

# Drug poisoning mortality: scope of the problem

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Prescription Drug Overdose  
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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Centers for Disease Control and Prevention  
National Center for Health Statistics

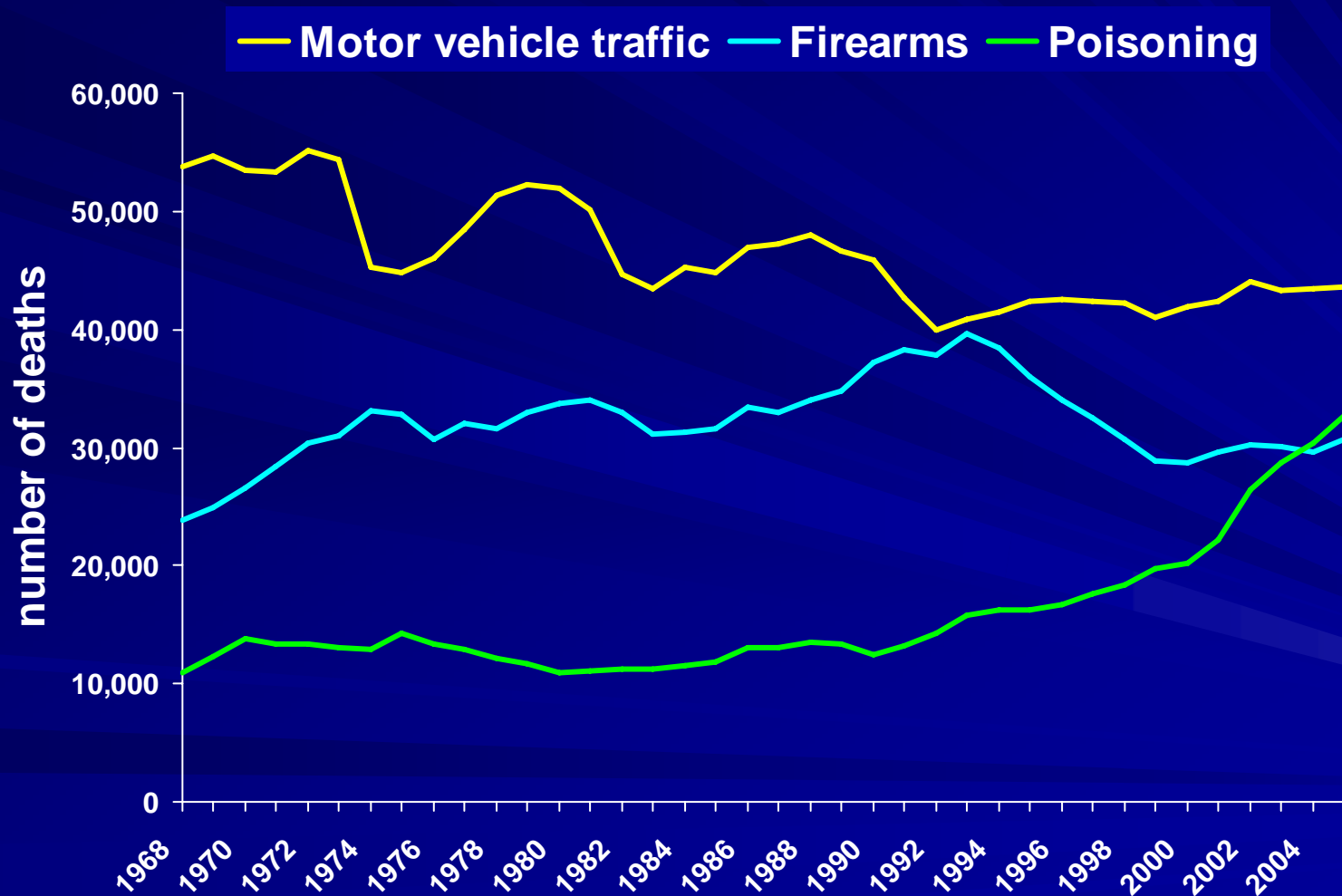


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# Presentation Overview

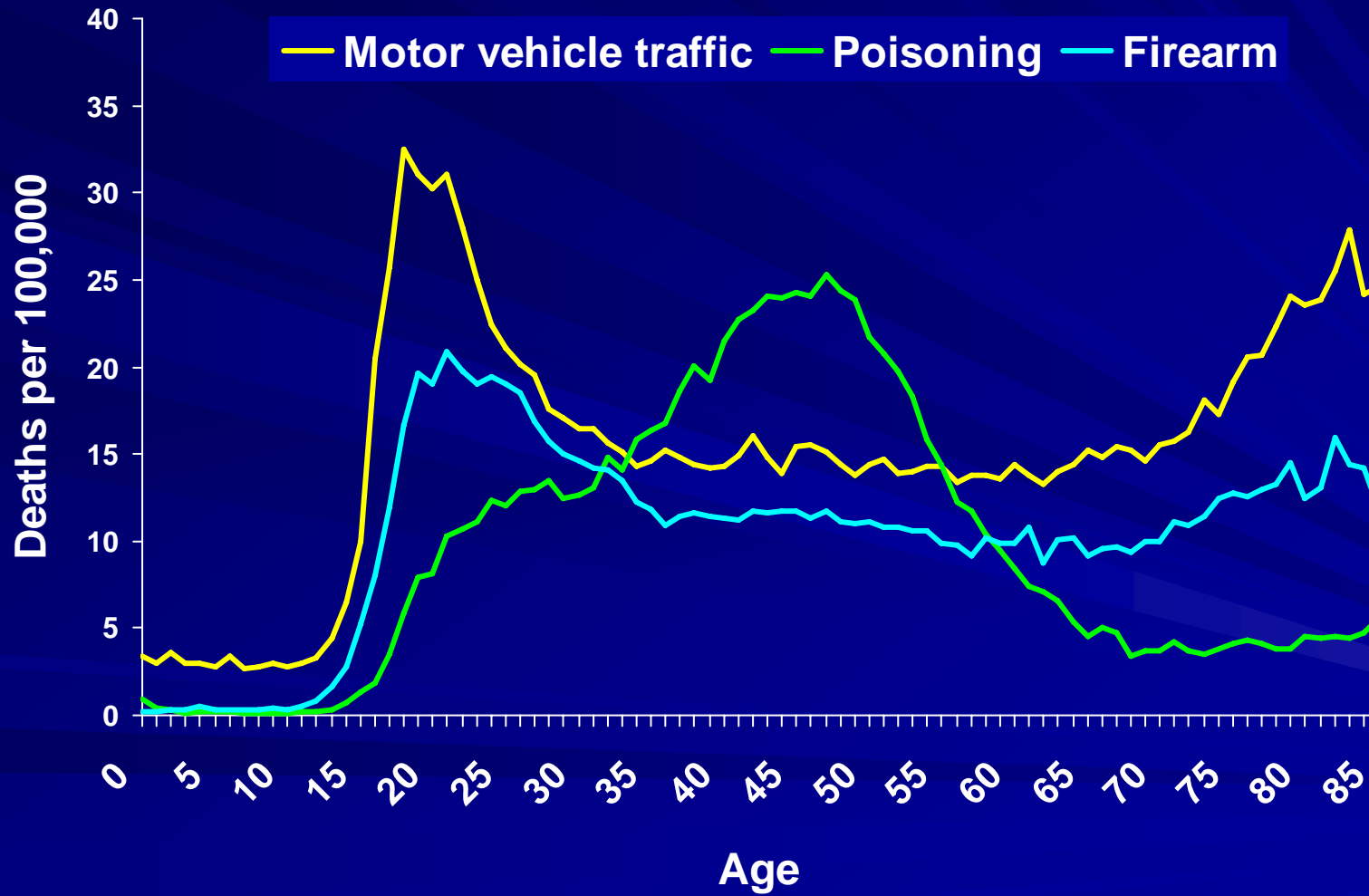
- **Background : National poisoning mortality in perspective**
- **Methods**
- **Narrowing the scope of the problem**
  - Intent
  - Age group
  - Types of drugs involved
- **Geographic variation**
  - State
  - Urban/rural
- **Summary**

# Trends in leading causes of injury death: 1968-2005



Source: NCHS, National Vital Statistics System

# Leading causes of injury death by age: 2004-2005



Source: NCHS, National Vital Statistics System

# Methods

## ■ Data source:

- National Vital Statistics System: Multiple cause of death file
- Data compiled from information recorded on death certificates
- All resident deaths in US
- Years 1999-2005

# Methods

- **Multiple cause of death analysis**
  - **Classification of cause of death by ICD-10**
    - **Underlying cause of death**
      - disease or injury which initiated the chain of events directly leading to death or
      - the circumstances of the accident or violence which produced the fatal injury.
    - **Contributing causes of death**
      - Significant conditions contributing to the death
        - **Drugs specified**

