

Great Plains IDeA-CTR Statistical Data Brief

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

March 2020

Authors:

Shinobu Watanabe-Galloway, Alfred Jerrod Anzalone, Kaeli Samson, FNU Kanishka, Jessica Pahwa, Zaeema Naveed, and Erin Johnson

Corresponding Author:

Professor Shinobu Watanabe-Galloway
Department of Epidemiology
University of Nebraska Medical Center
College of Public Health
Email: swatanabe@unmc.edu

Aim:

To examine the time and geographic trends of marijuana 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

Data Source:

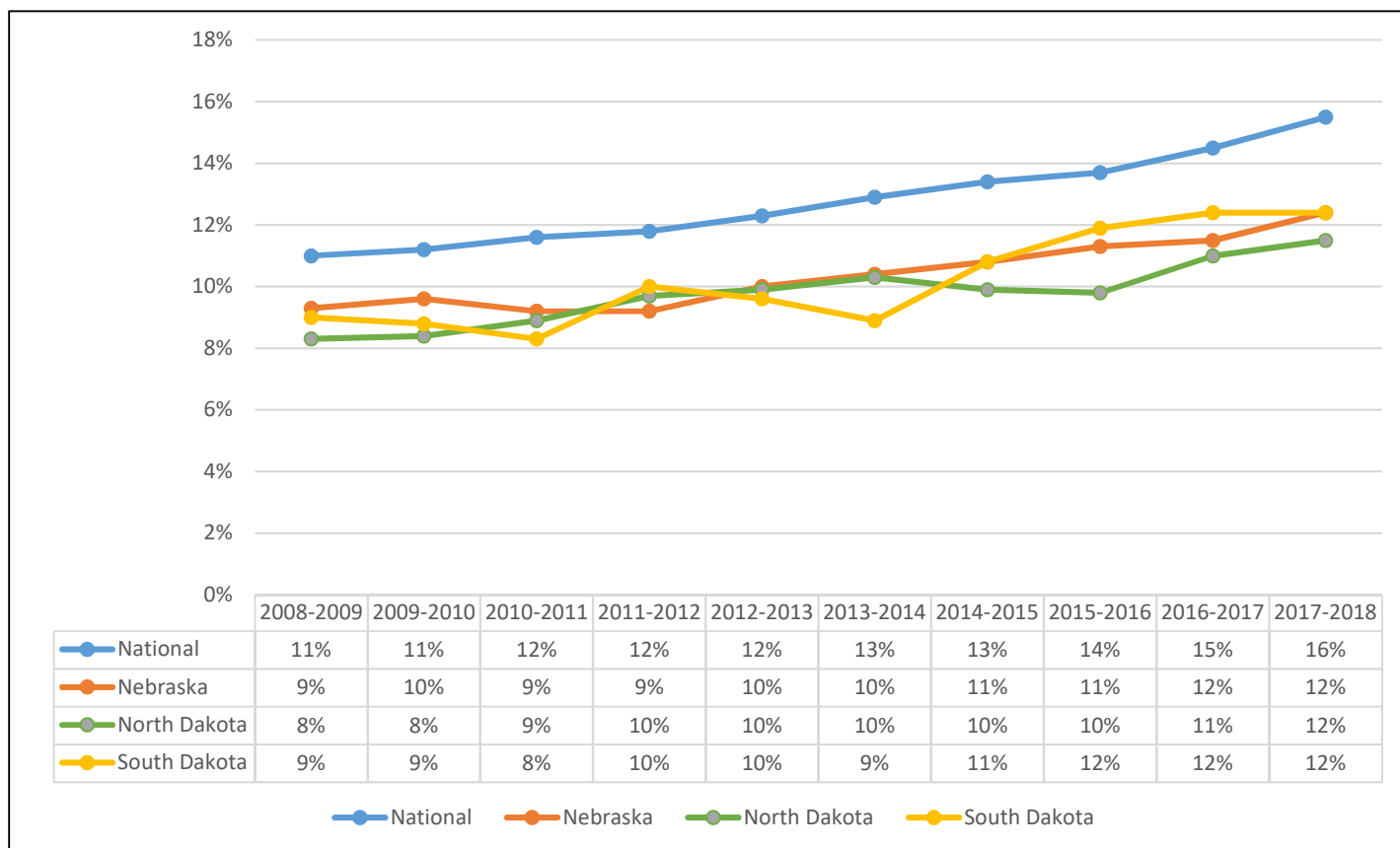
The brief used most recent data available through National Survey on Drug Use & Health (NSDUH), Monitoring the Future.

