



Monitoring Opioid Analgesic Abuse and Overdose in the United States

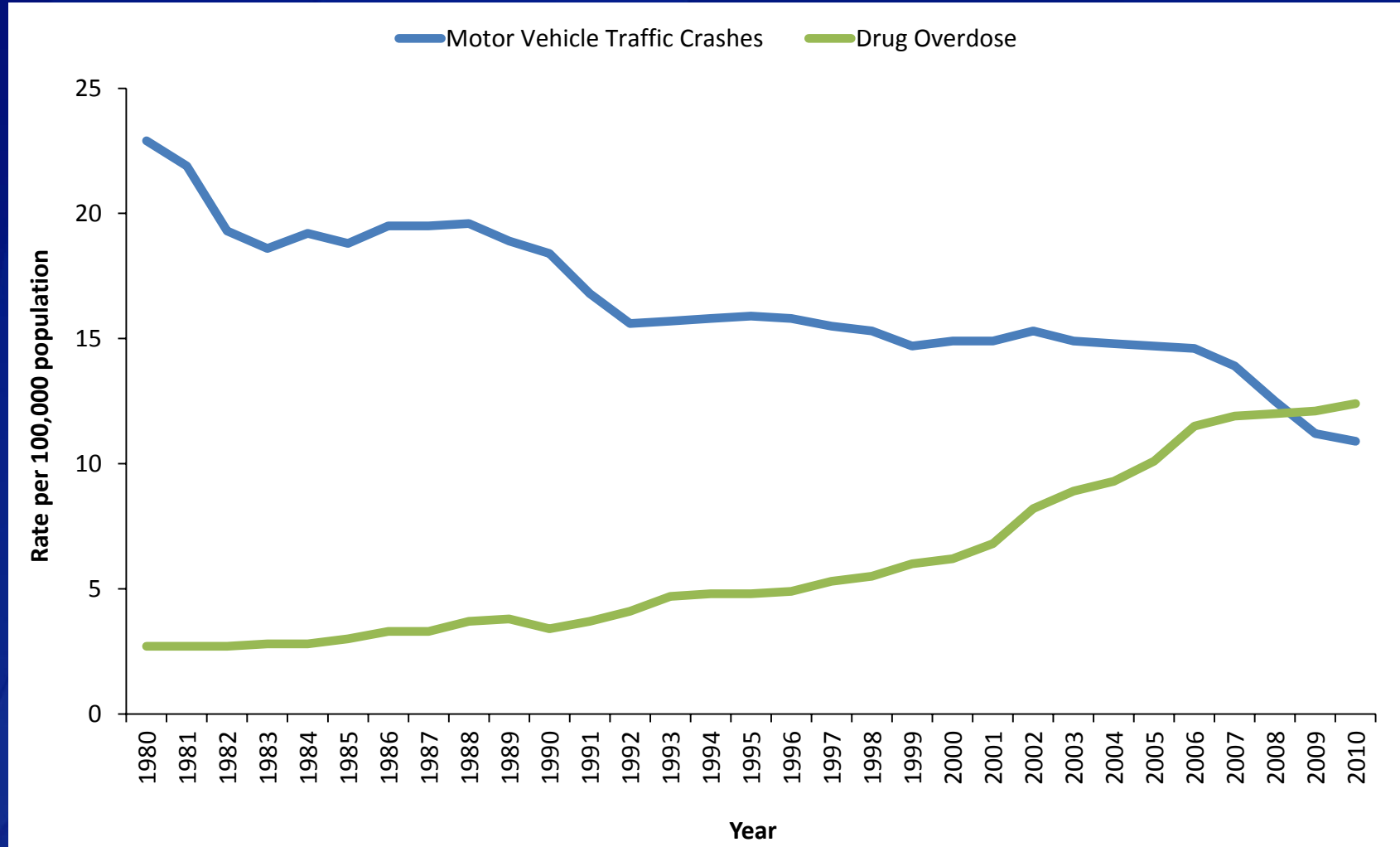
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Overview of Presentation

