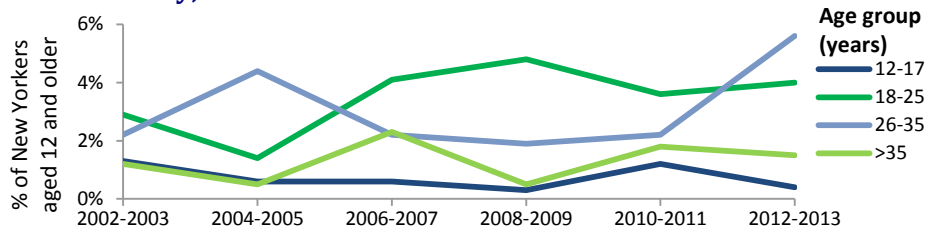# Epi Data Brief

## 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 City[1]

- 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
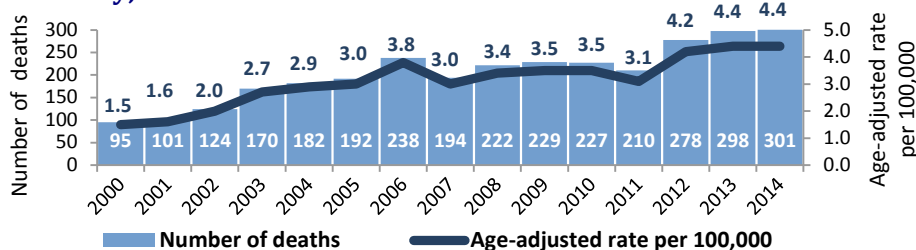


Source: National Survey on Drug Use and Health, analysis by SAMHSA, 2002-2013

### Unintentional drug poisoning (overdose) deaths involving benzodiazepines[2]

- 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

**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
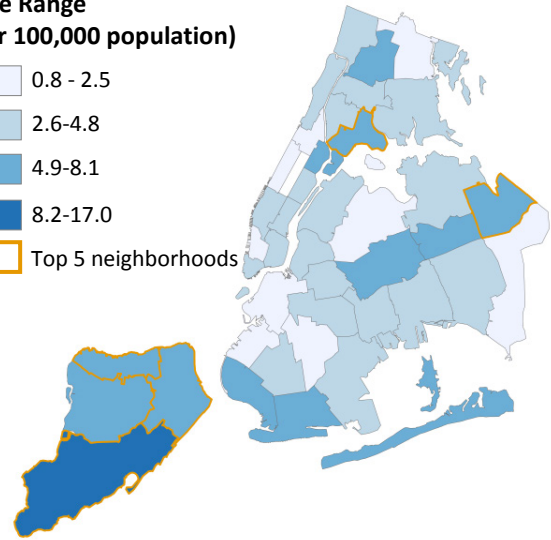
**Rate Range (per 100,000 population)**

- 0.8 - 2.5
- 2.6-4.8
- 4.9-8.1
- 8.2-17.0
- Top 5 neighborhoods

^The United Hospital Fund classifies NYC into 42 neighborhoods, comprised of contiguous ZIP codes.
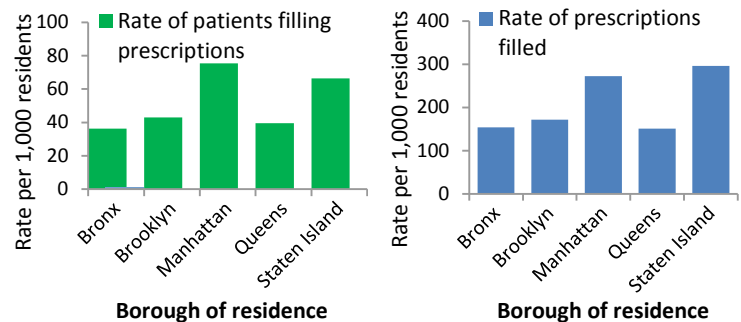*Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics, 2013-2014*

- 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 residents[3]

- 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.

