

Great Plains IDeA-CTR Statistical Data Brief

Time and Geographic Trends of Opioid Use in
the Great Plains Region and the U.S.

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Aim:

To examine the time and geographic trends of opioid use in Nebraska, North Dakota, and South Dakota compared to the U.S. where data are available.

Definitions:

- **Prevalence:** The proportion of people in the population affected by a (medical) condition
- **Opioid use:** All data in this brief are based on a class of drugs that include prescription pain relievers, synthetic opioids and heroin.

Data Source:

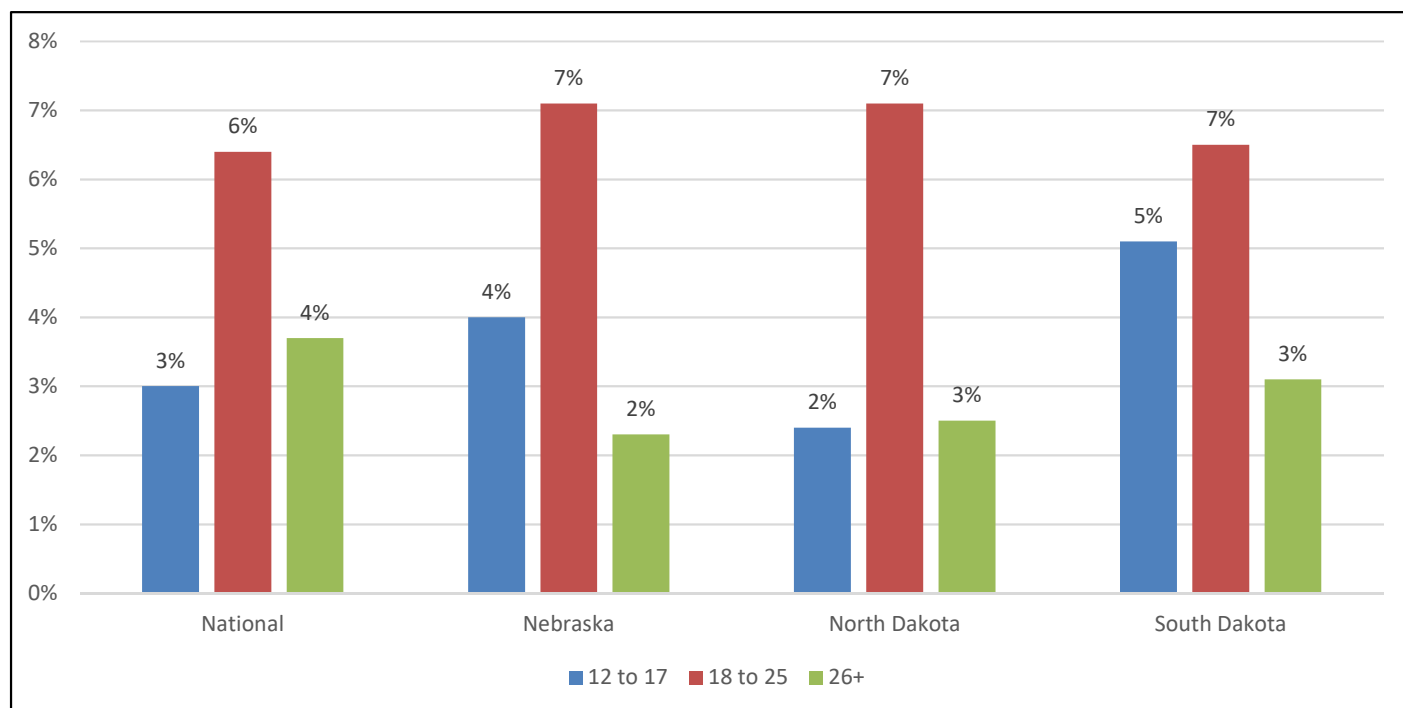
The brief used most recent data available through Healthcare Cost and Utilization Project (HCUP) and National Survey on Drug Use & Health (NSDUH).