# Cause of death classification

**Underlying cause:**

**Cause categories with drugs mentioned**

**X40-X44**

**Poisoning -- Unintentional**

**X60-X64**

**Poisoning -- Suicide**

**Y10-Y14**

**Poisoning -- Undetermined intent**

**Remainder VWXY**

**Other injury – All intents**

**Remainder**

**Non-injury**

# Drug classification

## Contributing cause:

**T36-T50 Drugs, medicaments & biological substances**

### Selected drugs

**T40.1 Heroin**

**T40.2 Other opioids**

**T40.3 Methadone**

**T40.4 Other synthetic narcotics**

**T40.5 Cocaine**

**T40.6 Other and unspecified narcotics**

**T42.2 Benzodiazepines**

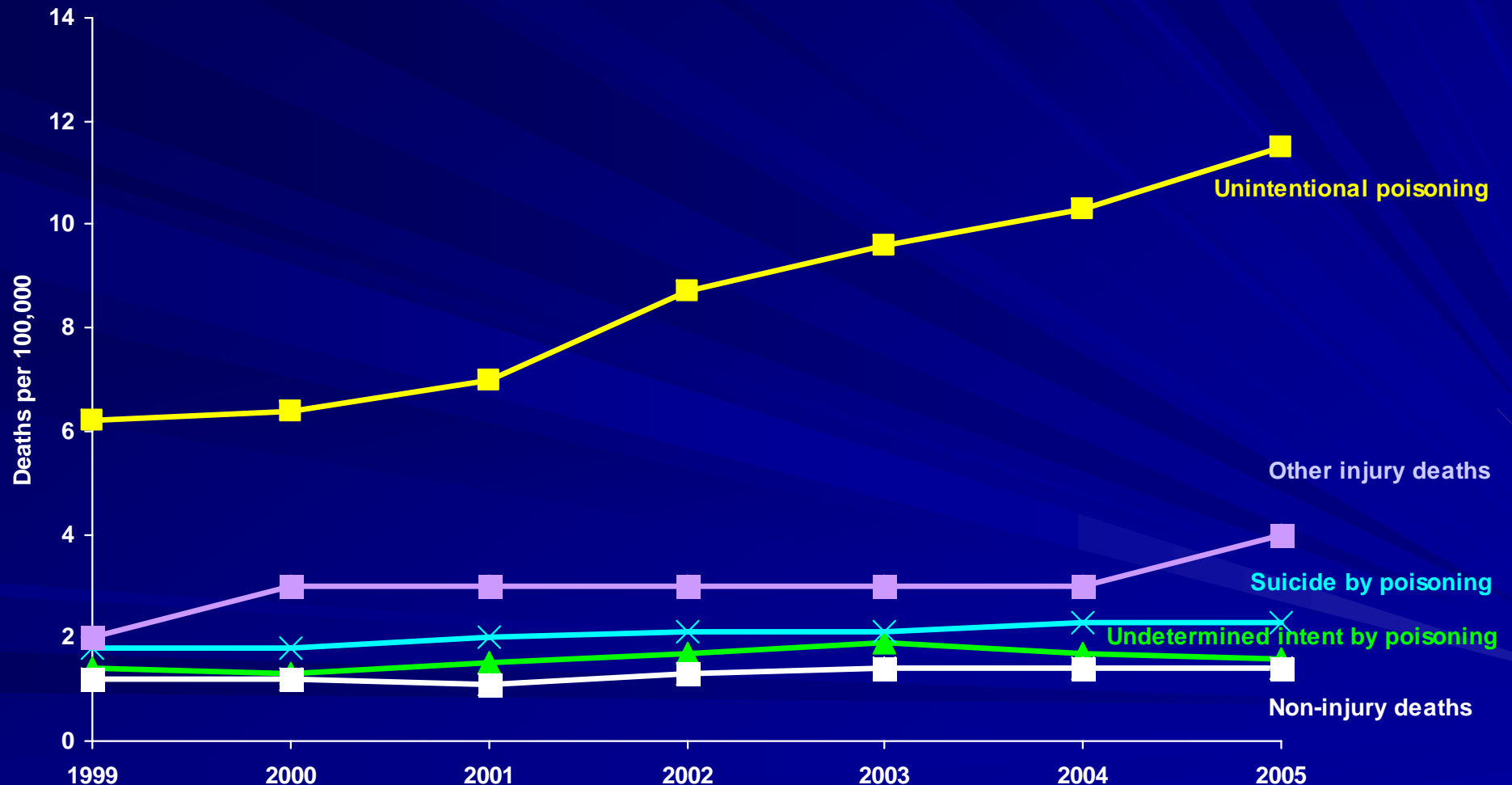
**T50.9 Other and unspecified drugs**

**Opioid analgesics**

T40.2+T40.3+T40.4



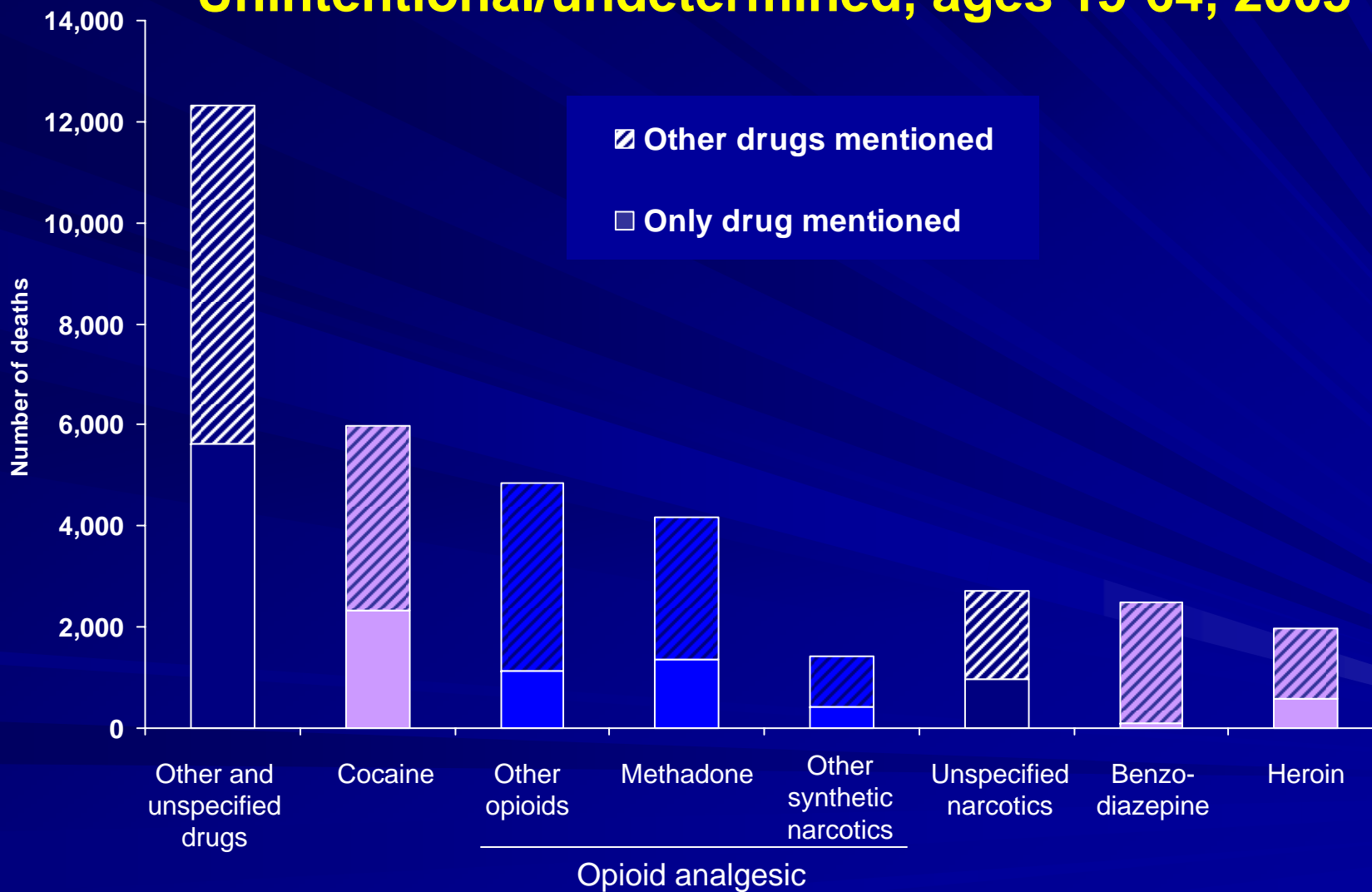
# Death rates mentioning drugs by mechanism and intent ages 15-64, 1999-2005