- Clonazapam 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 benzodiazipine prescription also filled an opioid analgesic prescription in 2014 (n =118,757 or 13.1 residents per 1,000 residents). Rates for co-occuring benzodiazepine and opioid analgesics were highest for females in older age groups, and Staten Island residents.

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## Benzodiazepines in New York City

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### Data Sources

**National Survey on Drug Use and Health (NSDUH) 2002-2013** conducted annually by 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.

**NYC 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. Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2014 updated October 2015.

**NYS Prescription Monitoring Program (PMP) 2013-2014,** managed by the New York State Department of Health Bureau of Narcotics, includes data from drug dispensers on schedule II-V controlled substances.

## Table 1. Any self-reported drug use in the past year, New York City and US, 2010-2013

*Source: National Survey on Drug Use and Health; analysis by Substance Abuse and Mental Health Services Administration [SAMHSA]*
NYC Data presented as two-year averages of 2010-2011 and 2012-2013
National (US) data presented for the years 2011 and 2013

|  | NYC 2010-2011 | | US 2011 | | NYC 2012-2013 | | US 2013 | |
|---|---|---|---|---|---|---|---|---|
|  | N | % | N | % | N | % | N | % |
| **Any Drug** | 1,055,000 | 16.5 | 38,287,000 | 14.9 | 1,279,000 | 20.1 | 41,591,000 | 15.9 |
| **Marijuana** | 794,000 | 12.4 | 29,739,000 | 11.5 | 1,043,000 | 16.4 | 32,952,000 | 12.6 |
| **Cocaine** | 138,000 | 2.2 | 3,857,000 | 1.5 | 150,000 | 2.4 | 4,182,000 | 1.6 |
| **Heroin** | 13,000 | 0.2 | 620,000 | 0.2 | 4,000 | 0.1 | 681,000 | 0.3 |
| **Opioid Analgesics** | 256,000 | 4 | 11,143,000 | 4.3 | 290,000 | 4.6 | 11,082,000 | 4.2 |
| **Benzodiazepines** | 134,000 | 2.1 | 5,109,000 | 2 | 168,000 | 2.6 | 5,269,000 | 2 |
| **Any Drug Except Marijuana** | 516,000 | 8 | 18,959,000 | 7.4 | 626,000 | 9.9 | 19,868,000 | 7.6 |

## Table 1a. Self-reported benzoidazepine misuse in the past year by age group, New York City, 2002-2013

*Source: National Survey on Drug Use and Health; analysis by by Substance Abuse and Mental Health Services Administration*
NYC data presented as two-year averages of 2002-2003, 2004-2005, 2006-2007, 2008-2009, 2010-2011, 2012-2013

| Variable | 2002-2003 | | 2004-2005 | | 2006-2007 | | 2008-2009 | | 2010-2011 | | 2012-2013 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % |
| **Benzodiazepines** | 100,000 | 1.6 | 80,000 | 1.3 | 143,000 | 2.3 | 90,000 | 1.4 | 134,000 | 2.1 | 168,000 | 2.6 |
| 12 to 17 | 8,000 | 1.3 | 3,000 | 0.6 | 3,000 | 0.6 | 2,000 | 0.3 | 6,000 | 1.2 | 2,000 | 0.4 |
| 18 to 25 | 26,000 | 2.9 | 11,000 | 1.4 | 37,000 | 4.1 | 45,000 | 4.8 | 34,000 | 3.6 | 42,000 | 4.0 |
| 26 to 34 | 26,000 | 2.2 | 45,000 | 4.4 | 23,000 | 2.2 | 24,000 | 1.9 | 26,000 | 2.2 | 68,000 | 5.6 |
| 35+ | 40,000 | 1.2 | 21,000 | 0.5 | 80,000 | 2.3 | 20,000 | 0.5 | 68,000 | 1.8 | 56,000 | 1.5 |