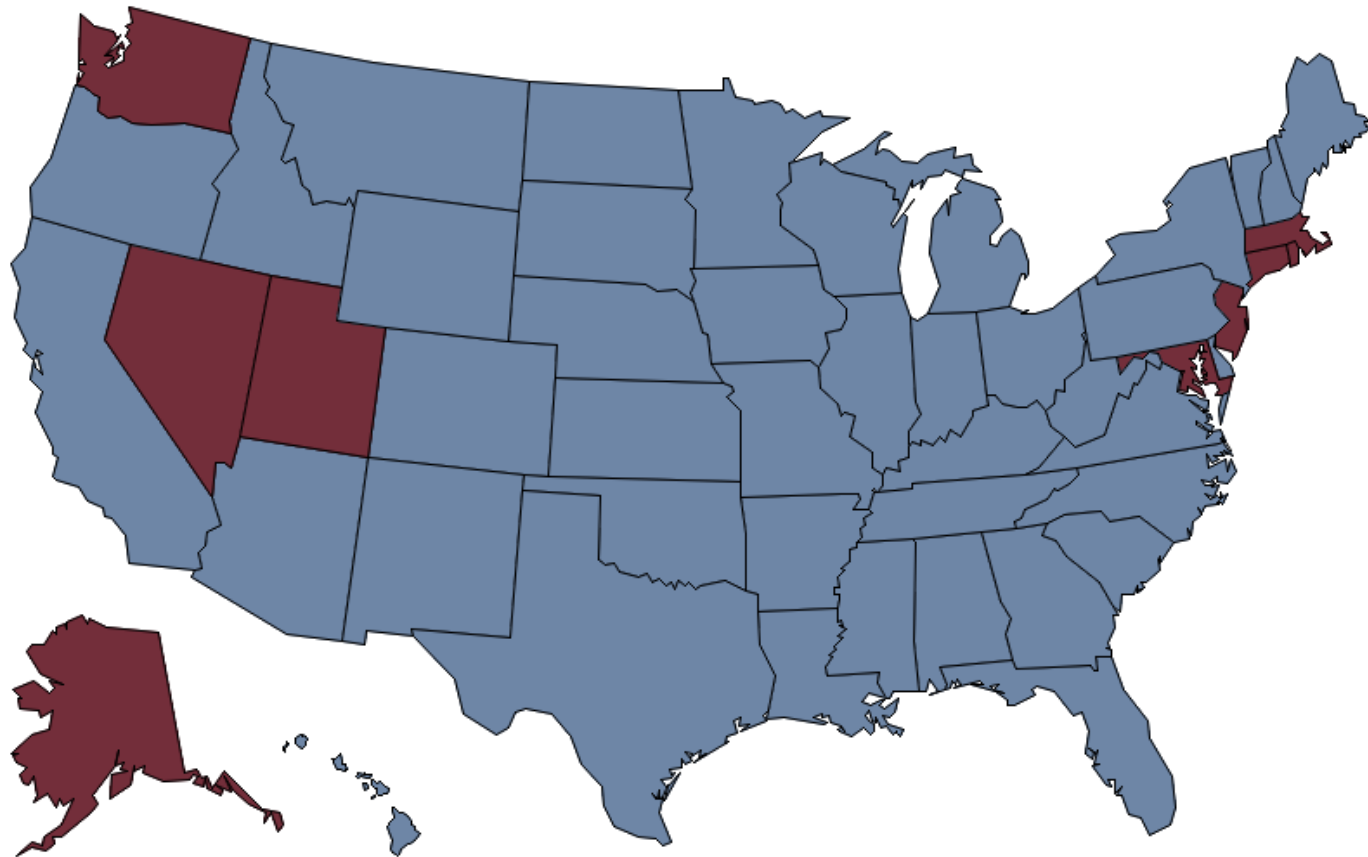
- ❑ Prescription drug abuse and overdose statistics
- ❑ Risk factors
- ❑ Discussion of select surveillance systems

NOTE: the term opioid is used synonymously with opioid analgesic throughout this presentation.

