's goal is to help individuals in New York with mental health needs that could benefit from emotional support, but not necessarily clinical treatment, and support community mental health and wellness connections.

OMH's Community Outreach and Public Education Office was created in 2004 in response to the increased demand for accessible mental health information. It was also created to nurture OMH's physical presence at professional and community events. To promote the mental health and wellness of all individuals in New York through education and outreach, the office provides community outreach and mental health education in a variety of forums, including:

- Outreach to colleagues at professional mental health, nursing, and public health conferences to increase awareness and access to services
- Legislative events so that elected officials can bring resources back to their constituents in their districts
- Community events such as food festivals, block parties, faith-based events, and open houses at public libraries to normalize and de-stigmatize the conversation around mental health

OMH's *Project ENGAGE* was initiated to decrease disparities in mental health and substance use problems by utilizing technology and training lay personnel. The Project created a Community Wellness Workforce to provide high quality and accessible mental health assessments, immediate care, and referrals and promote overall wellness. A significant focus of the Project is to address the social determinants of health.

Project ENGAGE was originally designed through research in low-resourced countries. The *ENGAGE* model was developed in response to the need for service delivery approaches that dramatically increase the number of people who get quality care for behavioral health problems.

ENGAGE diversifies the workforce to reach communities in need that have been historically underserved by the public mental health system. *ENGAGE* also connects high-need individuals in New York with a Community Wellness Workforce comprised of lay community members who are trained and certified to provide screening and services in historically underserved communities supervised by mental health specialists.

By training Community Wellness Workers to triage and provide care through a digital decision and treatment support platform, *ENGAGE* can greatly increase the number of people receiving evidence-based care promptly and reduce clinic waitlists.

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Environmental Health and Healthy Communities

This section provides information on environmental health in New York State, related trends, disparities, and resources. It includes the following topics: Childhood Lead Exposure, Foodborne Diseases, Heat-related Illness, Injury, Violence and Occupational Health, Legionella, and Radon Exposure.

Data Highlights

- The number of children under 18 tested for blood lead has increased from 2021 to 2023. In 2023, 5,969 children were identified with elevated blood lead levels (BLL ≥ 5 micrograms-per-decilitar ($\mu\text{g}/\text{dL}$)). Children living in older housing, families in poverty, refugee populations, and non-Hispanic Black children are at greatest risk of childhood lead poisoning.
- From 1980 to 2022, there were 3,343 identified foodborne disease outbreaks in New York State, including New York City. On average, there were 80 foodborne disease outbreaks, 339 associated illnesses, 64 hospitalizations, and 2 deaths annually. From 2018 to 2022, there were 33 outbreaks of unknown etiology, accounting for 16.7% of all outbreaks during that period.
- Each year about 2,000 individuals in New York State visit the emergency department or are hospitalized for a heat-related illness. Historically disadvantaged or marginalized communities may have an increased risk of heat-related illness due to socioeconomic disparities and disproportionate exposures. Outside of New York City, more than 30% of people with incomes less than \$35,000, and more than 20% of people with incomes from \$35,000-\$49,999 do not have access to air conditioning.
- Injuries, unintentional and intentional, are a leading cause of death and disability among all age groups in New York State. More than 13,000 individuals in New York State die every year due to an injury. More than 94,000 individuals are hospitalized annually, and another 1.2 million injured individuals are treated at an emergency department in New York State. More than 250 workers die annually from traumatic work-related injuries in New York State. Another 9,200 are hospitalized each year from work-related injuries and illnesses.
- More than 800 cases of Legionnaires' disease and Pontiac Fever are reported each year in New York State, including New York City. In New York State, Black/African American persons consistently have higher incidence rates than other racial and ethnic groups. The factor that most strongly correlated with racial disparities in legionellosis is low-income level/household poverty.
- Radon is a naturally occurring radioactive gas that comes from the radioactive decay of uranium in soil, rock, and groundwater. Radon is the second leading cause of lung cancer and the number one cause of lung cancer among non-smokers. Radon is responsible for about 21,000 lung cancer deaths in the U.S. every year. 40 of 62 counties in New York State have an average indoor basement-level radon concentration greater than the U.S. Environmental Protection Agency (EPA) action level of 4 pCi/L and are considered "high-risk" radon counties.

Childhood Lead Exposure

Burden and Distribution Across New York State

Lead is among the most common environmental contaminants. Children are most often exposed to lead by dust or dirt that is contaminated with lead. In 2023, 5,969 children under the age of 6 years old were identified with elevated blood lead levels (Blood Lead Level (BLL) ≥ 5 micrograms-per-decilitar ($\mu\text{g}/\text{dL}$))¹, which causes learning disabilities, anemia, and growth problems.² Children exposed to lead may have difficulty paying attention and may become aggressive.

Elimination of childhood lead exposure is essential to improving the lives of children in New York State, especially those in low-income families who are disproportionately affected. New York State has made significant progress toward reducing the incidence and severity of childhood lead exposure, but it remains a serious public health problem.

Because damage from lead poisoning cannot be reversed, children must be protected from lead exposure. Routine blood lead testing helps identify children early, and it is essential to ensure coordination of follow-up services to minimize harmful effects and prevent further lead exposure. Health care providers are required under New York State Public Health Law Title 10 of Article 13 of the Public Health Law and 10 NYCRR Part 67 to test all

children for lead at or around age 1 and again around age 2. Providers are also required to assess all children ages 6-72 months at least once annually for lead exposure and perform blood lead testing of all children found to be at risk based on those assessments.

The number of children under 18 years old tested for lead has increased from 2021 to 2023 (Figure 1) after a reduction in testing was observed due to the COVID-19 pandemic. Figure 2 depicts blood lead testing results for children, not including New York City data. This figure shows a slight increase in the

Figure 1: Number of Children under eighteen years old tested for blood lead levels from 2019–2023.

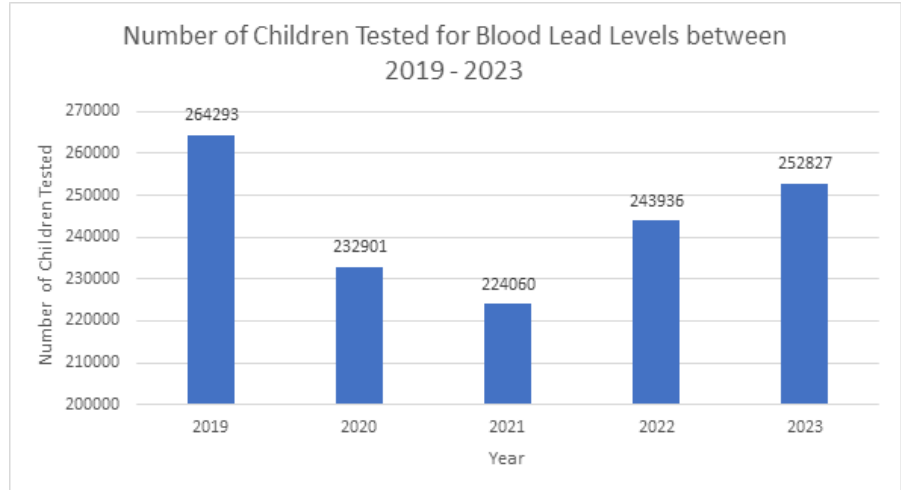
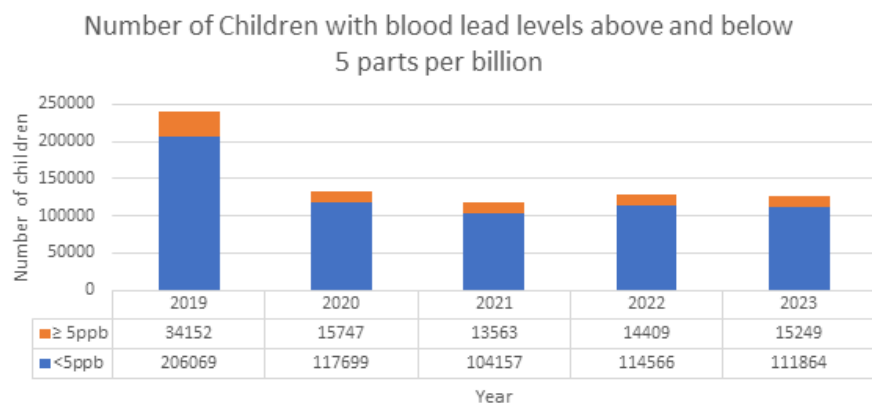


Figure 2: Number of children in NYS, excluding NYC, with blood lead levels, greater than 5 $\mu\text{g}/\text{dL}$ between 2019 - 2023



Environmental Health and Healthy Communities

number of children with elevated blood lead levels from 2021 to 2023, which likely corresponds to the increase in the number of children tested.

Key Risk Factors

Children living in older housing, families in poverty, refugee populations, and non-Hispanic Black children are at greatest risk of childhood lead poisoning. Children living in geographic areas with an elevated incidence of childhood lead exposure are most at risk. Many children with high blood lead levels are also disproportionately affected by other environmental issues in their communities.

Health Disparities

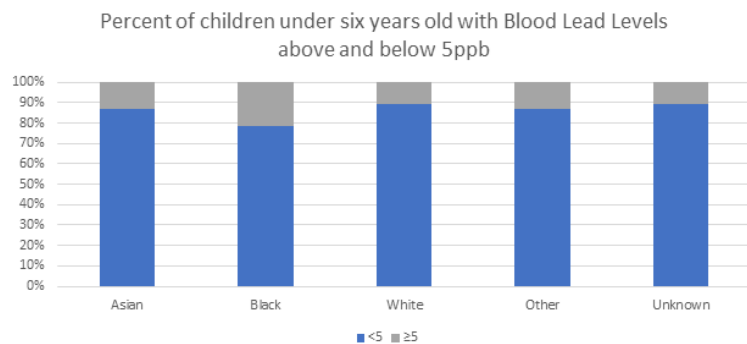
Over time, childhood lead exposure has steadily declined across the nation. Bans on lead in paint for residential housing, gasoline, food cans, and consumer products have led to significant reductions in the rates of lead exposure across all populations. However, findings from the National Health and Nutrition Examination Surveys (NHANES) continue to show that lead exposure disproportionately affects low-income families and non-Hispanic Black children.³

Residents of historically disadvantaged or marginalized communities may be more likely to encounter lead due to poor housing conditions. Rental properties in urban areas, where predominantly Black, Latino, or lower-income communities live, are often poorly maintained and contain chipping and peeling lead-based paint. It is common for landlords to provide fewer maintenance and renovation projects in these areas compared to those in less urban areas⁴.

Across New York State there is a legislative requirement for all 1- and 2-year-olds to have their blood lead level checked as part of their well-child visit, however, we know that there are disparities in access to health care that may lead to differences in testing rates among historically disadvantaged or marginalized communities.

In New York State more than 20% of Black children under 6 years old, tested for blood lead, had elevated blood lead levels (Figure 3).

Figure 3: Number of Children under six years old tested for blood lead levels from 2019 – 2023, stratified by race.



Importance of Prevention

Lead is a known neurotoxin and there is no safe level of exposure - even minimal exposure can lead to behavioral and developmental delays, diminished growth, and a hindered ability to learn. Over time this can lead to costs associated with health care utilization, special education needs, and increased crime rates. Lead can be found in air, water, soil, and in products used in and around homes. While lead exposure is preventable, in most cases, the main source of lead exposure for children is deteriorating lead-based paint in pre-1978 housing. Less common sources of lead may include, but are not limited to, water contaminated from lead pipes, soil contaminated by lead, and certain consumer products that contain lead. In New York State roughly 7,000 children are identified as having elevated blood lead levels annually. Any amount of lead is hazardous and investments in lead poisoning prevention can lead to improved health outcomes and financial return on investment.

New York State's Approach to Modifying Risk Factors

Compared to other states, New York State bears an especially heavy burden from childhood lead exposure, with low-income families living in older, poorly maintained housing which increases the risk of childhood lead exposure. U.S. Census data⁶ states that New York State has the highest number (3,303,770) and the highest percentage (43%) of homes at risk for childhood lead exposure. Recognizing that there is no safe blood lead level in children, the Centers for Disease Control and Prevention (CDC) recommends the use of a reference value for lead poisoning which is currently 3.5 µg/dL. In New York State the current action level is 5.0 µg/dL.

Many local health departments are actively taking public health actions when these lower blood lead values are identified, significantly increasing the number of children needing care coordination services and additional resources. Examples of these public health actions include mailing lead poisoning prevention and nutrition educational materials to the child's parent or guardian, or referral to a Childhood Lead Poisoning Primary Prevention Program for an environmental investigation. Initiatives in New York State to reduce lead exposure include:

- **The Lead and Copper Rule** requires public water systems to monitor for lead in drinking water and to reduce the corrosivity of water if it exceeds an action level of 15 parts per billion.
- **The Lead Poisoning Prevention Program** is funded statewide and promotes childhood blood lead testing, laboratory reporting of results, care coordination, and environmental intervention for elevated blood lead levels in a child.
- **The Childhood Lead Poisoning Primary Prevention Program** uses a housing-based approach to prevention. Funding is used for environmental housing inspections in high-incidence geographic areas identified in 15 counties. According to a 2009 study⁶, every dollar invested nationally in lead paint hazard control results in a return of \$17-\$221, or a net savings of \$181-\$269 billion. The accrued financial benefits are derived from higher lifetime earnings, increased tax revenue, lower health care costs, lower direct costs for crime, and reduced need for special education.
- **The New York State Rental Registry Program** (to be implemented Fall 2025) requires pre-1980 rental units in housing with 2 or more dwelling units in Communities of Concern, which are designated by the State Department of Health, to be registered and inspected for lead safety at least once every 3 years.
- **The Healthy Neighborhoods Program** seeks to reduce the burden of housing-related illness and injuries through a holistic, healthy homes approach. This program includes lead poisoning prevention.
- **The Lead Testing of School Drinking Water** law became effective on September 6th, 2016, and was amended in December 2022. It requires that all New York State schools test for lead from all water outlets and report their results to the New York State Department of Health. If the water from any outlet exceeds the specified action level, the outlet must be taken out of service until corrective actions can be applied. The school must also provide public notification of its testing results.
- **The Lead Service Line Replacement Program** provides municipalities with grant funds to facilitate the replacement of residential lead water service lines (from the municipal water main to the residence) in the highest-risk areas of the state.
- **Regional Lead Resource Centers** are 3 regional hospitals that maintain and provide expertise on the medical treatment of children who are identified with very high blood lead levels. The Regional Lead Resource Centers provide lead poisoning prevention education directly to primary care providers and families within their region. They also provide consultation to the primary

care providers of lead-poisoned children and direct services to intervene in childhood lead exposure.

- **The Adult Occupational Health Lead Poisoning Program** tracks elevated blood lead levels in adults and provides occupational intervention and exposure risk assessment to workers and pregnant women who have been exposed to lead.

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Foodborne Illness

Burden and Distribution Across New York State

Each year, 1 in 6 Americans gets sick from eating contaminated food. The CDC defines a foodborne disease outbreak as an incident in which 2 or more persons experience a similar illness resulting from the ingestion of a common food.¹ This definition is also used by New York State, which divides foodborne disease outbreaks into 6 etiology categories: bacterial, viral, chemical, parasitic, multiple, and unknown. Foodborne disease outbreaks can be prevented by the control or elimination of hazards.

The collection of data about foodborne disease outbreaks in New York State began in 1980. From 1980 to 2022, there were 3,343 identified foodborne disease outbreaks in New York State, including New York City. On average, there were 80 foodborne disease outbreaks, 339 associated illnesses, 64 hospitalizations, and 2 deaths annually.

From 1980 to 2022, there was a decline in the annual number of outbreaks in New York State (Figure 1). This decline may be attributed to a multitude of factors including, but not limited to, improved food safety practices and the implementation of food safety policies. The decrease seen in 2009 and 2020 is likely due to multiple factors related to the 2009 H1N1 outbreak and the 2020 COVID-19 pandemic. This could have been related to stay-at-home orders, restaurant closures, school, and childcare closures, changes in travel habits, and other public health interventions.

From 2018 to 2022, there were 33 outbreaks of unknown etiology, accounting for 16.7% of all outbreaks during that period (Figure 2). Outbreaks of unknown etiology are of particular concern because the inability to identify an outbreak etiology can hinder efforts to prevent additional illnesses from occurring and implement appropriate control measures.¹

Figure 1. Number of Foodborne Disease Outbreaks, NYS, 1980 - 2022

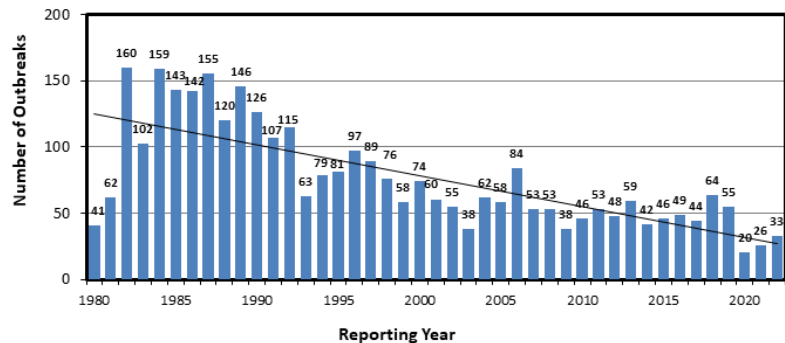
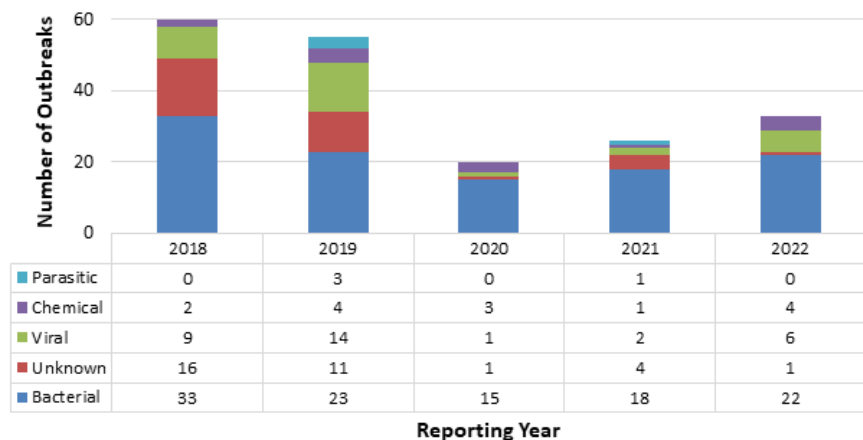


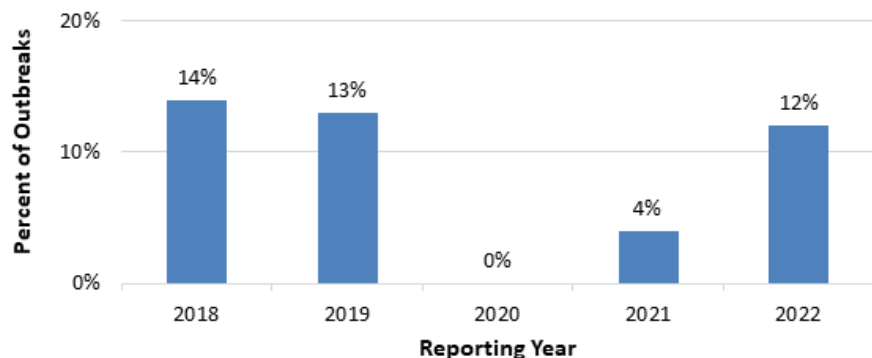
Figure 2. NYS Foodborne Disease Outbreak Etiology, 2018 - 2022



Key Risk Factors

There were 198 foodborne disease outbreaks identified from 2018 to 2022. Of these outbreaks, 107 (54%) identified 1 or more contributing factors during the outbreak investigation. Contributing factors are the circumstances that lead to the occurrence of the outbreak², and one outbreak may have multiple contributing factors. Among outbreaks where 1 or more contributing factors were identified, the most cited contributing factors were: contaminated ingredients (33.6%), an infected person (19.6%), inadequate cooking (14%), and a natural toxicant (14.0%). Between 2018 and 2022, infected persons were identified as a contributing factor in 21 (19.6%) foodborne disease outbreaks (Figure 3).

Figure 3. NYS Percentage of Foodborne Disease Outbreaks Attributed to Infected Persons, 2018-2022



Health Disparities

All state residents and visitors may be affected by foodborne illness, regardless of age, race, sex, geographic location, or socioeconomic background.

Importance of Prevention

Good food safety practices and policies that address transmission from an infected person are realistic control measures that can be implemented by Food Service Establishments (FSEs). Implementation and enforcement of good food safety practices could better control outbreaks associated with ill food handlers.

New York State's Approach to Modifying Risk Factors

New York State Department of Health investigates all foodborne disease outbreaks. The primary goals of outbreak investigations are to: (a) stop the outbreak(s) to prevent more people from becoming ill; (b) identify contributing factor(s), causative agent(s), and implicated food vehicle(s); and (c) inform the Department's prioritization of food service inspection efforts to help prevent future outbreaks. Grant funding provided by our federal partners provides staffing, training, and supplies to improve outbreak investigations and prevent future outbreaks across our state.