- 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).¹
- Monitoring the Future is a study of Americans from adolescence to young adulthood providing information on behaviors, attitudes, and values. This research is funded by the National Institute on Drug Abuse, a part of the National Institute of Health.²

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

² <http://monitoringthefuture.org/>

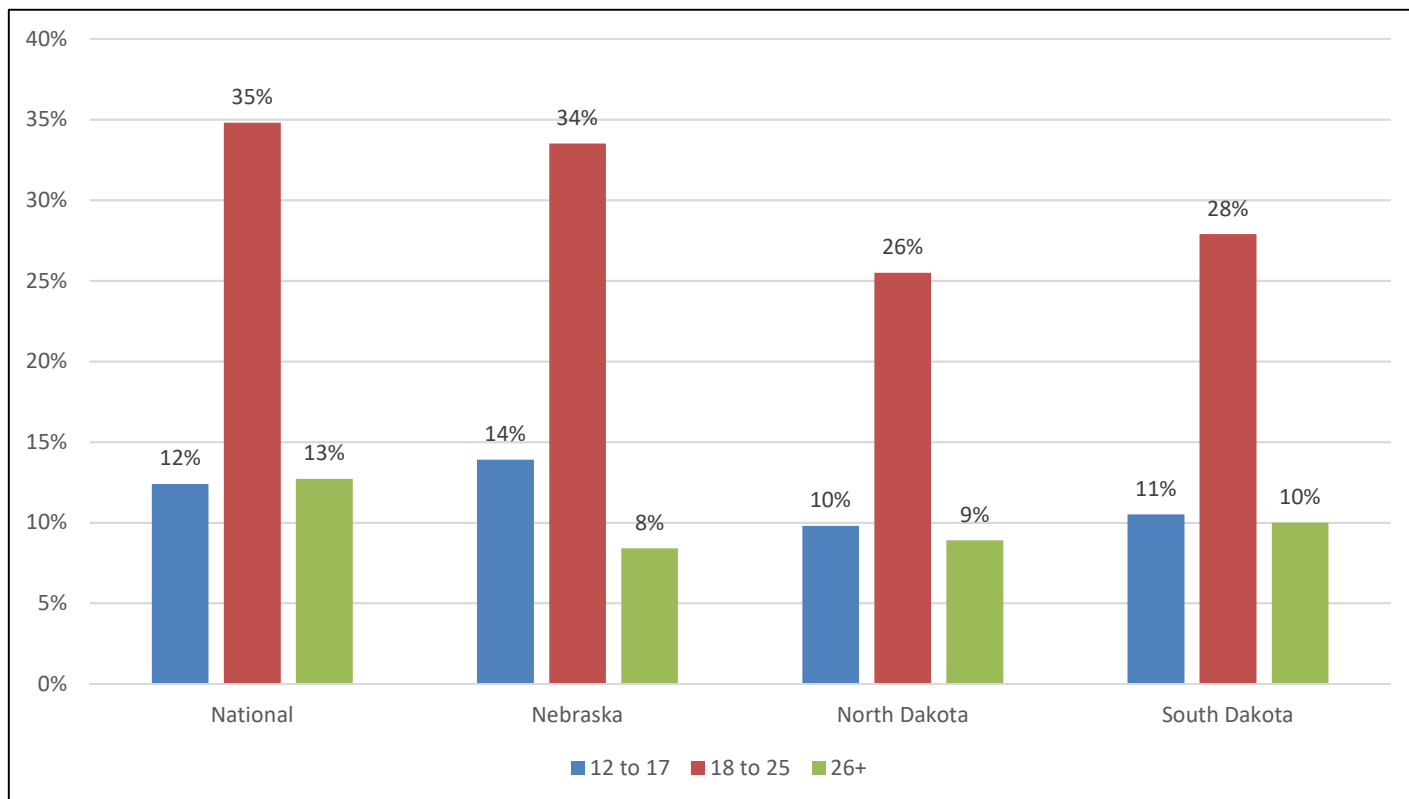
Percentage of Individuals Who Used Marijuana in the Past Year in the United States and Across the Great Plains Region: NSDUH 2008-2018



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

According to the most recently available data from the National Survey on Drug Use and Health (NSDUH), marijuana use in the United States and across the Great Plains region is increasing. In 2018, 15.5% of persons above the age of 12 in the United States reported having used marijuana in the last year. Across the Great Plains region, the reported values were 12.4% in Nebraska, 12.4% in South Dakota, and 11.5% in North Dakota. These numbers can be compared to the national level in 2008, which was 11%.

