

## Suicide and Self-inflicted Injuries in New York City

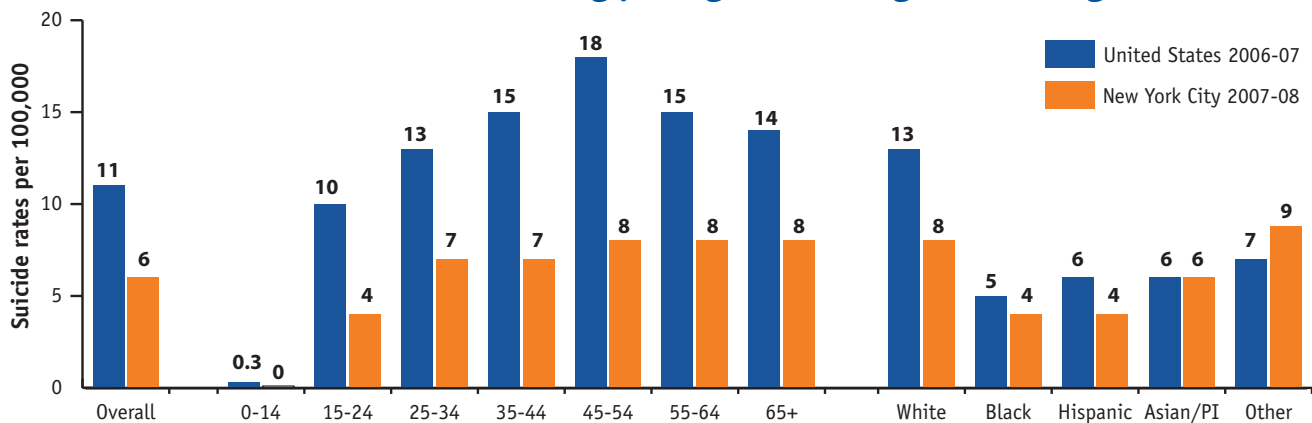
**S**elf-inflicted injuries result from acts committed by individuals trying to harm or kill themselves. When fatal, these are called suicides. Annually, approximately 475 New Yorkers commit suicide and more than 3,600 hospitalizations in the City result from self-inflicted injuries. These non-fatal injuries may be acts of self-harm without suicide intent, or they may be suicide attempts.

Suicide rates in New York City fell in the 1990s, associated with a reduction in firearm availability, but have remained steady since then.

This report examines the City's populations at greatest risk of suicide and self-inflicted injuries, and explores the circumstances related to these events. It describes connections among injuries (both fatal and non-fatal) and methods used to harm oneself, substance use, and mental health concerns including depression.

Recommendations for preventing suicides and self-inflicted injuries are on page four. They cover structural approaches, such as creating safe environments, and clinical approaches, such as diagnosis and treatment of depression.

### Suicide rates in New York City are half that of the United States, and the risk is lowest among young adults, highest among whites



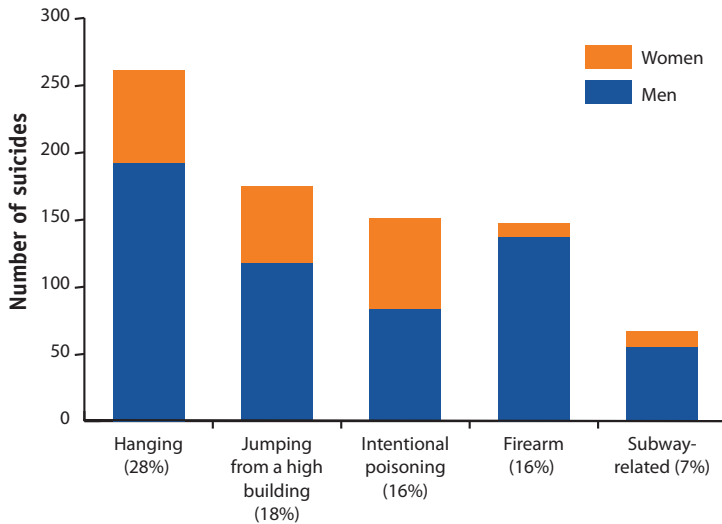
Sources: New York City DOHMH Bureau of Vital Statistics, 2007-2008; United States CDC WISQARS, 2006-2007

