

# Epi Data Brief

New York City Department of Health and Mental Hygiene

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## Opioid Analgesics in New York City: Misuse, Morbidity and Mortality Update

- Opioid analgesics (prescription pain medication) are synthetic drugs, such as oxycodone (for example, Percocet® or OxyContin®), hydrocodone (for example, Vicodin®), and codeine, which possess narcotic properties similar to opiates but are not made from “natural” opium.
- In 2009, opioid analgesics were involved in 25% (158) of unintentional drug poisoning (overdose) deaths.<sup>4</sup>

### Non-medical use of opioid analgesics in New York City<sup>1</sup>

- In 2008-2009, 4% of New Yorkers aged 12 and older (263,000) reported non-medical use of prescription opioids – without a prescription or use with a prescription in a manner other than prescribed.
- From 2002-2003 to 2008-2009, self-reported, non-medical prescription opioid use increased by 40%.

### Opioid analgesic use among adolescents<sup>2</sup>

- In 2008, 10% of students in grades seven through 12 in New York City reported non-medical use of a prescription opioid at least once in their lifetime.

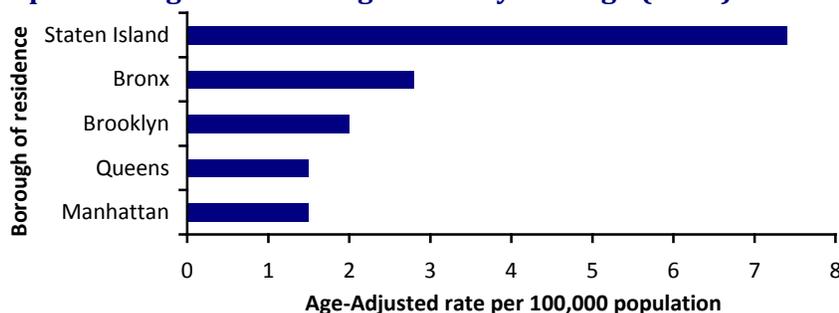
### Emergency department visits for opioid analgesic misuse/abuse<sup>3</sup>

- The rate of opioid analgesic-related misuse and abuse emergency department (ED) visits doubled between 2004 (4,466) and 2009 (9,254) rising from 55 to 110 visits per 100,000 New Yorkers.
- Opioid analgesic-related misuse and abuse ED visits were most common among adults aged 45 to 54 (251/100,000 in 2009), compared with 130/100,000 for those aged 55- to 64 and 222/100,000 for those aged 35-44.

### Unintentional opioid analgesic poisoning deaths<sup>4</sup>

- The unintentional opioid analgesic poisoning death rate increased by 20% between 2005 and 2009 from 2.0 to 2.4 per 100,000 New Yorkers, while the heroin poisoning death rate decreased by 24%.
- The Staten Island rate increased by 147% from 3.0/100,000 in 2005 to 7.4/100,000 in 2009 – more than double that of any other borough.

### Opioid Analgesic Poisoning Deaths by Borough (2009)



Source: Office of Vital Statistics and Office of the Chief Medical Examiner, 2009

### Data Sources

<sup>1</sup>**NSDUH:** The National Survey on Drug Use and Health (NSDUH) 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.

<sup>2</sup>**YDS:** The Youth Development Survey (YDS) conducted by the NYS Office of Alcohol Substance Abuse Services assesses risk (substance use, violence, pregnancy, drop-out, and delinquency) and protective factors (family, school, community, religion) for academic success among public and private school students in grades seven through 12. 2008 data are presented by grade and borough of residence.

<sup>3</sup>**DAWN:** The Drug Abuse Warning Network (DAWN), managed by 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 2004-2009.

<sup>4</sup>**OVS/OCME:** Mortality data result from an in-depth review of the NYC Health Department’s Bureau of Vital Statistics and the Office of the Chief Medical Examiner for 2005-2009. Rates are age adjusted to the year 2000 standard population, except those for specific age groups. Given the large number of methadone maintenance treatment clients in NYC, methadone mortality is reported separately and is excluded from unintentional opioid analgesic death analyses presented here.

<sup>5</sup>**NYS PDMP:** The Prescription Drug Monitoring Program (PDMP) managed by the New York State Department of Health, collects data from drug dispensers on schedule II-V controlled substances.