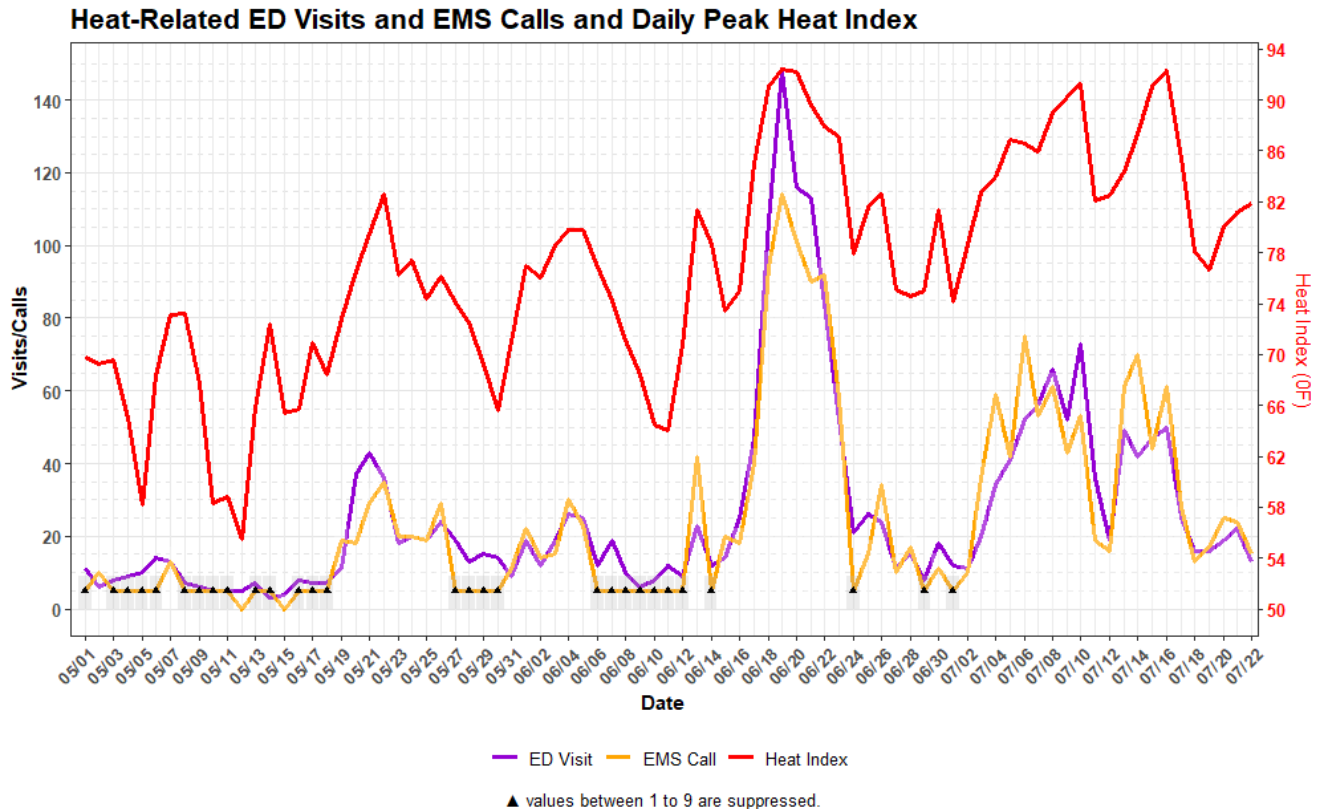
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Heat-Related Illness

Burden and Distribution Across New York State

As climate change progresses and temperatures continue to warm, New York State may be at higher risk for extreme heat compared to states with warmer climates. Studies suggest that the range of temperatures at which adverse health effects occur may be lower in the Northeast than in other areas of the country with hotter weather; this susceptibility to extreme heat at lower thresholds may be because residents' bodies are not acclimated to the heat.



Extreme heat affects the health and well-being of individuals across the state. Direct impacts of extreme heat include heat-related illnesses such as heat edema, heat stroke, heat exhaustion, heat cramps, and dehydration. Each year about 2,000 individuals visit the emergency department in New York State or are hospitalized for a heat-related illness. This burden is distributed across urban and rural areas and among race/ethnic groups. Extreme heat can also exacerbate other existing health conditions such as renal, lung, and cardiovascular disease. In some cases, exposure to extreme heat can directly or indirectly contribute to death.

Anyone can suffer from the impacts of extreme heat. Increases in emergency department visits, admissions to hospitals, and deaths are observed during and following extreme heat events. The figure above shows the relationship between emergency department visits and Emergency Medical Service (EMS) calls for heat and heat index during the summer of 2024 and illustrates increases during warmer weather.

Key Risk Factors

High-risk factors correlated with adverse health outcomes include socioeconomic vulnerabilities; working and recreating outdoors; age; preexisting medical conditions; and other factors that impact an individual's ability to access a cool space.

Health Disparities

Some studies suggest that residents of historically disadvantaged or marginalized communities have experienced socioeconomic disparities and disproportionate exposures to extreme heat that may increase their risk of heat-related illness.¹

Air-conditioning (A/C) is a primary resource for reducing the risk of heat-related illness. Data from the 2018 Behavioral Risk Factor Surveillance System (BRFSS) suggests that approximately 17% of individuals in New York State don't have access to air conditioning. This proportion is slightly higher (approximately 20%) among residents of New York State outside of New York City. The estimated proportion of Black non-Hispanics without access to air conditioning (A/C) is higher than other race/ethnic groups.

Access to air conditioning (A/C) is higher across all income groups in New York City compared to New York State outside of New York City. Outside of New York City, more than 30% of people with incomes less than \$35,000, and more than 20% of people with incomes from \$35,000-\$49,999 do not have access to air conditioning.

Although the rates of heat-related illness are not disproportionately higher among minorities, they may have disproportionate exposures that could contribute to the worsening of existing health conditions and are less likely to have air conditioning, a key preventative factor for heat-related illness.

Adults ages ≥65 tend to have higher rates and risks of heat-related illness emergency department visits and hospitalizations than younger age groups.

Importance of Prevention

There are relatively easily implementable strategies that could reduce the risk of heat-related illness. It is generally thought that access to a cool space is a key factor in reducing the risk of heat-related illness and may play a role in reducing heat-exacerbated illnesses as well. Heat-related illness among workers impacts wages and productivity and could affect the ability to retain a job.

New York State's Approach to Modifying Risk Factors

The New York State Department of Health Center for Environmental Health is working to address heat-related illness by:

- Working with Office of Temporary and Disability Assistance to promote Home Energy Assistance Program (HEAP) Cooling Benefit
- Developing a Cooling Center Finder
- Encouraging climate and health adaptations on the part of local health departments
- Developing a multiagency Extreme Heat Action Plan
- Developing a program to provide free air conditioners to those eligible under the New York State of Health Essential Plan

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Legionella

Burden and Distribution Across New York State

Legionella, the bacteria that causes Legionnaires' disease and Pontiac fever, is part of the normal microbial population in freshwater environments worldwide. Its ability to thrive in biofilms of built water systems, affinity for thermally modified water, and resistance to chlorine levels found in potable water supplies have contributed to the emergence and increase of legionellosis/Legionnaires' disease in the United States and many other countries.¹ *Legionella* are particularly well suited to infecting alveolar macrophage cells in human lungs.²

Environmental conditions make people in the northeastern U.S. more prone to legionellosis than other parts of the country. In 2015, a large outbreak in the Bronx resulted in 138 cases and 16 deaths. Weather conditions have been implicated in the increased occurrence of legionellosis³, but multiple water exposures in the community can contribute to ongoing, sporadic disease.

A recent study conducted by New York State Department of Health and the University of Albany Department of Atmospheric Sciences found a strong correlation between improved air quality and the increase in legionellosis incidence across the U.S. and specifically New York State.⁴ The reduction in atmospheric sulfur dioxide may be having a protective effect on aerosolized bacteria emitted from cooling towers and other sources.

Nationally, Legionnaires' disease accounts for approximately 3-8% of community-acquired pneumonia cases.¹ Clusters and outbreaks occur when 2 or more people become ill in the same place at approximately the same time.⁵ Legionellosis is a growing concern both regionally and nationally. Reported cases in the United States increased 9-fold between 2000 and 2018.⁵ Currently, more than 800 cases of Legionnaires' disease and Pontiac Fever are reported each year in New York State including New York City (Table 1).⁶

Table 1: Legionellosis Cases and Case Rate per 100,000 in New York State

Legionellosis Cases and Case Rate per 100,000 population in New York (data from public website)												
	Year											
	2018		2019		2020		2021		2022		2023	
	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000
New York State Excl. New York City	770	6.9	606	5.5	380	3.4	615	5.5	456	4.1	516	4.7
New York City	656	7.6	443	5.4	321	3.9	363	4.4	361	4.4	281	3.4
Total/Average	1426	7.2	1049	5.4	701	3.6	978	5.1	817	4.2	797	4.1

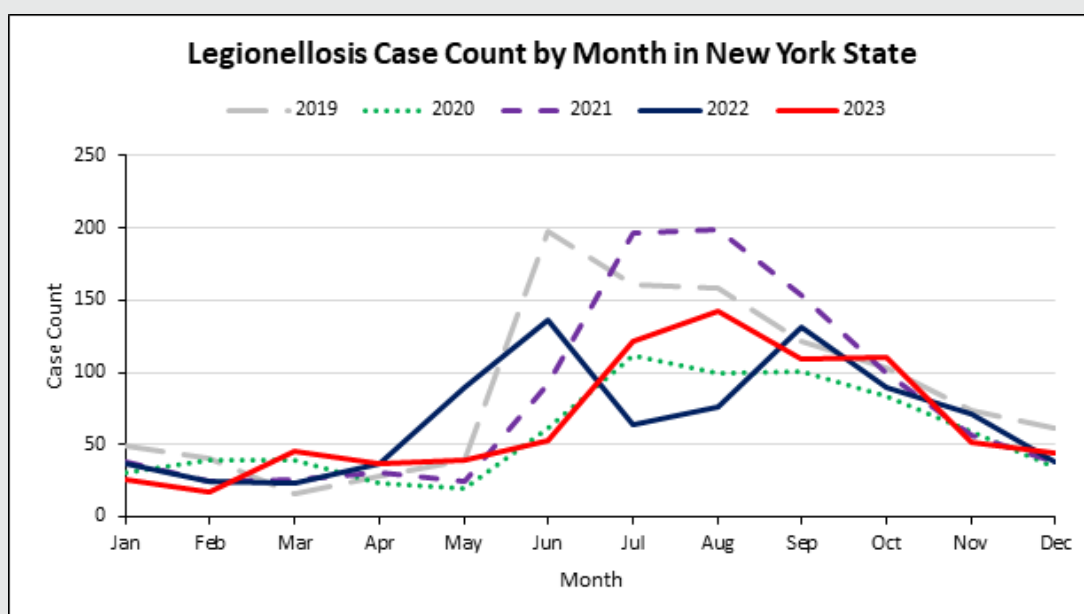
Incidence rates over this time were higher in New York City compared with the national average, which in recent years has fluctuated between 2.5 and 3 cases per 100,000.⁵ This increase may be due to local

conditions such as climate and weather, as well as New York’s more active surveillance practices.

Legionellosis incidence follows seasonal patterns in the U.S. Northeast, with most cases in New York State occurring between June and October (Figure 1). The high rates in warmer months correlate with the recently observed pattern of *Legionella* sampling results exceeding 1,000 colony-forming units per milliliter in cooling towers in the summer in New York State.

Many seasonal cooling towers are sampled during the months when maximum exceedances are observed, which may account for some of the coincident maximum disease occurrence. However, half of the >10,000 cooling towers registered with the State are used year-round so there may be additional variables affecting the increased incidence of legionellosis during warm weather.

Figure 1: Legionellosis case county by month in New York State, 2019 – 2023⁷



Key Risk Factors

Most healthy individuals do not become infected with *Legionella* when they have been exposed; only 5-10% of those exposed become ill. People at higher risk of getting sick after being exposed include those 50 or older; current or former smokers; those with chronic lung disease (like chronic obstructive pulmonary disease or emphysema); those with a weakened immune system from diseases such as cancer, diabetes, or kidney failure; and those who take drugs that suppress (weaken) the immune system (such as after a transplant operation, chemotherapy, or corticosteroid treatment). These risk factors make individuals in hospitals and nursing homes particularly vulnerable to *Legionella*. Health care-associated outbreaks of legionellosis currently account for 57% of cases and 85% of fatalities in the U.S., with potable water systems being the most frequent source of exposure.¹⁰

Health Disparities

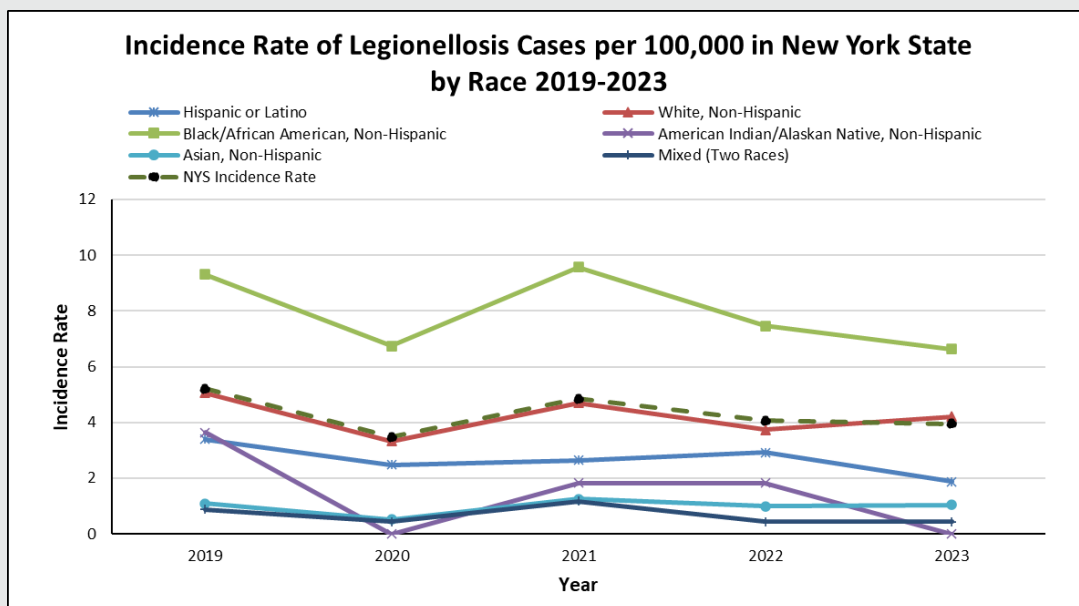
The factor that most strongly correlated with racial disparities in legionellosis is low-income level/household poverty.¹¹ Disparities in housing stock or community-level infrastructure such as proximity

to industrial buildings and cooling towers, aging water infrastructure and premise plumbing, and the percentage of vacant buildings may drive racial and socioeconomic inequities in environmental exposures.¹²

Nationally, the incidence rate among Black/African American persons has been rising at a faster rate than other racial and ethnic groups.¹¹ In New York State, Black/African American persons consistently have higher incidence rates than other racial and ethnic groups (Figure 2).⁹

Older adults are more vulnerable to infection. In 2016, the incidence rate among adults ages 60 and over was more than twice that of those ages 50-59 (12.3/100,000 population vs. 5.2/100,000 population).⁹

Figure 2: Incidence rate of Legionellosis cases per 100,000 in New York State by Race, 2019-2023⁹



Importance of Prevention

Legionnaires' disease is a severe form of pneumonia caused by inhaling or aspirating water contaminated with *Legionella* bacteria. Legionnaires' disease often requires hospitalization and is fatal in about 10% of cases overall, and in 25% of health care-associated cases.¹⁶ The U.S. observed a nearly 9-fold increase in *Legionella* infection between 2000 and 2018⁵, with New York State having one of the highest case counts and incidence rates at approximately 3 times the national average. *Legionella*-associated outbreaks have increased in number over time and were the leading cause of reported drinking water outbreaks, including hospitalizations and deaths.¹⁸

Approximately 1000 cases a year are typically reported in New York State. Those most vulnerable to Legionnaires' disease are male, over age 50, have a history of smoking, have chronic respiratory diseases, diabetes, are immunocompromised, and/or minorities.¹⁹ Legionnaires' disease has been shown to have a socioeconomic gradient, with the highest incidence occurring in the highest poverty areas impacted by lower housing and drinking water infrastructure quality, pollutant exposures, and comorbidities^{20, 21}.

New York State's Approach to Modifying Risk Factors

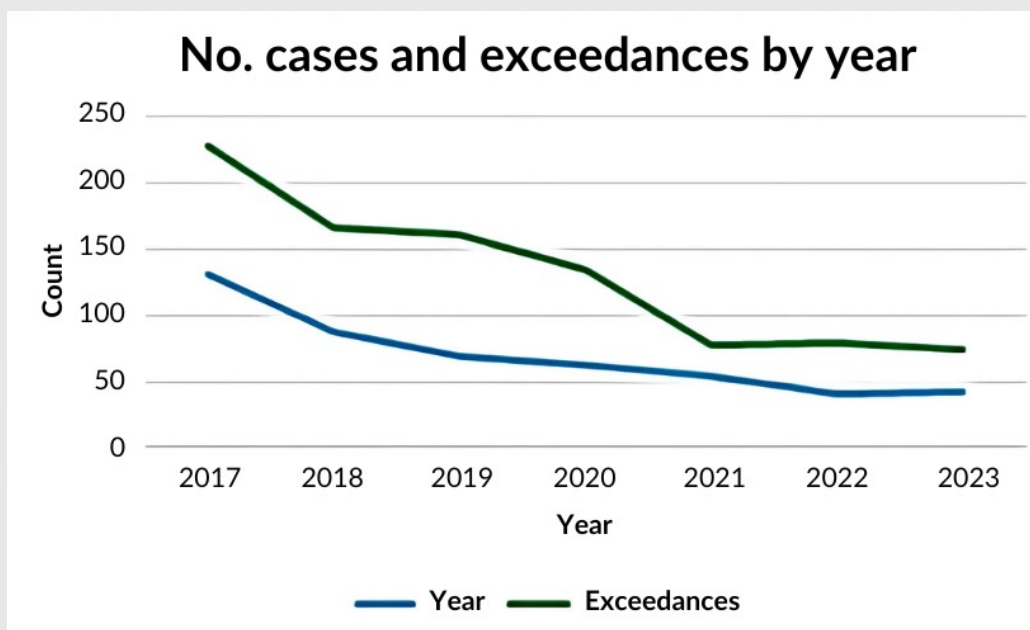
Despite funding and resource limitations, the New York State Department of Health *Legionella* program is recognized as one of the strongest in the country. New York State was the first state to implement comprehensive regulations addressing *Legionella* and has the most extensive state requirements for cooling towers and health care facilities in the country.¹³

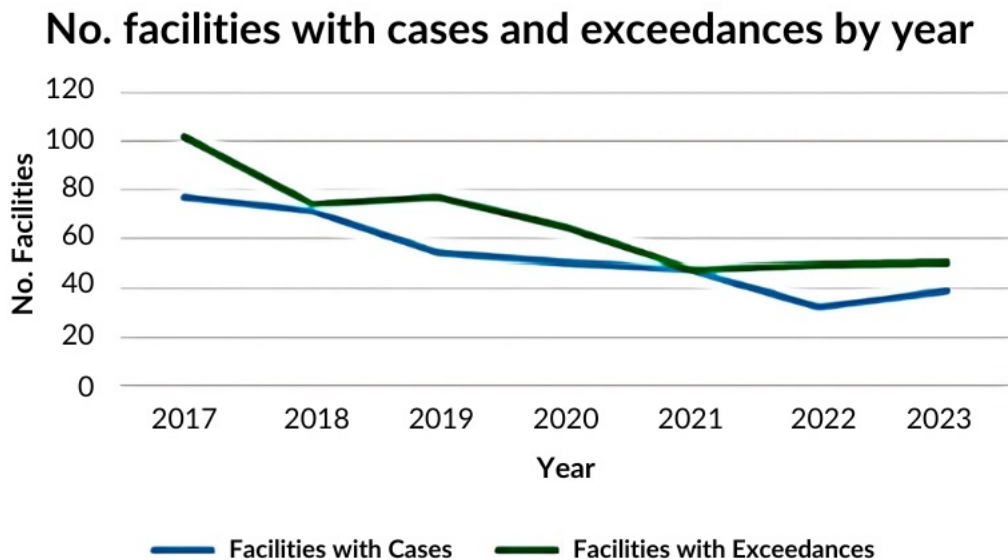
In 2016, New York State implemented 10 New York Codes, Rules, and Regulations (NYCRR) Part 4, Protection Against *Legionella*, a regulation to help reduce the burden of disease in the state. The new regulation is divided into 2 sections: Subpart 4-1, which regulates the operation of cooling towers (cooling towers, evaporative coolers, and condensers), and Subpart 4-2, which regulates the potable water systems in general hospitals and residential health care facilities (i.e., nursing homes). The statewide cooling tower registry is an important tool for identifying possible point sources of *Legionella* during outbreak investigations.¹⁴

Active enforcement of Subpart 4-2 by New York State Office of Primary Care and Health Systems Management (OPCHSM) health care facility inspectors appears to be contributing to a steady reduction in nosocomial (health care-acquired) legionellosis cases compared with the overall state trend (Figure 3)¹⁵.

In 2017, the Centers for Medicare & Medicaid Services (CMS) issued a memorandum requiring surveyors in nursing homes, hospitals, and critical access hospitals to ensure that these facilities are protecting patients from Legionnaires' disease and other waterborne pathogens. The guidance in the CMS memo closely parallels the Subpart 4-2 requirements. While the memo is addressed to health care facilities across the country, other jurisdictions may be limited in their ability to actively enforce the recommendations.

Figure 3: Trends in New York State reported nosocomial cases and exceedances, 2017-2023⁹





New York State Department of Health’s interdisciplinary community legionellosis team has developed an effective protocol for conducting outbreak investigations that incorporates several novel methods.^{13,16} Through a combination of epidemiological and environmental investigation strategies coupled with whole genome sequencing (WGS), point sources are now often identified and remediated in large outbreaks. Research relationships have been established with nationally recognized experts across the country and internationally, resulting in a much-improved understanding of factors contributing to the increase in cases, as well as better guidance on areas to target for improvement.¹⁵

Research and monitoring results directly feed into New York State Department of Health’s outreach and education efforts. Clinicians and local health department staff receive an annual health advisory: [HEALTH ADVISORY: LEGIONELLOSIS](#)

Two new supplemental fact sheets on New York State regional trends and a test-treat-monitor protocol will be distributed in August 2024. An environmental health program page provides resources for the Part 4 regulated community: [Protection Against Legionella](#), as well as at-risk nonregulated facilities, such as hotels: [Legionella Flyer](#).

Finally, New York State Department of Health is partnering with a community-based organization to pilot a new outreach program to raise awareness of legionellosis in hard-hit communities. Vulnerable residents are provided with tips to help manage their home water systems and are encouraged to seek medical care if they experience symptoms of “summertime pneumonia.”