## Table 2. Demographics of all unintentional Benzodiazepine drug poisoning decedents, age-adjusted rates, New York City, 2011-2014

*Source: Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2014 updated October 2015. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.*

Rates per 100,000 New Yorkers are age adjusted, except those for specific age groups.

| | 2011 | | | 2012 | | | 2013 | | | 2014 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Rate | Number | Percent | Rate | Number | Percent | Rate | Number | Percent | Rate |
| **Total Unintentional Drug Poisoning Deaths** | 630 | 100% | 9.4 | 730 | 100% | 10.9 | 788 | 100% | 11.6 | 800 | 100% | 11.7 |
| **Total Unintentional Drug Poisoning Deaths Involving Benzodiazepines** | 210 | 33% | 3.1 | 278 | 38% | 4.2 | 298 | 38% | 4.4 | 301 | 38% | 4.4 |
| **Gender** | | | | | | | | | | | | |
| Male | 158 | 75% | 5.0 | 207 | 74% | 6.5 | 210 | 70% | 6.5 | 202 | 67% | 6.2 |
| Female | 52 | 25% | 1.5 | 71 | 26% | 2.1 | 88 | 30% | 2.4 | 99 | 33% | 2.7 |
| **Race/Ethnicity[†]** | | | | | | | | | | | | |
| Black (non-Hispanic/Latino) | 24 | 12% | 1.6 | 32 | 12% | 2.0 | 24 | 8% | 1.5 | 26 | 9% | 1.6 |
| Hispanic | 34 | 17% | 1.8 | 63 | 23% | 3.4 | 75 | 26% | 4.0 | 65 | 23% | 3.4 |
| White (non-Hispanic/Latino) | 147 | 72% | 6.7 | 178 | 65% | 8.3 | 190 | 66% | 8.8 | 196 | 68% | 8.8 |
| **Age (years)** | | | | | | | | | | | | |
| 15-24 | 16 | 8% | 1.4 | 28 | 10% | 2.5 | 23 | 8% | 2.1 | 24 | 8% | 2.2 |
| 25-34 | 53 | 25% | 3.7 | 53 | 19% | 3.6 | 57 | 19% | 3.8 | 79 | 26% | 5.2 |
| 35-44 | 47 | 22% | 4.0 | 67 | 24% | 5.7 | 66 | 22% | 5.6 | 66 | 22% | 5.6 |
| 45-54 | 64 | 30% | 5.7 | 87 | 31% | 7.8 | 92 | 31% | 8.2 | 77 | 26% | 6.9 |
| 55-84 | 30 | 14% | 3.2 | 43 | 15% | 4.8 | 60 | 20% | 6.5 | 55 | 18% | 5.8 |
