



Epi Data Brief

New York City Department of Health and Mental Hygiene

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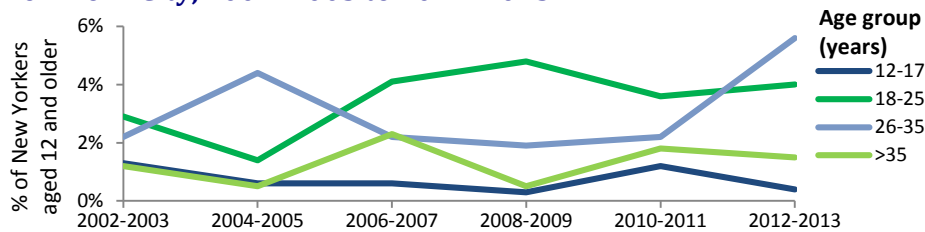
Benzodiazepines in New York City

- Benzodiazepines, such as Xanax®, Valium® and Ativan®, are central nervous system depressants used primarily to treat anxiety and sleep disorders.
- Overdose deaths from benzodiazepines alone are very rare; however, when used in combination with other central nervous system depressants, such as heroin, opioid analgesics, or alcohol, benzodiazepines increase risk of fatal overdose.
- In 2014, benzodiazepines were involved in 38% of unintentional drug poisoning (overdose) deaths in New York City (NYC), an increase from 15% in 2000. Most (97%) drug overdose deaths involve more than one substance.

Non-medical use of benzodiazepines in New York City¹

- In 2012 and 2013, an average of 168,000 (2.6%) New Yorkers aged 12 and older reported non-medical benzodiazepine use – use without a prescription or with a prescription in a manner other than prescribed – in the past year.
- The largest increase was among New Yorkers aged 26 to 35; the proportion increased from 2.2% in 2010–2011 to 5.6% in 2012–2013.

Non-medical use of benzodiazepines in the past year by age group, New York City, 2002–2003 to 2012–2013

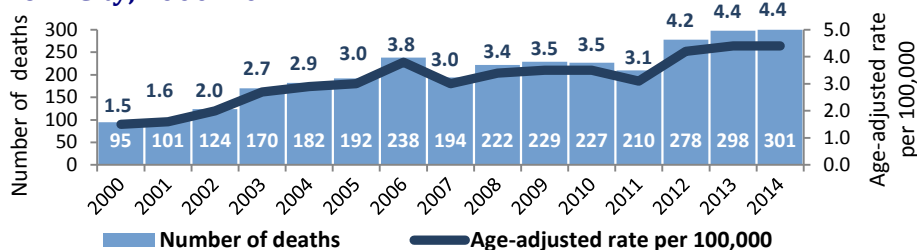


Source: National Survey on Drug Use and Health, analysis by SAMHSA, 2002-2013

Unintentional drug poisoning (overdose) deaths involving benzodiazepines²

- From 2000 to 2014, the rate of unintentional drug overdose deaths involving benzodiazepines nearly tripled from 1.5 per 100,000 New Yorkers (95 deaths) in 2000 to 4.4 per 100,000 New Yorkers (301 deaths) in 2014.
- Benzodiazepine-involved overdose deaths were found in combination with other substances, including heroin (62%), alcohol (42%), opioid analgesics (39%), and cocaine (31%).

Unintentional overdose deaths involving benzodiazepines, New York City, 2000–2014



Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2000-2014

Data Sources

¹National Survey on Drug Use and Health (NSDUH) 2002-2013, conducted annually by the Substance Abuse and Mental Health Services Administration [SAMHSA], includes a representative sample of NYC residents aged 12 years and older. Two-year averages are presented as data are received in lagged time.

²NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics 2000-2014: Mortality data were collected through an in-depth review of data and charts from the Health Department's Bureau of Vital Statistics and the Office of the Chief Medical Examiner for 2000-2014. Methadone is reported separately and not included in opioid analgesic analyses.

³NYS Prescription Monitoring Program (PMP) 2014, managed by the New York State Department of Health Bureau of Narcotics, includes data from drug dispensers on schedule II-V controlled substances.

Definitions

Rate Calculation: DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2014, updated October 13th, 2015. Rates are age-adjusted to Census 2000 US standard population, except those for specific age groups.