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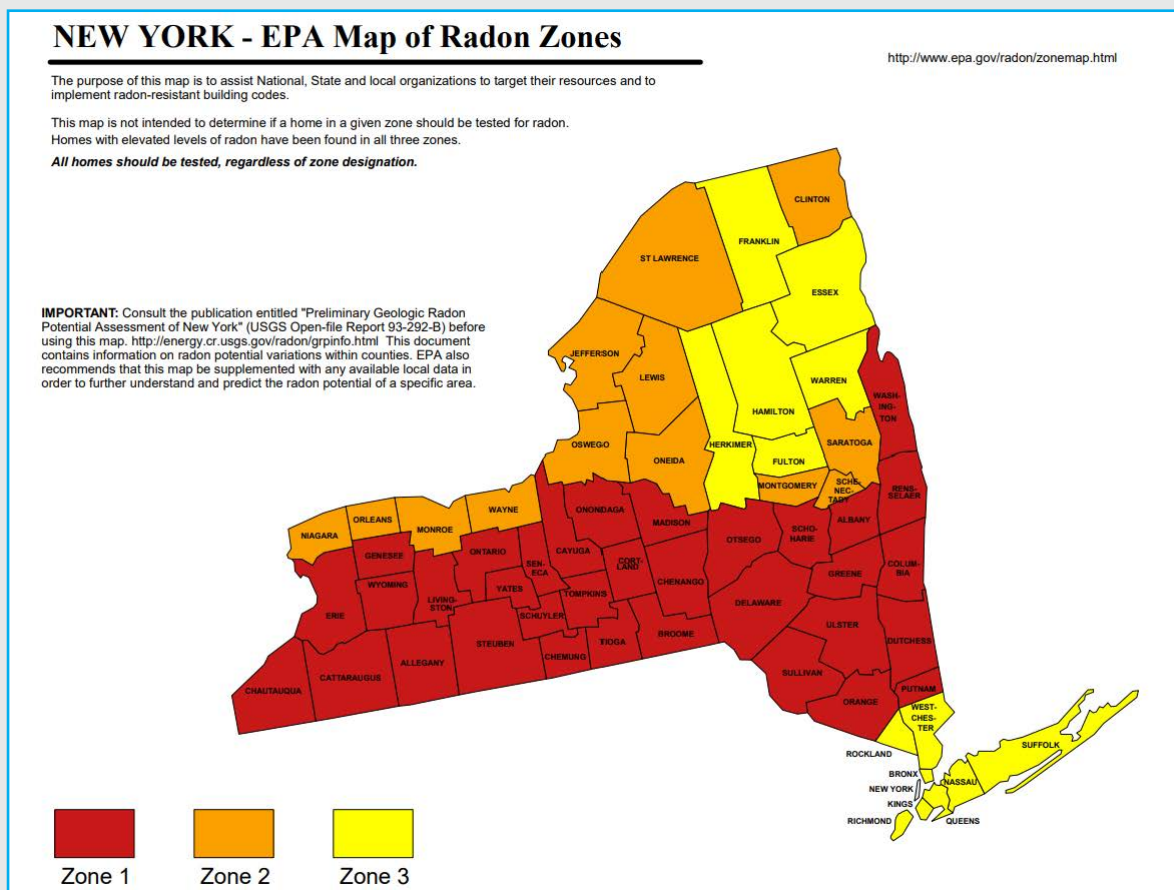
Radon Exposure

Burden and Distribution Across New York State

Radon is a naturally occurring radioactive gas that comes from the radioactive decay of uranium in soil, rock, and groundwater. It has no color, odor, or taste. Radon is found all over the United States (U.S.). It gets into the indoor air primarily from soil under homes and other buildings.

Radon is a known human lung carcinogen and the largest source of radiation exposure. Radon is the second leading cause of lung cancer. Radon is responsible for about 21,000 lung cancer deaths in the U.S. every year. 20% of the people who die from lung cancer in the U.S. every year have never smoked or used any other form of tobacco. Radon is the number one cause of lung cancer among non-smokers, causing about 2,900 deaths.^{1,2,3}

Figure 1: NYS Counties at High Risk for Radon Exposure



40 of 62 counties in New York State are considered “high-risk” radon counties (Figure 1). This means that the average indoor basement-level radon concentration is greater than the U.S. Environmental Protection Agency (EPA) action level of 4 pCi/L.⁴ These counties are high risk, mostly due to their underlying geology. The Reading Prong, which underlies northern Pennsylvania and southern New York

State, is characterized by elevated concentrations of uranium, the decay of which produces radon gas.

Everyone is exposed to radon, including residents in the New York City metropolitan area. Radon concentration varies based on several factors, including home construction, type of heating and ventilation, and geology. This is why the concentration of radon can vary widely from home to home in the same area and why testing is recommended.

A smoker who is also exposed to radon has a much higher risk of lung cancer. For example, if 1,000 people who smoked were exposed to radon at a level of 20 pCi/L, about 260 people could get lung cancer. The risk of cancer from radon exposure is 250 times greater than the risk of drowning.⁶

Health Disparities

Residents of historically disadvantaged or marginalized communities likely experience disproportionate exposure to radon and increased risk of lung cancer associated with this exposure.

Differential access to health care to diagnose and treat lung cancer increases risk among some populations.

Since radon is a naturally occurring, colorless, and odorless radioactive gas, access to information on testing and treatment is critical to reducing this exposure. Minority communities likely do not have equitable access to this information or resources to address the issue.

Individuals experiencing low or fixed income may not be able to afford radon testing or mitigation.

Importance of Prevention

Radon is responsible for about 21,000 lung cancer deaths in the U.S. every year. As many as 20% of the people who die from lung cancer in the U.S. every year have never smoked or used any other form of tobacco. Radon is the number one cause of lung cancer among nonsmokers according to EPA estimates, causing about 2,900 deaths.^{1,2,3} Overall, radon is the second leading cause of lung cancer.

New York State's Approach to Modifying Risk Factors

The New York State Department of Health has maintained a Radon Outreach and Education Program funded through the EPA's State Indoor Radon Grants (SIRG) Program for nearly 30 years. The program includes:

- Free and low-cost radon detection kits
- Grants to high-risk counties (currently, 7 counties participate)
- A radon testing database that includes results for more than 190,000 radon tests
- A radon hotline and shared mailbox where members of the public can request technical assistance addressing their radon concerns
- Maintenance of a radon website (health.ny.gov/radon) which includes:
 - Radon publications and other information materials
 - Radon maps showing radon potential by town, county, and zip code
 - Lists of certified radon testers and mitigators
 - Information on radon risk for physicians

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Injury, Violence, and Occupational Health

Injuries, unintentional and intentional, are a leading cause of death and disability among all age groups in New York State. Injuries occur where people live, work, and play. They are the leading cause of death for individuals in New York ages 1-44 years. Consequences of non-fatal injuries range from temporary pain and inconvenience to long-term disability, chronic pain, and a diminished quality of life. Topics included: Falls Among Vulnerable Populations, Vulnerable Road Users, Sex Violence, Gun Violence, and Occupational Health.

Data Highlights

- More than 13,000 individuals in New York die every year due to an injury.
- More than 94,000 individuals in New York are hospitalized annually, and another 1.2 million injured individuals are treated at an emergency department.
- The estimated lifetime cost of fatal injuries sustained in New York in 2022 is \$135 billion.
- Falls are the leading cause of injury-related deaths, hospitalizations, and emergency department visits for adults 65 years and older, including work-related injuries.
- Black, non-Hispanic, Hispanic, American Indian/Alaskan Native and Asian and Pacific Islanders are all more likely to be hospitalized or treated at an emergency department for an injury sustained as a pedestrian than White, non-Hispanics.
- Over half of women and almost 1 in 3 men have experienced sexual violence involving physical contact during their lifetimes.
- Over 1,000 individuals in New York died by firearm--another 3,000 firearm-related injuries were treated at a hospital in 2022.
- More than 250 workers die annually from traumatic work-related injuries in New York State. Another 9,200 are hospitalized each year from work-related injuries and illnesses.

Falls Among Vulnerable Populations

Burden and Distribution Across New York State

In New York State, more than 1,700 residents ages 65 and older die every year due to a fall injury. Almost 38,000 residents ages 65 and older are injured severely enough to require hospitalization annually, and another 138,000 are treated at an emergency department each year. Nationally, hospitalizations and emergency department visits for these injuries in 2022 resulted in an estimated \$736.16 billion in lifetime costs.

Key Risk Factors

Falls are a public health concern because of the immediate medical costs associated with fall-related injuries and hospitalizations, the potential for ensuing disability, loss of independence, and possible institutionalization, or long-term dependence on care partner support at home. Key risk factors include muscle weakness, gait and balance problems, poor vision, use of psychoactive medications, and home hazards.

Health Disparities

Gaps remain as evidenced by the high rates of falls and fall injuries, especially in Nassau and Suffolk counties, as well as the rest of the state. One identified gap is the disorganized methods to identify underserved populations and older adults with disabilities. The current fall prevention programs are offered free to communities with a first come-first served enrollment strategy. This approach best serves older adults already connected to community resources and does not address the diverse needs of historically underserved populations.

Older adult falls prevention is not consistent across all communities. Efforts to bridge the gap are to create a sustainable, results-based, comprehensive screening and referral system that identifies older adults at risk for falls, coordinates care with local primary care providers and provides appropriate community referrals to evidenced-based programs.

Screening and referral processes to bridge the gap between clinical care providers and patient referral to fall prevention interventions need to be established. Another significant gap is the reach of older adults living in rural communities. Lack of internet access and transportation availability lessen the opportunities for older adults to participate in evidence-based fall prevention classes.

There is currently no standard of care for the formalized screening and referral of older adults at risk for falling in Nassau and Suffolk counties. This results in a problematic disconnect between falls prevention efforts and referring medical providers. Older adults who fall are twice as likely to fall again. Furthermore, falls-related injuries are a leading cause of hospital readmission, and that risk is higher for older adults discharged home. This gap in care not only impacts the individual in need of fall prevention management but also results in burgeoning health care costs and creates a system with decreased continuity of care, limited safety nets, and poor patient tracking.

Importance of Prevention

Falls remain the number one cause of injury-related death and hospitalization for older adults (ages ≥65 years), with rates continuing to rise. Each year, older adult falls result in more than \$1.7 billion in hospitalization costs and \$145.3 million in emergency department charges. Our public health system shoulders most of this financial burden with Medicare and Medicaid assuming 95% of these expenses.

New York State's Approach to Modifying Risk Factors

Advancing health equity and reducing falls among older adults and adults with disabilities can be accomplished through evidence-based fall prevention programs (in-person and/or virtual) that address modifiable risk factors for falls such as Otago Exercise Program; A Matter of Balance; Stepping On; and Tai Chi for Arthritis.

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Vulnerable Road Users

Burden and Distribution Across New York State

There is an average of 1,076 deaths, 9,635 hospitalizations, and 138,229 emergency department visits due to motor vehicle traffic injuries each year in New York State. Populations most at risk include pedestrians, cyclists, motorized wheelchair users, and those on foot within work zones. These injuries result in more than \$1.468 billion in annual hospitalization and emergency department charges. The highest rate of hospitalizations and emergency department visits for pedestrian injuries were among Black non-Hispanic and Hispanic residents.

Key Risk Factors

Vulnerable road users, including pedestrians, cyclists, motorized wheelchair users, and those on foot within work zones, are more susceptible to serious injuries and fatalities when hit by a motor vehicle. Vulnerable road users (VRUs) are those who are unprotected by an outside shield and sustain a greater risk of injury in collisions with vehicles. Examples of VRUs include pedestrians, cyclists, wheelchair users, and scooter riders.

Health Disparities

With input from the New York State Department of Health and other contributors, the New York State Department of Transportation's Vulnerable Roadway User Safety Assessment includes a thorough risk assessment. The results of the risk assessment produced a map of high-risk areas throughout the state. The map designates locations where crashes occur at increased rates, as well as locations of communities with disadvantaged socio-economic characteristics.

Considering disadvantaged communities in the assessment helps to determine if crashes involving vulnerable road users are occurring more frequently in disadvantaged communities than in other places so that additional efforts can be made to create equitable road safety conditions.

Underserved and marginalized communities have a disproportionately high amount of fatal and serious injury crashes involving vulnerable road users. These communities often lack transportation and a built environment for their safety. Public transportation in urban centers has many benefits: public health, air quality, traffic decongestion, and economic opportunities. Cities are encouraging residents and visitors to walk or bike between destinations. The safety of these vulnerable road users is directly impacted by infrastructure, such as separated bike lanes, road diets, and traffic-calming solutions.

The lack of public transportation and personal vehicles often leads those living in Tribal Nations and refugee centers to walk between destinations. While walking can be beneficial for personal health, there can be increased risks for safety concerns. For example, where suburban areas lack sidewalks, and during winter when sidewalks need to be cleared. Limited English-proficient populations need culturally and linguistically appropriate interpretation and translation services, including the availability and accessibility of educational materials.

Older adults ages ≥ 65 are not overrepresented in vulnerable road user crashes. However, due to fragility, older adults sustain severe injuries or even death.

Injury, Violence, and Occupational Health

Importance of Prevention

To promote health equity, it is critical to support initiatives aimed at improving outreach and education, active transportation, and the built environment for vulnerable road users to help reduce injuries and fatalities on the State's roadways.

New York State's Approach to Modifying Risk Factors

Addressing the safety of vulnerable road users through a multifaceted, collaborative, and comprehensive approach allows for safe access to the transportation system. Efforts are underway to engage with underserved and marginalized communities to improve equity in the State's highway safety program. Through statewide plans for which the New York State Department of Health contributed, the New York State Governor's Traffic Safety Committee and New York State Department of Transportation identified communities that will benefit most from targeted interventions. These interventions are intended to improve road safety outcomes and to ensure a more equitable approach in outreach efforts to people who are poor and underserved populations. This includes populations with people with disabilities, as well as Black, Indigenous, and People of Color/non-English-speaking persons. The interventions also aim to prioritize planning and investments.

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Sexual Violence

Burden and Distribution Across New York State

Sexual violence can have a profound impact on the lifelong health, opportunity, and well-being of individuals and communities. Sexual violence impacts every community and affects people of all genders, sexual orientations, and ages. Anyone can experience sexual violence.

Sexual violence victimization can lead to serious short- and long-term health consequences for individuals including physical and psychological injury, depression, anxiety, suicidal thoughts, and chronic health problems, such as post-traumatic stress disorder, sexual health problems, negative health behaviors (e.g., smoking, abusing alcohol/drugs, risky sexual activity). A person's economic well-being (e.g., employment, work performance) can also suffer due to sexual violence. Data shows:

- Over half of women and almost 1 in 3 men have experienced sexual violence involving physical contact during their lifetimes.¹
- Individuals ages 12-34 are at highest risk for experiencing sexual violence.²

Key Risk Factors

Societal and community factors such as social norms that support sexual violence, weak laws and policies related to sexual violence and gender equity, lack of employment opportunities, and community poverty can increase the risk of sexual violence.⁶

Health Disparities

Sexual violence is rooted in power inequality and is a symptom and a tool of oppression. Violence itself is a social determinant of health; violence may also be a result of the environments where people live and grow. For example, people who grow up and live in environments with limited social, educational, and economic opportunities and where violence, racism, and community and domestic instability are daily stressors, are at increased risk of multiple forms of violence.

Access to health care and other supportive resources after sexual violence has occurred is critical for preventing associated short- and long-term health consequences. Unfortunately, there are many underserved communities with limited or no access to a Rape Crisis Program or Sexual Assault Forensic Examiner. This is further compounded by the stigma associated with sexual violence and the impact on victim's reporting or seeking services.

Sexual violence impacts every community and affects people of all identities. However, many negative outcomes may not be experienced equally in all communities. Currently and historically marginalized communities, such as people who are Black and Native American, people with disabilities, people who identify as women, and people who identify as LGBTQIA+, are disproportionately impacted by sexual violence and associated negative consequences.

Data shows:

- Women of color, especially multiracial, Black, and indigenous individuals, are at highest risk for all forms of sexual violence.²
- Individuals who identify on the LGBTQIA+ spectrum experience higher levels of violence. 1 in 2 people who identify as nonbinary, trans, lesbian, gay, bisexual, queer, or pansexual have experienced sexual assault in their lifetime.³

Injury, Violence, and Occupational Health

- People with disabilities are twice as likely to experience sexual assault as individuals without a disability. People with multiple disabilities are at an even greater risk.

Sexual violence against older adults occurs in both domestic and institutional settings, and it involves older adults who do not or cannot consent. Often the sexual violence is committed without the consent of the person harmed due to cognitive or other impairments.⁵

Importance of Prevention

Sexual violence is preventable. To prevent violence, the underlying social determinants of health must be addressed, including root causes of inequity and social disadvantage. By addressing root causes of violence, programs can address shared risk and protective factors across different forms of violence.

Violence itself is also a social determinant of health; violence may also be a result of the environments where people live and grow. For example, people who grow up and live in environments with limited social, educational, and economic opportunities and where violence, racism, and community and domestic instability are daily stressors, are at increased risk of multiple forms of violence. Preventing sexual violence reduces negative health outcomes and future violence for all people and all communities.

New York State's Approach to Modifying Risk Factors

The New York State Department of Health's Sexual Violence Prevention Unit Rape Prevention and Education (RPE) Program aims to prevent sexual violence by fostering meaningful engagement and coordination with communities most at risk for violence. RPE provides funding, monitoring, and training and technical assistance (TTA) to community-based organizations to reduce the incidence of sexual violence within their communities. They achieve this by (1) building internal and external capacity, (2) planning, implementing, and evaluating prevention strategies that increase economic stability, (3) improving the built environment, or changing the social and community context utilizing a community engagement approach. The community engagement approach includes community mobilization, coalition building, or promoters/community health worker model.

Funded organizations work toward increasing organizational capacity and qualified staffing; conducting an anti-racist health equity organizational capacity assessment; participating in training and technical assistance; conducting a planning process (including conducting a community assessment, developing a logic model, and creating an implementation work plan); and prioritizing evaluation and quality improvement.

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Gun Violence

Burden and Distribution Across New York State

More than 1,000 individuals in New York died by firearm and another 3,000 firearm-related injuries were treated at a hospital in 2022. Black non-Hispanic New York State residents are disproportionately impacted by firearm violence of any kind, with a death rate more than double the statewide firearm death rate, and rates of emergency department visits and hospitalizations 4 times higher than the statewide average. In 2020, Black, non-Hispanic individuals in New York were 26 times more likely to die by firearm-related homicide than White, non-Hispanic individuals.

Key Risk Factors

Key risk factors for gun violence include poverty; unemployment; poor education; poor housing conditions; lack of opportunity such as recreational, employment, and youth development activities; government disinvestment; availability of firearms, intergenerational violence; substance abuse; mental health issues; trauma; and exposure to community violence.

Health Disparities

The neighborhoods with the highest rates of gun violence today reflect the redlining maps dating back to the 1930s, and the systemic disinvestment in Black communities. Discriminatory housing policies have historically segregated neighborhoods, concentrating poverty and limiting access to quality education, health care, and employment opportunities.

17 counties account for more than 80% of the violent crime that occurs in the 57 counties in New York State outside of New York City. Gun violence in these neighborhoods not only claims lives, but it perpetuates poverty, creating a cycle of violence. In New York City, 50% of all shootings happen in zip codes where the median household income is below \$50,000, even though these areas represent only 24% of the population.¹

Access to health resources, including mental health services, trauma care, and violence prevention programs, varies significantly across different communities in New York State. Minority and low-income neighborhoods often face barriers such as a shortage of health care providers, lack of insurance coverage, and transportation issues. These disparities hinder timely and effective medical and psychological interventions for victims of violence, exacerbating health outcomes and perpetuating inequities.

In addition to issues of access to resources, widespread mistrust in health and legal systems within Black and Brown communities in New York State impacts the likelihood of utilizing available services. Historical and ongoing experiences of discrimination, biased treatment, and systemic neglect have fostered deep-seated skepticism toward these institutions. This mistrust leads to underutilization of health care services, resulting in untreated medical and mental health conditions that can exacerbate stress and violence.

Similarly, distrust of the legal system discourages reporting of crimes and cooperation with law enforcement, perpetuating cycles of violence and reducing community safety. Addressing these trust issues is crucial for improving health outcomes and reducing interpersonal violence in minority communities.

Both in New York State and nationally, gun violence impacts Black and Hispanic communities at higher

Injury, Violence, and Occupational Health

rates than White communities. Black people are 10 times more likely to be killed and 12 times more likely to be injured by a gun than their White counterparts.^{2,3} These numbers are driven by a small subset of neighborhoods that continue to experience a disproportionate burden of gun violence due to historic disinvestment, racist policies, and systemic oppression. For example, although only 24% of New York City residents are Black, they make up 71% of the city's firearm fatality victims.¹ These communities face greater economic and social repercussions, including loss of income, housing instability, and disrupted social networks. The cumulative impact of violence further hampers community development.

Older adults are at risk of interpersonal violence, particularly physical abuse perpetrated by caregivers. The physical and psychological consequences of elder abuse can lead to increased morbidity, mortality, and diminished quality of life.

Importance of Prevention

Gun violence is not inevitable. It can be prevented. This requires a comprehensive public health approach that keeps families and communities safe. An approach that considers the social determinants of health and invests in communities with the highest rates of gun violence to fill in gaps in services, resources, and opportunities.

In addition to the tragic loss of life due to gun violence, it has a heavy economic toll. The aftermath of gun violence costs federal, state, and local governments a combined average of nearly \$35 million a day, or approximately \$557 billion per year. In New York State, the estimated annual losses are \$11.4 billion².

New York State's Approach to Modifying Risk Factors

New York State has a large violence prevention ecosystem that employs a multidisciplinary approach by working with agency partners across the state, including the New York State Department of Health, the Division of Criminal Justice Services, the Office of Victim Services, the Office of Child and Family Services, the Department of Labor, the Office of Mental Health, the Division of Homeland Security and Emergency Services, and the Office to Prevent Domestic Violence. At the core of this work are community-based violence intervention efforts such as the SNUG Street Outreach Program ([Division of Criminal Justice Services](#)) and the Crisis Management System ([The Office of Neighborhood Safety](#)) that work to stop violence at the local level.

In 2021, New York declared the first-in-the-nation gun violence disaster emergency under Executive Order 211 as part of a new, comprehensive strategy to build public safety. The New York State Department of Health established the Office of Gun Violence Prevention (OGVP) under this order, identifying gun violence for what it is: a public health crisis.

The mission of the Office of Gun Violence Prevention is to build a comprehensive, coordinated, and sustainable approach to preventing gun violence by strengthening equity and empowering communities to foster locally led prevention strategies and approaches. With a focus on historically under-resourced New York State communities—the ones that struggle with the highest rates of gun violence—the Office seeks to address its root causes and contribute to the prevention and elimination of this national scourge.

Additionally, New York State has some of the strongest laws to prevent gun violence including background checks, assault weapon bans, extreme risk protection orders, and safe storage laws.