- Since 2001, HCUP has been collecting inpatient data from a nationwide sample. HCUP manages the largest publicly-available inpatient healthcare database in the United States and contains detailed estimates on hospital stays.¹
- NSDUH is conducted every year in all 50 states and the District of Columbia and provides information in the United States on health-related issues including tobacco, alcohol, and drug use, mental health. NSDUH is under the Substance Abuse and mental Health Services Administration (SAMHSA), an agency in the US Department of Health and Human Services (DHHS).²

¹ <https://nsduhweb.rti.org/respweb/homepage.cfm>

² <http://monitoringthefuture.org/>

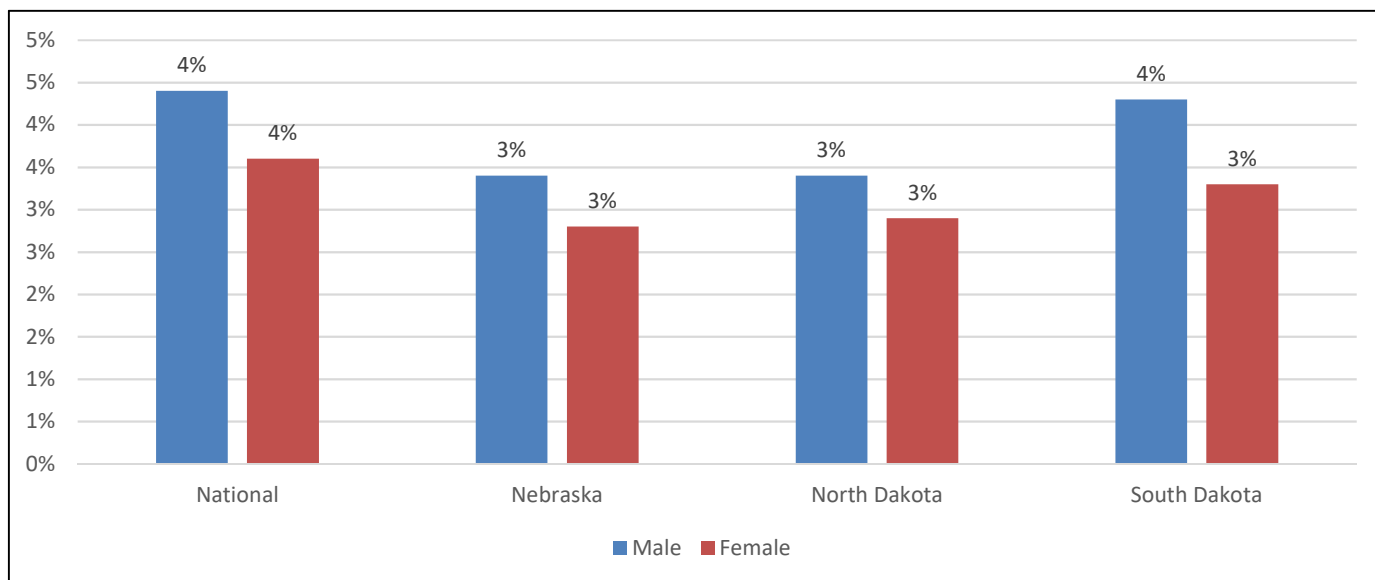
Percentage of Individuals Who Misuse Opioids in the Past Year in the Great Plains Region by State and Age Group: NSDUH 2017-2018