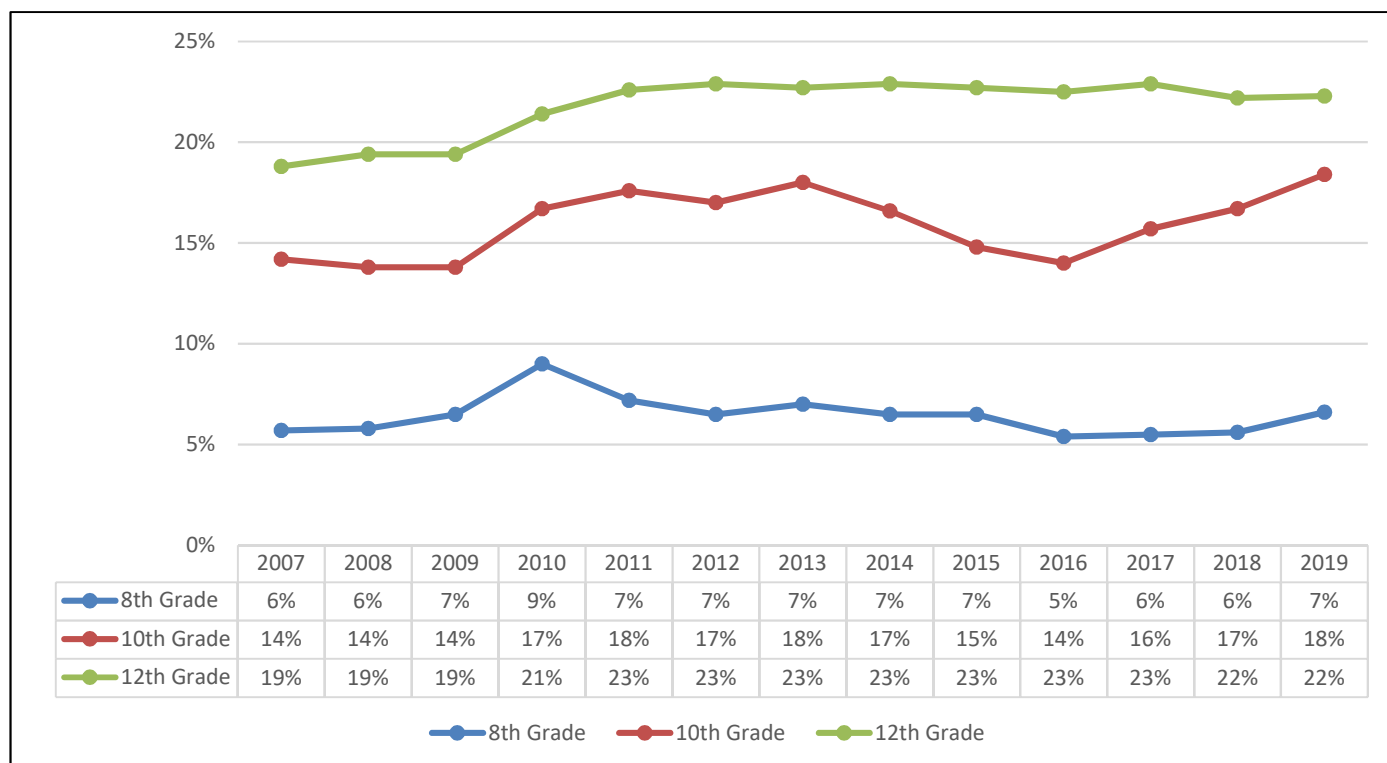
Percentage of Individuals Who Used Marijuana in the Past Year in the United States and Across the Great Plains Region by Age Group: NSDUH 2017-2018



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

This graph provides detailed information about the age of the individuals reporting marijuana use in the past year. 34.8% of adults (18-25) in the United States reported marijuana use in the last year, while one in four (25.5%) reported in North Dakota. Use among adults (26+) was consistently lower in the Great Plains region than in the US overall. For example, the national prevalence is 12.7%, while in Nebraska, it is 8.4%.