Source: NCHS, data from the National Vital Statistics System

# Drugs mentioned in poisoning deaths

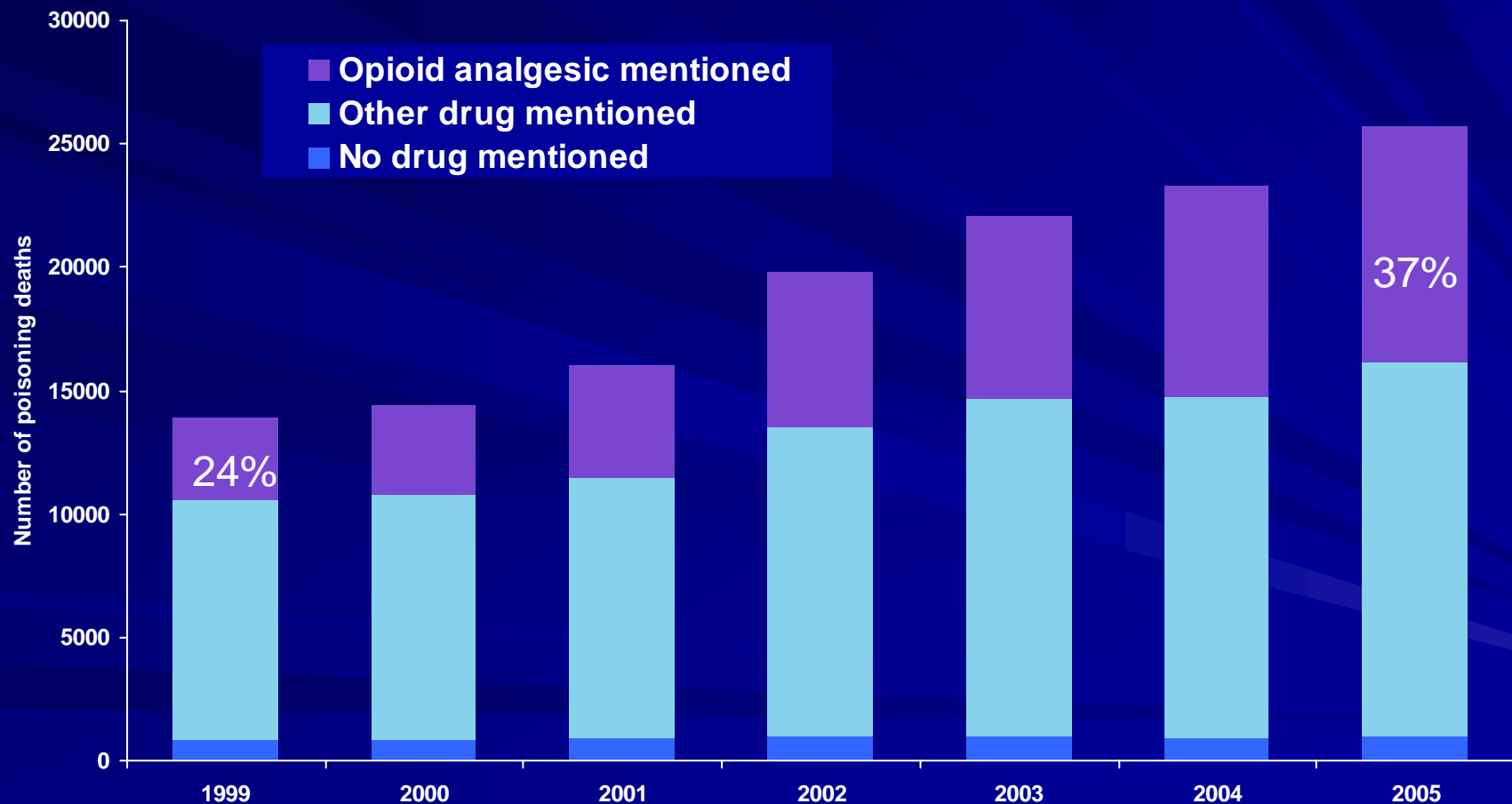
Unintentional/undetermined, ages 15-64, 2005