Comparison of rates of drug overdose and motor vehicle traffic crash deaths, US, 1980-2010

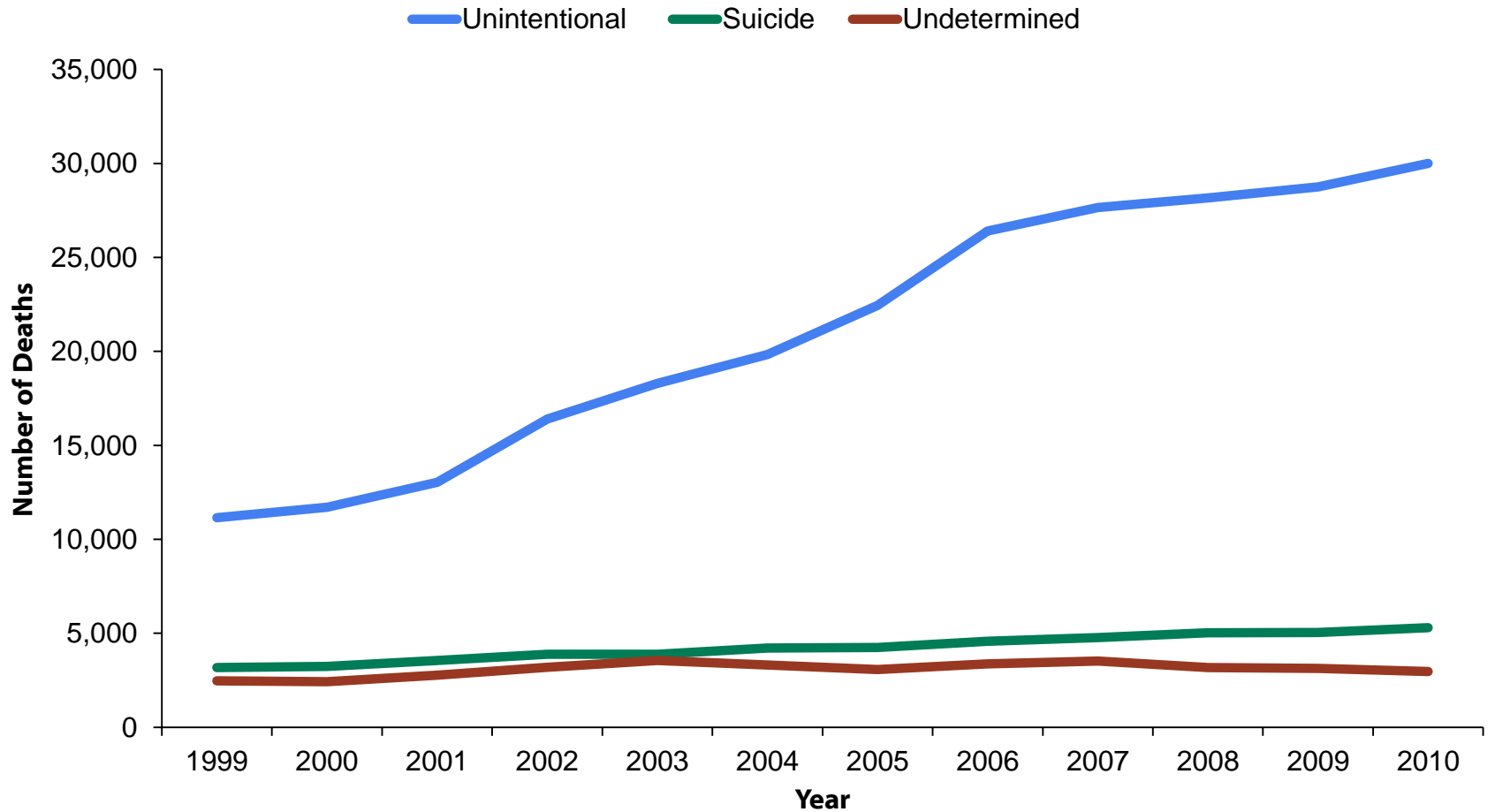


Drug overdose deaths outnumbered motor vehicle traffic deaths in 10 states in 2005