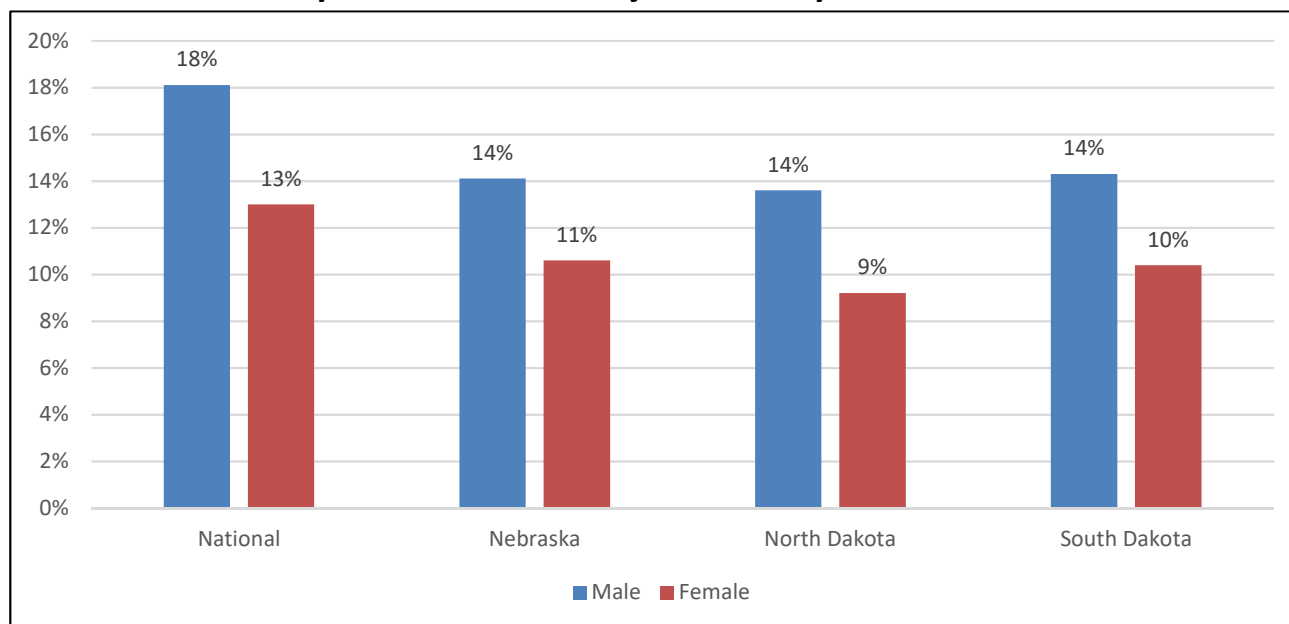
Trends in 30-Day Prevalence of Marijuana Use for 8th, 10th, and 12th graders: Monitoring the Future, 2018-2019



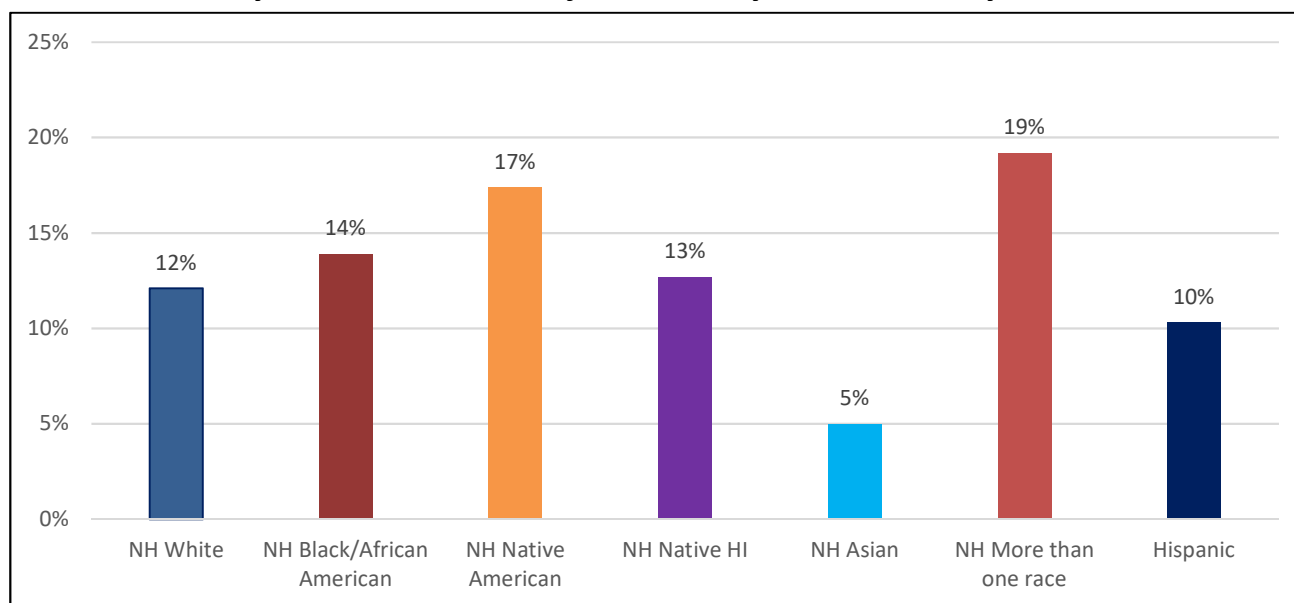
Data Source: Substance Abuse and Mental Health Services Administration (SAMSHA),
The National Survey on Drug Use and Health (NSDUH).