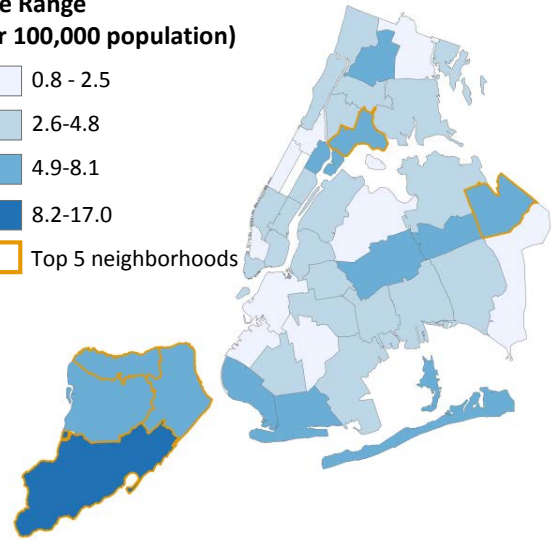
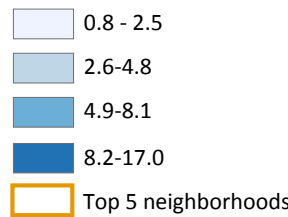
Neighborhood poverty: Based on ZIP code and defined as percentage of residents with incomes below 100% of the federal poverty level (FPL), per American Community Survey 2007-2011, in four groups: low (<10% FPL), medium (10 %-< 20% FPL), high (20 %-< 30% FPL), and very high (≥30% FPL).

Race/ethnicity: White and Black race categories exclude Hispanic/Latino ethnicity.

- In 2014, the rate of benzodiazepine-involved overdose deaths was highest among White New Yorkers (8.8 per 100,000) – more than double the rate for Hispanics/Latinos (3.4 per 100,000) and more than five times the rate for Black New Yorkers (1.6 per 100,000).
- From 2000 to 2014, the rate among Hispanic/Latino New Yorkers increased 386%, from 0.7 to 3.4 per 100,000.
- Residents of Staten Island had the highest rate of benzodiazepine-involved overdose deaths (10.1 per 100,000), almost three times the rates of Brooklyn (3.6 per 100,000) and Manhattan (3.5 per 100,000) residents.
- The rate of benzodiazepine-involved overdose deaths increased annually on average by 15% in Staten Island from 2000 to 2014.
- In 2014, the neighborhoods with the highest rates of unintentional benzodiazepine-involved overdose deaths were in Staten Island (South Beach-Tottenville and Port Richmond), followed by East Harlem in Manhattan, Bayside-Little Neck in Queens, and Hunts Point-Mott Haven in the Bronx.

Unintentional benzodiazepine-involved poisoning deaths by New York City neighborhood of residence,[^] 2013–2014

Rate Range
(per 100,000 population)



[^]The United Hospital Fund classifies NYC into 42 neighborhoods, comprised of contiguous ZIP codes.

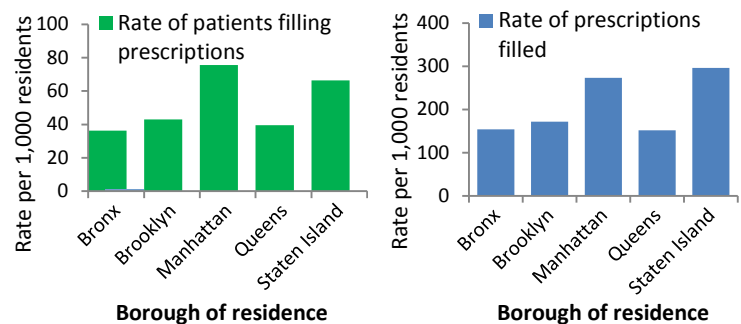
Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2013-2014

- Residents of low-poverty neighborhoods had the highest rate of benzodiazepine-involved overdose deaths (5.1 per 100,000), and the largest increase from 2000 to 2014, from 1.1 to 5.1 per 100,000.

Benzodiazepine prescriptions filled by New York City residents³

- In 2014, 1.7 million benzodiazepine prescriptions were filled by 440,000 NYC residents.
- In 2014, the rate of benzodiazepine prescriptions filled was 191.2 prescriptions per 1,000 NYC residents.
- Clonazepam and alprazolam were the most common types of benzodiazepine prescriptions filled, 36% and 31% respectively.
- Nearly two-thirds of benzodiazepine prescriptions were filled by female New Yorkers in 2014.

Benzodiazepine prescriptions, rates of patients filling, and prescriptions filled, New York City, 2014



Source: New York State Prescription Monitoring Program, 2014

- The rates of benzodiazepine prescriptions filled were highest in Staten Island (296.2 prescriptions per 1,000 residents), and Manhattan (272.7 prescriptions per 1,000). The number of residents who filled at least one benzodiazepine prescription was highest in Manhattan (75.5 per 1,000 residents).
- Almost one-third of NYC residents who filled a benzodiazepine prescription also filled an opioid analgesic prescription in 2014 (n =118,757 or 13.1 residents per 1,000 residents). Rates for co-occurring benzodiazepine and opioid analgesics were highest for females in older age groups, and Staten Island residents.

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