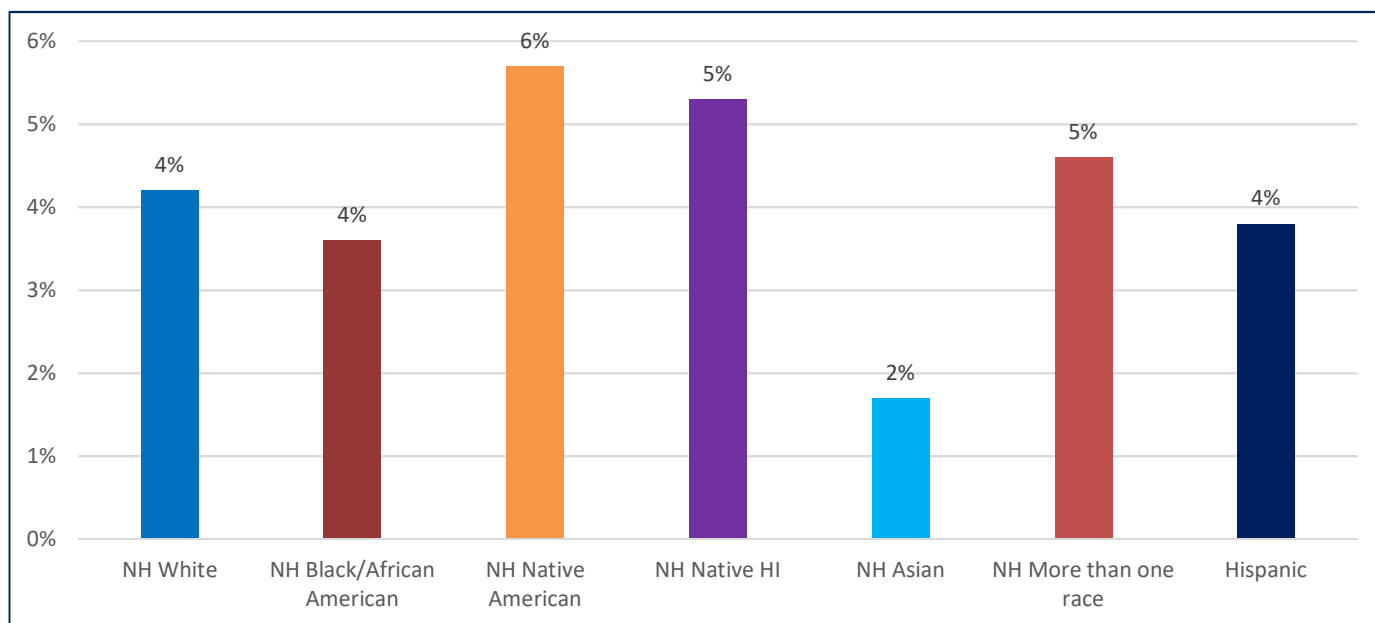
Data Source: Substance Abuse and Mental Health Services Administration (SAMSHA),
The National Survey on Drug Use and Health (NSDUH).

The above graph demonstrates that the age group most misusing opioids by a large margin is 18 to 25-year-olds, according to the most recently available data from the National Survey on Drug Use and Health (NSDUH). In this age group, opioid misuse in the US overall is 6.4%, 7.1% in Nebraska, 7.1% in North Dakota, and 6.5% in South Dakota. The prevalence among 12 to 17-year-olds in South Dakota is higher than the US as a whole and the other states in the Great Plains region, at 5.1%.

Percentage of Individuals Who Misuse Opioids in the Great Plains Region by State and Gender: NSDUH 2017-2018



Percentage of Individuals Who Misuse Opioids in the Past Month in the Great Plains Region by State and Race/Ethnicity: NSDUH 2017-2018