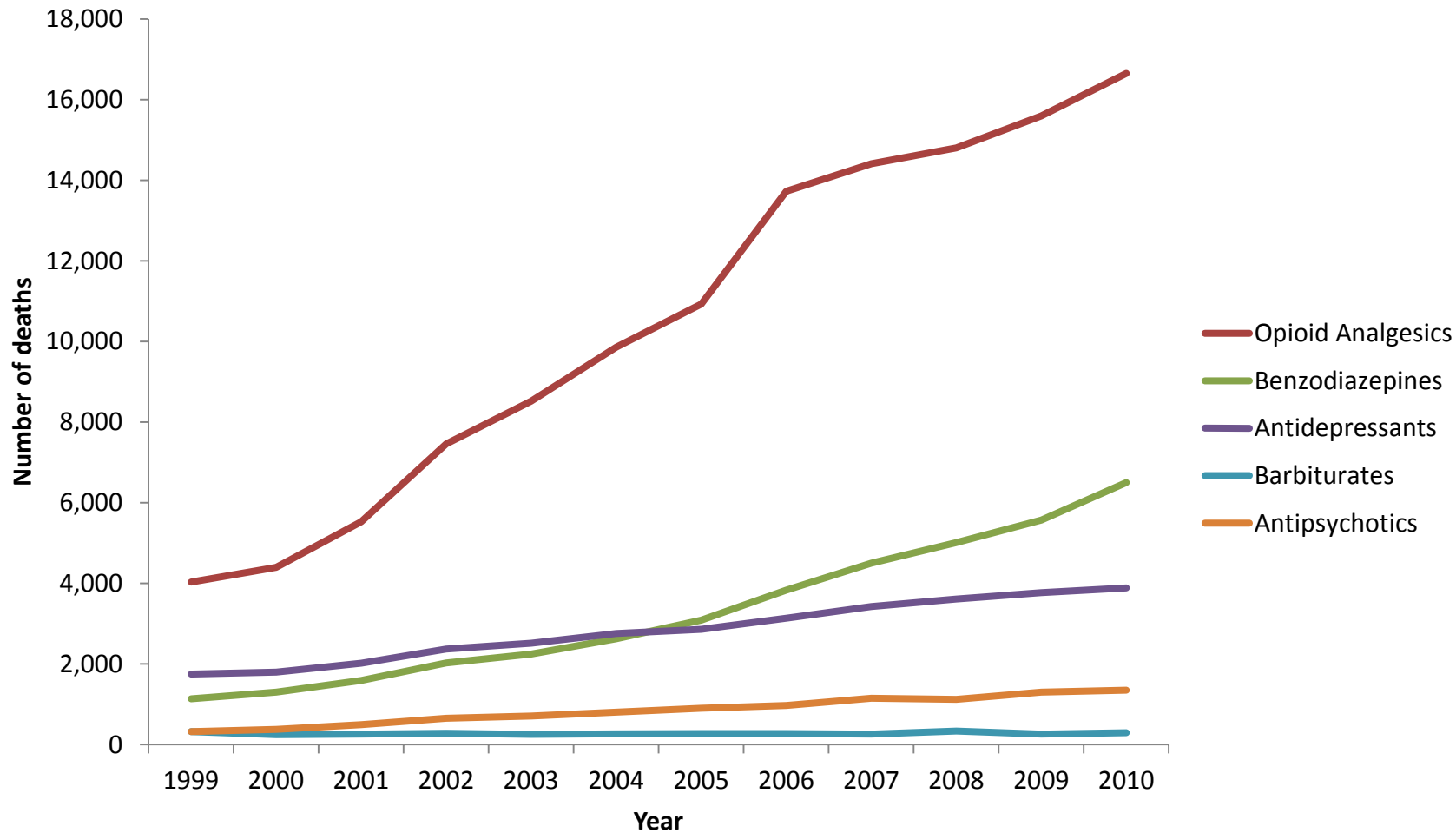
 More deaths from drug overdose

Drug overdose deaths by intent, US, 1999-2010



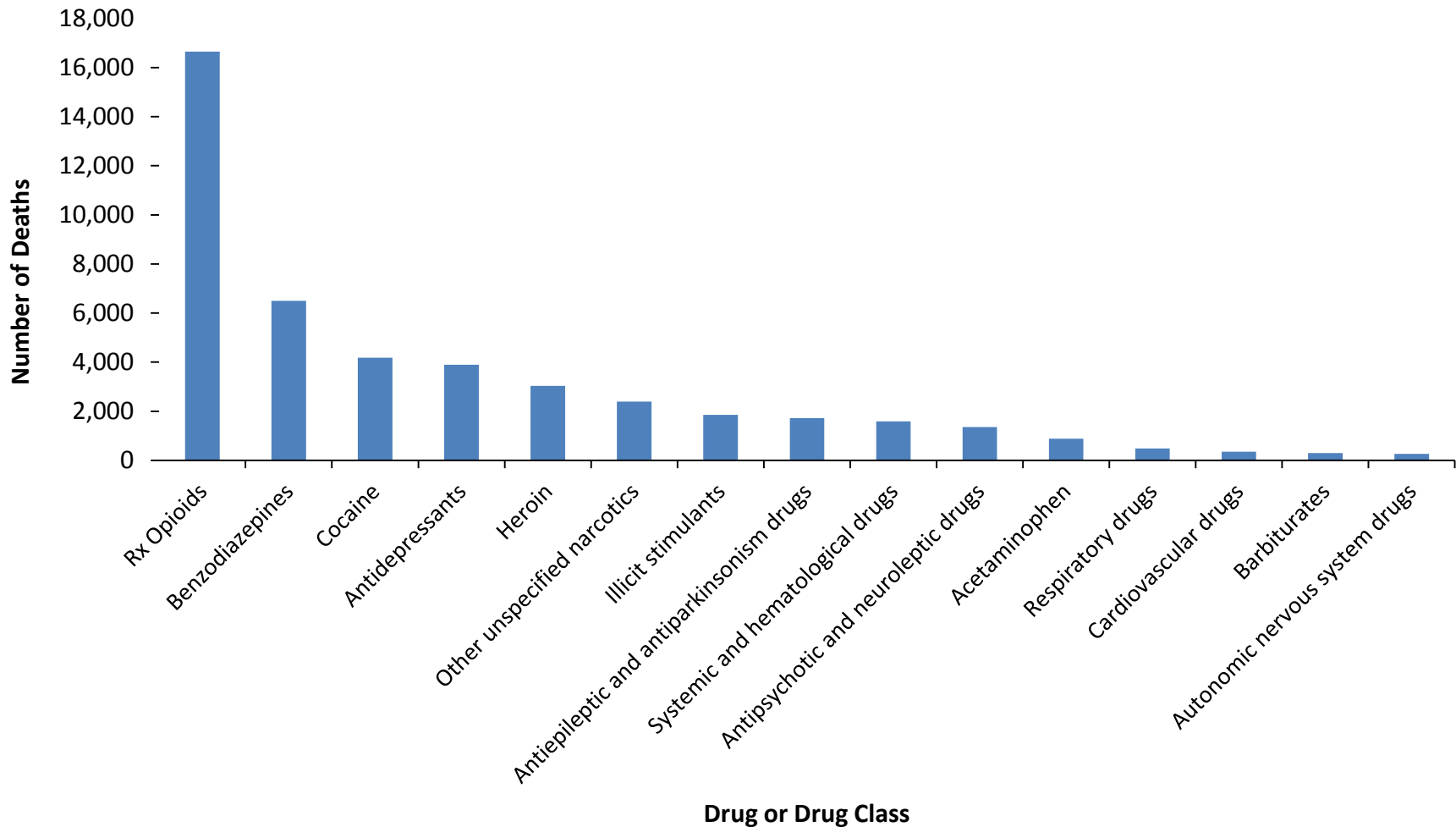
National Vital Statistics System. 1999-2010.