- Since 2000 the overall suicide rate in New York City has held steady, at about half of the national rate (6 vs. 11 per 100,000).
- In New York City and the United States, suicide rates were lowest among young adults, blacks, and Hispanics.
- Suicide trends in the City vary by race and ethnicity. From 2000 to 2008, rates among Asians increased by 67%, driven mostly by an increase among Asian women. During this same time period, suicide rates among black men decreased by 37%.
- Nearly three quarters of suicides in New York City in 2007 and 2008 were among men (73%), close to the national figure (79%).

Data presented in this report are from the New York City Department of Health and Mental Hygiene (DOHMH) Bureau of Vital Statistics (mortality data), the Office of Chief Medical Examiner (OCME), the New York State Statewide Planning and Research Cooperative System (SPARCS, hospitalization data), and the Youth Risk Behavior Survey (YRBS, health risks among public high school students). National data are from the US Centers for Disease Control and Prevention (CDC) Web-based Injury Statistics Query and Reporting System (WISQARS) at [www.cdc.gov/injury/wisqars/fatal.html](http://www.cdc.gov/injury/wisqars/fatal.html).

## Hanging is the most common method of suicide in New York City

Number of suicides by method and gender



Sources: New York City DOHMH Bureau of Vital Statistics and OCME, 2007-2008

\* CDC WISQARS, 2006-2007

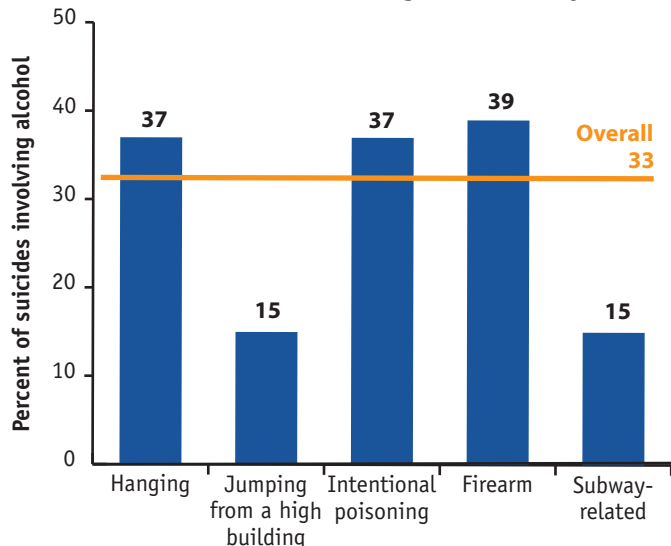
- In New York City, almost one third of suicides are from hanging.
- More suicides in New York City result from jumping from a high place (18% from a high building) than in the rest of the United States (2%).\*
- Firearm use is the fourth leading method of suicide, accounting for 16% of the City total. This is in sharp contrast to the United States as a whole, in which firearms account for more than half (53%) of all suicides.\*
- According to recent CDC figures, the City firearm suicide rate is the lowest among large US metropolitan areas and is one fifth the average rate.
- Suicide methods in the City differ by gender: more than nine in 10 (93%) of all firearm suicides are among men, but suicides by intentional poisoning are almost evenly split between men and women (55% and 45%, respectively).

**Mental Health and Suicide Risk:** Suicide risk is closely tied to an individual’s mental well-being. The Office of Chief Medical Examiner (OCME) data from 2007 and 2008 reveal circumstances of suicides not reported in other sources. Documentation of medical history is not universal in the OCME files, but is complete for 86% of records. Among those with complete information, 64% of suicide decedents had a documented history of depression, 8% had a history of schizophrenia, and 5% had a history of anxiety. Of those with complete medical histories, 23% were known to have made a previous suicide attempt and 39% had received mental health treatment within a year of death. Nearly one quarter (24%) of New York City’s suicides were witnessed.