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Workplace Injuries and Illnesses

Burden and Distribution Across New York State

Work is a social determinant of health and, as such, it is important to incorporate occupational injuries, illnesses, and fatalities into ongoing public health surveillance. Workplace injuries and illness can be prevented by controlling or eliminating hazards. In New York State, 251 workers died from traumatic occupational injuries in 2022.¹ There are more than 9,200 inpatient work-related hospitalizations annually, resulting in an average annual rate of around 110 hospitalizations per 100,000 employed persons.³

Key Risk Factors

The leading cause of death in New York State is transportation events, accounting for more than 1 out of every 4 occupational fatalities. Transportation events may include both motor vehicle collisions and pedestrian workers struck by vehicles. Other leading causes are falls, exposure to harmful substances or environments, violent injuries, and contact with objects or equipment. In New York City, violent injuries are the leading cause of worker deaths. Although women accounted for only 8.8% of worker fatalities over the last 5 years, they accounted for 16% of the violent injuries, the major event causing their deaths at work.¹

Table 1. Characteristics of Work-Related Fatalities, 2018-2022

Characteristics	Number	Percentage
Total	1,265	
Leading Causes		
Transportation- motor vehicle/ pedestrian	313	24.7
Slips, trips, and falls	298	23.6
Exposure to harmful substances/ environments	218	17.2
Assaults and Violent acts	199	15.7
Contact with objects/equipment	196	15.5
Gender		
Male	1,154	91.2
Female	111	8.8
Race/Ethnicity		
White, non-Hispanic	736	58.2
Black, non-Hispanic	150	11.9
Asian/Pacific Islander	66	5.2
Hispanic/Latino	286	22.6
Other	*	*

**Data is either not reported or does not meet publication criteria.*

Source: Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2018-2022

Injury, Violence, and Occupational Health

Health Disparities

Nearly a quarter of fatal occupational injuries during 2018-2022 occurred to Hispanic or Latino workers (Table 1) even though they account for only about 17% of the workforce during the same period. The rate of work-related hospitalizations was highest in Hispanic/Latino and Native American workers (Table 2).

During the period 2018-2022, more than 90% of fatal work-related injuries occurred in males, even though approximately 47% of the workforce is female (Table 1). Males were also almost 2 times more likely to be hospitalized (Table 2). More than 60% of New York State occupational fatalities are to those with a high school/GED or less education level¹. Less-educated workers may indeed find themselves in occupations or performing job tasks that involve higher risk and face more severe hazards.

Older workers (55 or older) accounted for 40.4% of all fatal occupational injuries, a population that continues to remain active in the workplaces of New York State.¹ The rate of work-related hospitalizations was also highest for workers ages 65 and older (Table 2).

Table 2: Number and Rate of Work-Related Hospitalizations for New York State Workers, 2018-2022

Characteristics	Number	Rate per 100,000 FTE Workers
Total	10,533	118.3
Age Group		
15-19	53	22.8
20-24	216	30.7
25-44	2,467	61.4
45-64	5,919	178.8
65+	1,898	297.6
Gender		
Male	7,152	153.6
Female	3,399	79.8
Unknown	2	N/A
Race/Ethnicity		
White, non-Hispanic	6,352	121.8
Black, non-Hispanic	1,566	136.4
Native American	33	156.8
Asian/Pacific Islander	145	16.1
Hispanic/Latino	1,143	174.1

Source: New York State Department of Health, Statewide Planning and Research Cooperative System, 2018-2022

Injury, Violence, and Occupational Health

Importance of Prevention

Work-related injuries and illnesses are costly. The National Academy of Social Insurance estimated the cost of worker's compensation benefits paid to workers to be about \$6.4 billion in New York State during 2021³. This number does not include the indirect costs of an injury or illness such as lost productivity. However, addressing the needs of the changing workforce and the nature of workplace hazards is an ongoing challenge.

New York State's Approach to Modifying Risk Factors

A greater emphasis on outreach and education is needed to target low-income workers, immigrant populations, and workers in high-risk occupations, as well as older workers. Public health data can guide the development of new and safer controls, better training and education activities, and the initiation of regulatory and policy changes to make workplaces safer, healthier, and more secure.

Lack of safety training and exposure to physical and chemical hazards on the job are also risk factors. These work-related injuries can be prevented with adequate and routine training of employees; the wearing of appropriate personal protective equipment; and the establishment of efficient administrative and work practice controls by the employer.

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Sexual and Drug User Health

The intersectionality of people using drugs, experiencing fatal and non-fatal overdoses, living with hepatitis C or HIV, or living with other sexually transmitted infections provides public health and medical care providers a unique opportunity to provide focused and inclusive care addressing multiple needs.

Data Highlights

- Since the peak in 2014, the number of hepatitis C reports has decreased by 62% for New York State and 61% for New York City. Since the peak in 2020, the number of acute hepatitis C reports has decreased by 22% for New York State and 25% for New York City.
- From 2011 to 2020, the number of new HIV diagnoses in New York State decreased by 53%. Since 2020, there has been an 8% increase, but the number of new diagnoses has not reached the level it was before 2020.
- While chlamydia has routinely been the most reported sexually transmitted infection in New York State, the overall number of diagnoses has decreased by 13% from 2018 to 2022.
- Gonorrhea and syphilis (primary and secondary) diagnoses increased by 16% and 36%, respectively, from 2018 to 2022.
- From 2021 to 2022, the rate of overdose deaths involving opioids increased from 25.3 to 27.4 per 100,000 New York State residents. Since 2015, the percentage of deaths driven by synthetic opioids other than methadone increased from 30.8% to 92.3%.
- In 2022, non-Hispanic Black individuals represent the greatest proportion of individuals diagnosed with chlamydia, gonorrhea, syphilis (primary and secondary), and HIV (new diagnoses and persons living with diagnosed HIV). They also had the highest age-adjusted hepatitis C-related death rate amongst all race/ethnicity groups, accounted for the largest proportion of deaths among persons diagnosed with HIV, and accounted for the largest proportion of overdose deaths involving opioids or nonfatal opioid-related hospital events.

Hepatitis C

Burden & Distribution Across New York State

The opioid epidemic, nationally and in New York State, is fueling the increase in new hepatitis C infections. New data released by the Centers for Disease Control and Prevention (CDC) shows that, in recent years, the number of new hepatitis C infections (acute hepatitis C) has doubled. There were an estimated 33,900 (2,436 reported) new cases of acute hepatitis C in 2015 and 67,400 (4,848 reported) new cases in 2022.

In the United States, between 2019 and 2022, rates of new infections were highest among people ages 30-39. Rates in this age group have been increasing since 2007.¹ In the United States, new hepatitis C infections among people ages 18-40 years are tracked as a proxy for new infections due to injection drug use.²

In New York State, hepatitis C trends outside of New York City are monitored by New York State Department of Health while trends in New York City are monitored by the New York City Department of Health and Mental Hygiene.

In New York State, outside of New York City, reports of hepatitis C (including both acute and chronic infections) have declined 62% percent since the peak in 2014 (8,814 in 2014 and 3,374 in 2022). Reports of new infections (acute hepatitis C) have decreased 22% percent since the peak in 2020 (328 in 2020 and 257 in 2022). In 2022, the rate of reported hepatitis C was 29.6/100,000 persons.

By Ryan White Region, rates were highest in the NY Penn/Binghamton (53.1/100,000 persons), Central NY/Syracuse (40.7/100,000 persons), Mid-Hudson Valley (37.9/100,000 persons), and Western NY/Buffalo (35.2/100,000 persons) regions of the state.³

In New York City, reports of chronic hepatitis C have declined 61% since the peak in 2014 (7,216 in 2014 and 2,805 in 2022). Reports of new infections (acute hepatitis C) have decreased 25% percent since the peak in 2020 (185 in 2020 and 139 in 2022). In 2022, the rate of reported chronic hepatitis C was 34.4/100,000 persons. Among New York City boroughs, the rate of reported chronic hepatitis C was highest in the Bronx (51.4/100,000 persons).⁴

Key Risk Factors

New infections of hepatitis C are fueled by the opioid epidemic and the sharing of drug injection equipment: including needles, syringes, cookers, water, ties, and cottons. The most reported hepatitis C risk factor is a history of injection drug use. In New York State, outside of New York City, 77% of people with newly reported hepatitis C who had available risk factor information reported a history of injecting drugs.

New York State supports harm reduction activities across the state including licensing syringe services programs and supporting drug user health hubs. At these locations, people who use drugs can access clean syringes and equipment, hepatitis C testing, and obtain assistance with linkage to hepatitis C treatment. Drug user health hubs also offer medication for opioid use disorder. These harm reduction services help to prevent further transmission of hepatitis C in this priority population.

Sexual and Drug User Health

Health Disparities

Hepatitis C is a preventable and curable condition. However, certain communities and populations are disproportionately impacted by hepatitis C morbidity, access to treatment, and mortality. Across New York State, younger adults and people who inject drugs are most commonly being diagnosed with hepatitis C. People who inject drugs are disproportionately impacted by policies that criminalize substance use and perpetuate social injustices, and stigma, which supports inequitable access and prevents them from successfully utilizing services to prevent, identify, and treat hepatitis C.

In 2022, rates of hepatitis C in New York State outside of New York City were highest among people ages 30-34 (78.0/100,000 persons) and 35-39 (72.9/100,000 persons). Among females reported with hepatitis C in 2022, 47.5% were of childbearing age (15-44 years). A history of injection drug use was the most reported risk factor, especially among younger adults, with 88% of people ages < 40 years with available risk factor information reporting a history of injection drug use.³

In 2022, rates of chronic hepatitis C in New York City were highest among people ages 40-49 (51.6/100,000). Among females with chronic hepatitis C, 43.6% were of childbearing age. Among people ages 18-34 with chronic hepatitis C, injection drug use was the most common risk factor, reported by 35% of interviewed patients.

New York tracks hepatitis C treatment/clearance data to determine what percent of people diagnosed with hepatitis C have been successfully treated or spontaneously cleared their infection. These data indicate that treatment/clearance percentages vary by region and by age.

In 2022, statewide, 53.1% of people diagnosed with hepatitis C since 2010 were known to have cleared their infection. When examining outcomes by Ryan White Region, treatment/clearance percentages were highest in New York City (54.5%), the Lower Hudson (57.9%), and Mid-Hudson (54.2%) regions and lowest in the New York Penn/Binghamton (46.7%) and Western/Bufalo (45.8%) regions. Treatment/clearance percentages were highest in the 50-59 age group (57.7%) and lowest in the 70+ age group (35.5%). These data can be found on the New York State Hepatitis C Dashboard at: hcvdashboardny.org/.

Although it is curable, too many individuals in New York continue to die from hepatitis C. Statewide, 535 people died of hepatitis C in 2021 (age-adjusted rate= 2.0/100,000). Hepatitis C-related age-adjusted death rates were highest in the non-Hispanic Black (3.9/100,000) and Hispanic (3.4/100,000) populations.³

Importance of Prevention

New York State promotes and funds numerous successful hepatitis C prevention activities. Harm reduction/syringe exchange programs provide clean injection equipment to people who inject drugs as well as hepatitis C testing, overdose prevention, and support.

Because hepatitis C is curable, treatment is an important means of preventing the further spread of hepatitis C. New York State funds and supports programs that serve people who use and inject drugs to provide hepatitis C testing, linkage to care, and treatment services across the state. Babies born to people who have hepatitis C may acquire hepatitis C at birth. Ensuring that people who may become pregnant are tested and, if needed, treated for hepatitis before becoming pregnant, or following birth, will prevent perinatal transmission of hepatitis C.

Sexual and Drug User Health

New York State's Approach to Modifying Risk Factors

People who use drugs are impacted by multiple social determinants of health and may avoid health care due to the stigma they experience in many health care settings.

New York State supports 6 hepatitis C initiatives including:

- The Hepatitis C Testing Program
- Hepatitis C Patient Navigation in High-Risk Settings Initiative
- Hepatitis C Nurse Care Coordination in Opioid Treatment Initiative
- Hepatitis C Care and Treatment Initiative
- The Innovative Models Initiative
- The Hepatitis C Learning Collaborative for Substance Use Disorder Treatment Programs

These initiatives aim to provide stigma-free hepatitis C testing, linkage to care, and treatment, and supportive services in settings that are accessible and comfortable for people who use drugs.

New York State has developed several hepatitis C [educational materials](#) to promote prevention, testing, and treatment, especially for people who inject drugs.

Many people with hepatitis C are not aware that they have it. Beginning May 3, 2024, New York State expanded hepatitis C testing by requiring that all persons 18 years of age and older and persons under the age of 18 with risk, be offered a screening test for hepatitis C.

In addition, providers are required to order a hepatitis C screening test for all pregnant people, during each pregnancy. These new requirements align New York State with the current CDC hepatitis C screening recommendations.

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Human Immunodeficiency Virus

Burden and Distribution Across New York State

Public Health Law § 2133 requires Human Immunodeficiency Virus (HIV) reporting and partner notification for individuals who reside in New York State and/or receive their care within the state. Laboratories that conduct HIV-related testing are legally required to report all positive and reactive HIV-related test results whether conducted to diagnose or monitor HIV infection.

Reportable tests include confirmatory Western Blot, viral load, CD4+ T lymphocyte, and genotypic tests. Physicians and others authorized to order diagnostic tests are also legally mandated to report initial HIV infection, initial stage 3 (AIDS) infection, and HIV illness; providers must also report information on partners of newly diagnosed individuals. These reports also require sharing any information related to the individual's sexual or needle-sharing partner(s). For this report, the data presented comes from the New York State Department of Health Statewide HIV Registry.

According to the CDC, at the end of 2022, there were almost 1.2 million persons living with diagnosed HIV in the United States.¹ While New York State has maintained a large proportion of the HIV/AIDS burden in the United States since the start of the epidemic, the work addressing this burden and the widespread availability of antiretroviral therapies since 1996 for prevention and treatment have proved effective and resulted in the decline of new diagnoses. Since the introduction of antiretroviral therapies, New York State experienced a sharp decline in new diagnoses until 1998. Since then, there has been an overall gradual decrease in the number of new diagnoses until 2020.

From 2011 to 2020 the number of new HIV diagnoses in New York State decreased by 53% and new AIDS diagnoses have decreased by 65%. While AIDS diagnoses continued to decrease in 2021 and 2022, there was an 11% and 8% increase, respectively, in new HIV diagnoses compared to 2020 numbers. Despite the increase, the number of new HIV diagnoses in 2021 and 2022 was still less than the number of new diagnoses before 2020.

Of the individuals who have acquired HIV, it is estimated that from 2015 to 2020 the percentage of individuals with knowledge of their status increased from 92% to 94%.

Key Risk Factors

New York State collects information on risk factors associated with HIV transmission such as history of male-to-male sexual contact, history of heterosexual contact, history of intravenous drug use, pediatric risk, and unknown risk. From 2011 to 2022, a history of male-to-male sexual contact was the most reported transmission risk among those newly diagnosed with HIV. A history of heterosexual contact was the next most reported transmission risk factor from 2011 to 2019 for individuals newly diagnosed with HIV. Since 2020, unknown risk has been the next highest transmission risk factor.

Health Disparities

On June 29, 2014, New York State announced the Ending the Epidemic initiative. This initiative was meant to maximize the availability of lifesaving, transmission-interrupting treatment for HIV, saving lives, and improving the health of New York State residents. As of 2023, this initiative included the calculation of many HIV-related metrics some of which encompass time to linkage to care and time to becoming virally suppressed. While working towards ending the epidemic, disparities between sub-groups are seen which require further work.

Sexual and Drug User Health

Since 2011, there has been a steady decline in new diagnoses across all race and ethnicity groups. This decline is not equal across all subgroups and non-Hispanic Black and Hispanic individuals consistently represent the largest groups newly diagnosed with HIV each year.

Across New York State in 2020, 16% of the population identified as non-Hispanic Black, and 19% identified as Hispanic. When looking at the racial/ethnic distribution among persons newly diagnosed, 46% identified as non-Hispanic Black and 30% identified as Hispanic showing a disproportionate number of diagnoses among these race/ethnicity groups. This trend is seen as well among persons living with diagnosed HIV (HIV and AIDS). In 2020, 45% of individuals living with diagnosed HIV identified as non-Hispanic Black while 29% identified as Hispanic.

Across the state in 2022, 81% of individuals newly diagnosed were linked to care within 30 days and approximately 58% of individuals newly diagnosed were virally suppressed within 3 months. Among individuals who identified as non-Hispanic Black or Hispanic, 80% of them were linked to care in 30 days in comparison to the 83% of individuals who identified as non-Hispanic White. Viral suppression within 3 months of diagnoses was achieved by 64% of non-Hispanic White individuals, 59% of Hispanic individuals, and 54% of non-Hispanic Black individuals.

Between 2015 and 2019, the total number of deaths among persons diagnosed with HIV/AIDS was stable with a slight increase and fluctuation since 2020. Each year, most deaths were among non-Hispanic Black individuals followed by Hispanic individuals. In 2022 alone, non-Hispanic Black individuals accounted for more than 50% of the total deaths while Hispanic individuals accounted for 26%.

Importance of Prevention

New York State promotes and funds numerous successful prevention activities. Needle exchange programs provide clean injection equipment to people who inject drugs as well as testing, overdose prevention, and support. These programs have reduced the transmission of HIV through reused needles dramatically. Pre-exposure prophylaxis (PrEP) coverage in New York State is among the highest in the nation. Preventing perinatal HIV transmission is a priority and through diligent and sustained efforts we have met the (CDC definition of elimination of perinatal transmission for 8 consecutive years (2015-2022). Helping individuals in New York living with HIV maintain a suppressed viral load is also part of our prevention agenda. Services are provided to relink people to care and assist with the cost of anti-retroviral drugs.

While HIV is now considered a chronic condition and the adverse effects of the therapeutic use of antiretrovirals have improved HIV remains a devastating diagnosis that affects all aspects of life including, health conditions, social and economic well-being, and overall quality of life.² Long-term complications of antiretroviral therapy (e.g., cardiovascular disease, renal disease) exist, and individuals who are infected as children may be especially vulnerable.^{3,4}

Recent data continue to demonstrate that individuals living with HIV who experience multi-morbidity, HIV-related stigma, and have low income were more likely to have poorer physical, mental, social, and environmental quality of life outcomes compared to their counterparts despite residence in a high-income setting.⁵ Within the United States., the estimated lifetime HIV-related medical cost for a person with HIV ranges from \$326,411 to \$490,045 (retention in care and time since diagnosis dependent), representing a significant economic burden.⁶

Sexual and Drug User Health

By the end of 2023, there were approximately 105,000 individuals living with HIV within New York State (BHA Annual Surveillance Report) and individuals ages 25-34 years have represented the largest number of new diagnoses in recent years. In addition, those who acquire HIV are “surviving and aging, which adds to a growing population of older individuals with HIV.”⁷ Taken together these factors demonstrate the importance of ongoing and targeted HIV prevention and public health efforts in New York State.

New York State’s Approach to Modifying Risk Factors

New York State has multiple programs and initiatives in place to reduce transmission of HIV and keep those with diagnosed HIV healthy. The Expanded Syringe Access Program (ESAP) provides access to sterile hypodermic needles and syringes. This program has no limit to the number that may be provided and allows access without the need for a prescription. The participating locations also dispose of exchanged needles in a manner that is compliant with local and state laws regarding medical waste disposal.

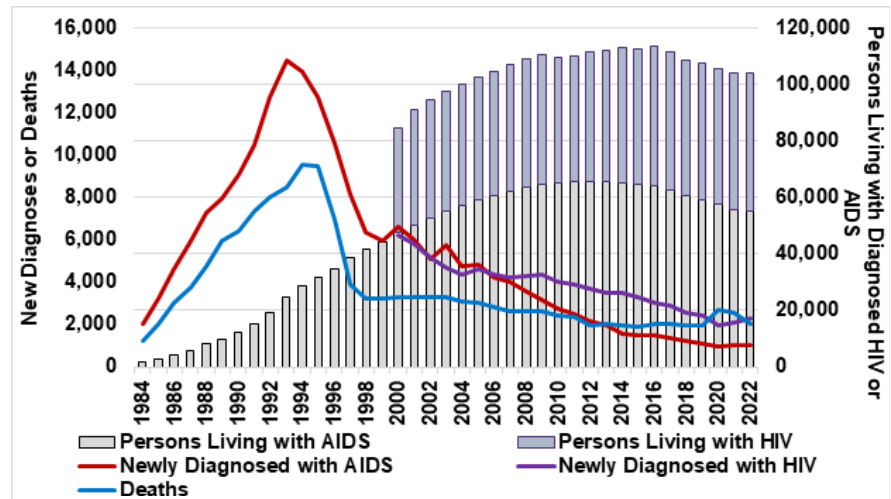


Figure 1: The Epidemiology of HIV, New York State, 1984-2022

The HIV Perinatal Program supports individuals able to become pregnant with PrEP/post-exposure prophylaxis (PEP) access and prevention services before conception and during the pregnancy. Rapid initiation of antiretroviral therapy for those newly diagnosed with HIV is available to prevent transmission (vertical and partner) as well as the Newborn Screening Program and Bloodborne Viruses Laboratory/Pediatric HIV Testing Services to support these individuals for testing.

These programs ensure that the individuals living with HIV, the birth parents, and the infants all receive appropriate and timely care through navigation and linkage to prevent transmission and maintain the health of those diagnosed.

The Uninsured Care Program, and specifically the AIDS Drug Assistance Program, provides access to free health care (including medications) for New York State residents who are uninsured or underinsured and are at risk of acquiring or being diagnosed with HIV. Medication compliance is imperative to maintain the health of individuals living with diagnosed HIV and reduce the chance of transmission to those at risk.

Sexual and Drug User Health

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Sexually Transmitted Infections (STIs)

Burden and Distribution Across New York State

The 3 nationally notifiable bacterial sexually transmitted infections (STIs) for which there is federal funding to support state prevention activities include chlamydia, gonorrhea, and syphilis¹. However, there are many other STIs impacting the health and well-being of individuals in New York for which data are not currently collected. Therefore the burden and distribution across New York State is largely unknown. Those include but are not limited to the following STIs that are believed to be more prevalent than those described in this section: human papillomavirus, herpes simplex virus, and trichomoniasis.

Since chlamydia became a reportable STI in 2000, the number of diagnoses in New York State has greatly exceeded all other reportable STIs. Though the five-year trend for chlamydia diagnoses in New York State shows an overall 13% decrease from 2018² to 2022³.

It is unclear if this is a true decline in infections or a change in screening and/or care-seeking that resulted from COVID-19⁴. Following a dramatic decline in reported chlamydia diagnoses in 2020, chlamydia diagnoses increased by approximately 2% in 2022 compared to 2021. It continued to remain the most reported sexually transmitted infection in New York State with 103,689 diagnoses (6.7% increase from 2020). The highest rates in 2022 were among females 15-24 years of age.

Gonorrhea diagnoses increased 16% from 37,322 in 2018 to 43,368 in 2022. However, the increase from 2021 to 2022 was the smallest annual increase (0.7%) since 2014 suggesting the rate of increase may be slowing. Rates were highest among males 20-34 and among females 15-24.

