

**Drug-Associated Hospitalizations
and Deaths, South Dakota —
2006-2014**

Methodology

- **Employed methodology provided by the Council of State and Territorial Epidemiologists (CSTE)**
- **Document entitled “Recommended CSTE surveillance indicators for substance abuse and mental health”**
- **We analyzed**
 - **hospital discharge**
 - **Death certificate data**

Methodology

- **All drug-associated deaths included:**
 - Unintentional
 - Suicide
 - Homicide
 - Undetermined intent
- **Deaths involving opioids included:**
 - Natural and semisynthetic opioids
 - Methadone
 - Synthetic opioids other than methadone
 - Heroin

Hospital Discharge Data

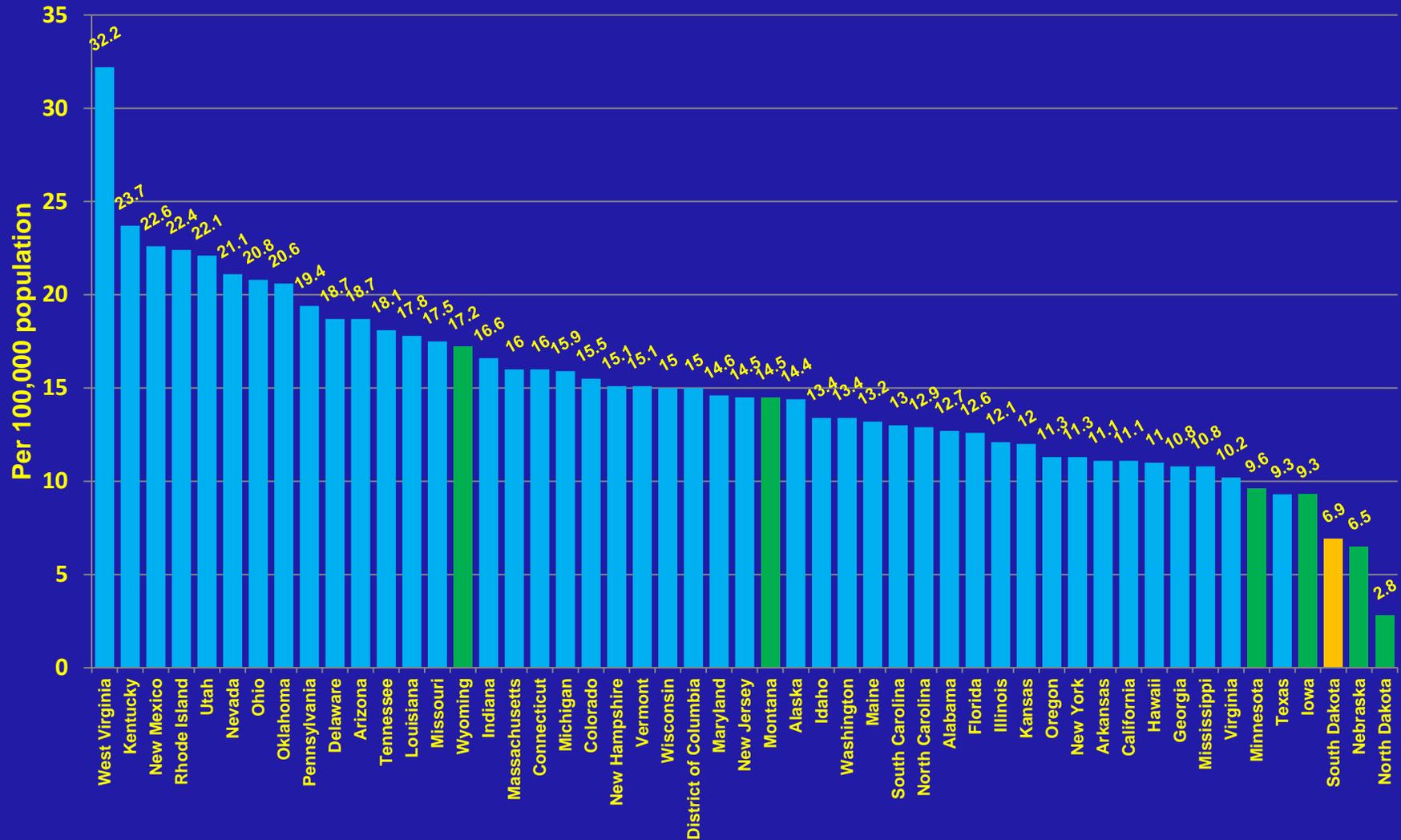
- **Included specific ICD 9 Codes in principal diagnosis**
- **Hospitalizations where the reason of hospitalization was a drug overdose and/or dependence**