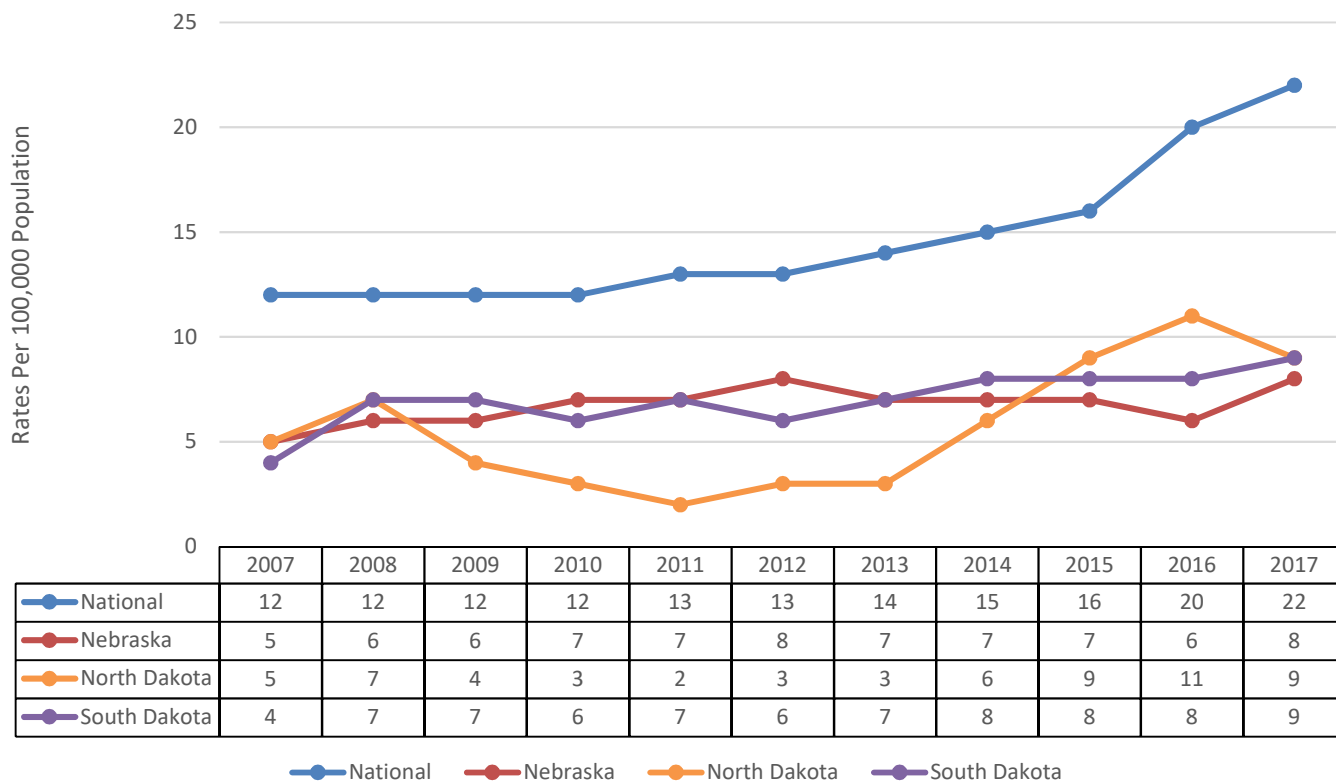


NH: Non-Hispanic

Data Source: Substance Abuse and Mental Health Services Administration (SAMSHA),
The National Survey on Drug Use and Health (NSDUH).

Males misuse opioids more often than females both in the Great Plains region and in the US overall. We see that the prevalence of opioids misuse is highest among Native Americans (5.7%) and the lowest among Asians (1.7%).