Source: NCHS, National Vital Statistics System

# Poisoning deaths with and without opioid analgesic mentioned

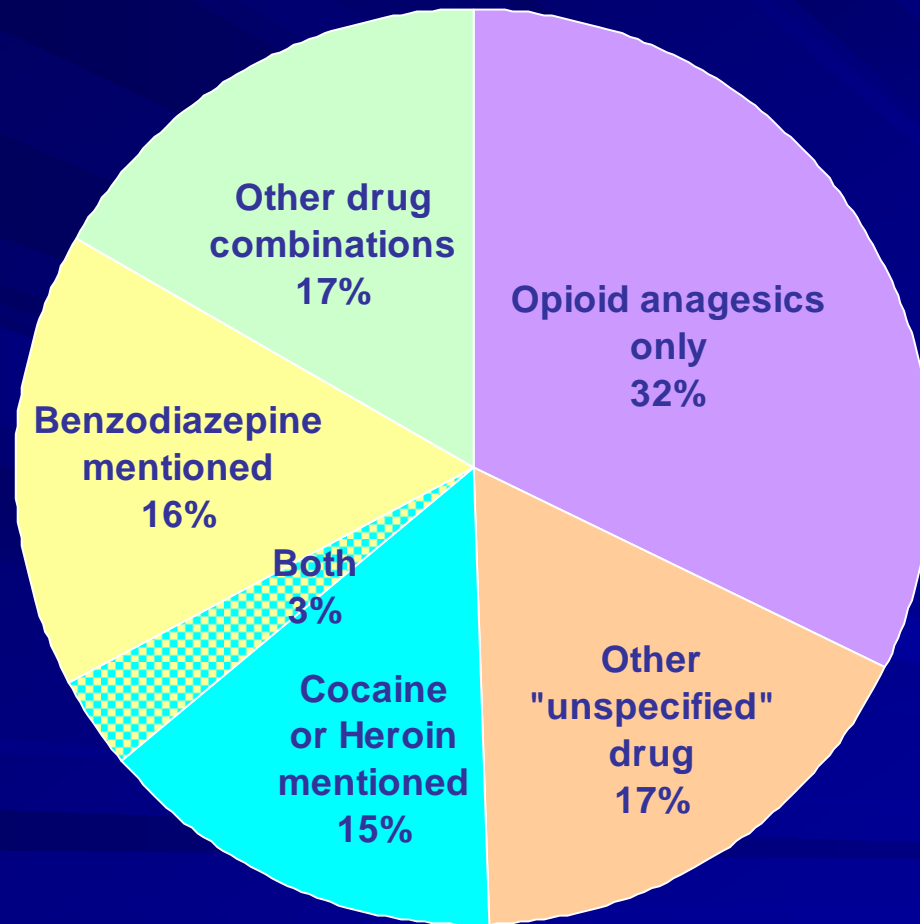
## Unintentional/undetermined, ages 15-64, 1999-2005



Source: NCHS, National Vital Statistics System

# Drugs mentioned in opioid analgesic poisoning deaths

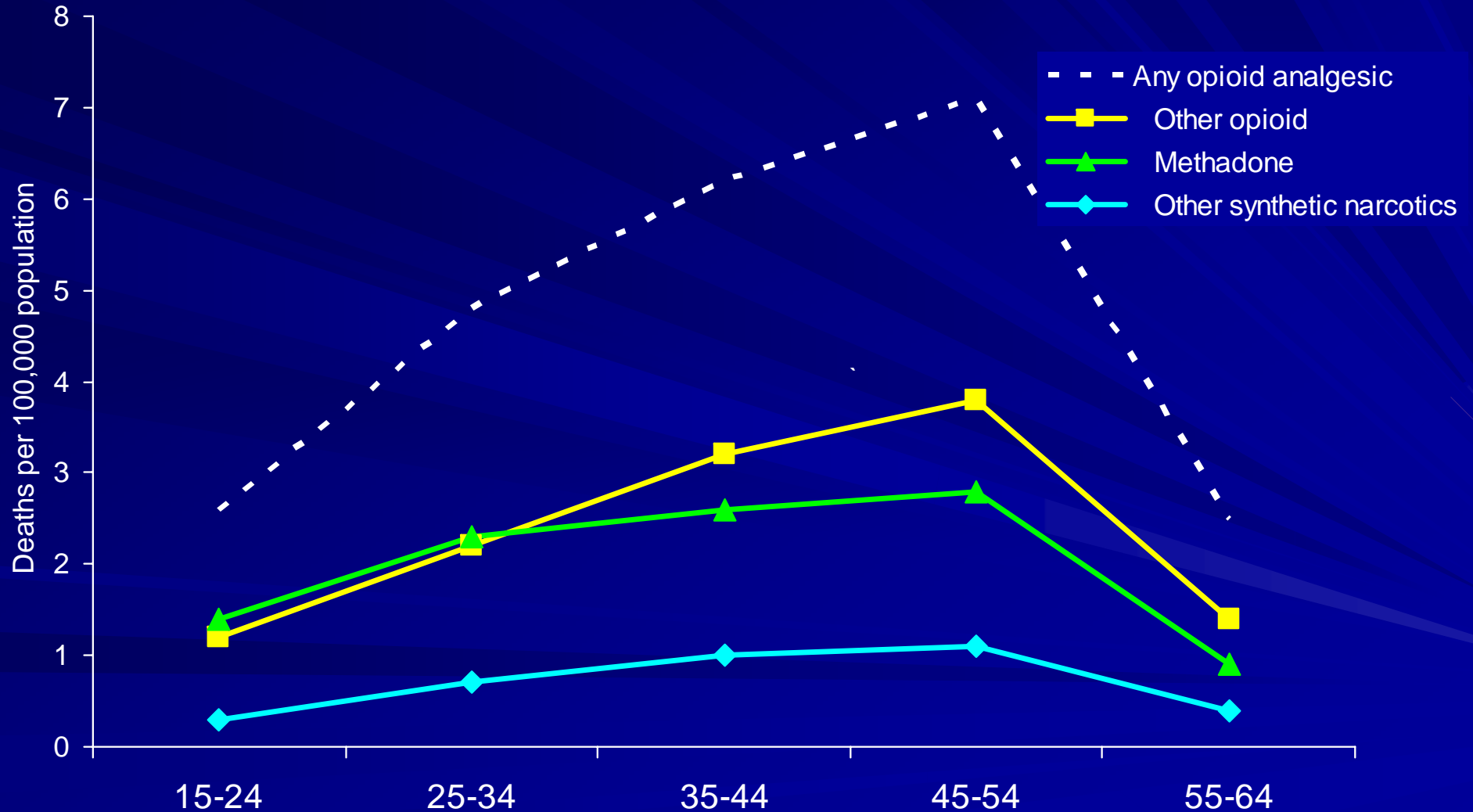
Unintentional/undetermined, ages 15-64, 2005