United States and South Dakota

Age-Adjusted Death Rates

2013 Age-Adjusted Drug Overdose Death Rates by State

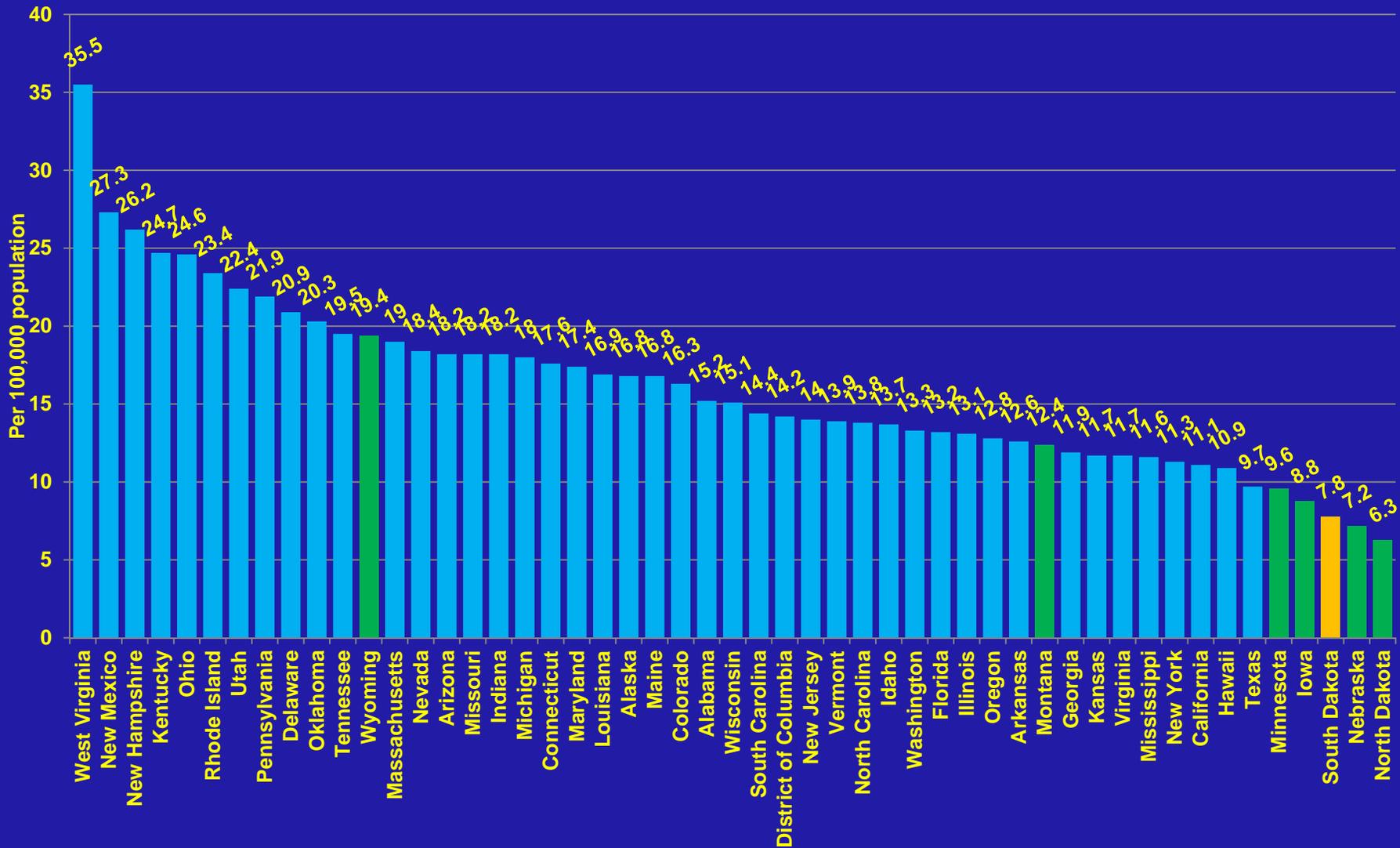
US rate: 13.8



Deaths are classified using the International Classification of Diseases, Tenth Revision (ICD-10). Drug overdose deaths are identified using underlying cause-of-death codes X40-X44, X60-X64, X85, and Y10-Y14. Age-adjusted death rates were calculated by applying age-specific death rates to the 2000 U.S. standard population age distribution.

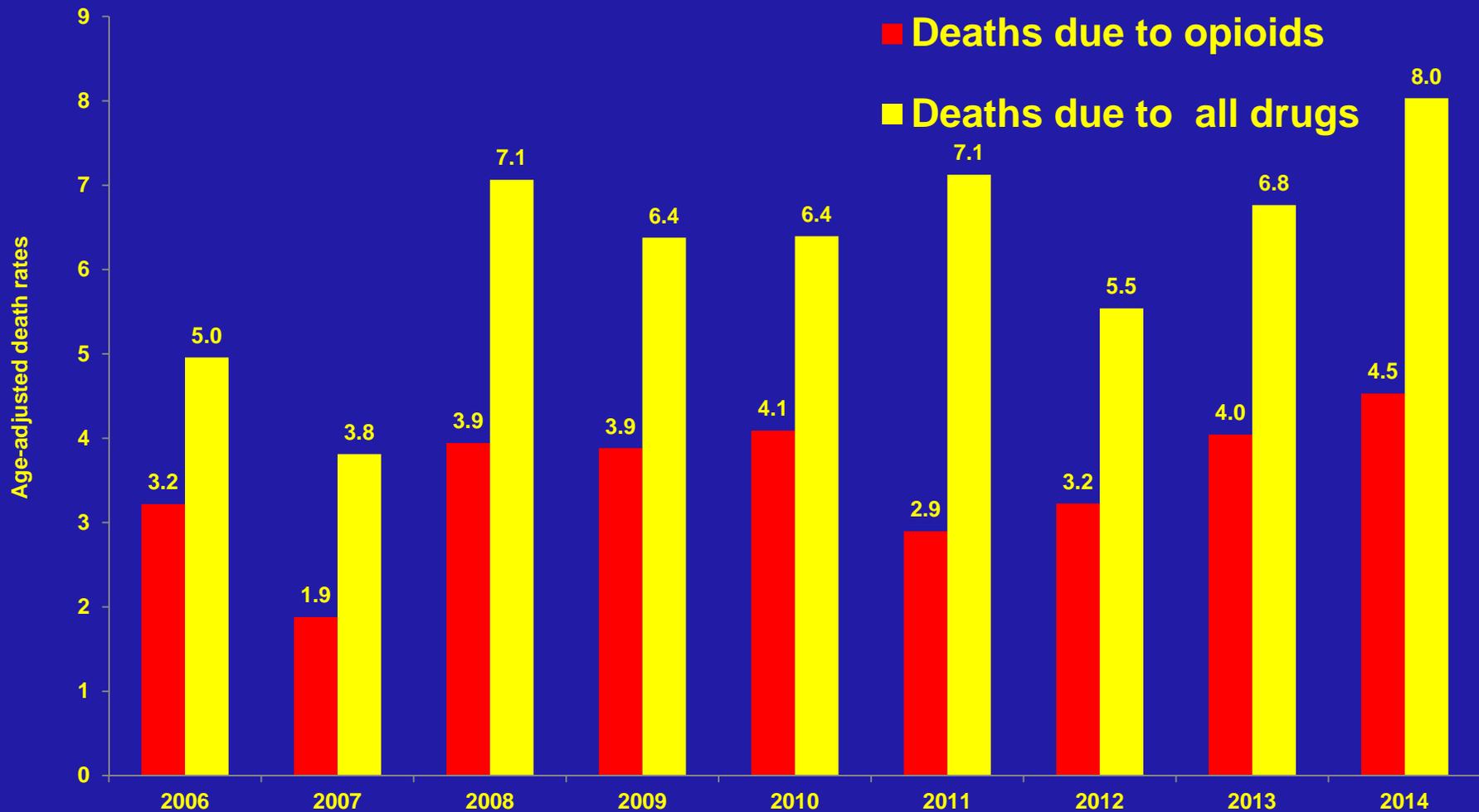
2014 Age-Adjusted Drug Overdose Death Rates by State

US Rate: 14.7



Deaths are classified using the International Classification of Diseases, Tenth Revision (ICD-10). Drug overdose deaths are identified using underlying cause-of-death codes X40-X44, X60-X64, X85, and Y10-Y14. Age-adjusted death rates were calculated by applying age-specific death rates to the 2000 U.S standard population age distribution.

Age-adjusted rates of drug overdose deaths and drug overdose deaths involving opioids