Primary and secondary syphilis (considered acute and the most infectious stages of syphilis) diagnoses increased by 36% from 2018 to 2022 with more than 3,600 individuals diagnosed in 2022. Diagnoses among males accounted for 86% of primary and secondary syphilis diagnoses; 74% of males diagnosed with primary or secondary syphilis reported other males as their sex partners. In 2022, rates of primary and secondary syphilis among females of childbearing age increased 11-fold compared to 2014 rates.

Additionally, in 2022, 51 diagnoses of congenital syphilis were reported statewide, a 76% five-year increase compared to 2018 (29 diagnosed infants).

Key Risk Factors

In 2022, the highest rates of STIs in New York State continued to be seen in young persons, non-Hispanic Black individuals, and men who have sex with men. Further, with the rise in congenital syphilis births, persons of reproductive capacity are a population of concern for sexually transmitted infection transmissions.

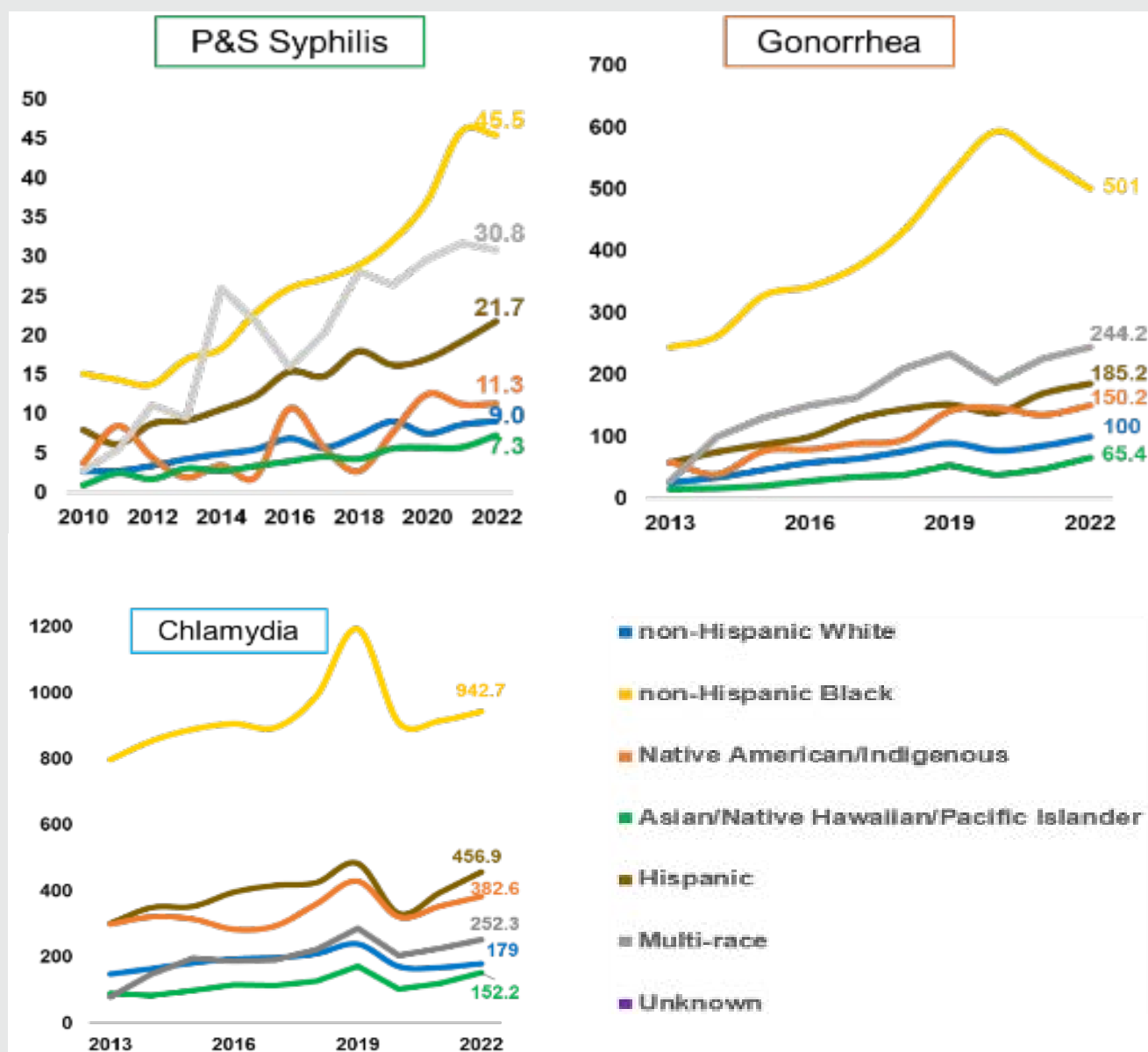
Additional risk factors identified include drug-risk-related behaviors, sex without a condom, and anonymous sex partners.

Health Disparities

All the STIs detailed in this section are preventable, and treatable with antibiotics. However, communities of color are disproportionately impacted by these reportable STIs, including congenital syphilis. It is difficult to ascertain the degree to which access issues impact these disparities as data are limited to only positive sexually transmitted infection data. Therefore, there is no way to identify areas where screening is not occurring.

Sexual and Drug User Health

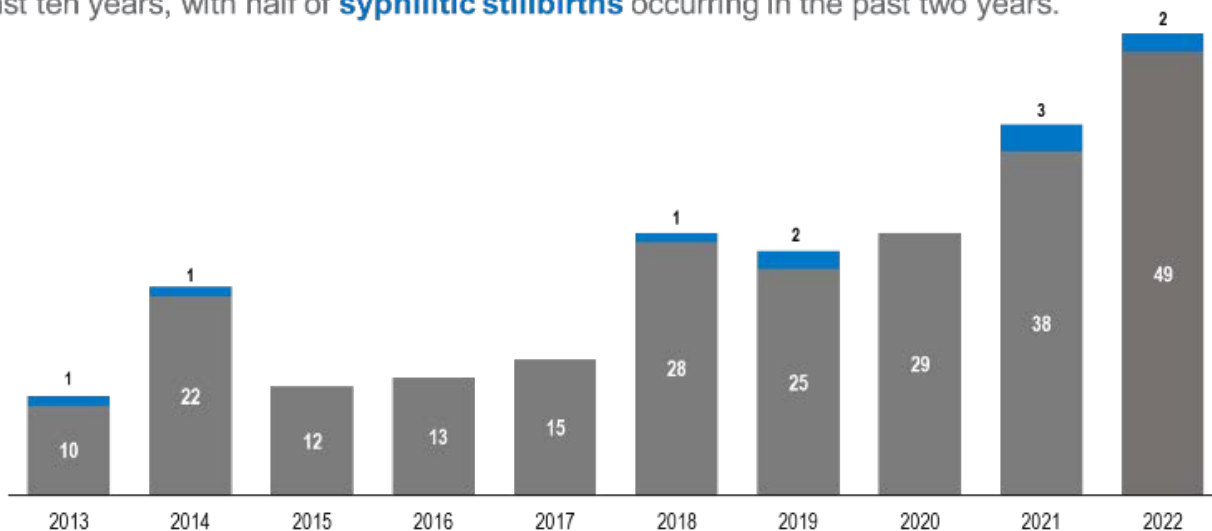
Figure 1: Age-adjusted rates of chlamydia, gonorrhea, and primary and secondary syphilis in New York State



Sexual and Drug User Health

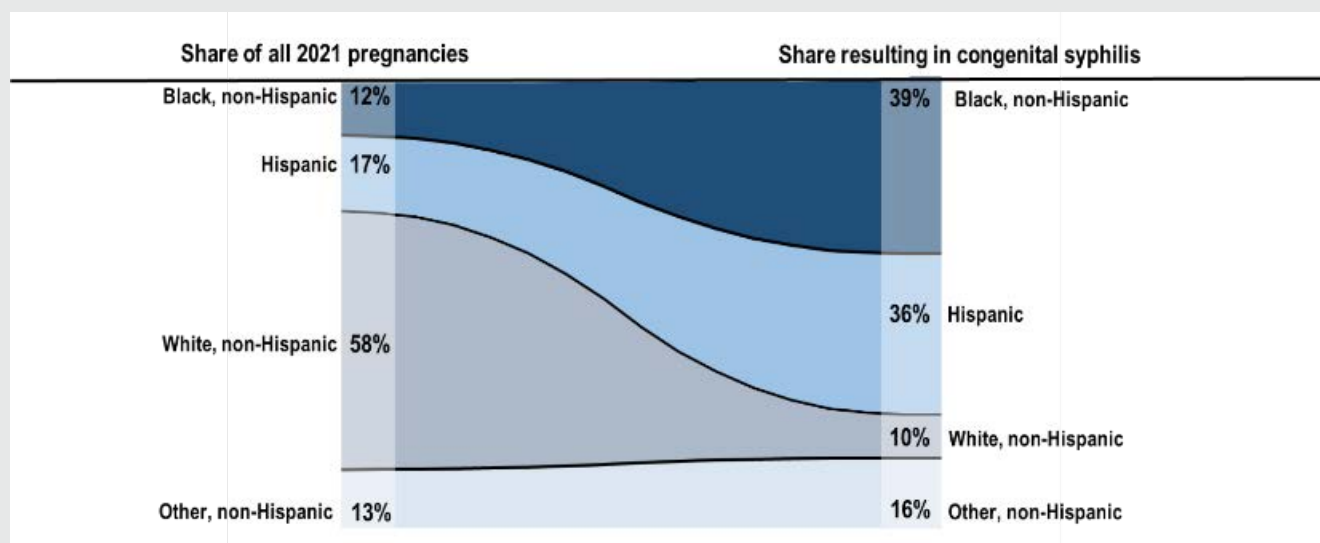
Figure 2: Congenital syphilis births including stillbirths and deaths, New York State, 2013 – 2022

2022 accounted for >20% of the total **congenital syphilis** cases reported over the past ten years, with half of **syphilitic stillbirths** occurring in the past two years.



Columns sum to total number of congenital syphilis cases reported.
This data includes all New York State, including New York City.

Figure 3: Racial and Ethnic distribution of pregnant persons giving birth (including congenital syphilis) in New York State, 2021



1. Data for all pregnancies from Vital Statistics https://www.health.ny.gov/statistics/vital_statistics/2021/table29.htm#1
2. Other, non-Hispanic includes Asian/Native Hawaiian/Other Pacific Islander, American Indian/Alaska Native, Multi-Race, Other, and Unknown, and where race was missing.
3. Data for 2021 only.

Sexual and Drug User Health

Importance of Prevention

As with many infectious diseases, primary prevention is key. Methods of primary prevention for STIs are limited to condom use and abstaining from sexual activity. Though we have a robust condom access program, this is not enough to prevent vertical and horizontal transmission, and abstinence is neither sex-positive nor realistic as a life-long prevention strategy.

Treatment as prevention is our most relied upon secondary prevention strategy for individuals and a primary prevention strategy for their sexual partners. Treatment as prevention is supported through free or reduced testing and treatment available in every county through Sexually Transmitted Infection Clinics, Disease Intervention Specialist activities, Expedited Partner Treatment (EPT), and doxycycline post-exposure prophylaxis (Doxy-PEP).

New York State's Approach to Modifying Risk Factors

To effectively prevent these STIs, individuals need equitable access to sexual health education, clinical care, and timely treatment for themselves and their sexual partners.

New York State continues to promote [sexual health](#) options to broaden individuals' ability to access care. One option is [Expedited Partner Treatment \(EPT\)](#)--which is an evidence-based practice of providing a prescription or medication to a person diagnosed with chlamydia, gonorrhea, and/or trichomoniasis to prophylactically treat their sexual partner(s) without a clinical visit. EPT prevents the individual from becoming reinfected by their partner(s) and prevents forward transmission.

Another option is [doxycycline post-exposure prophylaxis \(Doxy-PEP\)](#) which is a newer biomedical intervention in which an individual can be prescribed doxycycline after having condomless sex to prevent bacterial sexually transmitted infections.

Furthermore, the State continues to promote [HIV pre-exposure prophylaxis \(HIV PrEP\)](#), a regimen to prevent acquisition of HIV, [partner services](#), a free and confidential program that informs individuals that they might have been exposed to a sexually transmitted infection, and [condoms](#). Specifically for the prevention of congenital syphilis, New York State is taking a multi-pronged approach to modify risk factors through [education campaigns](#), supporting [data-driven policy changes](#), and [working with the community](#).

Sexual and Drug User Health

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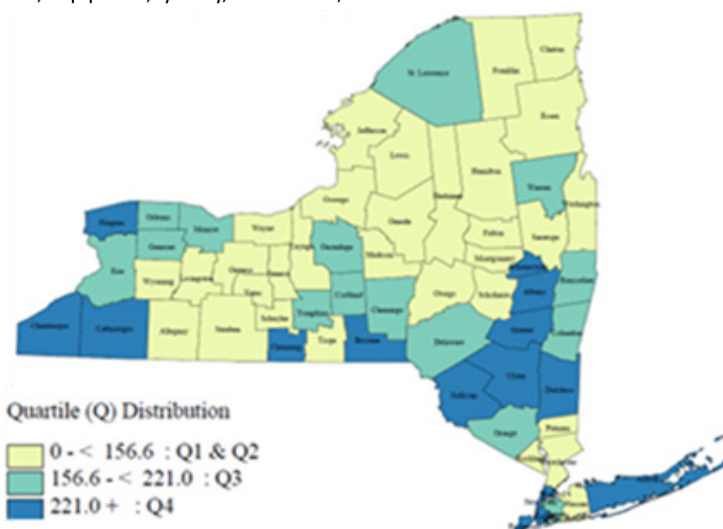
Sexual and Drug User Health

Drug User Health

Burden and Distribution Across New York State In New York State since 2015 there have been sharp increases in fatal and non-fatal drug overdoses mainly driven by synthetic opioids other than methadone. The drug overdose crisis is devastating communities and impacting New York State economy.¹ The rate of overdose deaths involving any opioid increased from 25.3 in 2021 to 27.4 per 100,000 New York State residents in 2022.

From 2015 to 2022, the percentage of opioid overdose deaths that involved synthetic opioids other than methadone increased from 30.8% to 92.3% percent. In 2022, there were 45,375 opioid use-related and overdose events, representing a crude rate of 230.6 per 100,000 population.

Figure 2: Overdose deaths involving opioids and nonfatal opioid-related hospital events, crude rate per 100,000 population, by county, New York State, 2022

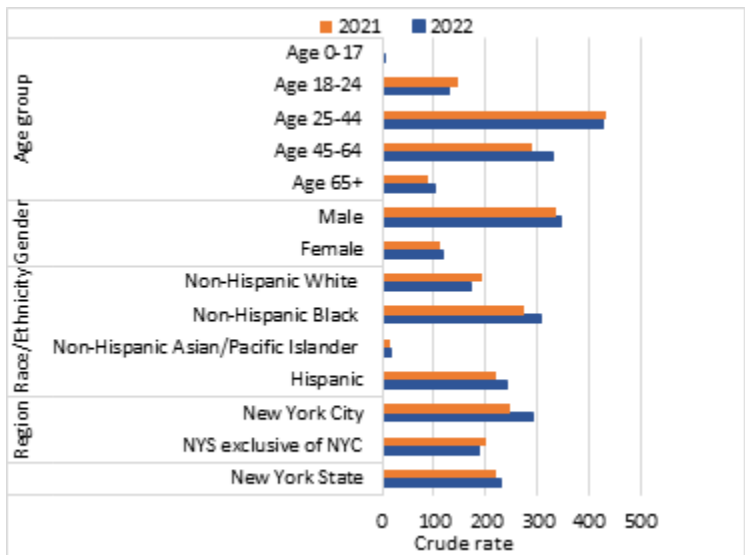


The New York State Department of Health monitors the dispensing of controlled substances as well as buprenorphine for the treatment of opioid use disorder. Between 2020 and 2023, the crude rate of opioid analgesic prescriptions declined by 13.5%.

Key Risk Factors

Policies driven by the “war on drugs” have criminalized people who use drugs disproportionately impacting communities of color. These policies resulted in stigma that has hindered access to mental and clinical health care, quality housing, transportation, prevention, and drug treatment, generating inequities that increase

Figure 1: Overdose deaths involving opioids and nonfatal opioid-related hospital events, crude rate per 100,000 population, by sub-population, New York State, 2021 and 2022



The rate was almost 3 times higher among males (347.7 per 100,000 population) than among females (118.3 per 100,000 population). It was highest among Black non-Hispanic Individuals (306.3 per 100,000 population), followed by the rates among Hispanic individuals (241.6 per 100,000 population).

In 2022, the crude rate of overdose deaths involving any opioid was higher among residents in New York City (28.9 per 100,000 population) than in New York State exclusive of New York City (26.3 per 100,000 population). The crisis impacted most counties with the Mid-Hudson Valley and Western NY being the most affected New York State Regions.

Sexual and Drug User Health

the risk of a drug overdose.² The ever-changing composition of the drug supply with the introduction of more potent synthetic opioids and additives such as fentanyl, nitazenes, and more recently xylazine and medetomidine increases the risk of overdose. Major risk factors for opioid use disorder include long-term and/or high-dose use of prescription opioids, and illicit use of opioids and other substances.

Health Disparities

The overdose crisis has disproportionately affected non-Hispanic Black men underscoring how structural racism and social determinants of health can hinder prevention and treatment efforts. Based on preliminary 2023 data from the State Unintentional Reporting System, 8% of persons who died of an overdose were experiencing homelessness or housing instability at the time of their death.

In 2023, 82% of persons who died of an overdose had a documented substance use history, but few have documented evidence of receiving evidence-based treatment at their time of death, specifically medications for opioid use disorders, based on coroner/medical examiner reports and toxicology reports. More than 86% had no presence of medications for opioid use disorder, which include methadone, naltrexone, or buprenorphine, in their systems according to postmortem toxicology testing. Among all fatal overdoses occurring among non-Hispanic Black persons, 34% occurred in the 55-64 age group. Structural disparities limiting access to health care and treatment for substance use disorder reduce opportunities to engage with persons at heightened risk of overdose.

Importance of Prevention

The complexity of the overdose crisis requires activities across the prevention continuum. Ensuring adequate access to prevention, harm reduction-based care and support, drug treatment, mental health, and clinical services plays a critical role in addressing the overdose crisis.

- Primary prevention interventions focus on reducing exposure to opioids and associated risks, including opioid prescriptions.
- Secondary prevention aimed at diagnosing and treating substance use disorders sets emphasis on expanding access for screening, diagnoses, and treatment of opioid and other substance use disorders well as initiatives to reduce stigma.
- Tertiary prevention designed to prevent life-threatening and adverse outcomes associated with drug use includes expanding the capacity to prevent and respond to opioid overdoses, enhancing data infrastructure, and HIV and hepatitis C prevention and treatment.

New York State's Approach to Modifying Risk Factors

Addressing social determinants of health and developing prevention programs across the prevention continuum is key to confronting the overdose crisis. New York State opioid prevention programs and Drug User Health Hubs provide comprehensive harm-reduction services including linkage to culturally appropriate clinical and mental health services, medication-assisted treatment, drug checking services, and Naloxone training and distribution.

Drug User Health Hubs address the syndemic of HIV, hepatitis C, and drug overdoses by providing comprehensive services which include HIV and hepatitis C testing and linkage to care and treatment. Other prevention activities include provider and individual education on the safe use and disposal of prescription opioids and expanding access to treatment. The New York State Department of Health fosters relationships with local health departments, public safety, emergency departments, emergency medical services, peers, and families to develop comprehensive programs.

Sexual and Drug User Health

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SECTION IV: SUMMARY OF NEW YORK STATE DEPARTMENT OF HEALTH ASSETS TO ADDRESS PUBLIC HEALTH ISSUES AND CHALLENGES

The Prevention Agenda 2019-2024, the New York State Health Improvement Plan, included priority-specific action plans that identified interventions that can be implemented by the New York State Department of Health (the “Department”) and partners across sectors. As part of the State Health Assessment, the Department identified internal assets available to address the 5 health priorities described in the Prevention Agenda 2019-2024. Additional work was done to identify assets contributed by other non-health state agencies as part of the newly initiated Health Across All Policies approach to state government, including efforts to make New York an age-friendly state.

Tables 1-5 summarize the Department’s programs and initiatives that have contributed to addressing each health issue at the regional and local levels. Local organizations funded by these programs are identified in a [contractor database](#) to inform local partners of the work being conducted in each county throughout New York State to address the Prevention Agenda goals.