According to the most recent data from Monitoring the Future, past month prevalence of marijuana use among 8th, 10th, and 12th graders has remained mostly constant. The prevalence of use varies greatly between grades, however. In 2018, only 6.6% of 8th graders reported marijuana use in the past month, while 18.4% of 10th graders and 22.3% of 12th graders reported use.

Trends in 30-Day Prevalence of Marijuana Use by Gender: NSDUH 2017-2018



Trends in 30-Day Prevalence of Marijuana Use by Race/Ethnicity: NSDUH 2017-2018

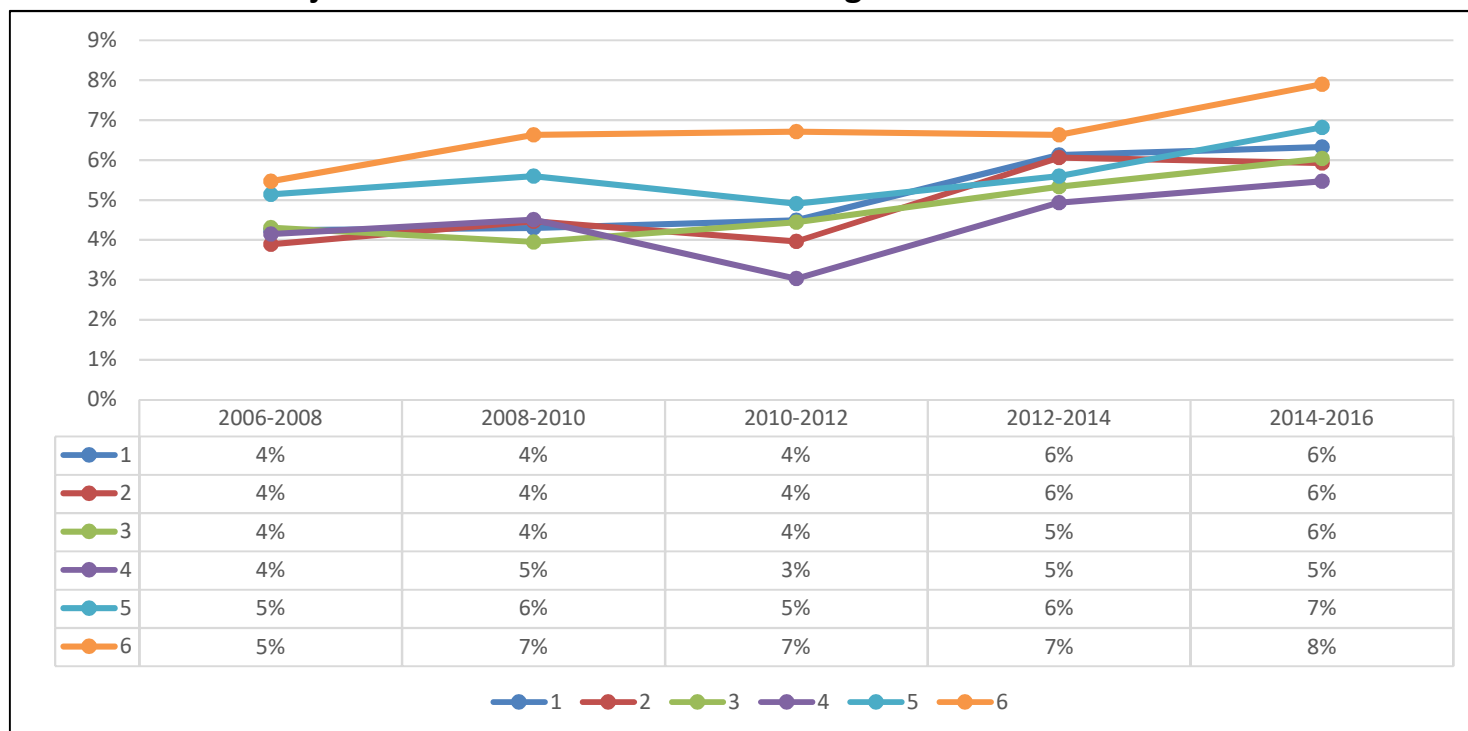


NH: Non-Hispanic