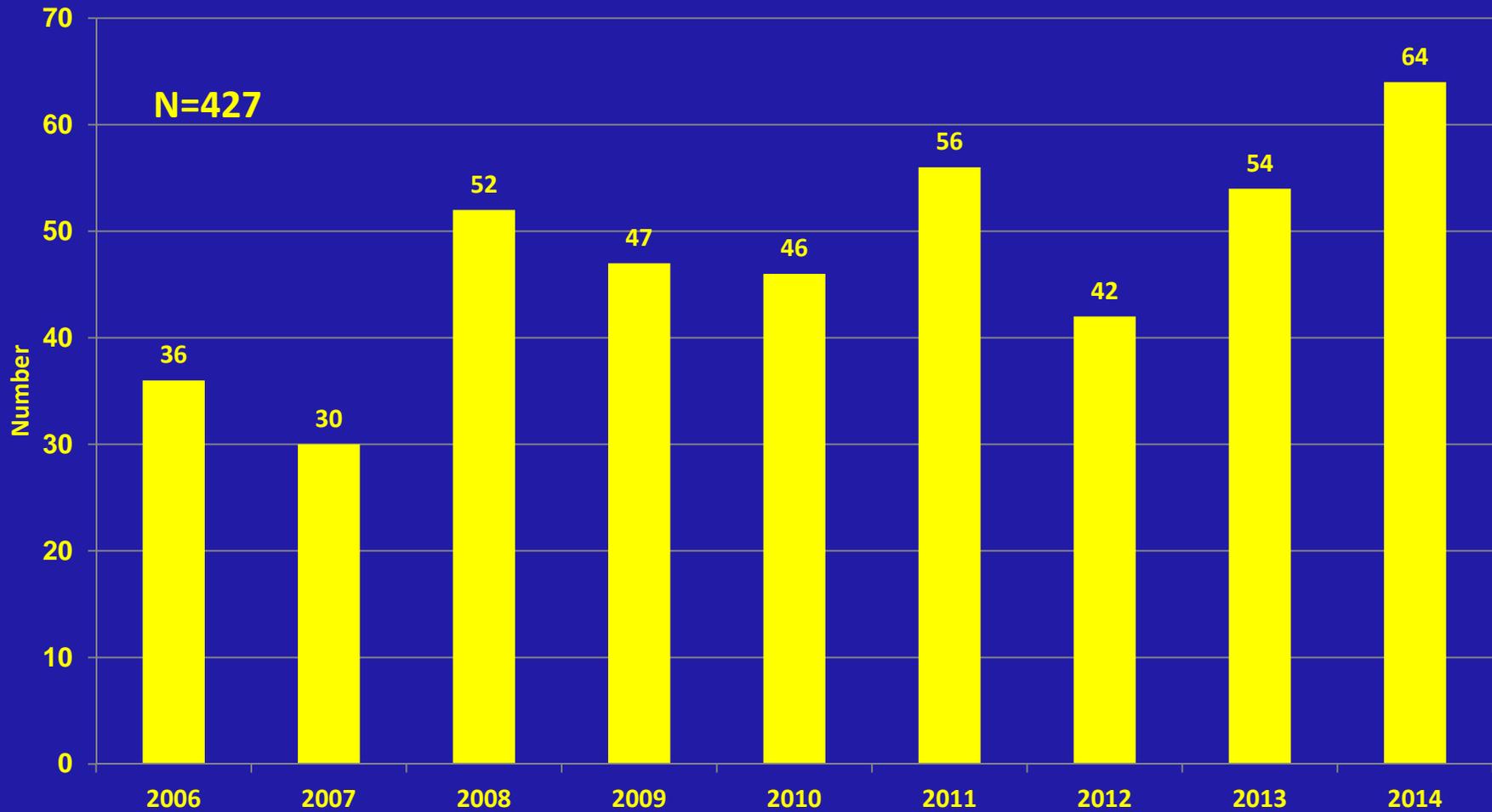


All Drug Related Deaths

2006-2014

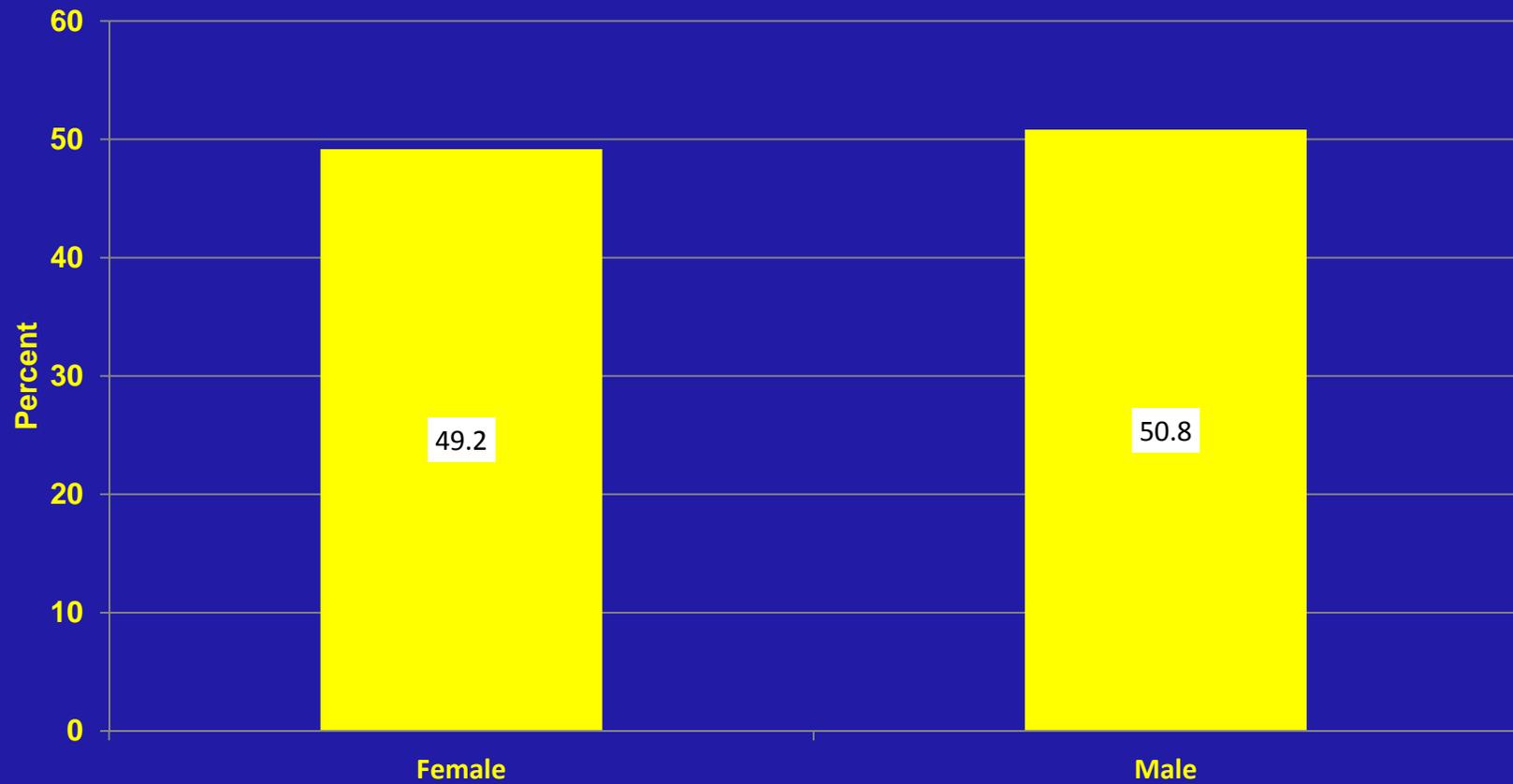
Vital Statistics Data

Number of Drug-Associated Deaths



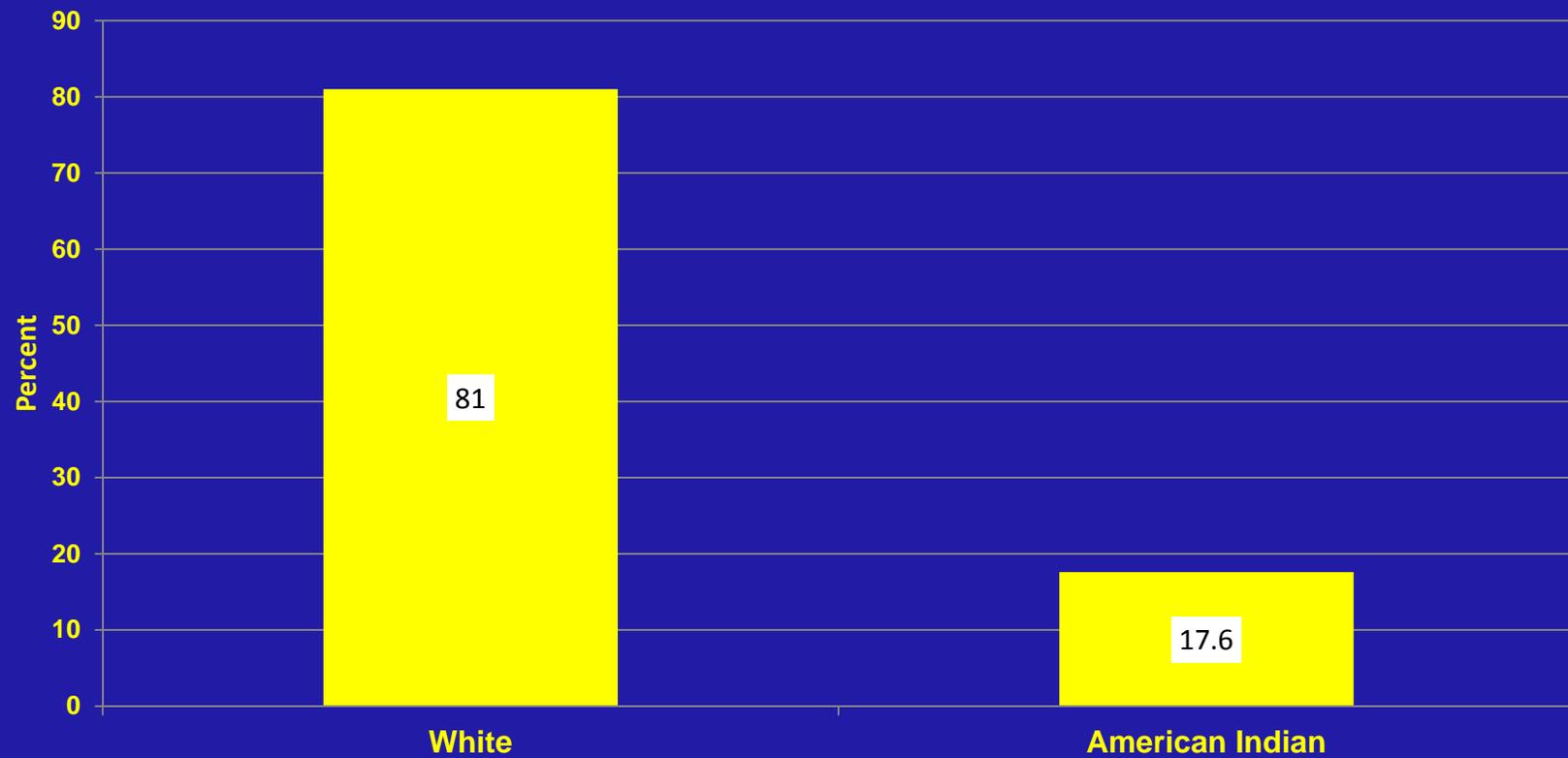
Vital Statistics Data

Percent of Drug Associated Deaths by Gender, 2006-2014