| **Borough of Residence[†]** | | | | | | | | | | | | |
| Bronx | 30 | 16% | 2.9 | 57 | 22% | 5.4 | 43 | 17% | 4.1 | 40 | 15% | 3.5 |
| Brooklyn | 47 | 25% | 2.3 | 71 | 28% | 3.6 | 57 | 22% | 2.8 | 72 | 27% | 3.6 |
| Manhattan | 30 | 16% | 2.2 | 38 | 15% | 2.8 | 42 | 16% | 3.1 | 48 | 18% | 3.5 |
| Queens | 41 | 22% | 2.2 | 46 | 18% | 2.4 | 76 | 29% | 3.9 | 69 | 26% | 3.7 |
| Staten Island | 38 | 20% | 10.3 | 42 | 17% | 11.7 | 41 | 16% | 11.5 | 37 | 14% | 10.1 |
| **Borough of Death** | | | | | | | | | | | | |
| Bronx | 35 | 17% | 3.4 | 59 | 21% | 5.6 | 56 | 19% | 5.4 | 41 | 14% | 3.7 |
| Brooklyn | 56 | 27% | 2.7 | 76 | 27% | 3.9 | 68 | 23% | 3.3 | 82 | 27% | 4.0 |
| Manhattan | 38 | 18% | 2.9 | 53 | 19% | 3.8 | 59 | 20% | 4.3 | 67 | 22% | 4.7 |
| Queens | 43 | 20% | 2.3 | 49 | 18% | 2.6 | 77 | 26% | 4.0 | 74 | 25% | 3.9 |
| Staten Island | 38 | 18% | 10.3 | 41 | 15% | 11.2 | 38 | 13% | 10.6 | 37 | 12% | 10.1 |
| **Neighborhood Poverty[†]*** | | | | | | | | | | | | |
| Low (wealthiest) | 56 | 30% | 4.0 | 72 | 28% | 5.3 | 88 | 34% | 6.5 | 72 | 27% | 5.1 |
| Medium | 69 | 37% | 2.7 | 78 | 31% | 3.1 | 72 | 28% | 2.8 | 89 | 34% | 3.5 |
| High | 30 | 16% | 1.9 | 51 | 20% | 3.3 | 51 | 20% | 3.1 | 53 | 20% | 3.3 |
| Very High | 31 | 17% | 2.7 | 52 | 21% | 4.6 | 47 | 18% | 4.2 | 51 | 19% | 4.3 |
| **Drug Type**** | | | | | | | | | | | | |
| Alcohol | 74 | 35% | 1.1 | 107 | 38% | 1.6 | 117 | 39% | 1.7 | 127 | 42% | 1.8 |
| Cocaine | 89 | 42% | 1.3 | 113 | 41% | 1.7 | 106 | 36% | 1.6 | 93 | 31% | 1.3 |
| Heroin | 94 | 45% | 1.4 | 153 | 55% | 2.3 | 155 | 52% | 2.3 | 187 | 62% | 2.7 |
| Methadone | 63 | 30% | 0.9 | 106 | 38% | 1.6 | 98 | 33% | 1.5 | 70 | 23% | 1.0 |
| Opioid Analgesics | 113 | 54% | 1.7 | 116 | 42% | 1.7 | 133 | 45% | 2.0 | 116 | 39% | 1.7 |