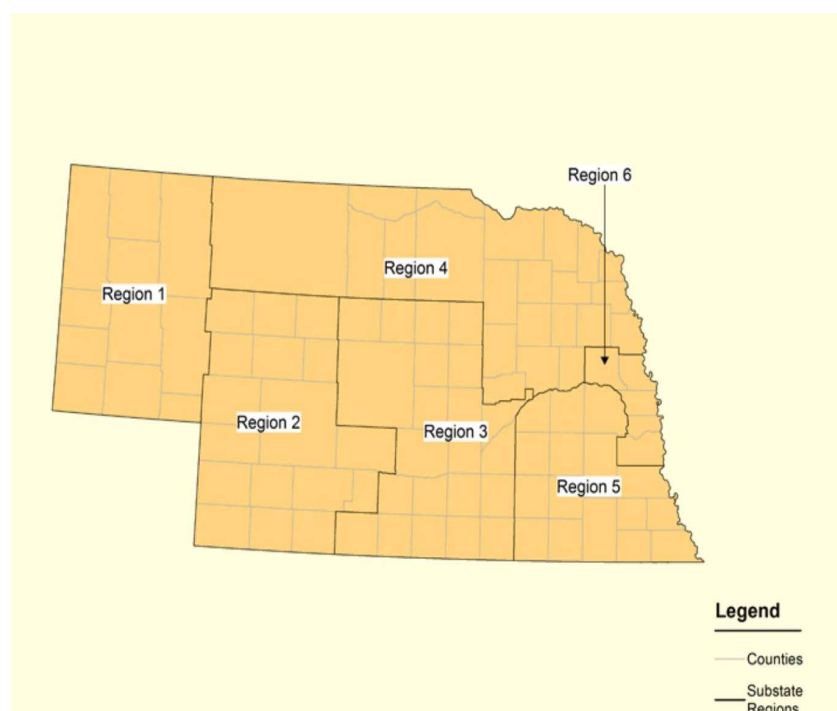
Data Source: Substance Abuse and Mental Health Services Administration (SAMSHA),
The National Survey on Drug Use and Health (NSDUH).

The above graphs represent marijuana use in the past month by gender and race/ethnicity. Males use marijuana at higher rates than females, while the proportion of individuals who use marijuana is lowest in the Asian population. Use of marijuana is the highest among those who identify as more than one race, at 19.2%, while Native American use is the second highest at 17.4%. Use is mostly similar among other demographics.