Prescription drugs commonly involved in overdose deaths, US, 1999-2010

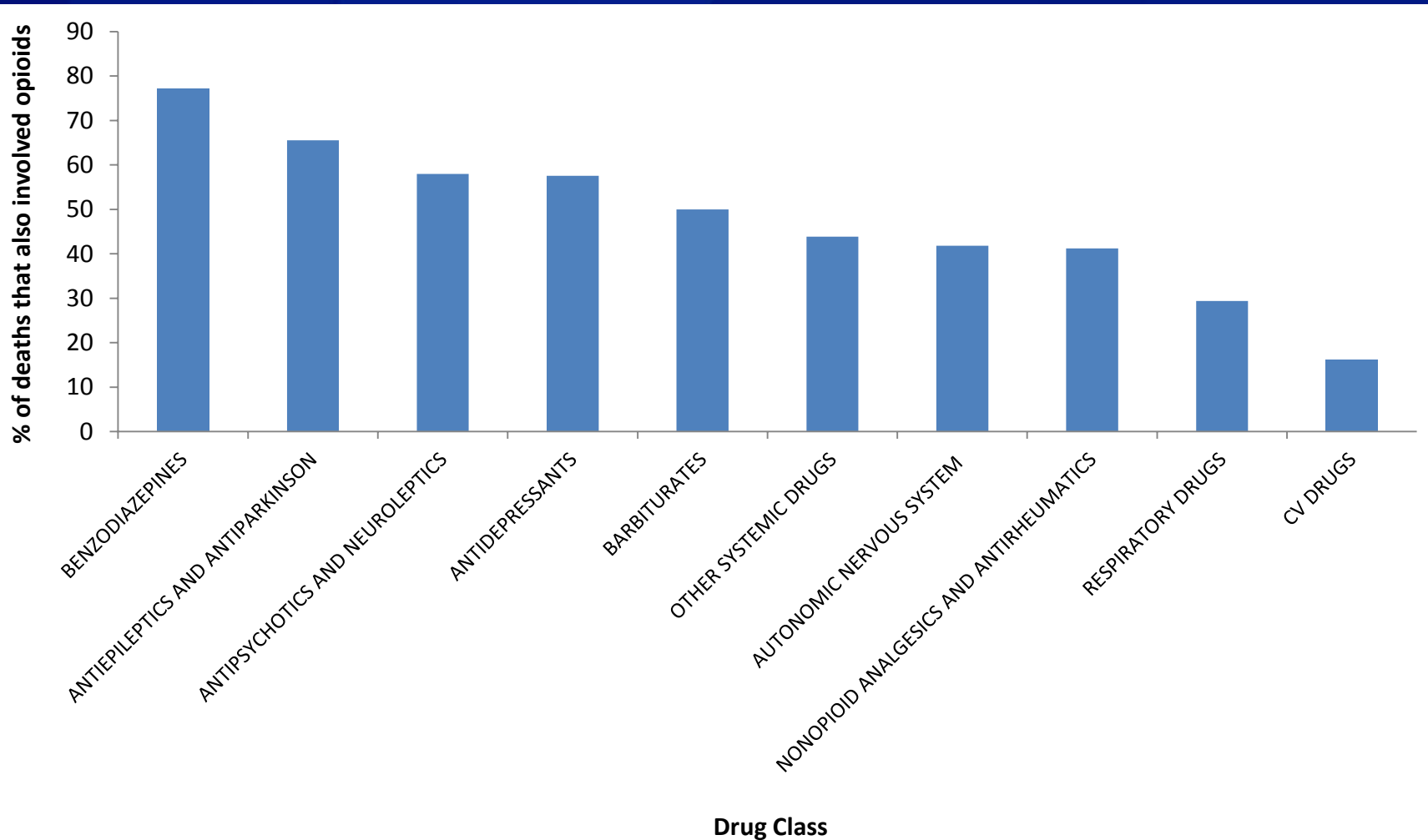


CDC/NCHS National Vital Statistics System, CDC Wonder. Updated with 2010 mortality.

Top 15 drugs or drug classes involved in overdose deaths, US, 2010

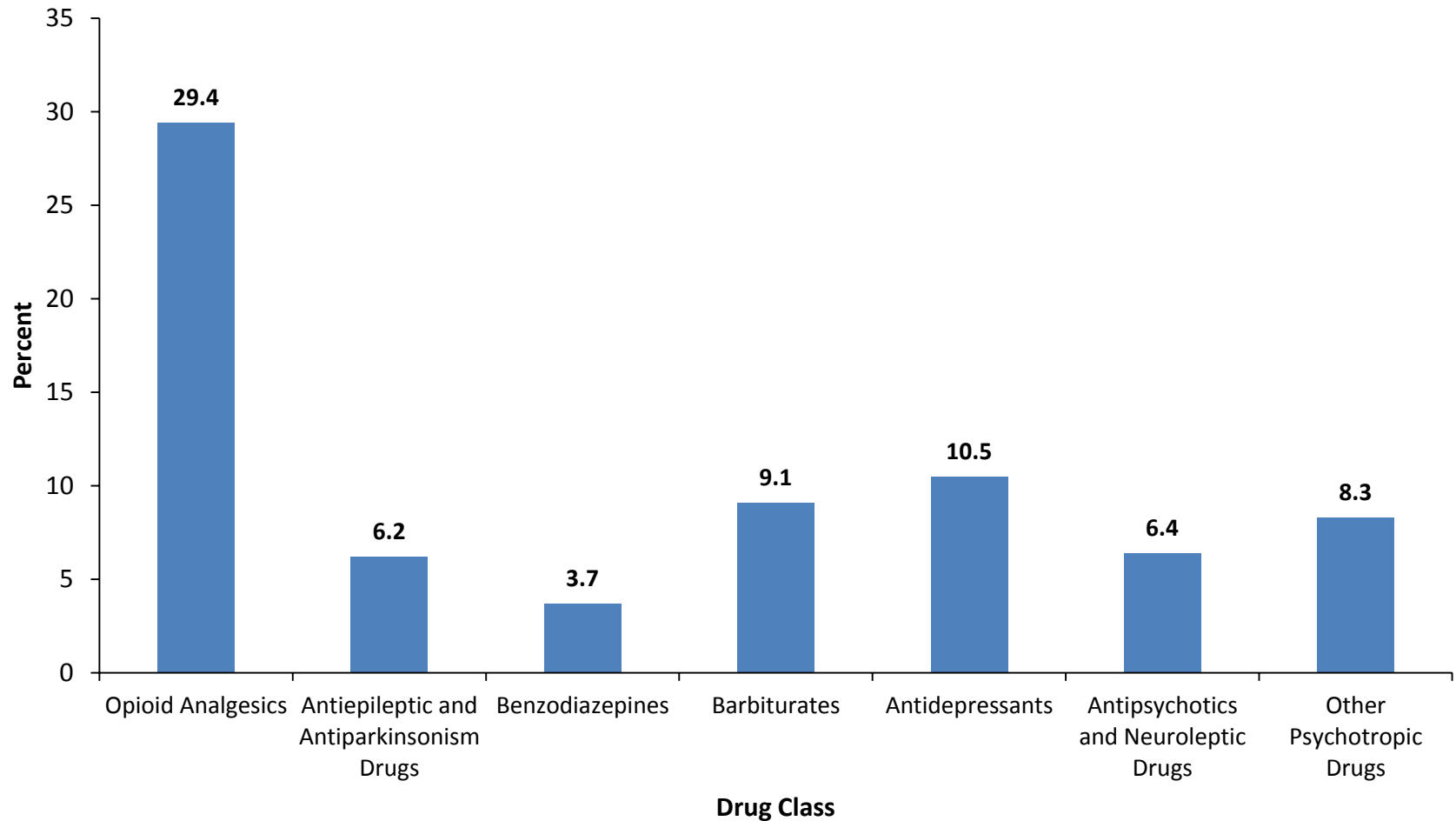


Opioid involvement in drug overdose deaths by selected prescription drug class, US, 2010