## Alcohol use at the time of suicide in New York City is frequent

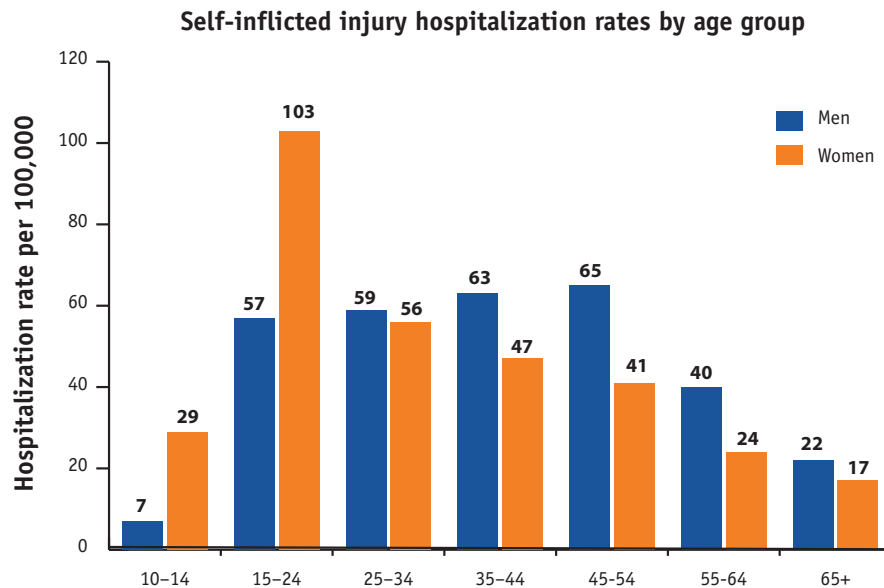
- One third of those who committed suicide had been drinking at the time of the incident (33%), according to toxicology results from 828 of the 950 suicide deaths in 2007 and 2008.
- Alcohol was more frequently involved in suicides by hanging (37%), intentional poisoning (37%), and firearms (39%) than suicides by jumping from a high building (15%) and those that were subway-related (15%).
- In suicides by intentional poisoning, 39% of decedents tested positive for one or more opioids, including heroin (24%), opioid analgesics (74%), and methadone (19%).

Percent of suicides involving alcohol use by method



Sources: New York City DOHMH Bureau of Vital Statistics and OCME, 2007-2008

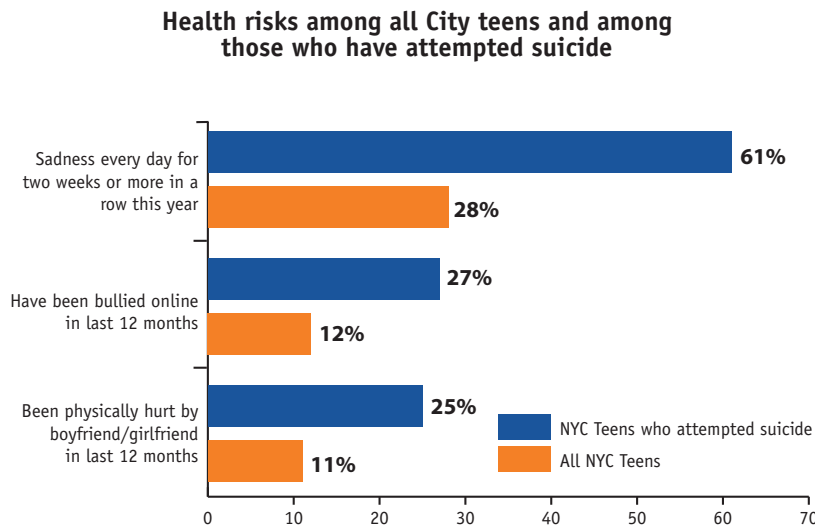
## Young adults have the greatest risk of hospitalization for self-inflicted injuries



