# 2019 REGIONAL NEEDS ASSESSMENT

A PLANNED, FORMAL METHOD
OF DETERMINING WHERE AND
IN WHOM THERE IS A GAP IN
RESOURCES

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Easing the Journey to Recovery

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# **Executive Summary**

The Regional Needs Assessment (RNA) is a document created by the Prevention Resource Center (PRC) in Region 10 along with evaluators from PRCs across the State of Texas and supported by Aliviane, Inc. and the Texas Department of State Health Services Commission (HHSC). The PRC-10 serves Brewster, Culberson, El Paso, Hudspeth, Jeff Davis, and Presidio counties.

This assessment was designed to aid PRC's, HHSC, and community stakeholders in long-term strategic prevention planning based on most current information relative to the unique needs of the diverse communities in the State of Texas. This document will present a summary of statistics relevant to risk and protective factors associated with drug use, as well as consumption patterns and consequences data, at the same time it will offer insight related to gaps in services and data availability challenges.

A team of regional evaluators has procured national, state, regional, and local data through partnerships of collaboration with diverse agencies in sectors such as law enforcement, public health, and education, among others. The information obtained through these partnerships has been analyzed and synthesized in the form of this Regional Needs Assessment. PRC-10 recognizes those collaborators who contributed to the creation of this RNA.

Alcohol continues to be the most common substance used in Region 10. According to the data in this RNA, more than half of the students have used alcohol in their lifetime. Tobacco and prescription drug use have seen a decrease from previous years. Unfortunately, Region 10 has seen an increase in marijuana use. The rise in youth usage of marijuana is a result of increasing e-cigarette use. Also, the accessibility of marijuana should be a target of prevention or intervention activities. Most of the state-funded treatment services go to address marijuana use in Region 10. Due to the negative effect of youth substance use to the developing mind and other consequences, prevention is still a high priority in our area. PRC-10 is available to assist the community in addressing the issues impacting Region 10.



# **Prevention Resource Centers**

There are eleven regional Prevention Resource Centers (PRCs) servicing the State of Texas. Each PRC acts as the central data repository and substance abuse prevention training liaison for their region. Data collection efforts carried out by PRC are focused on the state's prevention priorities of alcohol (underage drinking), marijuana, and prescription drug use, as well as other illicit drugs.

## **Our Purpose**

Prevention Resource Centers (PRC) are a program funded by the Texas Health and Human Services Commission (HHSC) to provide data and information related to substance use and misuse, and to support prevention collaboration efforts in the community. There is one PRC located in each of the eleven Texas Health Service Regions (see Figure 1) to provide support to prevention providers located in their region with substance use data, trainings, media activities, and regional workgroups.

Prevention Resource Centers have four fundamental objectives related to services provided to partner agencies and the community in general: (1) collect data relevant to alcohol, tobacco, and other drug use among adolescents and adults and share findings with community partners (2) ensure sustainability of a Regional Epidemiological Workgroup focused on identifying strategies related to data collection, gaps in data, and prevention needs, (3) coordinate regional prevention trainings and conduct media awareness activities related to risks and consequences of ATOD use, and (4) conduct voluntary compliance checks and education on state tobacco laws to retailers.

Efforts carried out by PRCs are focused on the state's three prevention priorities of underage drinking, use of marijuana and other cannabinoids, and prescription drug misuse.



Figure 1. Map of Health Service Regions Serviced by the Prevention Resource Centers

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Region 1	Panhandle and South Plains
Region 2	Northwest Texas
Region 3	Dallas/Fort Worth Metroplex
Region 4	Upper East Texas
Region 5	Southeast Texas
Region 6	Gulf Coast
Region 7	Central Texas
Region 8	Upper South Texas
Region 9	West Texas
Region 10	Upper Rio Grande
Region 11	Rio Grande Valley/Lower South Texas



Source: Texas Health and Human Services. Prevention Resource Centers. https://hhs.texas.gov/services/mental-health-substance-use/mental-health-substance-use/resources/prevention-resource-centers. Accessed May 10, 2019.

## **How We Help the Community**

PRCs provide technical assistance and consultation to providers, community groups, and other stakeholders in identifying data and data resources related to substance use or other behavioral health indicators. PRCs work to promote and educate the community on substance use and misuse and associated consequences through various data products, media awareness activities, and an annual regional needs assessment. These resources and information provide stakeholders with knowledge and understanding of the local populations they serve, help guide programmatic decision making, and provide community awareness and education related to substance use and misuse. Additionally, the program provides a way to identify community strengths as well as gaps in services and areas of improvement.

# **Next Action**

- POLICY We encourage policymakers to contact their local PRC to obtain data to help inform their decisions regarding policy.
- MEDIA Please contact your local Regional Evaluator to assist with creating media content regarding substance use trends in Region 10.
- ORGANIZATIONS If you produce or collect substance use data, the PRC would like to partner
  with you in disseminating that data.
- INDIVIDUALS If you would like to get connected into the substance use prevention providers in your area, then contact your Regional Evaluator.