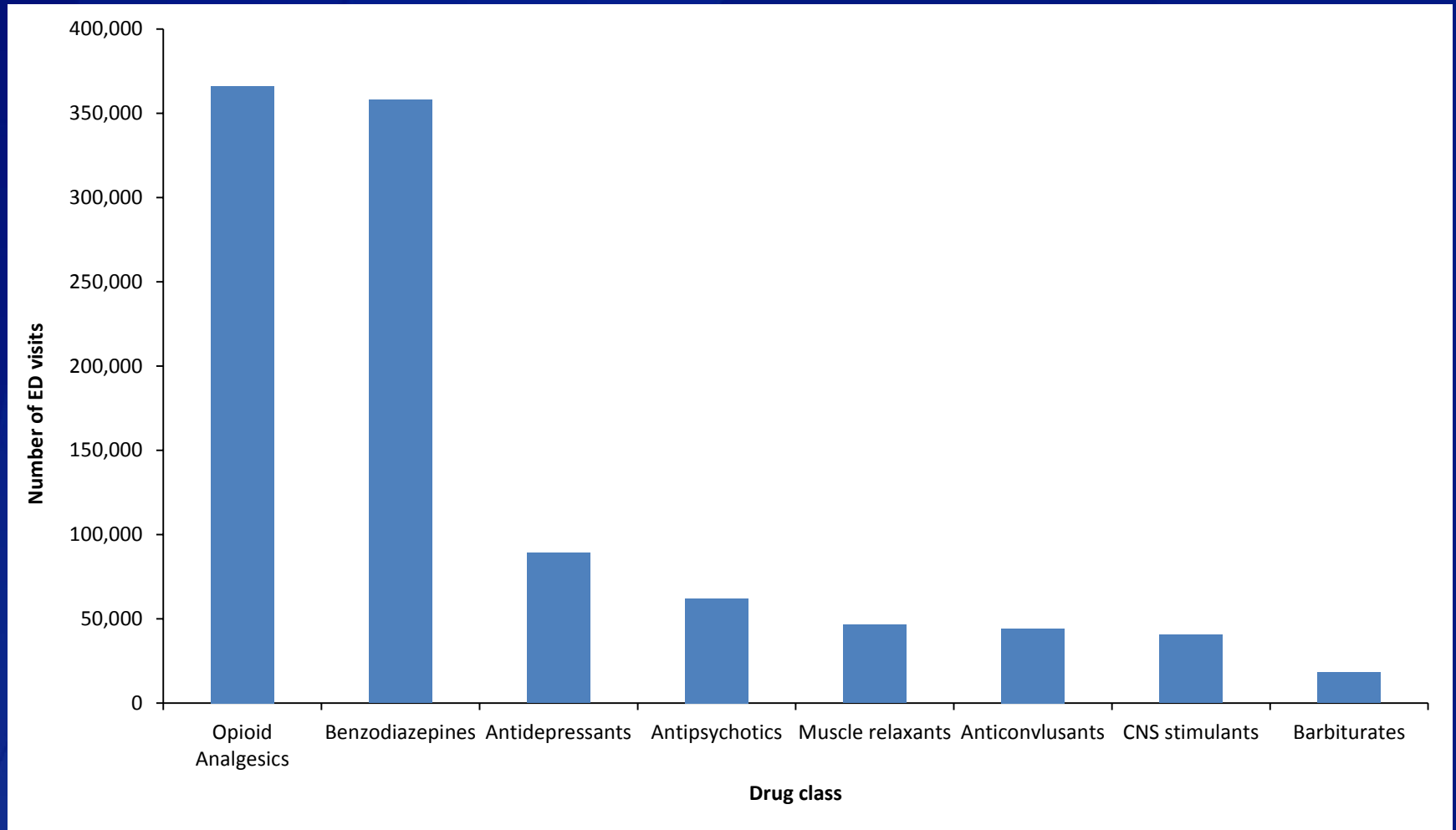
CDC/NCHS NVSS 2010. Jones et al Pharmaceutical overdose deaths, United States, 2010. JAMA 2013