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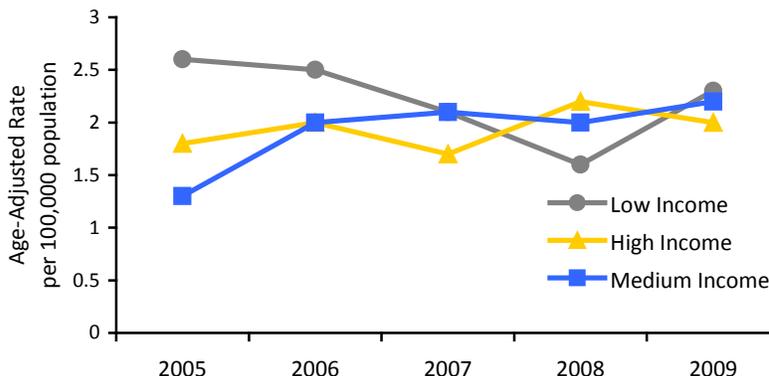
### Acknowledgements:

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- During the same time period, deaths from opioid analgesic poisoning increased by 75% among Hispanics; however whites had the highest 2009 rate (3.9/100,000).
- Seven in 10 unintentional opioid analgesic poisoning deaths occurred to residents of medium- and high- income neighborhoods.
- Residents of medium-income neighborhoods had the largest increase, by 69%, from 2005-2009.

### Rate of unintentional opioid analgesic deaths by neighborhood income, 2005-2009



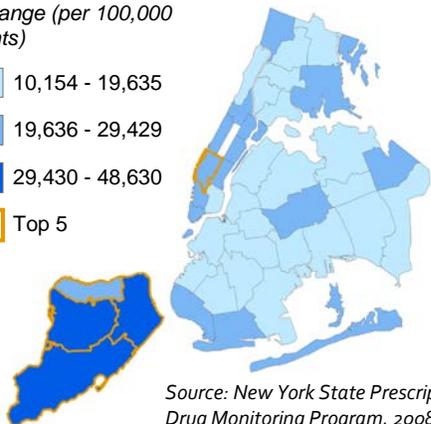
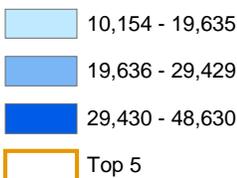
Source: Office of Vital Statistics and Office of the Chief Medical Examiner, 2005-2009

### Patterns of opioid analgesic prescribing and death rates in New York City<sup>5, 4</sup>

- Oxycodone and hydrocodone were the most commonly prescribed opioid analgesics in NYC in 2008-2009, with nearly 900,000 oxycodone prescriptions and more than 825,000 hydrocodone prescriptions filled in 2009.
- The five NYC neighborhoods with the highest rates of hydrocodone and/or oxycodone prescriptions filled per 100,000 residents were in high and/or medium income neighborhoods.
- Of the five NYC neighborhoods with the highest rates of hydrocodone and/or oxycodone prescriptions filled, four were in Staten Island and overlapped with four of the five neighborhoods where the rate of unintentional opioid analgesic poisoning (overdose) deaths was highest during the years 2008-2009.

#### Rates of hydrocodone and/or oxycodone prescriptions filled by NYC neighborhood<sup>5</sup>

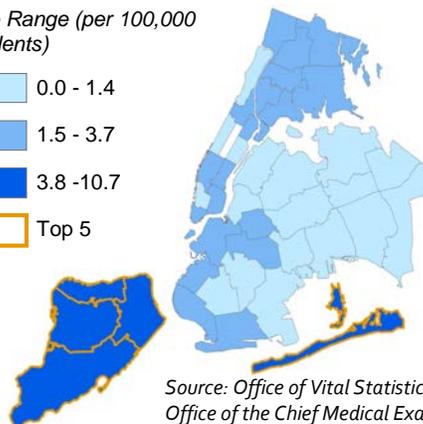
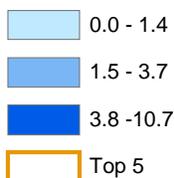
Rate Range (per 100,000 residents)



Source: New York State Prescription Drug Monitoring Program, 2008-2009

#### Rates of unintentional opioid analgesic poisoning (overdose) deaths by NYC neighborhood<sup>4</sup>

Rate Range (per 100,000 residents)



Source: Office of Vital Statistics & Office of the Chief Medical Examiner, 2008-2009

**Definitions:** The United Hospital Fund (UHF) classifies NYC into 42 neighborhoods, comprised of contiguous zip codes. Income is defined by the percent of households below 200% of the federal poverty level (Census 2000) and separated into three groups: low-income (43%-70%), medium-income (30%-43%) and high-income (13%-30%). To ensure rate stability, two years of prescription and death data were combined for neighborhood analyses.

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- For complete tables of data presented in this Brief, visit [www.nyc.gov/html/doh/downloads/pdf/epi/datatable3.pdf](http://www.nyc.gov/html/doh/downloads/pdf/epi/datatable3.pdf)
- For more information on prescription drug use, check out the following Health Bulletins: [When does Use Become Misuse](#), [Is Your Child Abusing Prescription Drugs](#), and [Help to Stop Using](#).
- Visit EpiQuery – the Health Department’s online, interactive health data system at [www.nyc.gov/health/EpiQuery](http://www.nyc.gov/health/EpiQuery)

My Community’s Health: Data and Statistics at [www.nyc.gov/health/mycommunityhealth](http://www.nyc.gov/health/mycommunityhealth)