Table 1: Prevent Chronic Diseases

Focus Area	New York State Department of Health Assets
Healthy Eating and Food Security	• Commodity Supplemental Food Program • COVID-19 Health Disparities--Small Wellness Programs • Creating Healthy Schools and Communities • Activity and Nutrition Center of Excellence • Eat Well Play Hard in Childcare Settings • Hunger Prevention and Nutrition Assistance • Nurse-Family Partnership/Home Visiting • Perinatal Infant Community Health Collaboratives • Post-Treatment Support Services for Breast Cancer Survivors who are Black • WIC Online Nutrition Education
Tobacco Prevention	• Addressing the Burden of Childhood Asthma in NYS • Advancing Tobacco-Free Communities • Behavioral Risk Factor Surveillance System • Breast, Cervical, and Colorectal Cancer Services Screening Program • Center of Excellence in Tobacco Policy • Health Systems for a Tobacco-Free New York • Independent Evaluation of the New York Tobacco Control Program • New York State Smoker’s Quitline • Pediatric Obesity Prevention: Creating Breastfeeding Friendly Communities • Perinatal Infant Community Health Collaboratives
Physical Activity	• Commodity Supplemental Food Program • COVID-19 Health Disparities- Small Wellness Programs • Eat Well Play Hard in Childcare Settings • Hunger Prevention and Nutrition Assistance • Perinatal Infant Community Health Collaboratives • WIC Online Nutrition Education

Focus Area	New York State Department of Health Assets
Preventive Care and Management	• Addressing the Burden of Childhood Asthma in NYS • Behavioral Risk Factor Surveillance System • Breast, Cervical, and Colorectal Cancer Services Screening Program • Breastfeeding, Chestfeeding, and Lactation Friendly New York • Cancer Surveillance, Education and Control • Community Cancer Prevention in Action • COVID-19 Health Disparities- Small Wellness Programs • Creating Healthy Schools and Communities • Independent Evaluation of the New York Tobacco Control Program • Nurse-Family Partnership/Home Visiting • Peer Education, Outreach, and Shared Decision Making for Persons at High Risk of Prostate Cancer • Perinatal Infant Community Health Collaboratives • Post-Treatment Support Services for Breast Cancer Survivors who are Black

Table 2: Promote a Healthy and Safe Environment

Focus area	New York State Department of Health Assets
Injuries, Violence and Occupational Health	• Nurse-Family Partnership/Home Visiting • Perinatal Infant Community Health Collaboratives • Rape Prevention & Education Program
Built and Indoor Environments	• Perinatal Infant Community Health Collaboratives
Water Quality	• Water supply protection
Food and Consumer Products	• Perinatal Infant Community Health Collaboratives

Table 3: Promote Healthy Women, Infants and Children

Focus Area	New York State Department of Health Assets
Maternal and Women's Health	• Adolescent Health – Comprehensive Adolescent Pregnancy Prevention (CAPP) • Adolescent Health – Pre-Exposure Prophylaxis (PrEP) • Family Planning Program • Hunger Prevention and Nutrition Assistance • New York State Smoker's Quitline • Nurse-Family Partnership/Home Visiting • Perinatal Infant Community Health Collaboratives • Regional Perinatal Centers • Women, Infants, and Children (WIC)
Perinatal and Infant Health	• Hunger Prevention and Nutrition Assistance • New York State Smoker'sQuitline • Nurse-Family Partnership/Home Visiting • Perinatal Infant Community Health Collaboratives • Regional Perinatal Centers • Women, Infants, and Children (WIC)

Focus Area	New York State Department of Health Assets
Child & Adolescent Health	• Adolescent Health – Comprehensive Adolescent Pregnancy Prevention (CAPP) • Adolescent Health – Pre-Exposure Prophylaxis (PrEP) • Adolescent Health – Sexual Risk Avoidance Education (SRAE) • Children and Youth with Special Health Care Needs (CYSHCN) Program • Hunger Prevention and Nutrition Assistance • New York State Smoker’sQuitline • Nurse-Family Partnership/Home Visiting • Perinatal Infant Community Health Collaboratives • School-Based Dental Home Program • School-Based Health Centers • Sick Cell Disease Adolescent Transition Services • Women, Infants, and Children (WIC)
Cross-Cutting Healthy Women, Infants, & Children	• Adolescent Health – Comprehensive Adolescent Pregnancy Prevention (CAPP) • Adolescent Health – Pre-Exposure Prophylaxis (PrEP) • Children and Youth with Special Health Care Needs (CYSHCN) Program • Hunger Prevention and Nutrition Assistance • New York State Smoker’sQuitline • Nurse-Family Partnership/Home Visiting • Perinatal Infant Community Health Collaboratives • Sick Cell Disease Adolescent Transition Services • Women, Infants, and Children (WIC)

Table 4: Promote Well-Being and Reduce Mental and Substance Use Disorders

Focus Area	DOH Assets
Well-Being and Substance Use	• COVID-19 Public Health Workforce • COVID-19 Health Disparities--Small Wellness Programs • Drug User Health Centers of Excellence (Hubs) • Harm Reduction/Prevention Education/Outreach • Health and Human Services for Lesbian Gay Bisexual and Transgender Individuals, Families and Communities • Methamphetamine overdose intervention pilot program • Opioid Overdose Prevention • Targeted Prevention and Support Services Programs (formerly Multiple Service Agencies (MSAs)) • Nurse-Family Partnership/Home Visiting • Perinatal Infant Community Health Collaboratives • Women, Infants, and Children (WIC) Targeted Outreach • Adolescent Health – Comprehensive Adolescent Pregnancy Prevention (CAPP) • Adolescent Health – Pre-Exposure Prophylaxis (PrEP)

Table 5: Prevent Communicable Disease

Focus Area	DOH Assets
Improve Vaccination Rates	• COVID-19 Health Disparities – Small Wellness Programs • Nurse-Family Partnership/Home Visiting • Perinatal Infant Community Health Collaboratives
Sexually Transmitted Infection (STIs) and Human Immunodeficiency Virus (HIV) and Hepatitis C	• Centers for Young Adults • Clinical Training - Transgender Health Care • Community-Based HIV/AIDS Case Management and Health • Education Services • Corrections - Men • Corrections Health Initiative • Criminal Justice - Strategies to Maintain HIV Viral Suppression • Disease Intervention Services, HIV Partner Notification Program • Expanded Partner Services • Family And Youth Services (FAYS) - Adolescent/Young Adult HIV Specialized Care Center • Family-Focused Health Care for Women • Financial Assistance and Housing Retention Services for People • Living with HIV/AIDS Outside of New York City • Hepatitis C Virus - Improving access to Hepatitis C Care and Treatment • HIV Primary Care Retention and Adherence Services • HIV/AIDS Emerging Communities: Services for Gay Men and MSM • HIV/Sexually Transmitted Diseases/Hepatitis C Virus Prevention and Related Services • Harm Reduction/Syringe Exchange • Health and Human Services for Lesbian Gay Bisexual and Transgender Individuals, Families and Communities • Hepatitis C Navigation Services in High-Risk Settings (Comp A Hepatitis C Navigation Request for Applications (RFA)) • Housing Financial Assistance for People Living with HIV/AIDS • Linkage, Retention and Treatment Adherence Services • Medicaid Redesign Team (MRT) Housing Retention and Financial Assistance Services for People Living with HIV outside of New York City Medicaid Redesign Team (MRT) Financial Assistance (High Need Medicaid Beneficiaries) Living Outside of New York City • Nurse Care Coordination in Opioid Treatment Settings (Comp B – Hepatitis C Navigation Request for Applications (RFA)) • Nutritional Services • People Aging with HIV (Pilot) • Pre-Exposure Prophylaxis (PrEP) Services in General and HIV Primary Care Settings • Prevention Services for Women • Regional Prevention and Support Programs • Retention and Adherence Program

	• Targeted Prevention and Support Services Programs (formerly Multiple Service Agencies (MSAs) • Transgender Health Care Services • Young Adult Community Access Programs • Adolescent Health – Comprehensive Adolescent Pregnancy Prevention (CAPP) • Adolescent Health – Pre-Exposure Prophylaxis (PrEP) • Family Planning Program • Perinatal Infant Community Health Collaboratives
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SECTION V: PROGRESS TO DATE ON LOCAL COLLABORATIVE PLANNING

Background

The Prevention Agenda 2019-2024 was New York State’s health improvement plan. It served as the blueprint for both state and local action to improve the health and well-being of all individuals in New York and to reduce health disparities. The New York State Public Health and Health Planning Council updated the Prevention Agenda in partnership with more than 100 organizations across the state, upon the request of the New York State Department of Health (the “Department”).

The vision of the Prevention Agenda for 2019-2024 was to be the healthiest state in the nation for people of all ages. The vision focused on addressing 5 health priorities:

1. Prevent Chronic Diseases
2. Promote a Healthy and Safe Environment
3. Promote Healthy Women, Infants and Children
4. Promote Well-Being and Prevent Mental and Substance Use Disorders
5. Prevent Communicable Diseases

Each priority of the Prevention Agenda included specific action plans that outlined established goals, outcome objectives, and health indicators to monitor progress and achieve reductions in health disparities. Additionally, the action plan outlined evidence-based interventions for different sectors, such as health care providers, employers, and academia, to implement. These interventions were organized by their level of public health impact, prioritizing activities expected to yield the most significant outcomes.

Partnership and Collaborative Effort

In line with the Prevention Agenda, local health departments and nonprofit hospitals were directed to select at least 2 Prevention Agenda priorities and encouraged to collaborate with local partners in enhancing community health. The Department facilitated these partnerships through 2 state regulations:

1. The New York State Public Health Law (NYS PHL) Section 602-a (2) mandates that local health departments work with community partners to conduct Community Health Assessments (CHA) and develop Community Health Improvement Plans (CHIP) every 3 years.
2. The New York State PHL Section 2803-I requires nonprofit hospitals to work together with their community partners to conduct a CHA every 3 years and develop Community Service Plans (CSPs).

New York State required local health departments and nonprofit hospitals to provide comprehensive Community Health Assessments, Community Health Improvement Plans, and/or Community Service Plans every 3 years. Additionally, local health departments and nonprofit hospitals were required to submit updated Community Health Improvement Plans and Community Service Plans annually. The Community Health Assessment includes the analysis of secondary data at the county level and, where available, primary data on health status, demographics, and community resources. Through these assessments, local health departments and nonprofit hospitals identified a list of community health issues and priorities and then developed Community Health Improvement Plans to address those priorities.

The State Department of Health collaborated with the New York State Association of County Health Officials (NYSACHO), the Greater New York Hospital Association (GNYHA), and the Healthcare Association of New York State (HANYS), to organize training sessions and provide technical assistance for the planning process. The Department of Health's priority-specific experts offered technical guidance on implementing evidence-based interventions.

Additionally, in a collaborative effort, staff from the Office of Mental Health (OMH), the Office of Addiction Services and Supports (OASAS), the Department of State (DOS), and the New York State Office for the Aging (NYSOFA) worked together to ensure that Prevention Agenda planning guidance was aligned with their respective guidance to local government agencies for planning behavioral health services.

The 2019-2024 Local Community Health Improvement Planning

The guidance issued for the third cycle of the Prevention Agenda strongly encouraged local health departments and nonprofit hospitals within the same county to develop one joint assessment and plan. This collaborative approach aimed to bring together all community health organizations' combined efforts and resources towards shared goals, improving effectiveness, and reducing duplication in assessment and planning efforts. Even when choosing to submit individual plans, nonprofit hospitals or hospital systems were required to discuss their priorities, goals, and proposed interventions with the local health department in their service area to ensure collaboration.

This guidance aligned with the Public Health Accreditation Board's recommendations and the Internal Revenue Service's standards for community benefit reporting, which require completing a Community Health Needs Assessment. According to the guidelines, local health departments and nonprofit hospitals must either select 2 priorities (ensuring at least 1 focus area for each) or 1 priority (with a minimum of 2 focus areas). The use of evidence-based interventions to address these priorities was strongly recommended. At least one of the selected priorities was intended to address a disparity and promote health equity. The submission deadline for the plans was December 2022.

Monitoring Local Progress

The New York State Department of Health staff read each plan submitted in 2019-2021 and 2022-2024. Reviewers were assigned by county to read all the plans submitted in that county to determine, as 1 indicator of collaboration, whether the county's local health department and hospital(s) chose the same priorities. Reviewers pulled out the following elements from each plan:

- The selected priorities, focus areas, goals, and objectives.
- Evidence of collaboration between the local health department and nonprofit hospitals in the county.
- Inclusion of evidence-based interventions in the plan to address the selected priorities.
- Evidence of process and outcome measures to assess progress.
- Identified disparities.
- Evidence of strategies for sustaining community engagement and the types of participating partner organizations

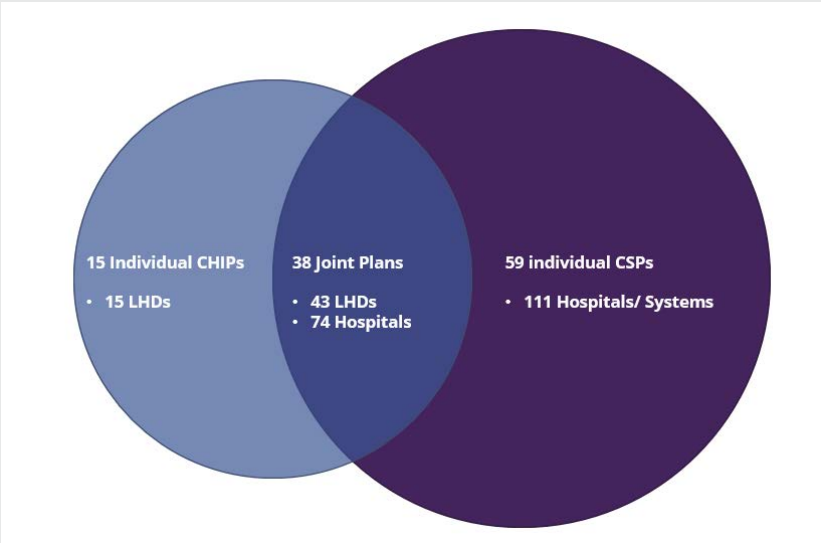
The evaluation process also assessed organizations' use of intermediate progress measures to monitor advancements toward their objectives. The Department's staff used a color-coded rubric to evaluate the interventions along with process and outcome measures. They also determined whether the selected interventions were evidence-based or aligned with best practices and reviewed if the intermediate progress measures were specific, and correlated with the selected interventions, goals, and objectives detailed in the plans.

Findings

The reviews indicated that over time there was increased attention on local collaboration, as well as evidence that local collaborative community health improvement plans had been implemented. Figure 1 provides a summary of the submissions for 2022-2024 Community Health Assessments/Community Health Improvement Plans/Community Service Plans.

The Department received 112 plans in total, submitted by 58 local health departments and 185 nonprofit hospitals/hospital systems. Among the submissions, 38 were the result of collaborative efforts, pooling resources, and expertise from 43 local health departments and 74 hospitals/hospital systems. In contrast, 16 local health departments individually submitted a total of 15 Community Health Improvement Plans, and 111 hospitals/hospital systems submitted 59 Community Service Plans on their own, indicating these were submissions from single entities.

Figure 1. 2022-2024 Community Health Assessments/Community Health Improvement Plans/Community Service Plans Submissions



Additionally, regional collaboration was observed across the state, with many local health departments and nonprofit hospitals coming together to submit regional plans. This collaborative effort resulted in the submission of 5 regional plans by 21 counties. Figure 2 below summarizes the regional plan submissions. Overall, joint planning took place outside of New York City, though large hospital systems serving multiple counties found it challenging to collaborate on planning with more than 1 county local health department.

Figure 2. Regional Community Health Assessments/Community Health Improvement Plans Submissions for 2022-2024

Finger Lakes Region	Mid-Hudson Region	Capital Region	Western Region	Others
•Chemung •Livingston •Monroe •Ontario •Schuyler •Seneca •Steuben •Wayne •Yates	•Dutchess •Orange •Putnam •Rockland •Sullivan •Ulster •Westchester	•Albany •Rensselaer •Schenectady	•Genesee •Orleans •Wyoming	•Columbia •Greene

Priorities Selection

In 2022, nearly all local health departments and nonprofit hospitals identified “Preventing Chronic Diseases” and “Promoting Mental Health and Preventing Substance Abuse” as priorities within their communities. “Preventing Communicable Diseases” and “Promoting Healthy and Safe Environments” were the least selected priorities. The “Healthy Women, Infants, and Children” priority area was chosen by 51% of nonprofit hospitals, whereas only 29% of local health departments selected it. Figure 3 displays the Prevention Agenda priority areas selected by the counties and Figure 4 shows the top priorities selected by local health departments and hospitals.

Figure 3. The Prevention Agenda Priorities Selected by Counties, 2022- 2024

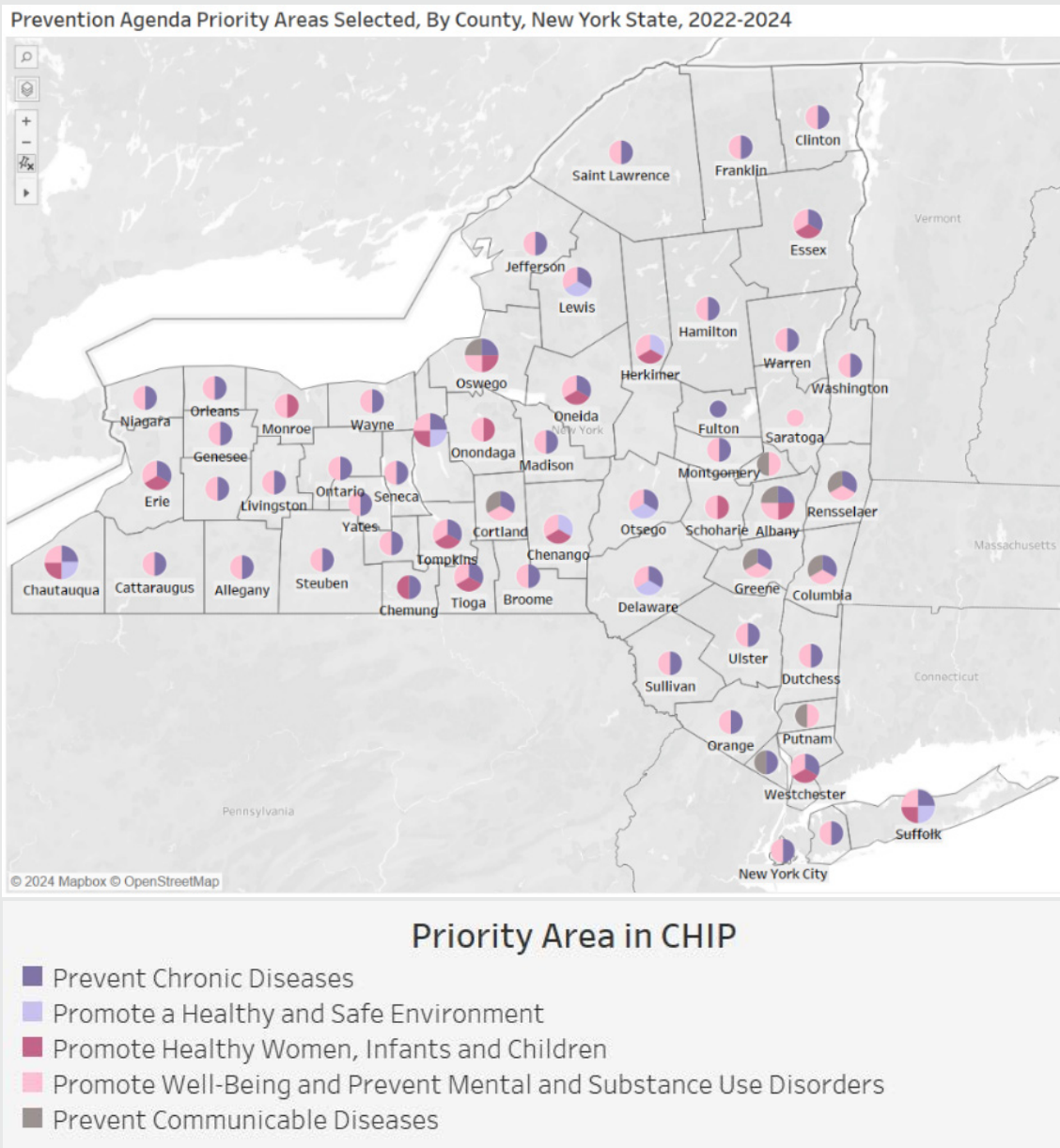
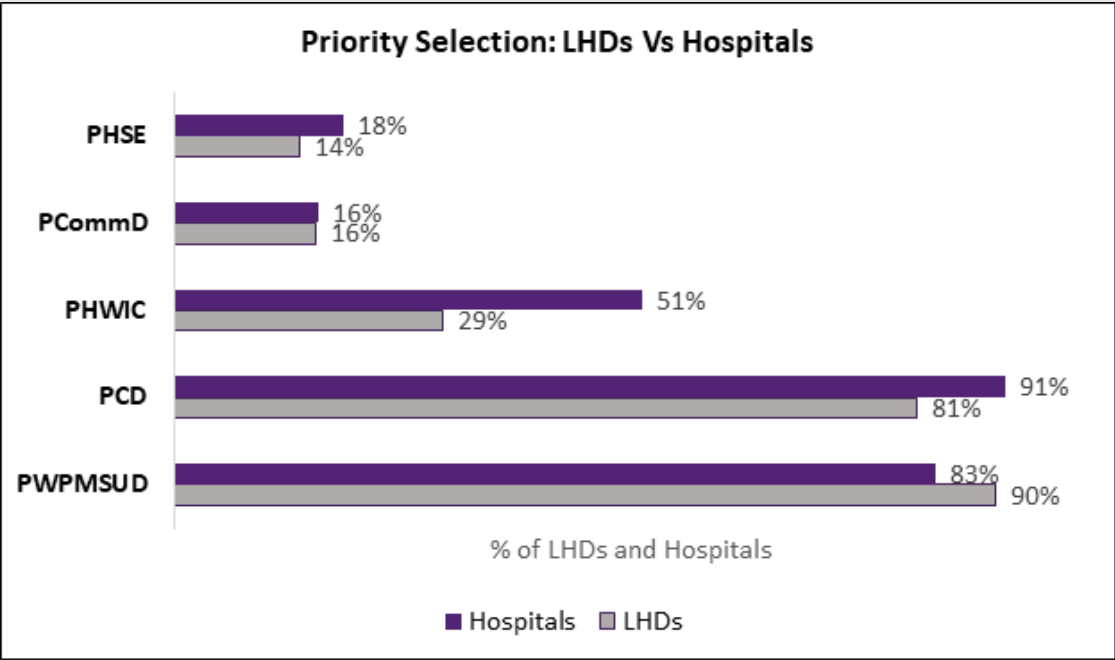
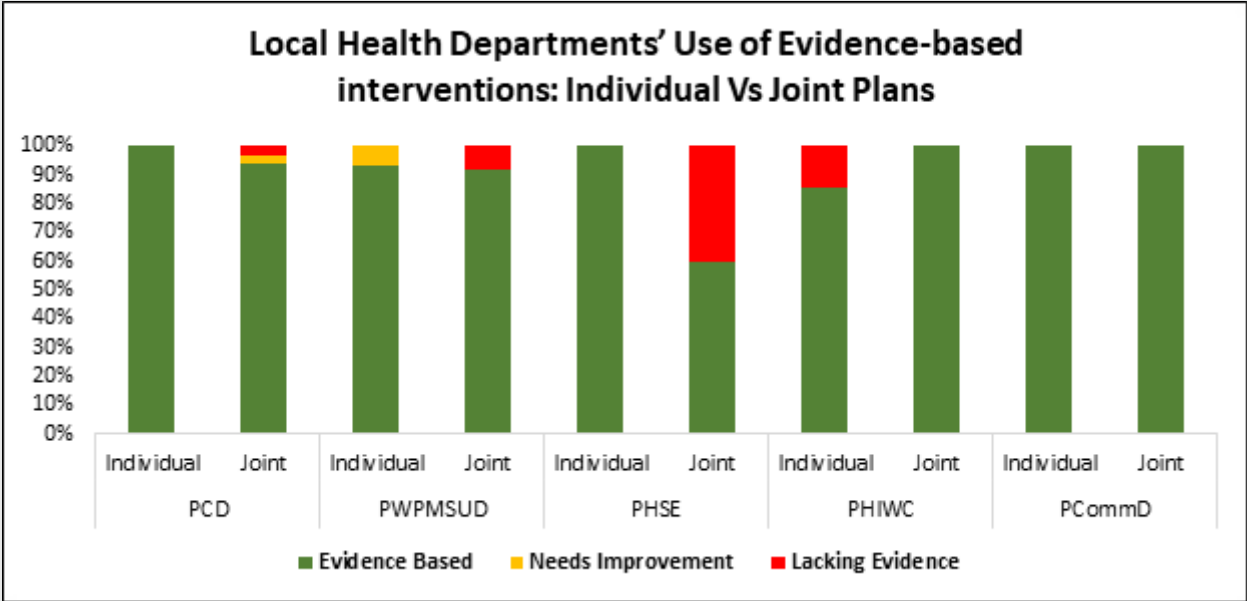


Figure 4. Priority Selections for Local Health Departments and Hospitals



Additionally, a review of intervention types revealed that the majority of local health departments and nonprofit hospitals selected evidence-based or best practice interventions. In general, individual plans had a higher percentage of evidence-based interventions compared to joint submissions (Figure 5).