Sources: New York State SPARCS, 2007 – 2008; New York City DOHMH Bureau of Vital Statistics and OCME, 2007-2008

- The rate of self-inflicted injury hospitalizations in New York City has been relatively stable since 2001. In 2008 there were 3,603 hospitalizations.
- Young adults have the highest hospitalization rate for self-inflicted injuries, driven largely by the rate among women aged 15 to 24. These findings differ from the City’s suicide completion findings.
- The most frequent method used by those hospitalized for self-inflicted injuries was intentional poisoning (76%). Firearms were involved in only 0.3% of non-fatal self-inflicted injuries.
- Of the 7,017 patients hospitalized in 2007 and 2008 for self-inflicted injuries, 6,459 (92%) were diagnosed with a mental health condition such as depression or anxiety.

## Suicide attempts co-occur with many health risks for New York City teens



Source: New York City DOHMH Youth Risk Behavior Survey, 2009.

- In 2009, 10% of New York City public high school students reported attempting suicide in the past year, and 3% reported an attempt that required medical care.
- Certain groups of City teens are at greater risk. In 2009, 15% of Hispanic female teens and 27% of lesbian, gay, bisexual, or questioning teens reported a suicide attempt.
- City teens who reported attempting suicide also reported additional mental, physical, and social health risks. For example, 27% of teens who attempted suicide reported being bullied online in the past year. More than one third (36%) of these youth identified as lesbian, gay, bisexual, or questioning.

# Recommendations

## Policymakers can promote safer environments and reduce suicide risk.

- Promote safe storage of firearms, if present in the home. Support improvements to the background check system for firearms licensing and purchasing.
- Enforce laws that prohibit selling alcohol to minors and those already intoxicated.
- Assess options for creating barriers at New York City's buildings, such as restricting roof access where possible, to prevent fatal jumps.
- Establish social environments in schools that promote safety and reduce bullying.

## Community organizations should promote seeking help, dispel misconceptions about mental illnesses, and reduce social isolation among those struggling with depression.

- Encourage adolescents who need help to confide in an adult whom they trust, such as a family member, guidance counselor, or coach and to use school or community mental health services.
- Reach out to individuals who are socially isolated and facilitate connections to friends, family, and support groups.
- Encourage people with depression or substance use problems to seek treatment.

## Health care providers should screen for depression, suicide risk, and alcohol problems.

- Make screening for alcohol problems and depression a routine part of patient assessment; when appropriate make proper referrals to mental health services. For more information visit "City Health Information: Detecting and Treating Depression in Adults" at [www.nyc.gov/html/doh/downloads/pdf/chi/chi26-9.pdf](http://www.nyc.gov/html/doh/downloads/pdf/chi/chi26-9.pdf).
- Develop crisis plans for patients currently receiving treatment for substance abuse or mental illness.
- Routinely provide brief interventions in both primary and specialty care settings to reduce harmful alcohol use. For more information visit "City Health Information: Brief Interventions for Alcohol Problems" at [www.nyc.gov/html/doh/downloads/pdf/chi/chi25-10.pdf](http://www.nyc.gov/html/doh/downloads/pdf/chi/chi25-10.pdf).

**Get Help:** Everyone feels sad sometimes. If you feel sad almost every day for more than two weeks—or lose interest or pleasure in things you like—it may be depression. Excessive drinking is dangerous, and can increase the risk of depression, violence, and even suicide. Problem drinking is treatable; there are many treatment options, including medications. For help and information on depression or problem drinking, talk to your doctor, or call **1-800-LIFE-NET** [1-800-543-3638]; in Spanish **1-877-298-3373**; or in Mandarin, Cantonese, and Korean **1-877-990-8585**.

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