Source: NCHS, National Vital Statistics System

# Poisoning death rates mentioning opioid analgesics by age

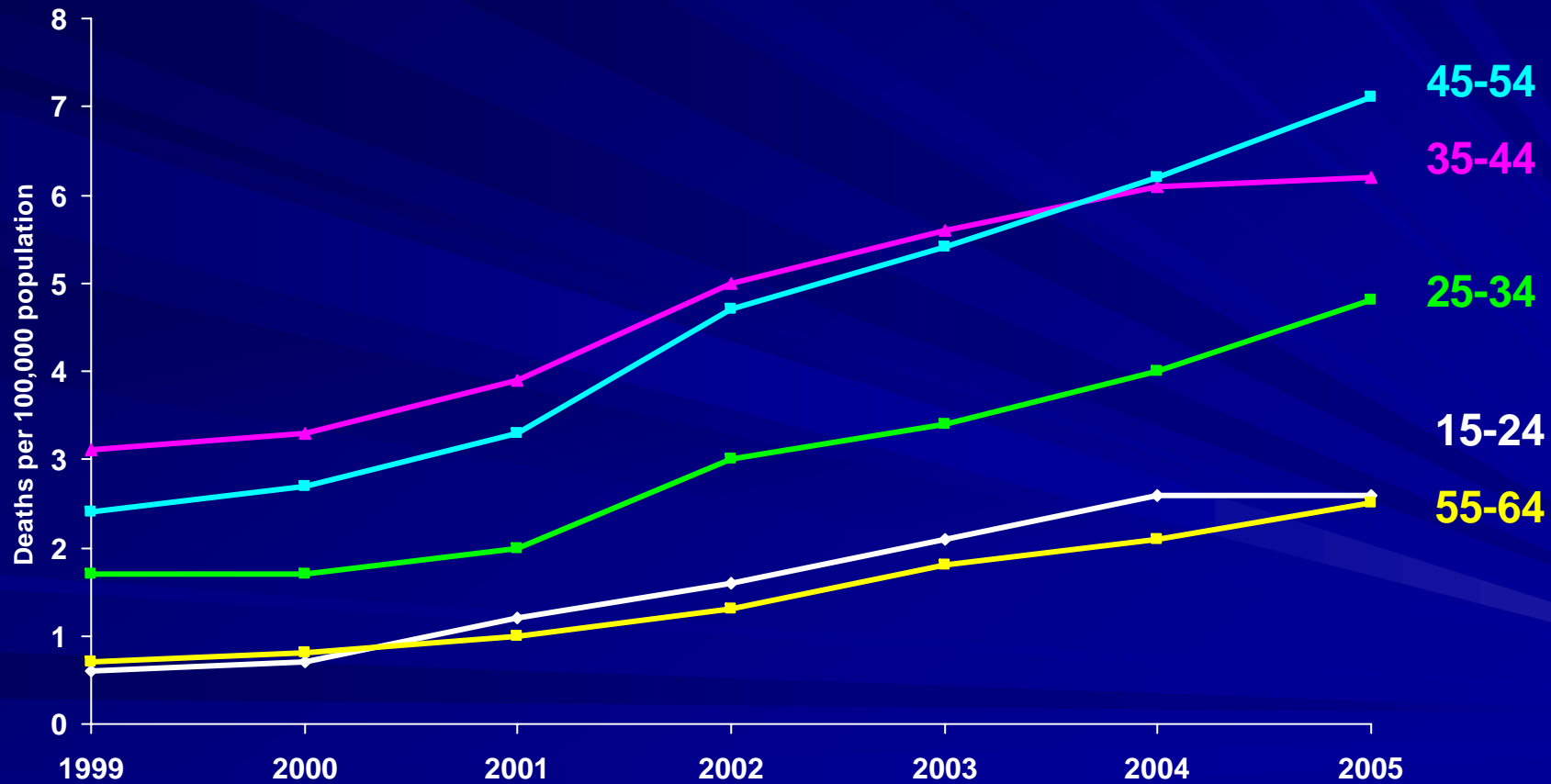
Unintentional/undetermined, age 15-64, 2005