Opioids more likely to be involved in single drug class deaths, US, 2010

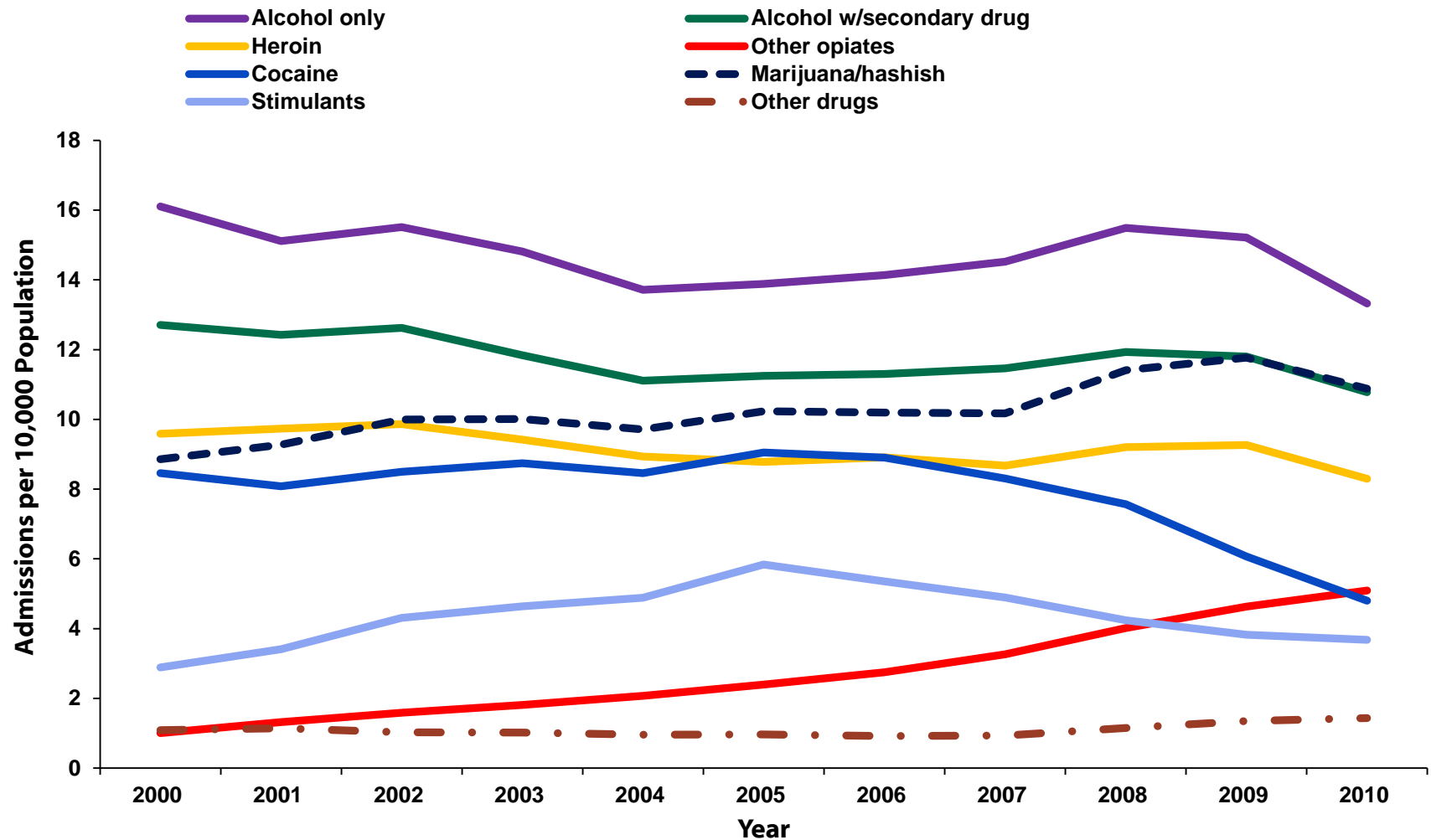


Jones et al Pharmaceutical overdose deaths, United States, 2010. JAMA 2013

Most common prescription drugs involved in nonmedical use-related ED visits, US, 2011

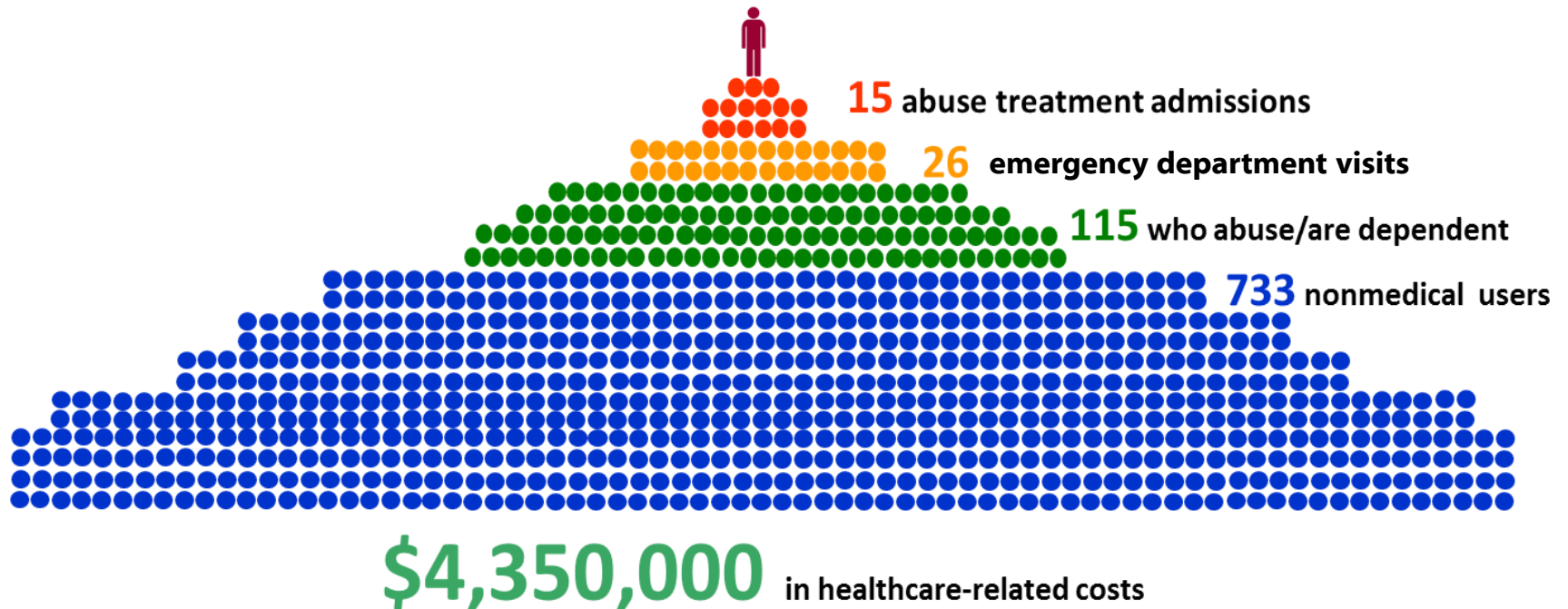


Primary substance of abuse at treatment admission, US, 2000-2010



Deaths are the tip of the iceberg

For every **1** opioid overdose death in 2010 there were...