| Top 5 NYC Neighborhoods^ | 2011-2012 Rate | | 2013-2014 Rate | |
|---|---|---|---|---|
| | Willowbrook | 17.8 | Fordham- Bronx Park | 10.0 |
| | South Beach- Tottenville | 12.5 | South Beach- Tottenville | 9.9 |
| | Stapleton- St. George | 10.3 | Northeast Bronx | 8.3 |
| | Rockaway | 7.9 | Hunts Point- Mott Haven | 7.4 |
| | Pelham-Throgs Neck | 6.3 | Pelham- Throgs Neck | 7.4 |

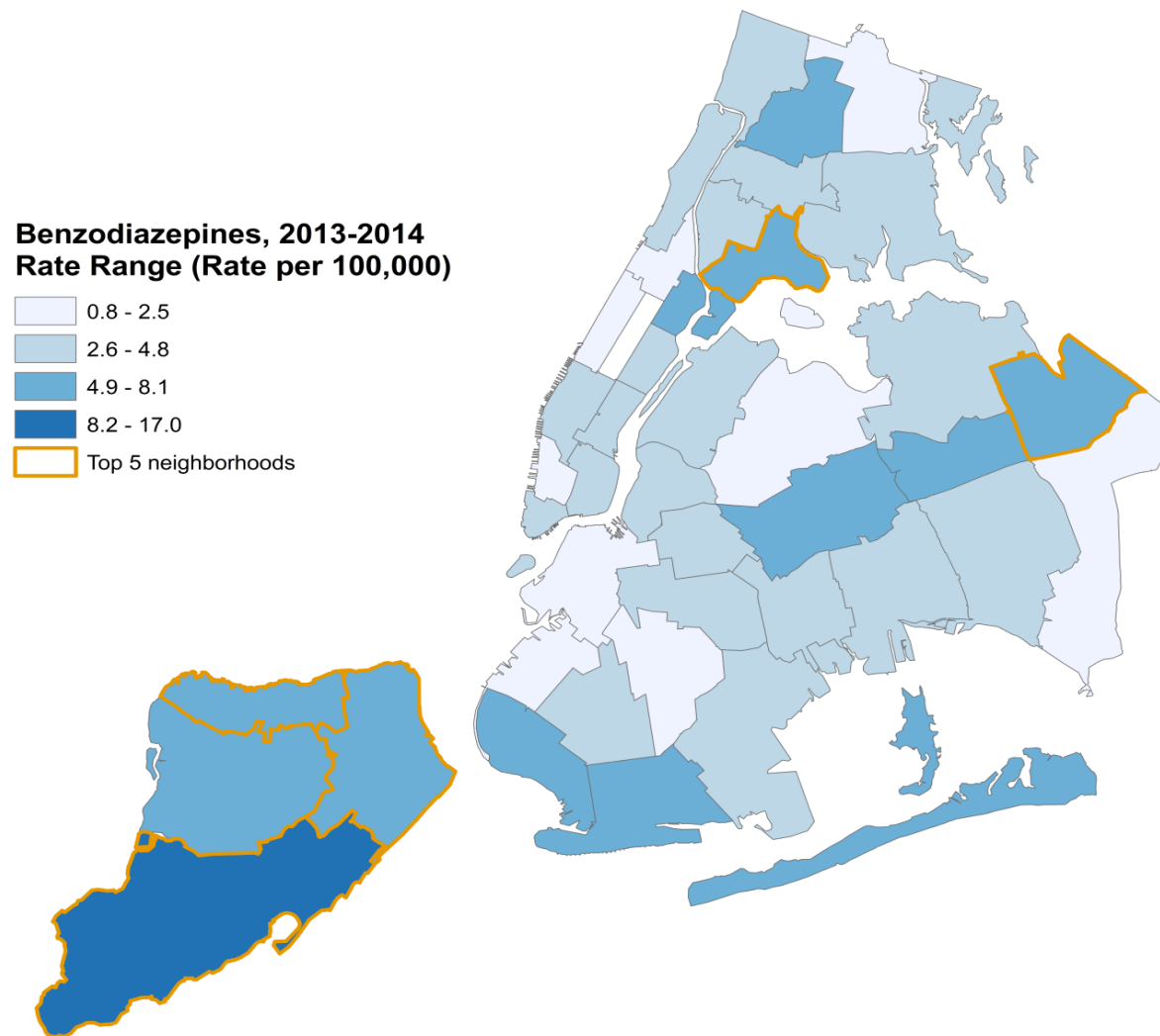[†]Percentage of deaths within subgroup are calculated among categories presented.

*Neighborhood poverty (based on ZIP code) was defined as percent of residents with incomes below 100% of the federal poverty level (Census 2000), separated into four groups: low (<10%), medium (10%-<20%), high (20%-<30%) and very high (>=30%).

**Drug Type, not mutually exclusive.; percent will not equal 100%.

^Top five of 42 NYC Neighborhoods

**Map 1. Top five New York City Neighborhoods: Rates of unintentional benzodiazepine-involved poisoning (overdose) death by neighborhood, 2013-2014**

*Source: Bureau of Vital Statistics/Office of the Chief Medical Examiner, New York City; Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2014 updated October 2015. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.*



**Benzodiazepines, 2013-2014
Rate Range (Rate per 100,000)**

- 0.8 - 2.5
- 2.6 - 4.8
- 4.9 - 8.1
- 8.2 - 17.0
- Top 5 neighborhoods

*The United Hospital Fund (UHF) classifies New York City into 42 neighborhoods, comprised of contiguous ZIP codes.