Figure 5. Local Health Departments Use of Evidence-Based Interventions



Lessons Learned

- The COVID-19 pandemic and response effort exposed challenges and limitations of public health infrastructure and workforce, and opportunities for collaboration and coordination between state and local public health institutions.
- Over the last 6 years, local planning guidance has promoted collaboration between local health departments and nonprofit hospitals during the implementation phase of the Community Health Improvement Plan. As a result, there was a notable increase in the number of nonprofit hospitals that submitted a joint plan with the local health department in their service area. Additionally, the guidance mandated the use of evidence-based interventions, leading to an increase in their utilization.
- Annual monitoring and regular technical assistance are essential to support local health departments and nonprofit hospitals in implementing their plans.
- New partnerships formed during the planning process of the Prevention Agenda can extend beyond traditional collaborations and benefit other ongoing health initiatives.
- Understanding the culture and public health knowledge of community partners is vital for effective communication. For example, the Department found that the perceived role and understanding of social determinants of health varies greatly from one organization to another.



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SECTION VI: PARTNER FEEDBACK

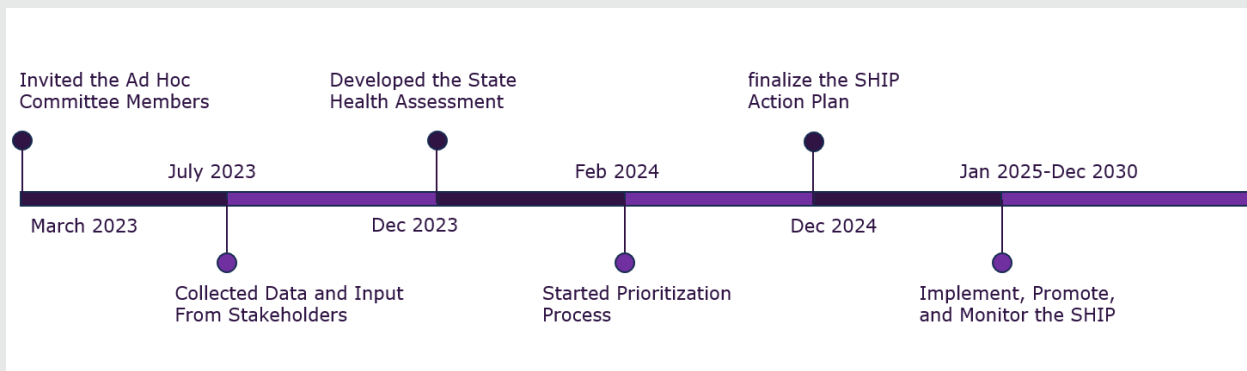
Partner Engagement

Collaboration within the New York State Department of Health (the Department) and with external partners is a key element in developing the Prevention Agenda. Engaging partners and seeking their feedback throughout the planning process is critical in identifying the most important health issues affecting New York.

The development of the 2024 State Health Assessment was a cooperative effort involving data collection and analysis from various sources at state, regional, and county levels. Multisectoral partners participated in this effort through routine meetings, as well as providing input via the partner survey designed to prioritize the identified health issues within the state.

Figure 1 illustrates the 2025-2030 Prevention Agenda planning process timeline. Partners were involved in the assessment, selection, design, prioritization, and development of an action plan for the 2025-2030 Prevention Agenda cycle. The Planning began in March 2023 with the establishment of a New York State Department of Health internal steering committee and the Ad Hoc Committee to lead New York's State Health improvement Plan.

Figure 1. Prevention Agenda Planning Process Timeline



The internal steering committee was comprised of subject matter experts from more than 38 centers, divisions, and programs across the Department. The steering committee met quarterly in 2023 to identify the priority areas for the 2025-2030 prevention agenda cycle, set goals, and determine which health issues from the previous Prevention Agenda cycle would carry forward. This internal partner engagement occurred alongside regular meetings of the Ad Hoc Committee.

The Ad Hoc Committee is a forum established to lead the process of partner engagement for New York's State Health Improvement Plan. It is comprised of more than 120 representatives from 48 agencies across various sectors beyond health. This includes members of the Public Health and Health Planning Council, as well as representatives from statewide organizations, local health departments, hospital associations, health care providers, community-based organizations, advocacy groups, academia, and partners that support community health improvement. **See Appendix C for a full list of Ad Hoc Committee members.**

The primary role of the Ad Hoc Committee is to provide feedback on the overall approach and cross-cutting principles of the Prevention Agenda. This included the vision, priorities, focus areas,

interventions, objectives, and tracking indicators. In addition, this cross-sector partnership helps identify assets and resources, evidence-based or best-practice interventions, and strategies for partners to implement, advancing the Prevention Agenda and improving the health of individuals of all ages.

The Ad Hoc Committee meets quarterly throughout the planning process for the 2025-2030 Prevention Agenda. Feedback from the committee encouraged the Department to adopt a new vision for the 2025-2030 Prevention Agenda, facilitating the development of a holistic framework. This framework emphasizes the social determinants of health, continues to focus on health across all policies, and addresses health disparities by promoting health equity.

Identification of Health Needs and Prioritization

The Department, in collaboration with the State Health Assessment/State Health Improvement Plan partners and the Ad Hoc Committee members, developed the priorities through extensive data analysis, assessment, and feedback from partners. There was a total of 31 partner meetings that included State Health Improvement Plan priority identification as part of their agenda. 6 of those meetings were convened exclusively to discuss and identify health priorities for the 2025-2030 Prevention Agenda.

The State Health Assessment/State Health Improvement Plan Planning Team began by identifying cross-cutting themes across the State Health Assessment. They presented these themes to the partners, who provided feedback and further refined them. The State Health Assessment/State Health Improvement Plan Planning Team then compiled a list of priorities based on data from the State Health Assessment and partner feedback. This priority list resulted in a total of 44 public health issues including health priorities and social determinants of health.

In February 2024, the State Health Assessment/State Health Improvement Plan Planning Team sent out a health prioritization survey to partners to identify the highest priorities for inclusion in the 2025-2030 Prevention Agenda. This survey aimed to prioritize the 44 identified public health issues using a weighted voting system. Criteria used for prioritization included: 1) Severity of the problem, 2) Size of the problem, 3) Disproportionate effects among subgroups; 4) Economic and social cost, 5) Life-span effect, 6) Feasibility, and 7) Availability of evidence-based interventions. **See Appendix D for additional information on the prioritization survey.**

The 2025-2030 Prevention Agenda Framework

A close examination of State Health Assessment data, alignment with topics in Healthy People 2030, and dialogue with partners over a series of engagements held over 18 months has led to the creation of the vision, foundations, and established priorities for the 2025-2030 Prevention Agenda (Figure 2).

The new framework adopts Healthy People 2030's 5 domains of the social determinants of health. These include 1) Economic Stability, 2) Social and Community Context, 3) Neighborhood and Built Environment, 4) Health Care Access and Quality, and 5) Education Access and Quality. The priorities selected for the 2025-2030 Prevention Agenda include the top 24 highest-ranking health issues from the survey. **Table 1 summarizes the evolution of the Prevention Agenda. Table 2 lists the public health issues identified in the survey with their total weighted scores.**

Figure 2. The 2025-2030 Prevention Agenda Framework



Subject matter experts have organized workgroups from the Ad Hoc Committee members and other partners to create 5 domain-specific action plans. Using a template provided by the Department, each workgroup will develop a final set of goals, equitable and inclusive objectives, indicators to assess progress, and organizational-level evidence-based interventions to address these goals. For each intervention, workgroups will identify the age group(s) of focus and the sector(s) that can play a lead or contributing role. To ensure a Health Across All Policies approach, these priority-specific action plans will be reviewed by other state agencies, and their comments and feedback will be incorporated. Additionally, the plans will be reviewed by the New York State Office for the Aging and other partners concerned with healthy aging to ensure the inclusion of age-appropriate interventions. In February 2025, these plans will be sent to the Ad Hoc Committee for final review and will be reviewed by the Public Health and Health Planning Council.

Table 1. Evolution of the Prevention Agenda

Prevention Agenda 2019-2024	Prevention Agenda 2025-20230
Priority 1 – Prevent Chronic Diseases	Domain 1 – Economic Stability
Focus Areas: 1. Healthy eating and food security 2. Physical activity 3. Tobacco prevention 4. Chronic disease preventive care and management	Goal: All people in New York have the financial security and support needed to thrive. Health Issues: Poverty, unemployment, nutrition security, and housing stability and affordability
Priority 2 – Promote a Healthy and Safe Environment	Domain 2 – Social and Community Context
Focus Areas: 1. Injuries, violence, and occupational health 2. Outdoor air quality 3. Built and indoor environments 4. Water quality 5. Food and consumer products	Goal: All people in New York live in communities that foster and support optimal physical, mental, and social well-being. Health Issues: Mental well-being, tobacco/e-cigarette use, adverse childhood experiences, and healthy eating
Priority 3 – Promote Healthy Women, Infants and Children	Domain 3 – Neighborhood and Built Environment
Focus Areas: 1. Maternal and women’s health 2. Perinatal and infant health 3. Child and adolescent health 4. Cross-cutting healthy women, infants, and children	Goal: All people in New York have equitable access to healthy, and safe neighborhoods. Health Issues: Safe and healthy communities, injuries, and violence
Priority 4 – Promote Well-Being and Prevent Mental and Substance Use Disorders	Domain 4 – Healthcare Access and Quality
Focus Areas: 1. Well-being 2. Mental and substance use disorders	Goal: All people in New York have access to timely, affordable, and high-quality healthcare services. Health Issues: Health insurance coverage, access to care, and healthy children
Priority 5 – Prevent Communicable Diseases	Domain 5 – Education Access and Quality
Focus Areas: 1. Vaccine preventable diseases 2. Human Immunodeficiency Virus 3. Sexually transmitted infections 4. Hepatitis C 5. Antibiotic resistance and healthcare-associated infections	Goal: All people in New York have equitable access to quality education in an environment that supports physical and mental health. Health Issues: K-12 Student success and educational attainment

Table 2. Rank of all Identified Public Health Issues from Health Prioritization Survey

Rank	Issue	Severity	Size	Disproportionate Effects	Cost	Life-span Effect	Feasibility	Evidence-based Availability	Total Score
1	Poverty	4.28	4.12	4.73	4.59	4.67	2.87	2.8	28.06
2	Prenatal Care and Maternal Mortality	4.12	3.62	4.43	4.1	4.04	3.94	3.77	28.02
3	Nutrition Security	3.96	3.81	4.6	3.92	4.13	3.67	3.71	27.8
4	Drug Overdose Death	4.59	3.56	3.67	4.13	4.38	3.65	3.67	27.65
5	Health Insurance Access	3.84	3.55	4.3	4.12	4.05	3.88	3.59	27.33
6	Housing Stability and Affordability	4.04	3.94	4.67	4.4	4.26	2.99	2.97	27.27
7	Infant Mortality	4.17	3.36	4.23	3.97	4.02	3.8	3.7	27.25
8	Healthy Eating	3.69	3.94	4.17	3.77	4.03	3.8	3.84	27.24
9	Suicide	4.57	3.43	3.2	3.99	4.43	3.59	3.66	26.87
10	Children Receive Appropriate Screening and Services	3.6	3.57	4.07	3.75	3.84	4.15	3.83	26.81
11	Depression	3.99	3.93	3.17	3.92	4.17	3.53	3.69	26.4
12	Early Intervention	3.51	3.37	3.87	3.88	3.83	3.82	3.72	26
13	Unemployment	3.78	3.54	4.57	4.31	4.03	2.89	2.87	25.99
14	Healthy Aging (i.e., preventive services for chronic disease and associated risk factors)	3.69	3.75	3.57	3.82	3.73	3.82	3.56	25.94
15	Physical Access and Proximity to Health Services	3.73	3.57	4.17	3.79	3.86	3.42	3.35	25.89
16	Anxiety and Stress	3.84	3.93	3.07	3.79	4.06	3.55	3.6	25.84
17	Adverse Childhood Experiences	3.75	3.63	3.7	3.9	4.27	3.12	3.29	25.66
18	Oral Health	3.34	3.45	4.03	3.49	3.74	3.83	3.74	25.62
19	Injuries and Violence	3.93	3.43	4	3.89	3.97	3.18	3.19	25.59
20	Education Access	3.43	3.55	4.03	3.84	3.96	3.31	3.38	25.5
21	Safe Community	3.52	3.56	4.1	3.72	3.81	3.22	3.15	25.08

Rank	Issue	Severity	Size	Disproportionate Effects	Cost	Life-span Effect	Feasibility	Evidence-based Availability	Total Score
22	Tobacco/ E-cigarette Use	3.79	3.44	3.07	3.66	3.8	3.53	3.77	25.06
23	Lead Poisoning	3.49	2.8	4.1	3.29	3.58	3.85	3.88	24.99
24	Language Access	3.26	3.19	4.23	3.35	3.59	3.76	3.57	24.95
25	Human Immunodeficiency Virus (HIV)	3.44	2.79	3.8	3.36	3.62	3.73	3.92	24.66
26	Teen Pregnancy	3.12	2.82	3.97	3.66	3.61	3.59	3.81	24.58
27	Alcohol Consumption	3.61	3.55	2.93	3.63	3.8	3.34	3.55	24.41
28	Water Quality	3.5	3.28	2.97	3.53	3.74	3.55	3.56	24.13
29	Healthy Schools Environment	3.3	3.3	3.47	3.49	3.45	3.52	3.53	24.06
30	Access to Exercise Opportunities	3.23	3.37	3.6	3.26	3.33	3.66	3.61	24.06
31	Hepatitis C	3.36	2.75	3.5	3.22	3.44	3.73	3.88	23.88
32	Sexually Transmitted Infections (STIs)	3.25	3.08	3.53	3.12	3.15	3.75	3.9	23.78
33	Human Papilloma Virus (HPV) Vaccine for Adolescents	3.1	2.95	2.9	3.05	3.14	3.95	3.94	23.03
34	Built and Indoor Environments	3.13	3.16	3.07	3.38	3.38	3.23	3.24	22.59
35	Social Cohesion	3.19	3.44	3	3.39	3.61	2.9	2.97	22.5
36	Climate Change	3.3	3.61	2.2	3.69	3.86	2.68	2.89	22.23
37	Outdoor Air Quality	3.25	3.21	2.43	3.36	3.52	2.88	3.04	21.69
38	Health care Associated Infections	3.23	2.7	2.03	3.17	2.92	3.78	3.76	21.59
39	End of Life Care and Planning	3.02	3.11	2.5	3.12	2.83	3.56	3.39	21.53
40	Indoor Radon	3.14	2.44	2.7	2.85	3.24	3.46	3.63	21.46
41	Cannabis Use	2.85	2.97	2.6	3.03	3.18	3.23	3.23	21.09
42	Foodborne Illness	2.82	2.56	1.8	2.75	2.59	3.59	3.76	19.87
43	Compulsive Gambling	2.83	2.45	2.33	2.91	3.2	2.9	3.24	19.86
44	Tickborne Diseases	3.02	2.63	1.63	2.86	2.94	3.21	3.3	19.59



Department
of Health

2024

New York State 2024 Health Assessment

SECTION VII: APPENDICES

Appendix A: Partners List

#	Organization Name
1	Greater New York Hospital Association (GNYHA)
2	Healthcare Association of New York State (HANYS)
3	Medical Society of the State of New York (MSSNY)
4	New York Health Plan Association
5	New York State Association of County Health Officials (NYSACHO)
6	NYS Conference of Local Mental Hygiene Directors
7	NYS Dental Association
8	NYS Business Council
9	The NYS Academy of Family Practice
10	The NYS Academy of Pediatrics
11	United Hospital Fund
12	Healthy Capital District
13	American Cancer Society
14	New York State Perinatal Association
15	Center for Independence of the Disabled, NY
16	Hunger Solutions
17	Let's get Immunized New York
18	NYS Podiatric Medical Association
19	AARP New York
20	Spanish American Medical Dental Society of New York, Inc.
21	John A. Hartford Foundation
22	Commission on the Public's Health
23	Housing Works
24	Community Health Care Assoc of NYS
25	Equality New York
26	The New York Academy of Medicine
27	NYS Health Foundation
28	Schuyler Center for Analysis and Advocacy Inc
29	Inclusive Alliance IPA Inc
30	Primary Care Development Corporation
31	Children's Defense Fund - New York
32	The Mental Health Association in New York State (MHANYS)
33	Greater Rochester Health Foundation
34	Health Foundation of Western and Central NY
35	Northeast Business Group on Health

#	Organization Name
36	NYS Rural Health Association
37	REACH CNY, Inc.
38	S2AY Rural Health Network
39	Long Island Health Collaborative
40	NYU School of Global Public Health
41	SUNY Albany School of Public Health
42	NYS Office for the Aging
43	NYS Department of Agriculture and Markets
44	NYS Office of Alcoholism & Substance Abuse (OASAS)
45	NYS Office of Mental Health
46	NYS Department of State
47	New York City Department of Health and Mental Hygiene (NYC DOHMH)
48	Public Health and Health Planning Council (PHHPC)
49	New York State Department of Health • Capital District Regional Office • Central New York Regional Office • Metropolitan Regional Office • Western Regional Office • Division of Family Health • Division of Epidemiology • Division of Chronic Disease Prevention • Public Health Information Group • Center for Environmental Health • Office of Public Health • Office of Local Health Services • Office of Primary Care and Health Systems Management • Office of Aging Long-term Care • Office of Health Equity and Human Rights • Office of Minority Health and Health Disparities Prevention • Office of Gun Violence Prevention • Office of the Commissioner • Office of Health Insurance Programs

Appendix B: Data Source Descriptions and Indicators

Alzheimer's Association

The Alzheimer's Association leads the way to end Alzheimer's disease and all other dementia by accelerating global research, driving risk reduction and early detection, and maximizing quality care and support. As the largest nonprofit funder of Alzheimer's disease research, the Association is committed to accelerating the global progress of new treatments, preventions, and, ultimately, a cure. The association provides annual infographics detailing the impact of Alzheimer's disease in each state.

Indicators:

- Alzheimer's disease key statistics, New York State, 2023

American Community Survey

The American Community Survey (ACS) is part of the Census Bureau's reengineered census process, designed to provide a fresh look at how communities are changing. The survey collects housing, demographic, social, and economic information annually from representative samples of the U.S. population.

The ACS-based indicators contained in this report are from the data collected during 2017-2021 with five-year estimates for the following race/ethnicity groupings: White non-Hispanic, Black, Asian, and Hispanic. Note that unlike other race/ethnicity groupings utilized in this report, the ACS groupings are not mutually exclusive. That is, the Black and Asian categories include Hispanics; the Hispanic category includes all races.

Indicators:

- Median gross rent, 2017-2021
- Percentage of individuals living at or below 200% poverty, 2017-2021 Percentage of families living at or below 200% poverty, 2017-2021 Percentage of households on food stamps, 2017-2021
- Percentage of households receiving public income, 2017-2021 Population distribution by age and sex, New York State, 2006 and 2021 Population by race and Hispanic origin, New York State, 2021

America's Health Rankings

For 3 decades, America's Health Rankings has provided an analysis of national health on a state-by-state basis by evaluating a historical and comprehensive set of health, environmental, and socioeconomic data to determine national health benchmarks and state rankings. The Annual Report is the longest-running annual assessment of the nation's health on a state-by-state basis. The reports analyze a comprehensive set of behaviors, public and health policies, community and environmental conditions, and clinical care data to provide a holistic view of the health of the people in the nation.

Indicators:

- Annual report summary of New York State, America's Health Rankings, 2022 Annual report summary of New York State, America's Health Rankings, 2022
- Number of active primary care providers per 100,000 population, New York State and United States, 2022
- Number of psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, and advanced practice nurses specializing in mental health care, per 100,000 population, 2022
- Number of general dentists and advanced practice dental therapists, per 100,000 population, 2022

Behavioral Risk Factor Surveillance System (BRFSS)

The BRFSS is an annual statewide telephone survey system designed by the United States Centers for Disease Control and Prevention (CDC). New York State has participated annually since 1985. BRFSS monitors modifiable risk behaviors and other factors contributing to the leading causes of morbidity and mortality. The BRFSS sample represents the noninstitutionalized adult household population, ages 18 and older.

Indicators:

- Obesity and leisure time physical activity among adults, New York State, 2016-2021
- Percentage of residents reporting they lack a regular healthcare provider, by race and ethnicity, education, gender, and household income, New York State, 2021
- Percentage of residents that reported avoiding seeking healthcare due to affordability in the last 12 months by race and ethnicity, education, gender, and household income, New York State, 2021

CDC WONDER

CDC WONDER is an integrated information and communication system for public health. Its purposes are: (1) to promote information-driven decision-making by placing timely, useful facts in the hands of public health practitioners and researchers, and (2) to provide the public with access to specific and detailed information from the CDC. CDC WONDER presents an array of health-related datasets. Each dataset is queried using a series of menus. The array of datasets available through CDC WONDER changes over time as the CDC works to make new data sources available and as problems are encountered and resolved. CDC WONDER presents public-use data for United States births, deaths, cancer diagnoses, tuberculosis cases, vaccinations, environmental exposures, and population estimates, among many other topics. These data collections are available as online databases, which provide public access to ad-hoc queries, summary statistics, maps, charts, and data extracts. Most of the data are updated annually; some collections are updated monthly or weekly.

Indicators:

- Weekly COVID-19 death reports, all facilities, New York State, March 2020-November 2023
- Magnitude of opioid burden, 2020-2021

County Health Rankings

County Health Rankings & Roadmaps is a program of the University of Wisconsin Population Health Institute. The program provides data, evidence, guidance, and examples to build awareness of the multiple factors that influence health and support leaders in growing community power to improve health equity.