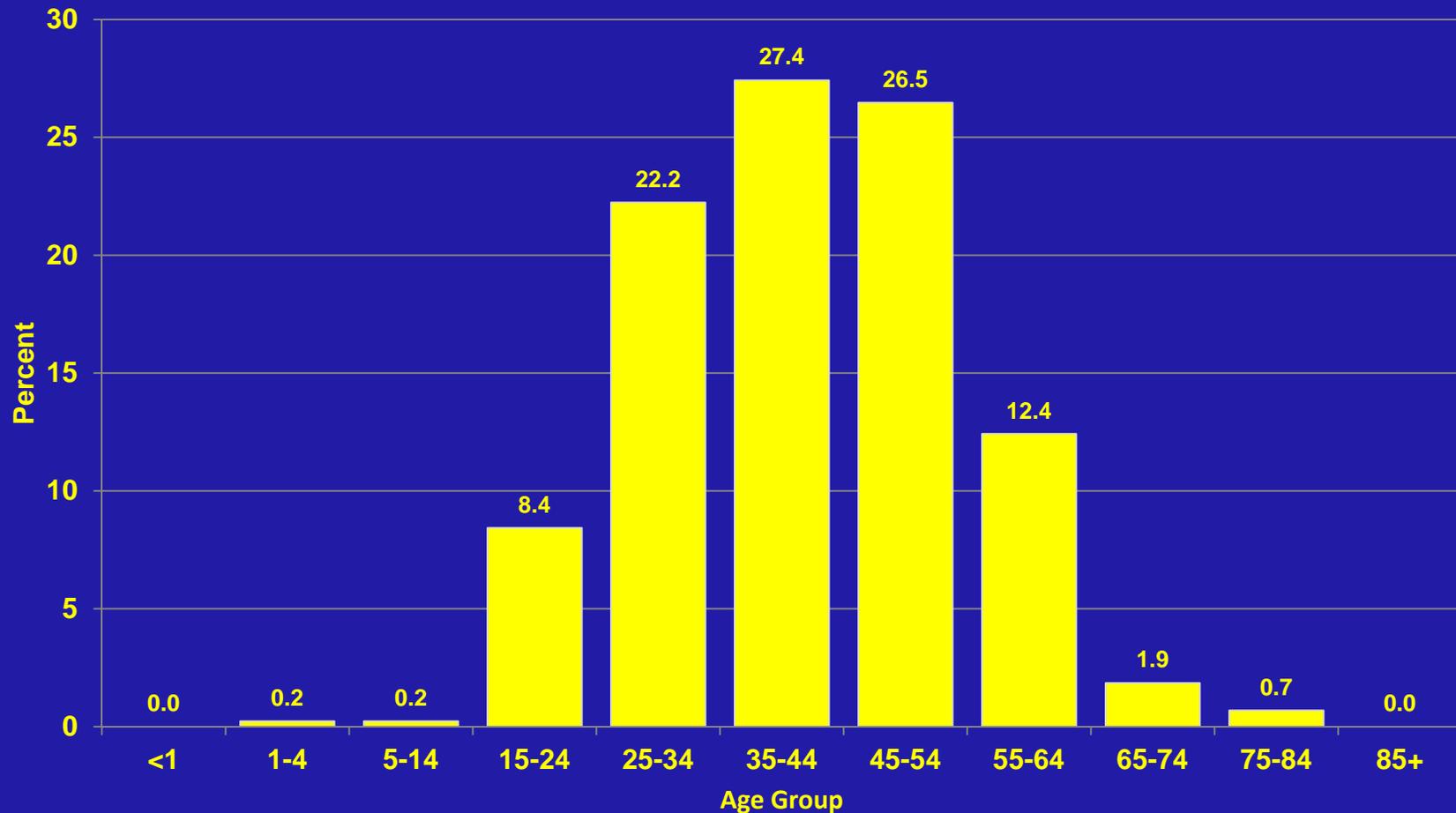
Vital Statistics Data

Percent of Drug Associated Deaths by Race



Vital Statistics Data

Percent of Drug Associated Deaths by Age Group, 2006-2014

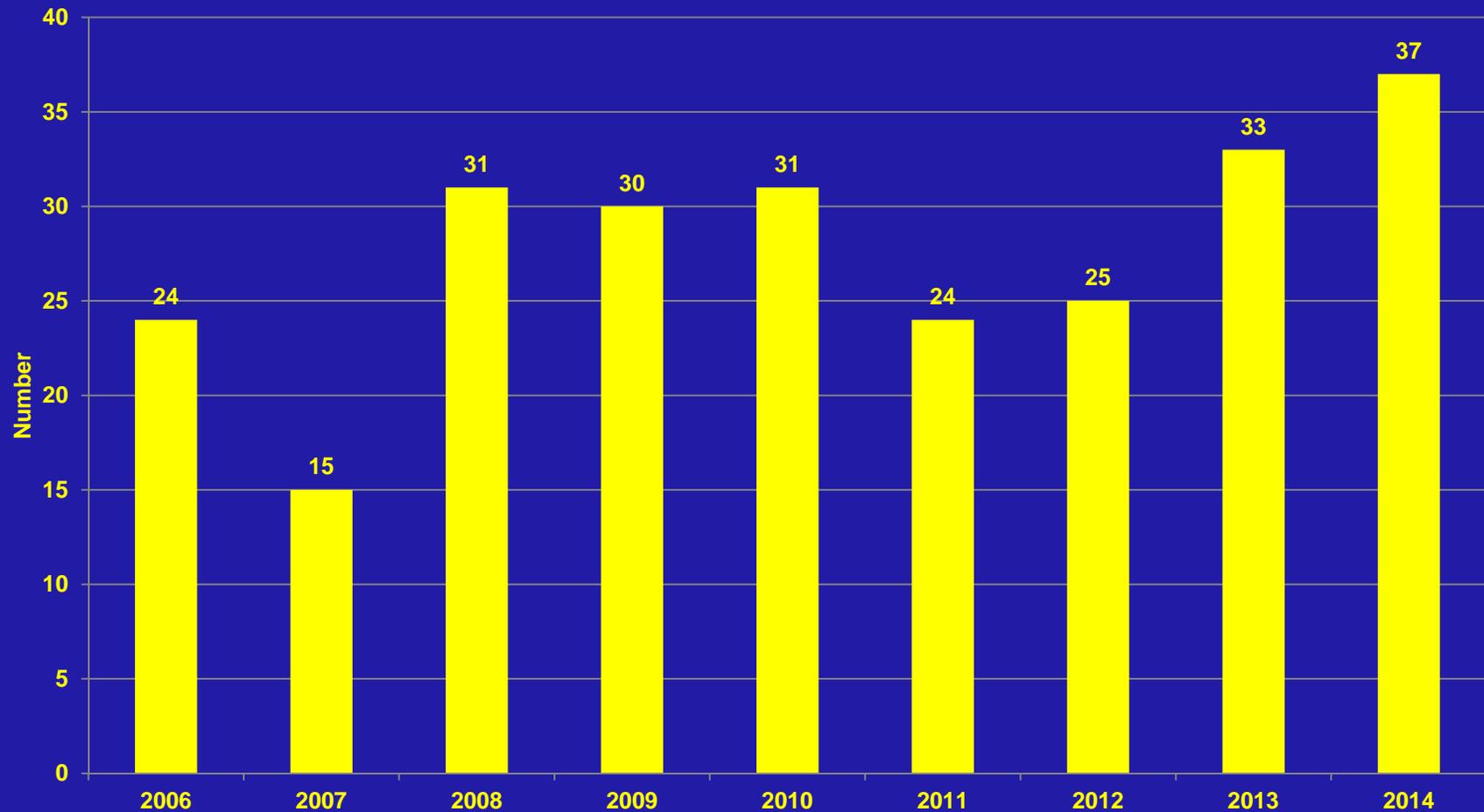


Opioid Related Deaths

2006-2014

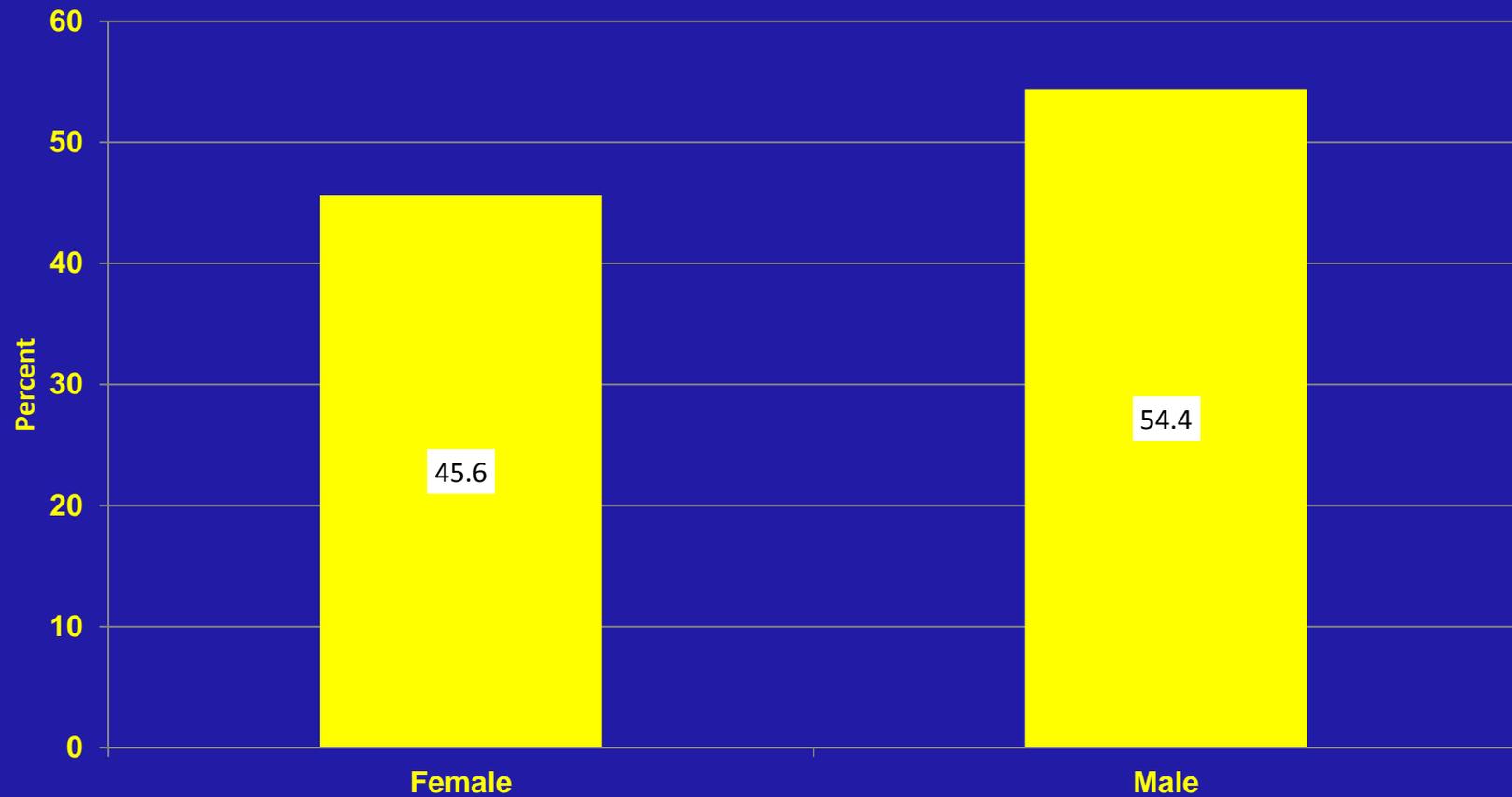