## Table 3. Benzodiazepine prescriptions[1] filled by New York City residents by drug type, age-adjusted rates[2] per 1,000 residents, 2013–2014

*Source: New York State, Bureau of Narcotics Enforcement, Prescription Monitoring Program, 2013-2014*

| | 2013 | | | 2014 | | |
|---|---|---|---|---|---|---|
| | N | % | Rate of prescriptions filled per 1,000 NYC residents[2] | N | % | Rate of prescriptions filled per 1,000 NYC residents[2] |
| Total benzodiazepine prescriptions | 1,712,155 | 100.0% | 191 | 1,725,435 | 100.8% | 191 |
| *By drug type* | | | | | | |
| Alprazolam | 534,955 | 31.2% | 59.7 | 535,227 | 31.3% | 59.1 |
| Chlordiazepoxide Hydrochloride | 7,530 | 0.4% | 0.9 | 7,356 | 0.4% | 0.8 |
| Clobazam | 5,951 | 0.3% | 0.7 | 7,635 | 0.4% | 0.9 |
| Clonazepam | 591,872 | 34.6% | 66.3 | 610,941 | 35.7% | 67.8 |
| Clorazepate Dipotassium | 2,942 | 0.2% | 0.3 | 2,625 | 0.2% | 0.3 |
| Diazepam | 190,790 | 11.1% | 21.3 | 188,879 | 11.0% | 20.9 |
| Estazolam | 938 | 0.1% | 0.1 | 800 | 0.0% | 0.1 |
| Flurazepam Hydrochloride | 4,535 | 0.3% | 0.5 | 3,730 | 0.2% | 0.4 |
| Lorazepam | 317,492 | 18.5% | 35.2 | 316,740 | 18.5% | 34.7 |
| Midazolam Hydrochloride | 209 | 0.0% | 0.0 | 287 | 0.0% | 0.0 |
| Oxazepam | 1,420 | 0.1% | 0.2 | 1,129 | 0.1% | 0.1 |
| Quazepam | 12 | 0.0% | * | 6 | 0.0% | * |
| Temazepam | 44,688 | 2.6% | 4.9 | 42,098 | 2.5% | 4.6 |
| Triazolam | 8,821 | 0.5% | 1.0 | 7,982 | 0.5% | 0.9 |

[1]Prescriptions written by veterinarians, or written under institutional licenses, or missing prescriber ID, or missing patient ID are excluded.

[2] Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2014 updated October 2015. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.

*Rates based on small numbers (RSE > 30) have been suppressed.

## Table 4. Number and rates of benzodiazepine prescriptions[1] filled by age, gender, and borough of residence, age-adjusted rates[2] per 1,000 residents, New York City, 2013–2014

*Source: New York State, Bureau of Narcotics Enforcement, Prescription Monitoring Program, 2013-2014*