Opioid analgesic overdose risk factors

❑ Demographics

- Men (women are catching up)
- 35-54 year olds
- Whites
- American Indians/Alaska Natives

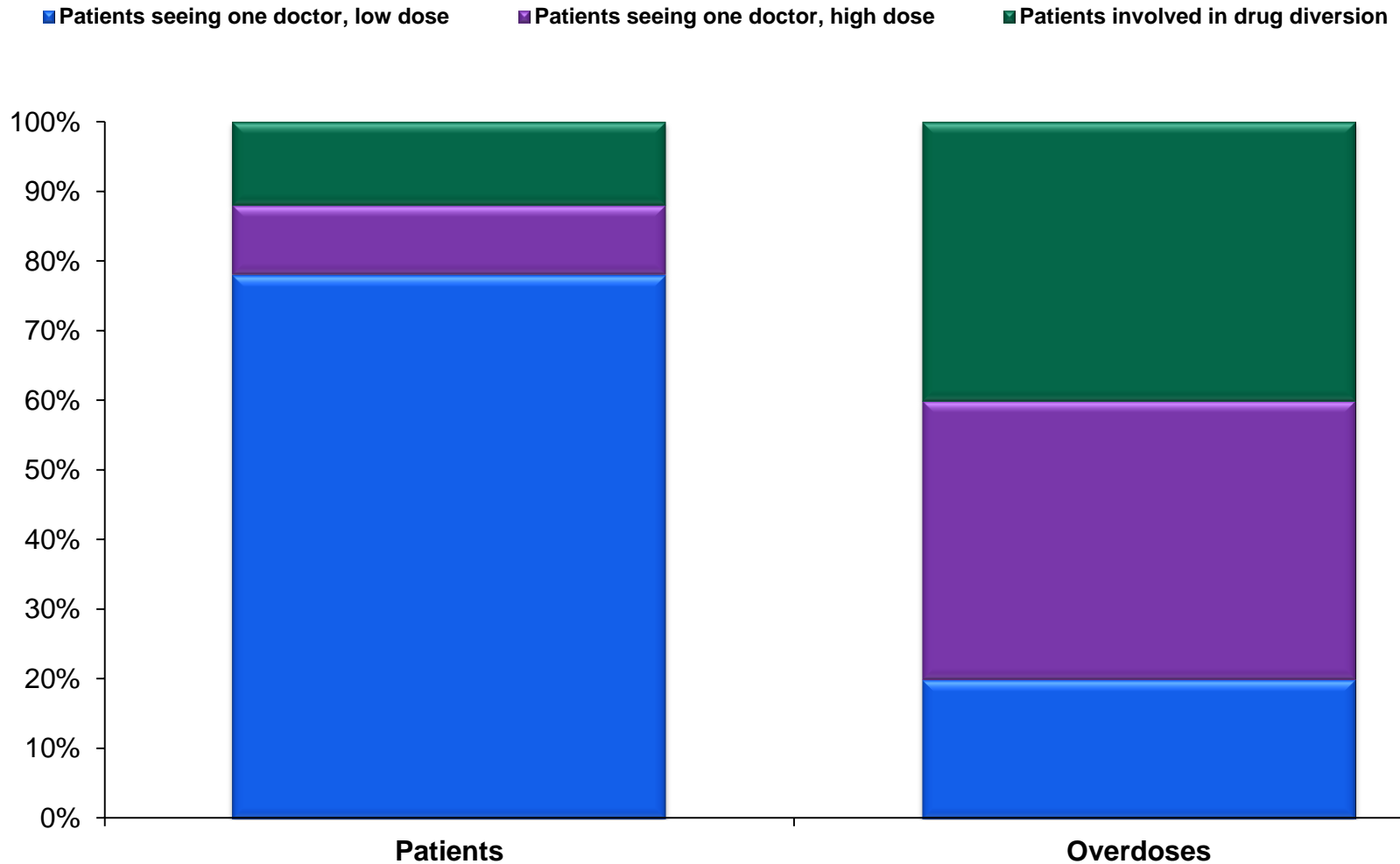
❑ Socioeconomics and Geography

- Medicaid
- Rural

❑ Clinical Characteristics

- Chronic pain
- Substance abuse
- Mental health
- Nonmedical use of prescription drugs
- Nonmedical route of administration
- Multiple prescriptions
- Multiple prescribers
- High daily dosage

Distribution of patients and opioid analgesic overdoses by risk group



Strengths and limitations National Vital Statistics System

□ Strengths

- Complete count of deaths
- Use of standard classification system for cause and manner of death
- National in scope, but includes state and county identifiers
- Ability to place poisoning mortality within larger context of all mortality
- Data are widely used and stable

□ Limitations

- Nationally 25% of the drug overdose death certificates do not include specified drugs
- Inability to identify specific opioids (other than methadone)
- Time lag

Prescription Behavior Surveillance System

- ❑ Joint effort of CDC, FDA, BJA, and PDMP Center of Excellence at Brandeis University**
- ❑ New surveillance system using PDMP data**
- ❑ It will be used to track prescribing practices for controlled substances at the state level using de-identified state PDMP data**
- ❑ Will track a number of metrics including general prescribing trends and potentially risky prescribing patterns such as multiple providers/multiple pharmacies, high-dose opioids, and opioid-benzodiazepine overlap, among others**

Strengths and limitations Prescription Behavior Surveillance System

□ Strengths

- Population-based surveillance; complete census
- Timeliness extremely good
- Accuracy of prescription information itself is likely high
- Data elements standardized across states
- Can be used for surveillance and evaluation
- Captures product specific information

□ Limitations

- Reason for prescription is not known
- Limited in geographic scope to a few states so far
- Validity of indicators has not been established
- Prescriptions for state residents filled out of state cannot currently be captured

Other surveillance systems commonly used to explore opioid abuse

- ❑ DAWN ED (CDC Nat'l Hospital Care Survey)**
- ❑ HCUP (AHRQ)**
- ❑ ARCOS (DEA)**
- ❑ NSDUH (SAMHSA)**
- ❑ TEDS (SAMHSA)**
- ❑ MTF (NIDA)**

The findings and conclusions in this report are those of the author and do not necessarily represent the views of the Centers for Disease Control and Prevention.

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