Source: NCHS, National Vital Statistics System

# Age-specific poisoning death rates mentioning opioid analgesics

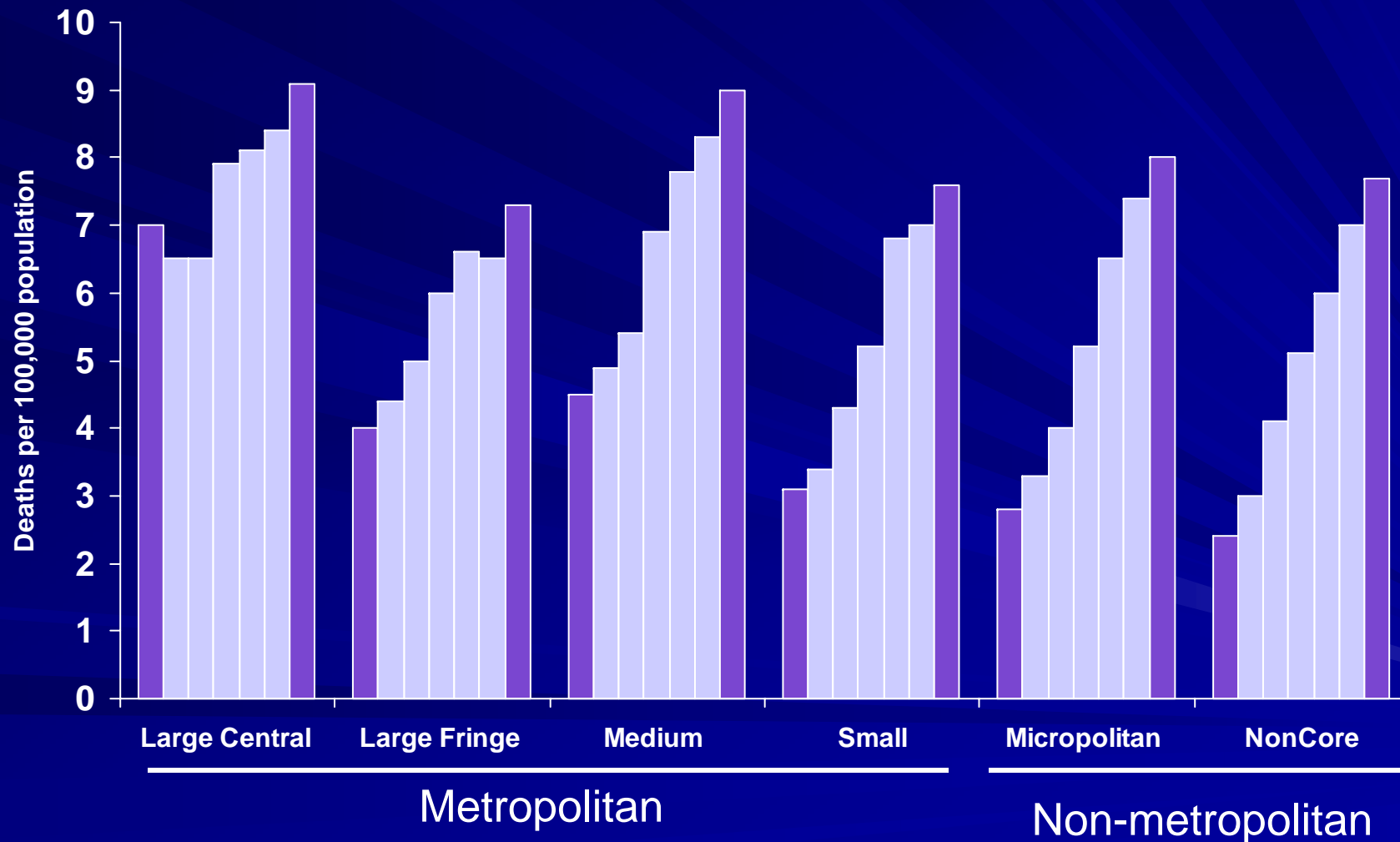
Unintentional/undetermined, ages 15-64, 1999-2005



Source: NCHS, National Vital Statistics System

# Poisoning death rates mentioning drugs by level of urbanization

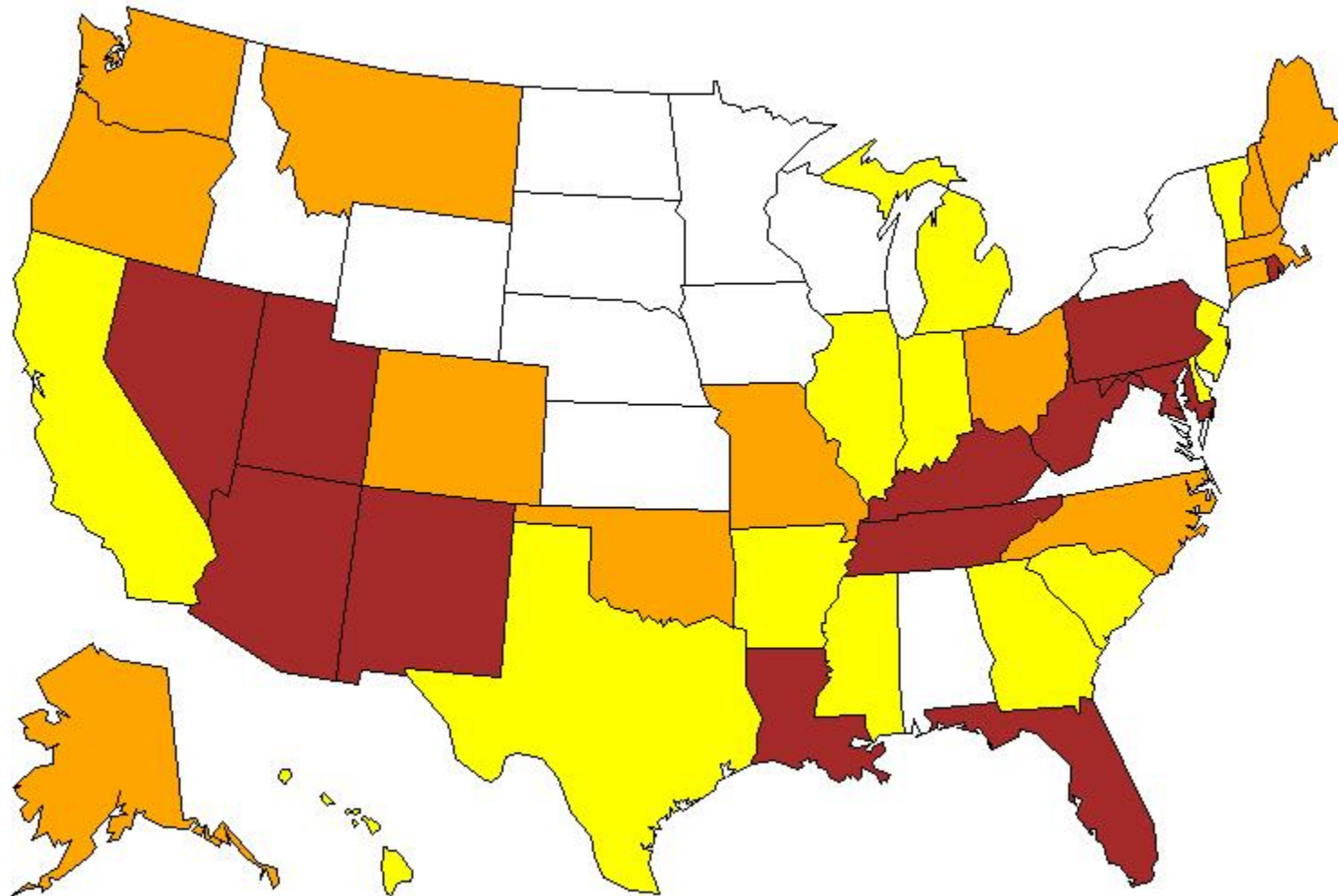
Unintentional/undetermined, ages 15-64, 1999-2005