| | 2013 | | | 2014 | | |
|---|---|---|---|---|---|---|
| | Number | Percent | Rate of prescriptions filled per 1,000 NYC residents[2] | Number | Percent | Rate of prescriptions filled per 1,000 NYC residents[2] |
| **Total number of benzodiazepine prescriptions** | 1,712,155 | 100% | 191.2 | 1,725,435 | 100% | 190.7 |
| **Median day supply** | 30 | | | 30 | | |
| **Age[3]** | | | | | | |
| 0-14 | 9,288 | 1% | 6.2 | 10,257 | 1% | 6.8 |
| 15-24 | 57,111 | 3% | 50.9 | 57,766 | 3% | 52.5 |
| 25-34 | 214,091 | 13% | 144.3 | 215,774 | 13% | 143.3 |
| 35-44 | 249,326 | 15% | 211.8 | 248,502 | 14% | 210.3 |
| 45-54 | 358,799 | 21% | 321.1 | 354,953 | 21% | 317.7 |
| 55-64 | 377,709 | 22% | 395.3 | 378,330 | 22% | 389.5 |
| 65-84 | 368,488 | 22% | 400.3 | 380,666 | 22% | 404.0 |
| 85+ | 77,241 | 5% | 500.7 | 79,123 | 5% | 505.0 |
| Missing | 102 | 0% | | 64 | 0% | |
| **Gender** | | | | | | |
| Male | 662,700 | 39% | 161.8 | 672,561 | 39% | 162.4 |
| Female | 1,049,422 | 61% | 215.1 | 1,052,793 | 61% | 213.8 |
| Unknown | 33 | 0% | X | 81 | 0% | X |
| **Borough of Residence[4]** | | | | | | |
| Bronx | 209,850 | 12% | 149.9 | 218,375 | 13% | 154.0 |
| Brooklyn | 461,165 | 27% | 173.3 | 461,445 | 27% | 171.5 |
| Manhattan | 495,994 | 29% | 272.2 | 500,021 | 29% | 272.7 |
| Queens | 385,708 | 23% | 151.4 | 389,958 | 23% | 151.2 |
| Staten Island | 159,438 | 9% | 306.7 | 155,636 | 9% | 296.2 |

[1]Prescriptions written by veterinarians, or written under institutional licenses, or missing prescriber ID, or missing patient ID are excluded.

[2] Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2014 updated October 2015. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.

[3]Patient age is an average of their age at all their prescriptions in the year.

[4]Borough of residence is derived from the 3-digit zip code listed for patient zip on prescription. Most frequent borough of residence per patient is reported.

## Table 5. Demographics of New York City residents who filled a benzodiazepine prescription,[1] age-adjusted rates[2] per 1,000 residents, 2013–2014

*Source: New York State, Bureau of Narcotics Enforcement, Prescription Monitoring Program, 2013-2014*

| | 2013 | | | 2014 | | |
|---|---|---|---|---|---|---|
| | Number | Percent | Rate of persons who filled a benzodiazepine prescription per 1,000 NYC residents | Number | Percent | Rate of persons who filled a benzodiazepine prescription per 1,000 NYC residents |
| **Total number who filled a prescription** | 444,990 | 100% | 49.9 | 440,918 | 100% | 48.9 |
| **Age group (years)[3]** | | | | | 0% | |
| 0-14 | 3,512 | 1% | 2.3 | 3,784 | 1% | 2.5 |
| 15-24 | 19,330 | 4% | 17.2 | 19,223 | 4% | 17.5 |
| 25-34 | 67,369 | 15% | 45.4 | 66,806 | 15% | 44.4 |
| 35-44 | 69,756 | 16% | 59.3 | 68,632 | 16% | 58.1 |
| 45-54 | 84,632 | 19% | 75.8 | 82,846 | 19% | 74.2 |
| 55-64 | 86,585 | 19% | 90.6 | 85,525 | 19% | 88.1 |
| 65-84 | 94,397 | 21% | 102.6 | 94,852 | 22% | 100.7 |
| 85+ | 19,336 | 4% | 125.4 | 19,211 | 4% | 122.6 |
| Missing | 73 | 0% | X | 39 | 0% | X |
| Mean age (years) | 51.8 | | | 51.8 | | |
| **Gender** | | | | | 0% | |
| Male | 162,305 | 36% | 39.8 | 162,472 | 37% | 39.4 |
| Female | 282,666 | 64% | 58.4 | 278,398 | 63% | 57.0 |
| Unknown | 19 | 0% | X | 48 | 0% | X |
| **Borough of Residence[4]** | | | | | 0% | |
| Bronx | 50,691 | 11% | 36.3 | 51,290 | 12% | 36.3 |
| Brooklyn | 116,874 | 26% | 43.9 | 115,516 | 26% | 43.0 |
| Manhattan | 139,613 | 31% | 76.6 | 138,335 | 31% | 75.5 |
| Queens | 101,666 | 23% | 40.3 | 101,044 | 23% | 39.6 |
| Staten Island | 36,146 | 8% | 69.9 | 34,733 | 8% | 66.4 |
| **Filled an opioid analgesic prescription in same year** | 123,966 | 28% | 13.9 | 118,757 | 27% | 13.1 |

[1]Prescriptions written by veterinarians, or written under institutional licenses, or missing prescriber ID, or missing patient ID are excluded.