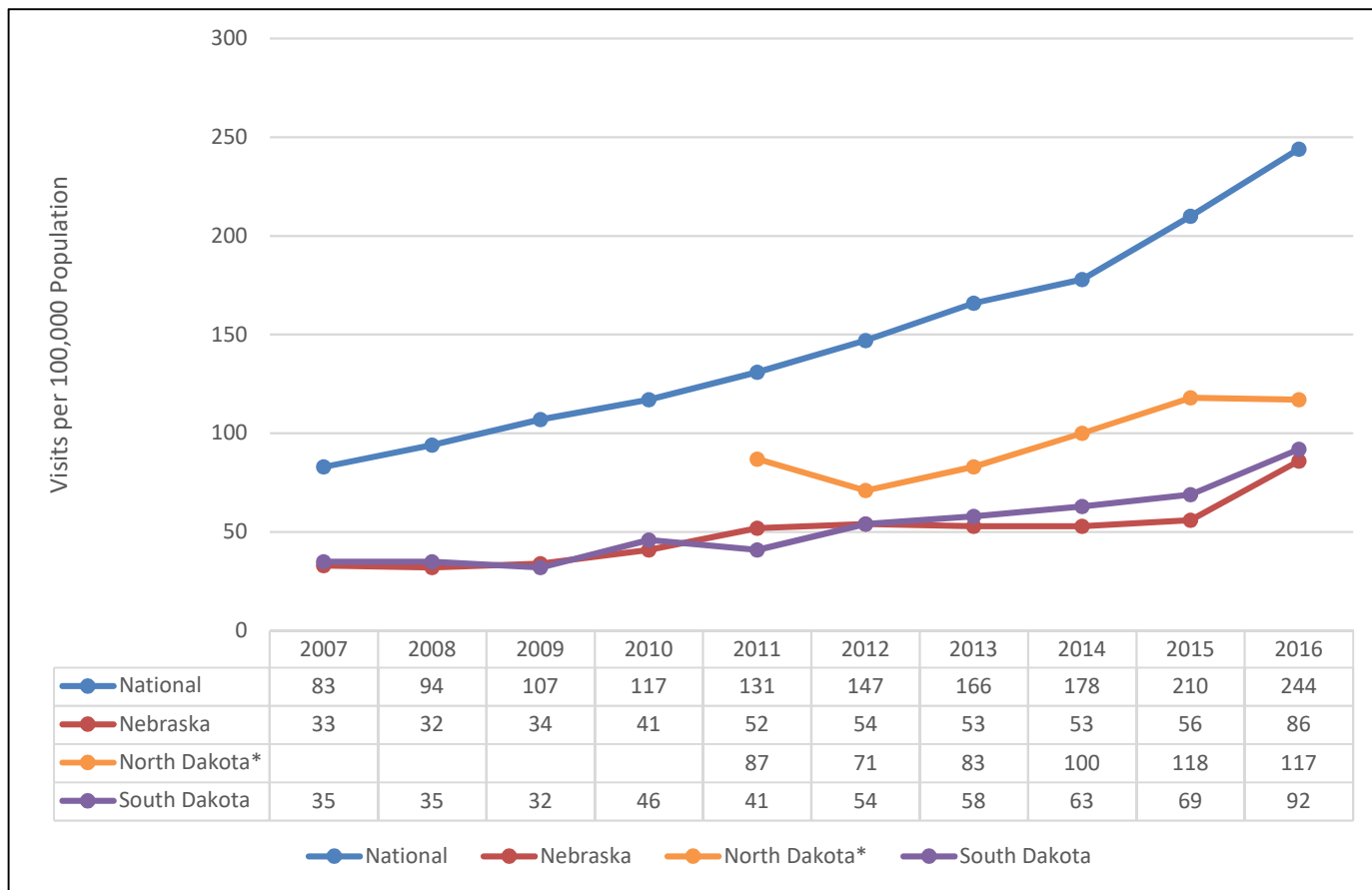
Mortality Associated with Opioid Overuse: Age-Adjusted Rates per 100,000 Population, US and Great Plains Region: CDC Drug Overdose Data 2007-2017



Data Source: CDC Injury Center
 CDC's State Unintentional Drug Overdose Reporting System (SUDORS)

According to the CDC's data on drug overdose, opioids were involved in 47,600 overdose deaths in 2017, which is 67.8% of all drug overdose deaths. The figure above illustrates that this rate has been increasing in the US, despite the number of ED visits and prescriptions decreasing. In the Great Plains region generally, the mortality rates are more constantly between 5 and 10 deaths per 100,000, with the exception of North Dakota, which ranges from around 2.5 and 10 per 100,000 between 2011 and 2016.

Number of ED Visits PER 100,000 Due to Opioid Misuse in US and Great Plains Region 2008-2017: HCUP 2008-2017