The Rankings are unique in their ability to measure the health of nearly every county in all 50 states, and are complemented by guidance, tools, and resources designed to accelerate community learning and action. The annual County Health Rankings measure vital health factors, including high school graduation rates, obesity, smoking, unemployment, access to healthy foods, the quality of air and water, income inequality, and teen births in nearly every county in America. Their data comes from a variety of sources, including the ACS, the BRFSS, Bureau of Labor Statistics, CDC, and many more. The annual Rankings provide a revealing snapshot of how health is influenced by where people live, learn, work and play.

Indicators:

- County Health Rankings, health factor rankings by county – New York State, 2022 Percentage of disconnected youth, New York State, 2022
- Social associations per 10,000 population, New York State, 2022 Percentage of children in single-parent households, New York State, 2022

New York State Community Health Indicator Reports

The New York State Community Health Indicator Reports (CHIRS) were developed in 2012 and are regularly updated to consolidate and provide information regarding health indicators in the County Health Assessment Indicators (CHAI) reports for all communities in New York. Data previously provided in these reports have now been incorporated into the CHIRS Dashboard and are displayed in enhanced more interactive data views. The CHIRS Dashboard tracks about 350 indicators organized by 15 health topics and is updated regularly to include the most recent year of data available for these indicators.

Additionally, all 62 counties in New York State have their own dashboards. These allow for comparison of each county's data in relationship to that county's region and New York State totals. They also include at-a-glance comparisons of the 2 most recent data points. Visualizations include tables, maps, charts, and graphs at the state and county levels. This dashboard is a key resource for assessing county trends and can assist in tracking intervention progress.

Indicators:

- Violent crime, rate per 100,000 population, New York State, 2011-2020
- Percentage of children ages 3 to 4 years enrolled in school, New York State and New York City, 2013- 2017 to 2017-2021

New York State County Health Indicators by Race and Ethnicity

The New York State County Health Indicators by Race and Ethnicity (CHIRE) are a series of indicators presented for New York State, New York City, New York State excluding New York City, and each of New York's 62 counties. There are 60 indicators presented for each geographic location across 4 race and ethnical subgroups (White non-Hispanic, Black non-Hispanic, Hispanic, and Asian non-Hispanic), as well

as the overall totals for each location. The indicators presented include sociodemographics, general health indicators, birth-related indicators, injury-related indicators, respiratory disease indicators, heart disease and stroke indicators, diabetes indicators, and cancer indicators.

Indicators:

- Number of births per year (3-year average), 2018-2020 Percentage of births with early (1st trimester) prenatal care, 2018-2020 Percentage of births with adequate prenatal care, 2018-2020
- Percentage of premature births (< 37 weeks gestation - clinical estimate), 2018-2020 Percentage of low birthweight births (< 2.5 kg), 2018-2020
- Teen pregnancies per 1,000 females under 18, 2018-2020 Pregnancies per 1,000 females ages 15-44 years, 2018-2020
- Fertility per 1,000 females ages 15-44 years, 2018-2020 Infant mortality per 1,000 live births, 2018-2020
- Percentage of low-risk births delivered by cesarean section, 2018-2020
- Motor vehicle-related mortality per 100,000 population, age-adjusted, 2018-2020 Unintentional injury mortality per 100,000 population, age-adjusted, 2018-2020 Unintentional injury hospitalizations per 10,000 population, age-adjusted, 2018-2020 Fall hospitalizations per 10,000 population, ages 65 or older, 2018-2020 Poisoning hospitalizations per 10,000 population, age-adjusted, 2018-2020
- Suicide mortality per 100,000 population, age-adjusted, 2018-2020 Opioid burden per 100,000 population.
- Asthma hospitalizations per 10,000 population, age-adjusted, 2018-2020 Asthma hospitalizations per 10,000 population, ages 0-17 year, 2018-2020
- Chronic lower respiratory disease mortality per 100,000 population, age-adjusted, 2018-2020
- Chronic lower respiratory disease hospitalizations per 10,000 population, age-adjusted, 2018-2020 Percentage of fee-for-service (FFS) Medicare enrollees who had an annual flu vaccination, 2021 Colorectal cancer mortality per 100,000 population, age-adjusted, 2017-2019
- Colorectal cancer incidence per 100,000 population, age-adjusted, 2017-2019
- Female breast cancer mortality per 100,000 female population, age-adjusted, 2017-2019
- Female late-stage breast cancer incidence per 100,000 female population, age-adjusted, 2017-2019
- Cervix uteri cancer mortality per 100,000 female population, age-adjusted, 2017-2019
- Cervical cancer incidence per 100,000 female population, age-adjusted, 2017-2019
- Percentage of female fee-for-service (FFS) Medicare enrollees ages 65-74 years who received an annual mammography screening, 2021
- Median annual household income in U.S. dollars, 2017-2021

- Percentage of families living below poverty, 2017-2021 Percentage unemployed among the civilian labor force, 2017-2021
- Percentage of population with a disability, 2017-2021 Arrests per 1,000 population ages 18 or older, 2019-2021
- Percentage of high school students who dropped out, 2021-2022
- Percentage of population ages 25 or older with a bachelor's degree or higher, 2017-2021
- Percentage of population who speak English less than "very well", 2017-2021

New York State Department of Health HIV/AIDS annual surveillance report, 2022

This report presents recent data on persons newly diagnosed with HIV while residing in New York State and persons living with diagnosed HIV in New York State as of December 2022. Tables are grouped by major geographic division (New York State, New York City, New York State excluding New York City, Ryan White Regions, and New York City boroughs). Most divisions feature four tables on separate pages – (A) persons living with diagnosed HIV, (B) new diagnoses of HIV, (C) new diagnoses of AIDS, and (D) deaths of persons with diagnosed HIV.

Indicators:

- New Diagnoses of HIV by sex at birth, age, race and ethnicity, and risk category, New York State, 2021

New York State Department of Health Sexually Transmitted Infections Surveillance System

Reportable STIs in New York State include syphilis, gonorrhea, chlamydia, chancroid, and lymphogranuloma venereum (LGV). Reporting requirements for granuloma inguinale are limited to residents of the 5 boroughs of New York City.

The 2021 STI morbidity data for New York State exclusive of New York City were obtained for diagnoses meeting federal case definition and reported by the 57 local health departments outside of New York City to the State Department of Health's Communicable Disease Electronic Surveillance System (CDESS). STI Surveillance data in this report include diagnoses reported to CDESS in 2021 and closed by September 15, 2022.

The 2021 New York City STI morbidity data were obtained from data provided by the New York City Department of Health and Mental Hygiene Bureau of STI in December 2022. The Maven surveillance system is the source of surveillance information for diagnoses reported among residents of the 5 boroughs of New York City.

Indicators:

- Chlamydia case rate per 100,000, 2010-2020
- Gonorrhea case rate per 100,000, 2010-2020
- Early syphilis case rate per 100,000, 2010-2020

New York State Department of Environmental Conservation/New York State Department of Health Center for Environmental Health

The New York State Department of Environmental Conservation (DEC) was created on July 1, 1970, to combine all state programs designed to protect and enhance the environment into a single agency. DEC is headed by a commissioner, who is assisted by executive managers. The Department has 24 divisions and offices and is further organized into bureaus to fulfill the functions and regulations established by Title 6 of New York Codes, Rules, and Regulations (6 NYCRR). Some programs are also governed by federal law. The mission of DEC is to conserve, improve, and protect New York's natural resources and environment and to prevent, abate, and control water, land, and air pollution, to enhance the health, safety, and welfare of the people of the state and their overall economic and social well-being.

The New York State Department Center for Environmental Health works closely with DEC. The Center conducts environmental health investigations, monitors occupational health risks, climate health, birth defects, radiation, and toxic substances, and protects the water supply.

Indicators:

- Counts of air quality index (AQI) days above 100 PM2.5 by New York State Department of Environmental Conservation forecast region, New York State, 2015- July 2023

New York State Immunization Information System

The Immunization Information System was established to have a complete, accurate, secure, real-time immunization medical record that is easily accessible and promotes public health by fully immunizing all individuals appropriate to age and risk. Providers have access to consolidated and accurate immunization records of their patients, receive clinical decision support in complying with an increasingly complex vaccination schedule, and can use an efficient tool to manage their vaccine inventory. Parents and caregivers get reminders when an immunization has been missed. Up-to-date information on a child's vaccination history helps to prevent over-immunization. Public health systems use the information to control vaccine-preventable diseases.

Indicators:

- Percentage of 24- to 35-month-old children with the 4:3:1:3:3:1:4* immunization series, New York State, 2021

New York State Maternal and Child Health Dashboard

The Maternal, Woman and Child Health dashboard is comprised of National and State selected performance measures to support the assessment of needs and to monitor progress towards improving the health of New York State residents and reducing health disparities, specifically for the following populations: women, infants, children, and adolescents including children and youth with special health care needs. It serves as an interactive visual presentation of the state and county data. The state dashboard homepage provides a view of currently available data and objectives for 43 tracking indicators. Trend data can be accessed, and 34 indicators have visualizations of indicator outcomes by major socio-demographic characteristics at the state level. The county dashboard contains 16 tracking indicators.

Indicators:

- Severe maternal morbidity, rate per 10,000 hospital deliveries, by residence type, race and ethnicity, zip code income quartile, age, and insurance status, New York State, 2021
- Percentage of births with early prenatal care, by maternal age, race and ethnicity, education, health insurance status, marital status, plurality, WIC participation, and urban-rural residence, New York State, 2020
- Percentage of children and adolescents ages 1-17 years who had 1 or more preventive dental care visits in the past year, by sex, child age, race and ethnicity of child, and education level of adult in household, New York State, 2019-2020

New York State Prevention Agenda Dashboard

The New York State Prevention Agenda Dashboard is an interactive visual presentation of the most current tracking indicator data to track the progress of the New York State's Health Improvement Plan at state and county levels. It serves as a key source for monitoring progress that communities around the state have made regarding meeting the Prevention Agenda objectives. The state dashboard provides a view of the most currently available data and the 2024 objectives for nearly 100 tracking indicators (n=99). On this page, indicators are grouped by priority area, and the most current data are compared to the previous data period to assess the annual progress for each indicator. From here, historical (trend) data for the tracking indicators are easily accessed. For 47 indicators, visualizations by major socio-demographic characteristics are available. The county dashboard contains 70 indicators, and data for 6 indicators are available at the sub-county level.

Indicators:

- Firearm assault-related hospitalizations, rate per 10,000 population, New York State, 2016-2019
- Prevalence of cigarette smoking among adults, by gender, age group, race and ethnicity, education, household income, healthcare coverage, employment status, frequent mental distress, and region, New York State, 2021
- Percentage of high school students who are physical active, by gender, race and ethnicity, and grade, New York State, 2019
- Age-adjusted percentage of binge drinking during the past month among adults, by gender, race and ethnicity, education, household income, regular health care provider, disability status, and region, New York State, 2021
- Prevalence of vaping product use by high school age students, by gender, race and ethnicity, grade, and region, New York State, 2020
- Progress on all 99 indicators of the New York State Prevention Agenda 2019-2024 progress, by Priority Area
- New York State Prevention Agenda 2019-2024 progress, by Priority Area, among indicators where target was not met
- New York State Prevention Agenda 2019-2024 progress, by Focus Area, within the Preventing Chronic Disease Priority Area

- New York State Prevention Agenda 2019-2024 progress, by Focus Area, within the Promote Healthy and Safe Environment Priority Area
- New York State Prevention Agenda 2019-2024 progress, by Focus Area, within the Promote Healthy Women, Infants, and Children Priority Area
- New York State Prevention Agenda 2019-2024 progress, by Focus Area, within the Promote Well-Being and Prevent Mental and Substance Use Disorders Priority Area.
- New York State Prevention Agenda 2019-2024 progress, by Focus Area, within the Prevent Communicable Diseases Priority Area
- Percentage of adults with perceived food security, among adults with annual household income less than
- \$25,000, by gender, age group, race and ethnicity, education, disability status, and region, New York State, 2021
- The percentage of residents served by community water systems that have optimally fluoridated water, New York State, 2021
- The number of homes inspected for lead and other health hazards, New York State, 2017-2020
- The 3-year average number of radon tests performed, New York State, 2015-2017 to 2019-2021
- Percentage of adults with major depressive episodes during the past year, New York State, 2015-2016 to 2018-2019

New York State Vital Records

New York State consists of 2 vital event registration areas, New York City and New York State Exclusive of New York City (also referred to as Rest of State). New York City includes the 5 counties of Bronx, Kings (Brooklyn), New York (Manhattan), Queens, and Richmond (Staten Island); the remaining 57 counties comprise New York State Exclusive of New York City.

The New York State Department of Health Bureau of Vital Records (BVR) processes data from live birth, death, fetal death, and marriage certificates recorded in New York State Exclusive of New York City. Through a cooperative agreement, the State BVR Department receives data on live births, deaths, fetal deaths, and marriages from the New York City Department of Health and Mental Hygiene. The State BVR Department also receives data on live births and deaths for New York State residents that have been recorded in other states and Canada.

Vital event indicators for New York City reported by the State Department of Health may differ from those reported by the New York City Department of Health and Mental Hygiene. This is because the former includes events for all New York City residents, regardless of where they occurred, and the latter reports those events that occurred in New York City. The indicators may also differ due to timing and/or completeness of data.

Indicators:

- Life expectancy in New York State, by age, 2011-2020 Leading causes of death, New York State, 2012-2020

U.S. Census Bureau, Small Area Health Insurance Estimates

The Small Area Health Insurance Estimates (SAHIE) program was created to develop model-based estimates of health insurance coverage for counties and states. This program builds on the work of the Small Area Income and Poverty Estimates (SAIPE) program. SAHIE is the only source of single-year health insurance coverage estimates. SAHIE data can be used to analyze geographic variation in health insurance coverage, as well as disparities in coverage by race/ethnicity, sex, age and income levels that reflect thresholds for state and federal assistance programs. Because consistent estimates are available from 2008 to 2021, SAHIE reflects annual changes over time. Data is available across 5 age groups, by sex, by 6 income categories, and by 8 racial and ethnic subgroups.

Indicators:

- Percentage uninsured, ages younger than 65, 2021 Percentage uninsured, ages younger than 19, 2021

Youth Risk Behavior Surveillance System

The Youth Risk Behavior Surveillance System (YRBSS) is a survey of mostly public high school students using a methodology and questionnaire designed by the Centers for Disease Control and Prevention (CDC). The YRBSS collects information on risk factors and behaviors for this adolescent population using an anonymous self-administered questionnaire. It is conducted every 2 years and in New York State is administered by the New York State Education Department. Results help monitor health trends, identify emerging issues, and plan and evaluate programs that can help improve adolescent health. Data collected include demographics, health behaviors, substance use behaviors, and student experiences.

Indicators:

- Current use of marijuana among high school students, New York State and United States, 1991-2021

Appendix C: Ad Hoc Committee Members

#	Organization Name
1	Greater New York Hospital Association (GNYHA)
2	Healthcare Association of New York State (HANYS)
3	Medical Society of the State of New York (MSSNY)
4	New York Health Plan Association
5	New York State Association of County Health Officials (NYSACHO)
6	NYS Conference of Local Mental Hygiene Directors
7	NYS Dental Association
8	NYS Business Council
9	The NYS Academy of Family Practice
10	The NYS Academy of Pediatrics
11	United Hospital Fund
12	Healthy Capital District
13	American Cancer Society
14	New York State Perinatal Association
15	Center for Independence of the Disabled, NY
16	Hunger Solutions
17	Let's get Immunized New York
18	NYS Podiatric Medical Association
19	AARP New York
20	Spanish American Medical Dental Society of New York, Inc.
21	John A. Hartford Foundation
22	Commission on the Public's Health
23	Housing Works
24	Community Health Care Assoc of NYS
25	Equality New York
26	The New York Academy of Medicine
27	NYS Health Foundation
28	Schuyler Center for Analysis and Advocacy Inc
29	Inclusive Alliance IPA Inc
30	Primary Care Development Corporation
31	Children's Defense Fund - New York
32	The Mental Health Association in New York State (MHANYS)
33	Greater Rochester Health Foundation
34	Health Foundation of Western and Central NY
35	Northeast Business Group on Health

#	Organization Name
36	NYS Rural Health Association
37	REACH CNY, Inc.
38	S2AY Rural Health Network
39	Long Island Health Collaborative
40	NYU School of Global Public Health
41	SUNY Albany School of Public Health
42	NYS Office for the Aging
43	NYS Department of Agriculture and Markets
44	NYS Office of Alcoholism & Substance Abuse (OASAS)
45	NYS Office of Mental Health
46	NYS Department of State
47	New York City Department of Health and Mental Hygiene (NYC DOHMH)
48	Public Health and Health Planning Council (PHHPC)
49	New York State Department of Health • Capital District Regional Office • Central New York Regional Office • Metropolitan Regional Office • Western Regional Office • Division of Family Health • Division of Epidemiology • Division of Chronic Disease Prevention • Public Health Information Group • Center for Environmental Health • Office of Public Health • Office of Local Health Services • Office of Primary Care and Health Systems Management • Office of Aging Long-term Care • Office of Health Equity and Human Rights • Office of Minority Health and Health Disparities Prevention • Office of Gun Violence Prevention • Office of the Commissioner • Office of Health Insurance Programs

Appendix D: Prioritization Survey

In February of 2024, the New York State Department of Health distributed an online survey to internal and external partners to prioritize the 44 public health issues proposed for inclusion in the next Prevention Agenda. The survey used 7 criteria, with weighted survey responses. The following criteria were used in the prioritization process:

Criterion 1: Severity of the Problem – referring to whether the identified issue can reduce life quality, limit opportunities, or cause serious health outcomes such as disability or death.

Question: Does this Issue have a significant impact on health?

Rating Scale:

1=No impact on the quality of life, health, or health outcomes

2=Mild Impact (i.e., low risk for illness)

3=Moderate Impact (i.e., high risk for illness)

4=Severe Impact (i.e., high likelihood of disability)

Criterion 2: Size of the Problem – refers to whether the identified issue affects a large number of individuals and has the potential for a significant impact on the health of the community.

Question: Does this issue impact a large number of individuals?

Rating Scale:

1=Relatively few individuals affected

2=Moderate number of individuals affected in particular subgroups

3=Moderate number of individuals affected across the entire population

4=Large number of individuals affected in a particular subgroup

5=Large number of individuals affected across the entire population

Criterion 3: Disproportionate Effects Among Subgroups – Refers to worse health outcomes caused by the issue in specific subgroups, defined by age, race, ethnicity, income, gender, or geography, compared to others.

Question: Does this issue disproportionately impact specific population subgroups?

RATING SCALE

0=No

5= Yes

Criterion 4: Economic and Social Cost – refers to the consequences of not addressing the issue, which include increased monetary costs (i.e., healthcare and social services expenses) and social costs (i.e., loss of productivity, reduced quality of life, etc.)

Question: Does this issue result in significant economic or social cost?

Rating Scale:

1=Minimal economic/societal cost

2=Relatively low economic/societal cost

3=Moderate Economic/societal cost

4=Very high economic/societal cost

5=Extremely high economic/societal cost

Criterion 5: Life-Span Effect – refers to a health issue arising at a certain life stage having the potential for lasting impacts and/or serving as a proxy for other related behavioral or social problems.

Question: Does this issue have cross-cutting implications across multiple issues, or have a lasting effect throughout the lifespan?

Rating Scale:

1=No Impact: Issue limited to one life stage and is not associated with other problems

2=Minimal Impact: Issue minimally impacts entire life course and is associated with multiple problems

3=Moderate Impact: Issue moderately impacts entire life course and is associated with multiple problems

4=Severe Impact: Issue severely affects either entire life course or is associated with multiple problems

5=Extremely Severe Impact: Issue severely impacts entire life course and is associated with multiple problems

Criterion 6: Feasibility - Refers to the practicality and adequacy of logistics, including the cost, resources and interventions needed for the state to effectively address the issue.

Question: Is it feasible to address this issue?

Rating Scale:

1=Not feasible

2=Not very feasible

3=Moderately feasible

4=Feasible

5=Very feasible

Criterion 7: Availability of Evidence-Based Interventions – Refers to whether evidence-based interventions or strategies to prevent or manage the health issue are available and can be implemented with relative ease.

Question: Are there evidence-based interventions or promising practices to prevent or control this issue? Can these interventions or practices be implemented easily?

Rating Scale:

1=No evidence-based interventions or promising practices available

2=No evidence-based interventions available, but promising practices are available

3=Evidence-based interventions available but difficult to implement

4=Evidence-based interventions available and can be implemented with moderate effort

5=Evidence-based interventions available and can be implemented easily

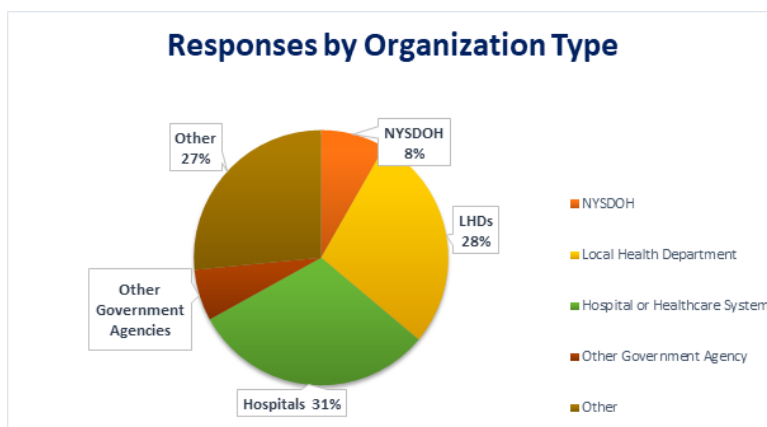
Survey Results:

Survey Participation

A total of 230 people participated in the survey. Only 155 participants answered at least 80% of the questions, yielding a response rate of 57%. Approximately 30% of the participants were affiliated with hospitals or healthcare systems, followed by 28% with local health departments and 26% with other organizations.

The category labeled as “Other organizations” includes community-based organizations, professional medical associations, school-based health center programs, organizations (NGOs), legal services organizations, private organizations, clinical care organizations, private health care providers, academic institutions, and health care foundations. Additionally, 8% of participants were from the New York State Department of Health and 6% from other government agencies.

Figure 3. Survey responses by organization type.



Findings:

The top priority list encompasses a range of issues, from socioeconomic factors to specific health conditions. The top 23 ranked health issues were then grouped into the following categories, becoming the basis for the Prevention Agenda:

- Economic Wellbeing
- Mental Wellbeing and Substance Use
- Safe and Healthy Communities
- Healthcare Insurance Coverage and Access to Care
- Healthy Children
- K-12 Student Success and Educational Attainment

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New York State Business Council	Chelsea Lemon
New York State Academy of Family Practice	Vito F. Grasso
New York State Academy of Pediatrics	Elizabeth Murray Lucia Castillejo
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