Vital Statistics Data

Number of Opioid Related Deaths by Year



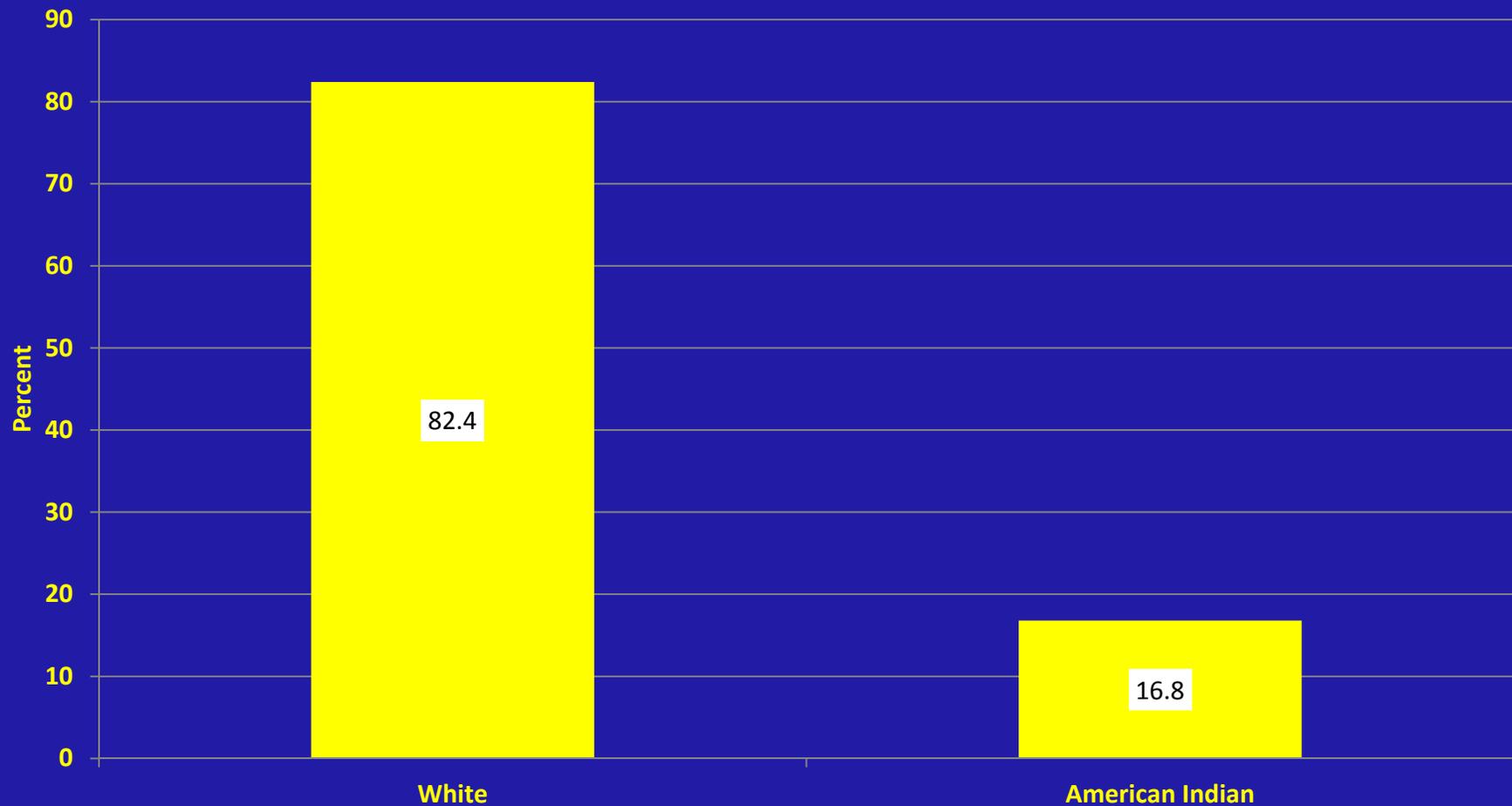
Vital Statistics Data

Percent of Opioid Related Deaths by Gender, 2006-2014



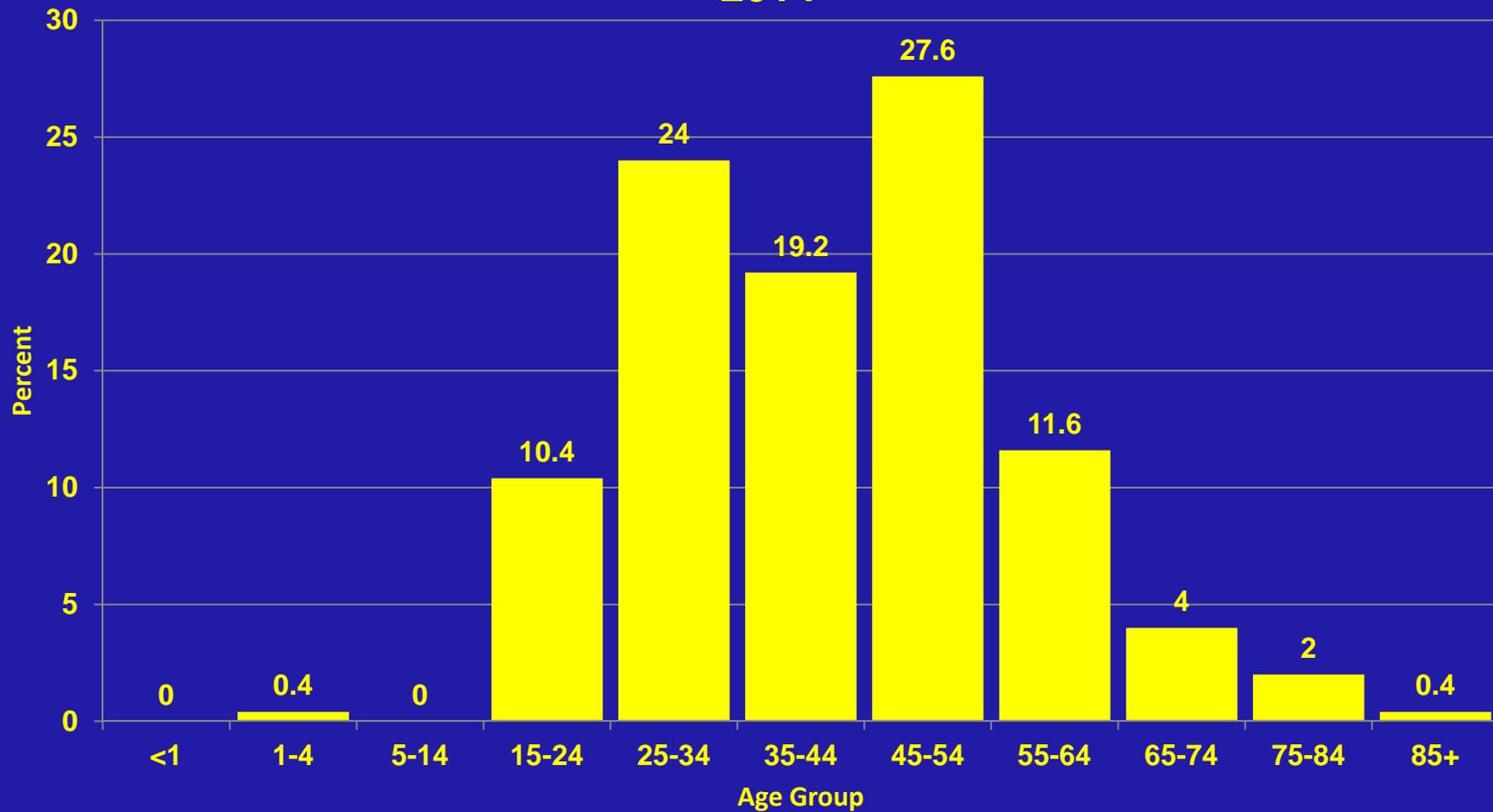
Vital Statistics Data

Percent of Opioid Associated Deaths by Race, 2006-2014