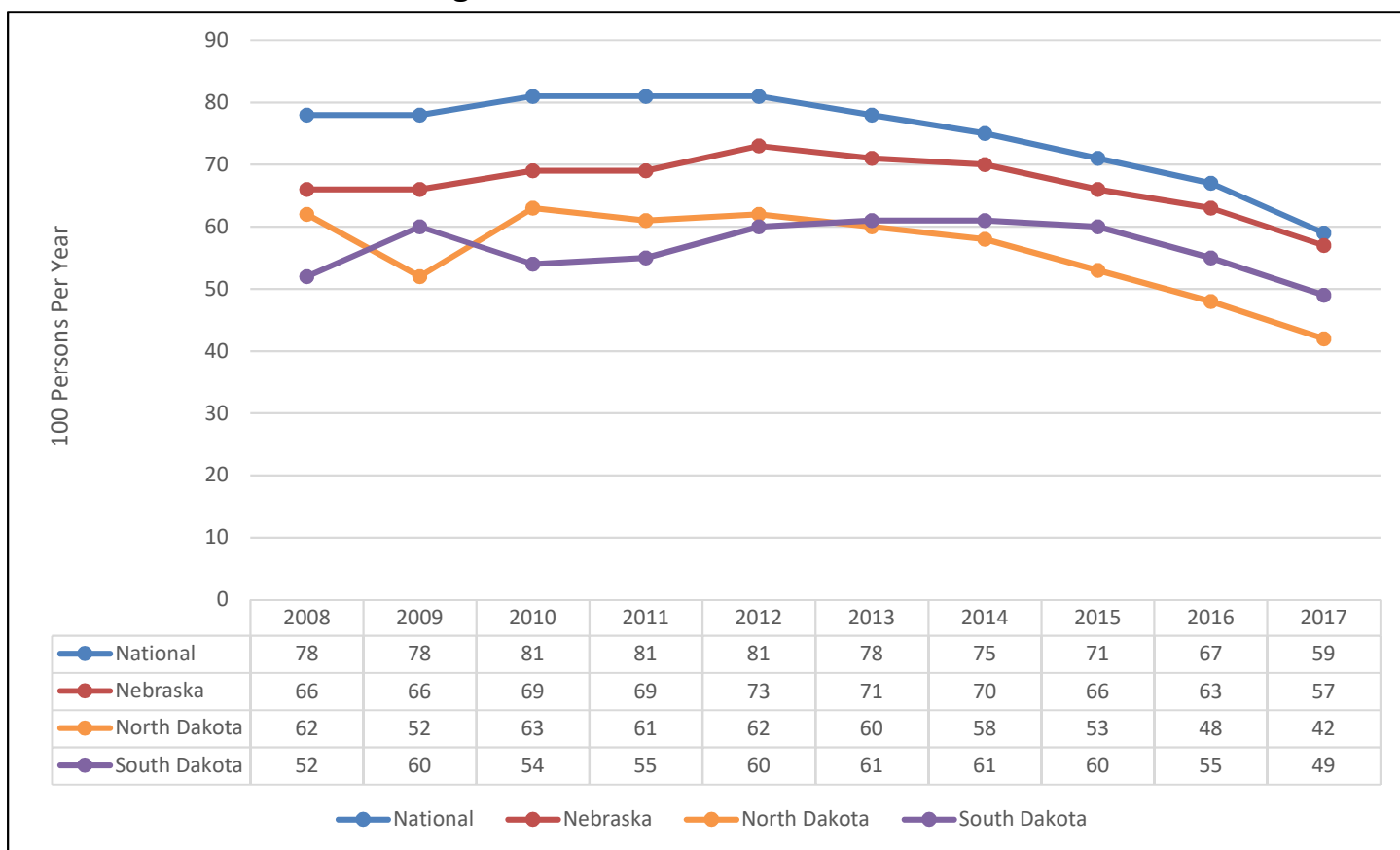


Data Source: CDC Injury Prevention Center,
Healthcare Cost Utilization Project (HCUP)

There has been a large increase in emergency department (ED) visits due to opioid misuse in the nation. In Nebraska and South Dakota, ED visits per 100,000 in the population increased from 2007 to 2016, but increased more slowly than the nation as a whole. In North Dakota, a decrease in ED visits occurred between 2011 and 2012. The number of ED visits increased steadily until 2015, when they stagnated.

*Data for North Dakota were not collected until 2011.