Past Year Marijuana Use in Nebraska Substate Regions: NSDUH Substate 2006-2016

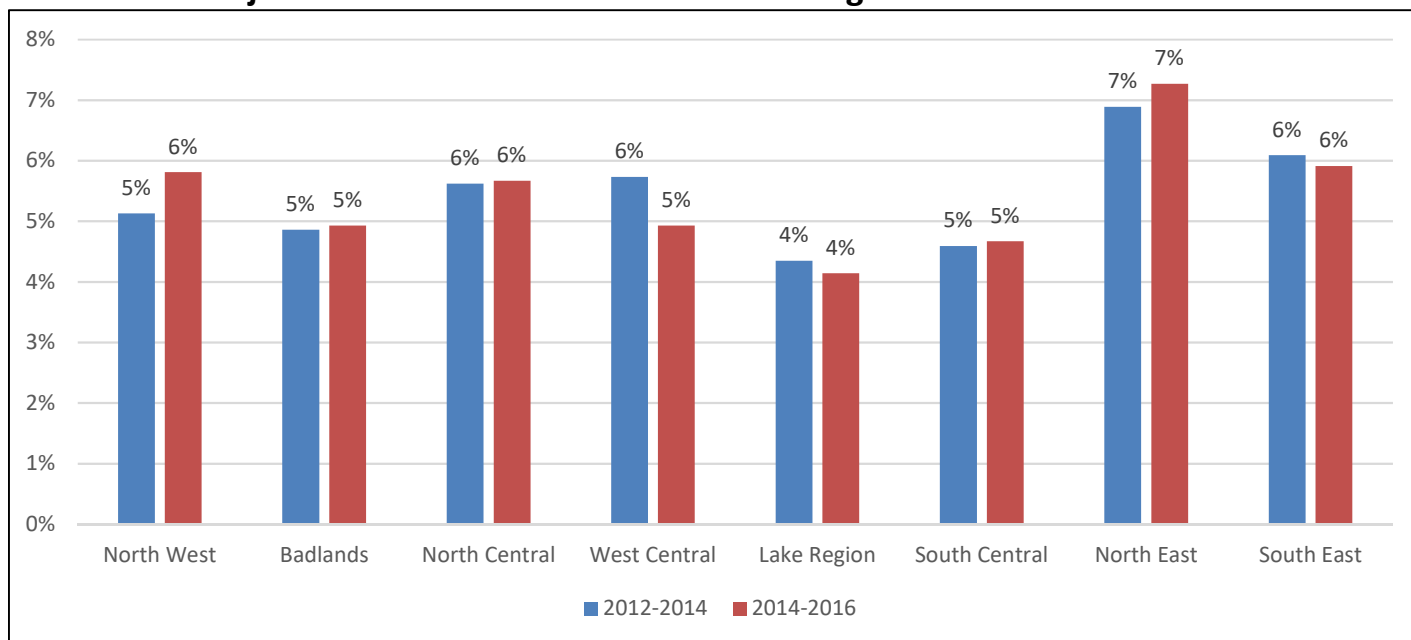


Data Source: Substance Abuse and Mental Health Services Administration (SAMSHA),
The National Survey on Drug Use and Health (NSDUH).

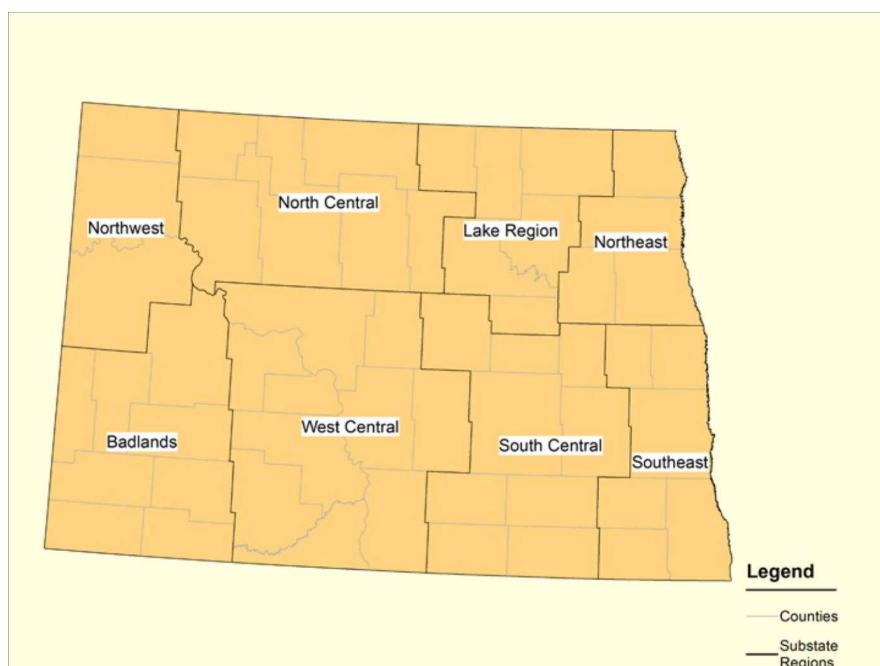


The figure above demonstrates that there has been an increase in marijuana use in Nebraska since 2008. It is also clear that Region 6 (see map) has the highest prevalence compared to the other subregions. For the most part, marijuana use has remained constant across subregions of Nebraska over the last decade.

Past Year Marijuana Use in North Dakota Substate Regions: NSDUH Substate 2012-2016