Vital Statistics Data

Percent of Opioid Associated Deaths by Age Group , 2006-2014

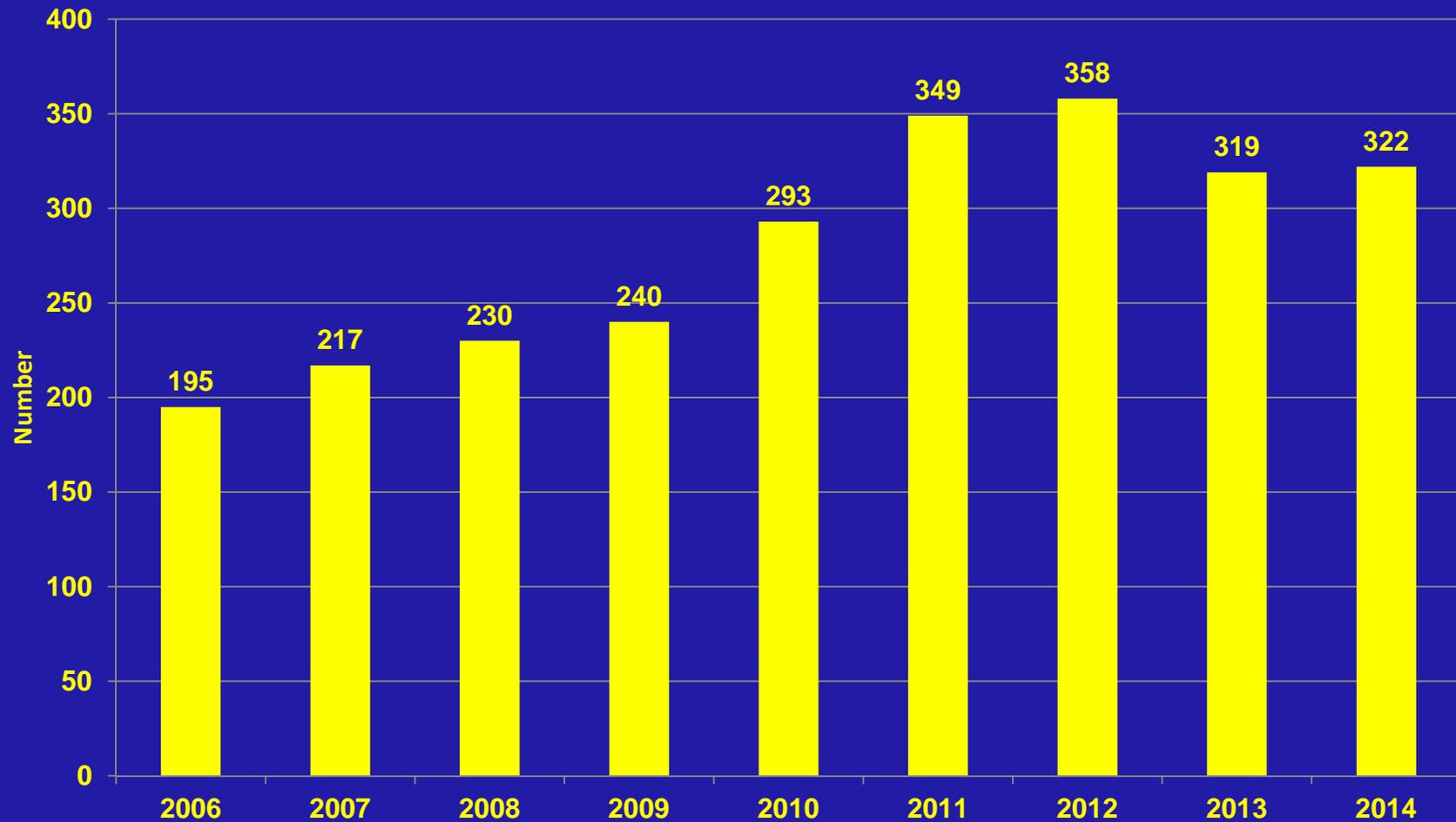


Hospital Discharge Data

2006-2014

Hospital Discharge Data

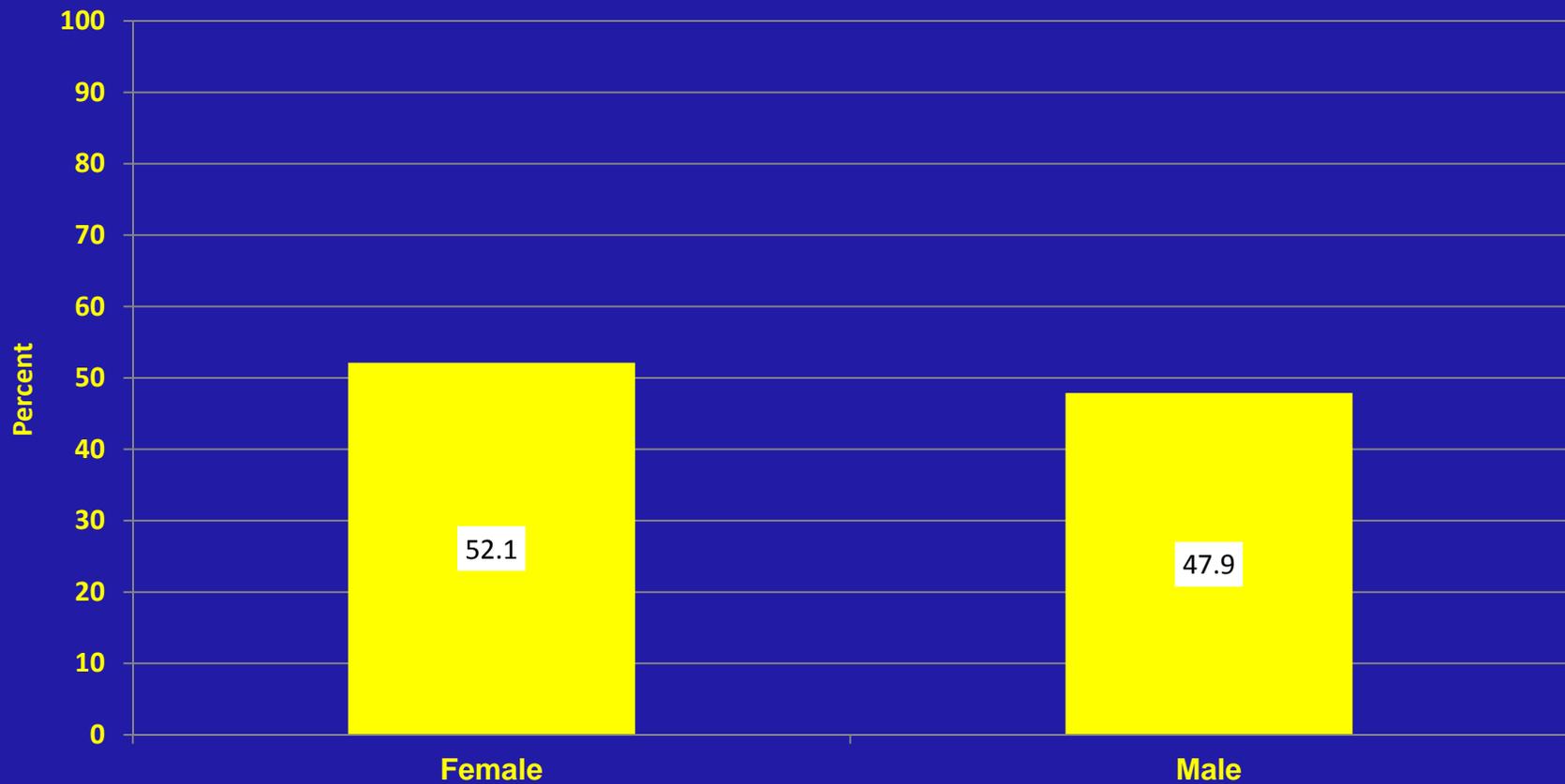
Hospitalizations Due to Drug Overdose by Year



N=2,523

Hospital Discharge Data

