Cocaine Use in New York City: Morbidity and Mortality

- Cocaine is the second most common drug involved in unintentional drug poisoning deaths (overdose) and the most frequently cited in drug-related emergency departments (ED) visits.
- In 2012-2013, approximately 150,000 (2.4%) New Yorkers aged 12 and older reported using cocaine in the past year, a 36% decrease from 2006–2007.
- In 2013, 5% of public school students in grades nine through 12 in New York City reported using cocaine at least once in their lifetime.

Cocaine-related morbidity

- In 2011, there were nearly 80,000 drug-related ED visits (960.0 per 100,000 New Yorkers); cocaine represented more than a third (27,752) of all drug-related ED visits (336.6 per 100,000 New Yorkers).
- New Yorkers aged 45 to 54 had the highest rate of cocaine-related ED visits (901.7 per 100,000), followed by 35 to 44 year olds (723.9 per 100,000) in 2011.
- In 2012, there were an estimated 59,000 drug-related hospitalizations (876.1 per 100,000); more than one-third (21,637) were cocaine-related (328.8 per 100,000).
- Black New Yorkers had the highest rate of cocaine-related hospitalizations in 2012 (727.3 per 100,000), nearly seven times higher than White New Yorkers (108.6 per 100,000).

Unintentional drug poisoning (overdose) deaths involving cocaine

- The rate of unintentional overdose deaths involving cocaine was highest in 2006 (a total of 508 deaths, 8.1 per 100,000 New Yorkers).
- Beginning in 2007, the rate of cocaine-involved overdose deaths decreased for four consecutive years (from 6.8 per 100,000 in 2007 to 4.4 per 100,000 in 2010, a 35% decrease).
- Since 2010, the rate of cocaine-involved overdoses increased by 25%, from 4.4 to 5.5 per 100,000 in 2013.
- In 2013, cocaine was involved in 46% of all unintentional overdose deaths; 67% of cocaine overdoses also involved an opioid and 55% involved alcohol.

Unintentional overdose deaths involving cocaine, New York City, 2000–2013

- Data Sources:
  1NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics: 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 2000-2013.
  2DAWN: The Drug Abuse Warning Network (DAWN), managed by Substance Abuse and Mental Health Services Administration (SAMHSA), is a database of drug-related visits to hospital emergency departments (EDs), including 61 NYC EDs. Data were weighted to produce citywide estimates of drug-related ED visits for 2011.
  3NSDUH: The National Survey on Drug Use and Health (NSDUH), conducted annually by SAMHSA, includes a representative sample of NYC residents aged 12 years and older. Two-year averages are presented.
  4NYC YRBS: The NYC Youth Risk Behavior Survey (YRBS), conducted by the NYC Departments of Health and Education, is an anonymous, self-administered biennial study of NYC public high school students in grades 9 to 12.
  5SPARCS: The Statewide Planning and Research Cooperative System (SPARCS) currently collects patient level detail for each hospital inpatient stay and outpatient emergency department visits in New York State. Data on NYC inpatient hospital stays are presented.

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Source: NYC Office of the Chief Medical Examiner and NYC DOHMH Bureau of Vital Statistics
In 2013, New Yorkers aged 45 to 54 had the highest rate of cocaine involved deaths (12.0 per 100,000).

From 2000 to 2013, the rate of cocaine-involved overdoses among individuals aged 55 to 64 increased 209% (from 2.2 per 100,000 in 2000 to 6.8 per 100,000 in 2013).

Age stratified by birth year cohorts identified “Baby Boomers” (born 1946 to 1964) and “Generation Xers” (born 1965 to 1980) accounted for a consistent proportion of overdose deaths from 2000-2013.

In 2006, Black New Yorkers had the highest rates of cocaine-involved deaths (12.5 per 100,000 residents).

From 2006 to 2013, racial disparities in cocaine overdose mortality rates narrowed, and, in 2013, rates of cocaine-involved mortality were similar among Black, White, and Hispanic New Yorkers.

Since 2000, residents of very high poverty neighborhoods had the highest rate of cocaine-involved deaths; in 2013 the rate was 7.7 per 100,000 residents.

In 2013, residents of the Bronx had the highest rate of overdose deaths involving cocaine (7.7 per 100,000) followed by residents of Staten Island (7.5 per 100,000).

From 2000 to 2013, the rate of cocaine-involved overdoses among Staten Island residents increased 341% from 1.7 per 100,000 to 7.5 per 100,000.

Definitions:
Rate calculation: NYC DOHMH population estimates, modified from US Census Bureau intercensal population estimates 2000-2013, updated October 8, 2014. These rates will differ from previously reported rates based on Census counts or previous versions of population estimates. 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 the percentage of residents with incomes below 100% of the federal poverty level (per American Community Survey 2007-2011) in four groups: low (<10%), medium (10 %-< 20%), high (20 %-< 30%), and very high (≥30%).
Unintentional drug poisoning deaths referred to as overdose deaths: Derived from death certificates and includes deaths from both illicit drugs and licit drugs taken for non-medical reasons. Excludes drug poisonings where the manner of death was intentional (suicide), undetermined, or homicide. Toxicology findings were abstracted from medical examiner files. Drugs are not mutually exclusive.
Cocaine: Includes all forms of cocaine (i.e., powder cocaine and crack).

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• Visit EpiQuery – the Health Department’s online, interactive health data system at nyc.gov/health/EpiQuery
Data & Statistics at nyc.gov/health/data