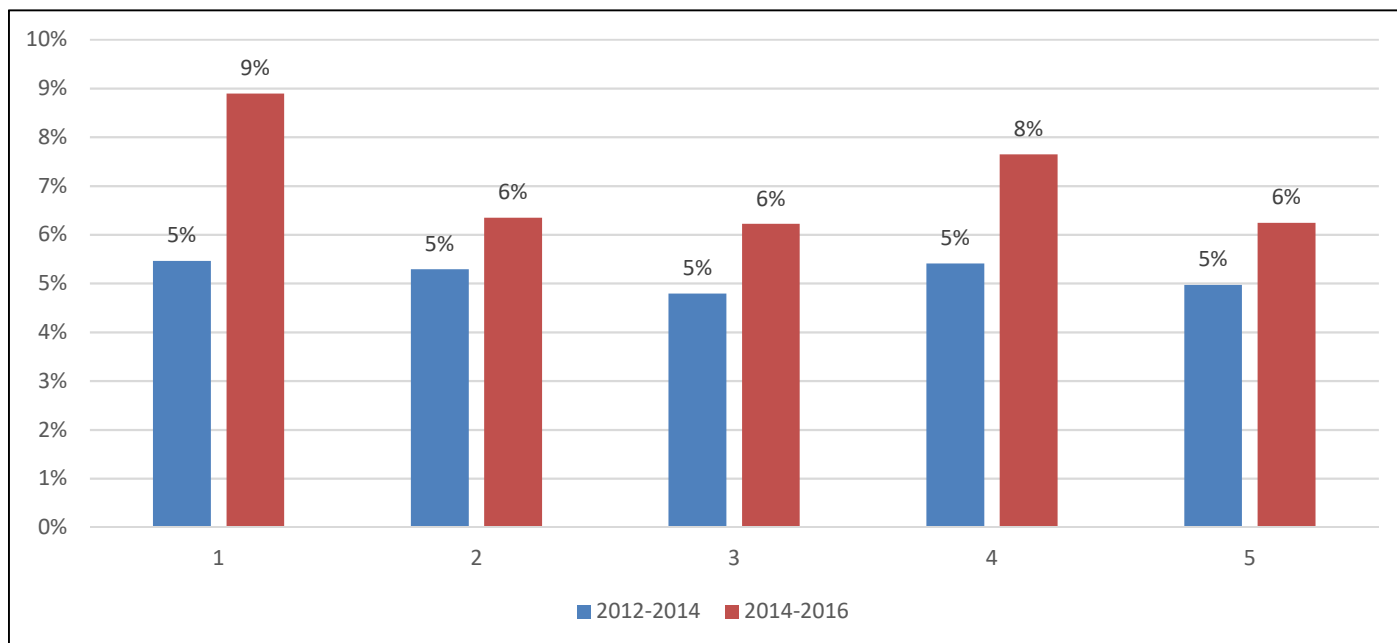


Data Source: Substance Abuse and Mental Health Services Administration (SAMSHA),
The National Survey on Drug Use and Health (NSDUH).

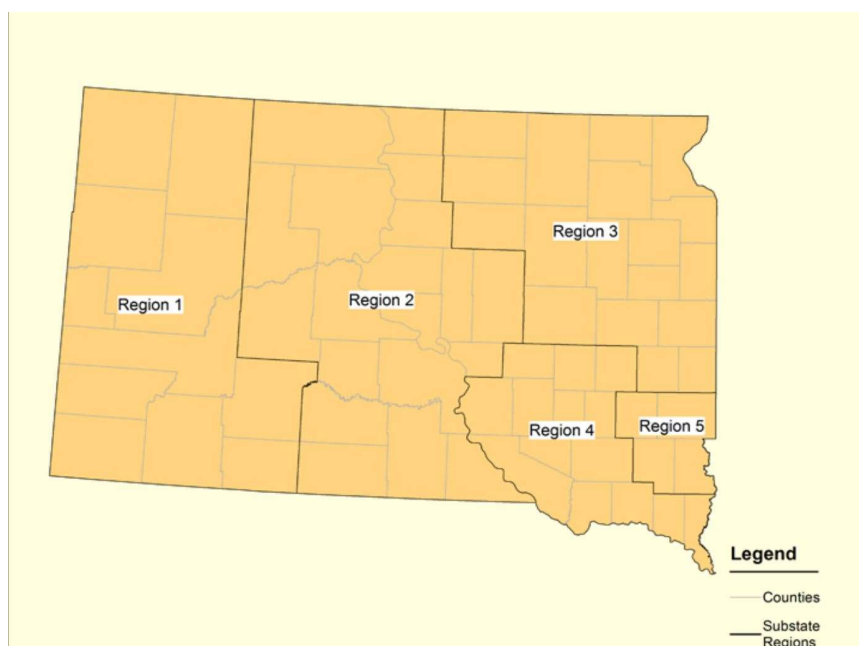


The data for North Dakota does not span as far back as that for Nebraska does, as the subregions in North Dakota were redefined in 2012. Reports of marijuana use in the past year in some regions increased from the first time period to the second (North West, North East) and decreased in others (West Central, Lake Region, South East).

Past Year Marijuana Use in South Dakota Substate Regions: NSDUH Substate 2012-2016



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



The above graph demonstrates that past-year marijuana use increased in each substate region of South Dakota between the two measured time periods. The data from the period prior to 2012 is not shown because the subdivision classification was different.

To learn more about becoming a member, please visit the [Great Plains IDeA-CTR website](#) and join today!

The project described is supported by the National Institute of General Medical Sciences, U54 GM115458, which funds the Great Plains IDeA-CTR Network. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.

GP IDeA-CTR

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.