Percent of Hospitalizations by Gender, 2006-2014



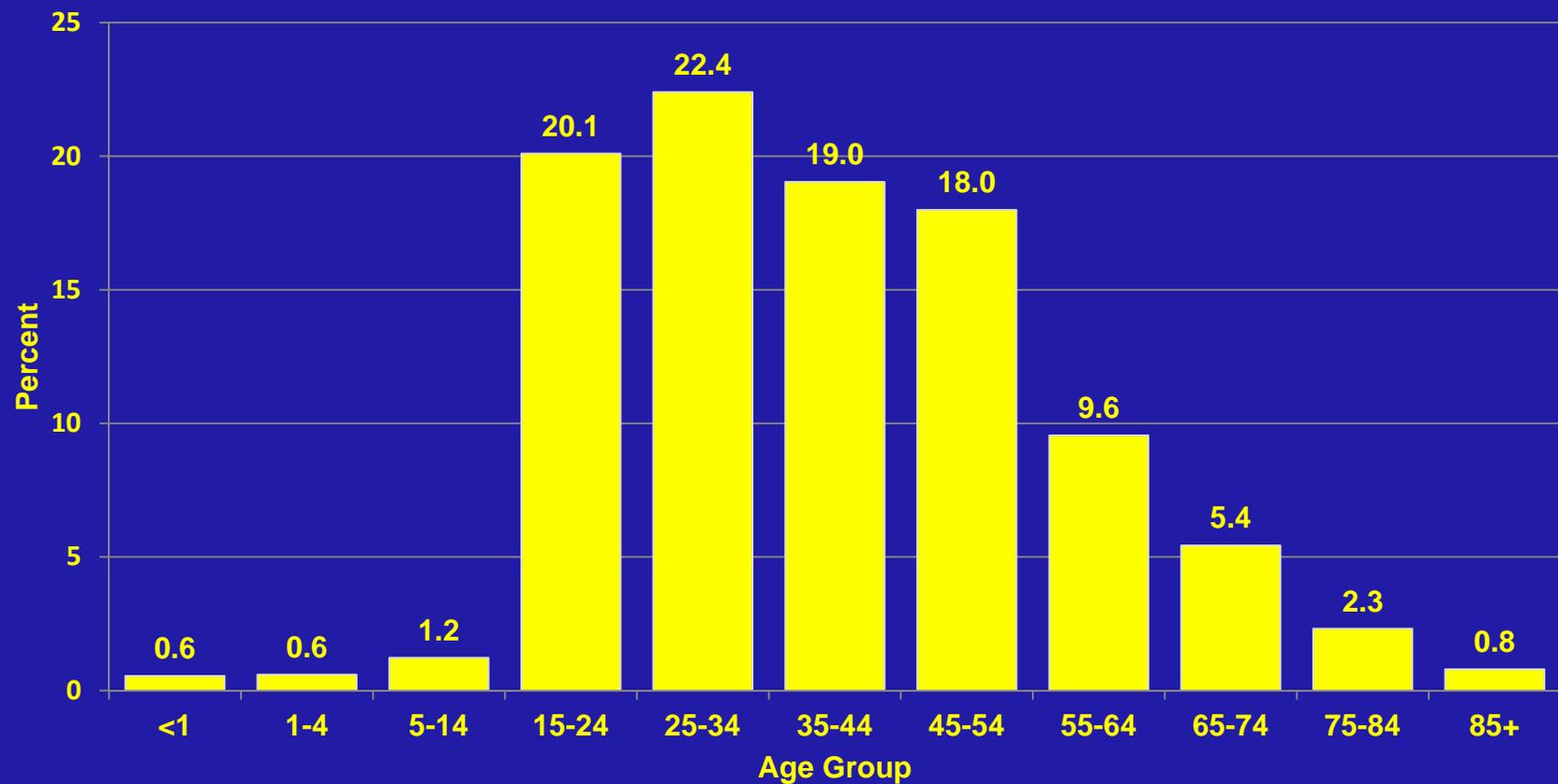
Hospital Discharge Data

Percent of Drug Overdose Related Hospitalizations by Race, South Dakota 2006-2014



Hospital Discharge Data

Percent of Overdose Related Hospitalizations by Age Group, South Dakota 2006-2014



Conclusions

- **South Dakota Ranked 49th in drug overdose deaths in 2013 and 2014**
 - **Followed only by Nebraska and North Dakota**
- **We have seen increases in drug related and opioid related deaths from 2006 to 2014**
- **As well as increases in the number of hospitalizations from 2006 to 2014**