[2]Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2014 updated October 2015. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.

[3]Patient age is an average of their age at all their prescriptions in the year.

[4]Borough of residence is derived from the 3-digit zip code listed for patient zip on prescription. Most frequent borough of residence per patient is reported.

## Table 6. Demographics of New York City residents who concurrently filled at least one benzodiazepine prescription and at least one opioid analgesic prescription,[1] age-adjusted rates[2] per 1,000 residents, 2013–2014

*Source: New York State, Bureau of Narcotics Enforcement, Prescription Monitoring Program, 2013-2014*

| | 2013 | | | 2014 | | |
|---|---|---|---|---|---|---|
| | Number | Percent | Rate of persons who concurrently filled a benzodiazepine and opioid analgesic prescription per 1,000 NYC residents | Number | Percent | Rate of persons who concurrently filled a benzodiazepine and opioid analgesic per 1,000 NYC residents |
| **Filled a benzodiazpine and opioid analgesic prescription in same year** | 123,966 | 100% | 13.9 | 118,757 | 100% | 13.1 |
| **Age goup (years)[3]** | | 0% | | | 0% | |
| 0-14 | 254 | 0% | 0.2 | 251 | 0% | 0.2 |
| 15-24 | 3,076 | 2% | 2.7 | 2,800 | 2% | 2.5 |
| 25-34 | 14,444 | 12% | 9.7 | 13,275 | 11% | 8.8 |
| 35-44 | 19,184 | 15% | 16.3 | 17,808 | 15% | 15.1 |
| 45-54 | 27,524 | 22% | 24.6 | 26,109 | 22% | 23.4 |
| 55-64 | 27,194 | 22% | 28.5 | 26,182 | 22% | 27.0 |
| 65-84 | 26,566 | 21% | 28.9 | 26,422 | 22% | 28.0 |
| 85+ | 5,720 | 5% | 37.1 | 5,905 | 5% | 37.7 |
| Missing | 4 | 0% | X | 5 | 0% | X |
| Mean age (years) | 53.8 | 0% | | 54.3 | 0% | |
| **Gender** | | | | | | |
| Male | 47,111 | 38% | 11.6 | 45,639 | 38% | 11.1 |
| Female | 76,850 | 62% | 15.9 | 73,105 | 62% | 14.9 |
| Unknown | 5 | 0% | X | 13 | 0% | X |
| **Borough of Residence[4]** | | 0% | | | 0% | |
| Bronx | 17,038 | 14% | 12.2 | 16,666 | 14% | 11.8 |
| Brooklyn | 29,212 | 24% | 11.0 | 27,746 | 23% | 10.3 |
| Manhattan | 37,685 | 30% | 20.7 | 35,879 | 30% | 19.6 |
| Queens | 27,093 | 22% | 10.6 | 26,255 | 22% | 10.2 |
| Staten Island | 12,938 | 10% | 25.0 | 12,211 | 10% | 23.2 |

[1]Prescriptions written by veterinarians, or written under institutional licenses, or missing prescriber ID, or missing patient ID are excluded.

[2]Rates calculated using NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2014 updated October 2015. Analysis by Health Department's Bureau of Alcohol and Drug Use Prevention, Care and Treatment.

[3]Patient age is an average of their age at all their prescriptions in the year.

[4]Borough of residence is derived from the 3-digit zip code listed for patient zip on prescription. Most frequent borough of residence per patient is reported.