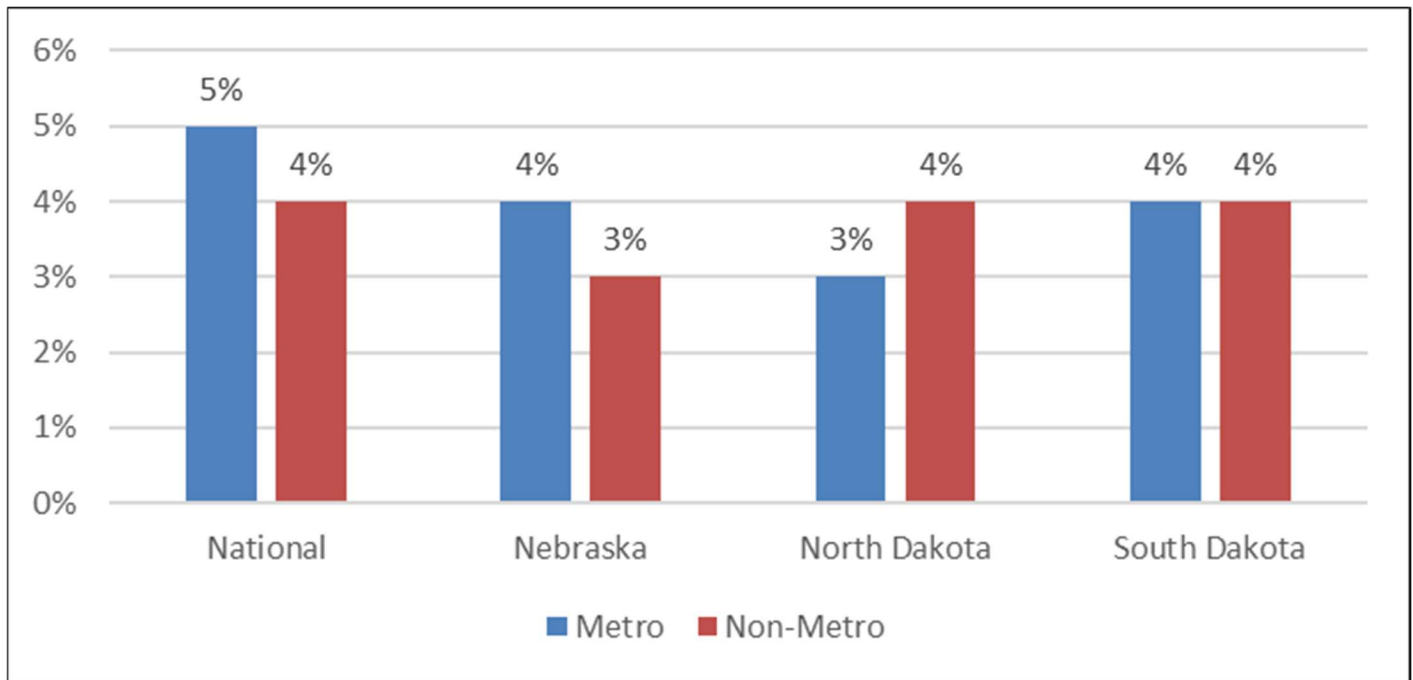
Retail Opioid Prescriptions Dispensed per 100 Persons per Year in US and Great Plains Region 2008-2017: HCUP 2008-2017



Data Source: CDC Injury Prevention Center,
Healthcare Cost Utilization Project (HCUP)

One category of opioid use is the abuse of prescription pain relievers. The trend in prescriptions dispensed per 100 persons per year has decreased over the past decade. Small increases have occurred both in the individual states of the Great Plains Region and in nation overall within the time period. Across all states and nationally, the number of prescriptions dispensed in 2017 is less than was dispensed in 2008.

Past Year Prevalence of Opioid Misuse by Metro Size: NSDUH 2018



Data Source: Substance Abuse and Mental Health Services Administration (SAMSHA),
The National Survey on Drug Use and Health (NSDUH).

There is no clear trend indicating a relationship between prevalence of opioid misuse and metro size. Nationally and in Nebraska, metro areas have a higher prevalence of opioid misuse, while in North Dakota, non-metro areas have a higher prevalence of misuse. In South Dakota, they are used similarly in metro and non-metro areas.

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The Great Plains IDeA-CTR is a collaborative effort between nine regional institutions. The IDeA-CTR strives to provide training, education and mentorship; tools and resources; and funding to regional researchers.