Source: NCHS, data from the National Vital Statistics System

# Poisoning death rates mentioning drugs by state

Unintentional/undetermined, ages 15-64, 2003-2005

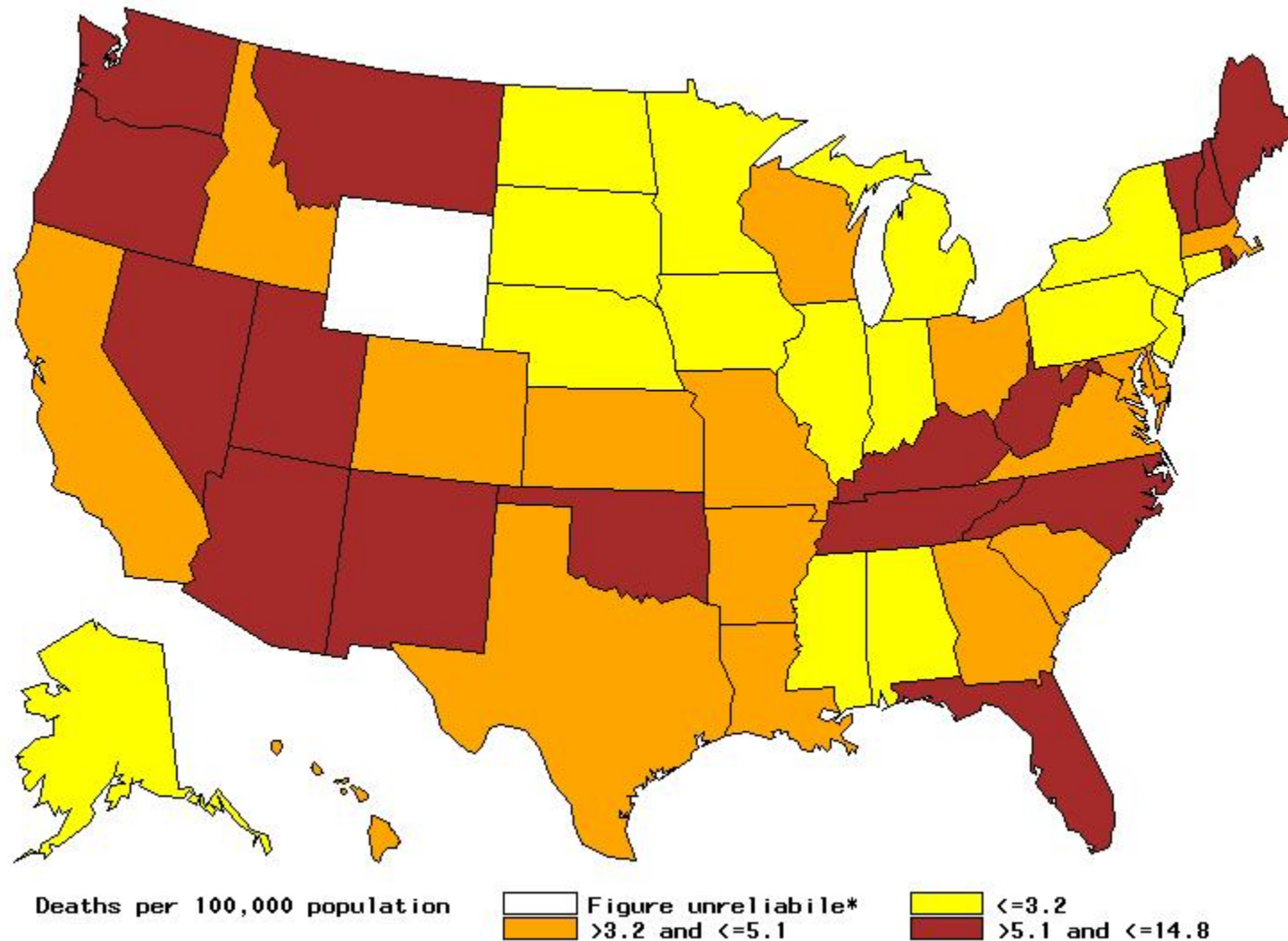


Rates    2.3 - 8.8    9.4 - 10.8    11.0 - 15.7    15.9 - 23.2



# Poisoning death rates mentioning opioid analgesics by state

Unintentional/undetermined, ages 15-64, 2003-2005



# Poisoning deaths with drugs mentioned, 2005

## ■ Place of poisoning

65 % At home

4 % Trade/service areas (including hotels)

25 % Unspecified place

## ■ Place of death

50 % At home

18 % Outpatient or emergency department

9 % Other medical (e.g. inpatient, nursing home)

4 % Dead on arrival

# Summary

- Poisoning death rates increasing
- Majority of poisoning deaths involved drugs
- Opioid-related increasing
- Multiple drugs involved
- Fastest increase in rural areas
- Varies by geographic location

# Thank you

For more information on  
injury data and resources from NCHS, see:  
[www.cdc.gov/nchs/injury.htm](http://www.cdc.gov/nchs/injury.htm).

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