# **Conceptual Framework**

As one reads through this need's assessment, two guiding concepts will appear throughout the report: a focus on the youth population and the use of an empirical approach from a public health framework. For the purpose of strategic prevention planning related to drug and alcohol use among youth populations, this report is based on three main aspects: risk and protective factors, consumption patterns, and consequences of substance misuse and substance use disorders (SUDs).

#### **Adolescence**

The World Health Organization (WHO) identifies adolescence as a critical transition in the life span characterized by tremendous growth and change, second only to infancy. This period of mental and physical development poses a critical point of vulnerability where the use and misuse of substances, or other risky behaviors, can have long-lasting negative effects on future health and well-being. This focus of prevention efforts on adolescence is particularly important since about 90 percent of adults who are clinically diagnosed with SUDs, began misusing substances before the age of 18. <sup>1</sup>

The information presented in this document is compiled from multiple data sources and will therefore consist of varying demographic subsets of age which generally define adolescence as ages 10 through 17-19. Some domains of youth data conclude with ages 17, 18 or 19, while others combine "adolescent" and "young adult" to conclude with age 21.

# **Epidemiology**

The WHO describes epidemiology as the "study of the distribution and determinants of health-related states or events (including disease), and the application of this study to the control of diseases and other health problems." This definition provides the theoretical framework through which this assessment discusses the overall impact of substance use and misuse. Through this lens, epidemiology frames substance use and misuse as a preventable and treatable public health concern. The Substance Abuse and Mental Health Services Administration (SAMHSA) establishes epidemiology to identify and analyze community patterns of substance misuse as well as the contributing factors influencing this behavior. SAMHSA

<sup>1</sup> The National Center on Addiction and Substance Abuse at Columbia University. 2011. CASA analysis of the National Survey on Drug Use and Health, 2009 [Data file]. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.



adopted an epidemiology-based framework on a national level while this needs assessment establishes this framework on a regional level.

## **Socio-Ecological Model**

The Socio-Ecological Model (SEM) is a conceptual framework developed to better understand the multidimensional factors that influence health behavior and to categorize health intervention strategies.<sup>2</sup> Intrapersonal factors are the internal characteristics of the individual of focus and include knowledge, skills, attitudes, and beliefs. Interpersonal factors include social norms and interactions with significant others, such as family, friends, and teachers. Organizational/institutional factors are social and physical factors that indirectly impact the individual of focus (e.g., zero tolerance school policies, classroom size, mandatory workplace drug testing). Finally, community/societal factors include neighborhood connectedness, collaboration between organizations, and policy.

The SEM proposes that behavior is impacted by all levels of influence, from the intrapersonal to the societal, and that the effectiveness of health promotion programs is significantly enhanced through the coordination of interventions targeting multiple levels. For example, changes at the community level will create change in individuals and support of individuals in the population is essential for implementing environmental change.

#### **Risk and Protective Factors**

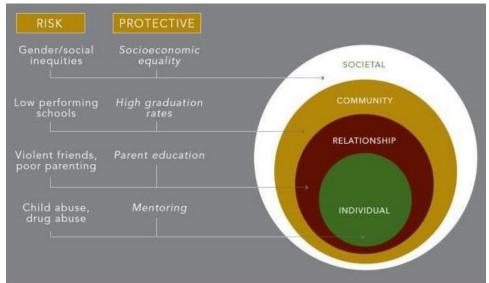
Researchers have examined the characteristics of effective prevention programs for more than 20 years. One component shared by effective programs is a focus on risk and protective factors that influence substance misuse among adolescents. Protective factors are characteristics that decrease an individual's risk for a substance use disorder. Examples may include factors such as strong and positive family bonds, parental monitoring of children's activities, and access to mentoring. Risk factors are characteristics that increase the likelihood of substance use behaviors. Examples may include unstable home environments, parental use of alcohol or drugs, parental mental illnesses, poverty levels, and failure in school performance. Risk and protective factors are classified under four main domains: societal, community, relationship, and individual (see Figure 2).<sup>3</sup>

<sup>3</sup> Urban Peace Institute. Comprehensive Violence Reduction Strategy (CVRS). http://www.urbanpeaceinstitute.org/cvrs/. Accessed May 29, 2018.



<sup>2</sup> McLeroy, KR, Bibeau, D, Steckler, A, Glanz, K. (1988). An ecological perspective on health promotion programs. Health Education & Behavior, 15(4), 351-377.

Figure 2. Examples of risk and protective factors within the domains of the Socio-Ecological Model



Source: Urban Peace Institute. Comprehensive Violence Reduction Strategy (CVRS). http://www.urbanpeaceinstitute.org/cvrs/ Accessed May 29, 2018.

## **Consumption Patterns**

For the purpose of this needs assessment, and in following with operational definitions typically included in widely used measures of substance consumption, such as the Texas School Survey of Drug and Alcohol Use (TSS)<sup>4</sup>, the Texas Youth Risk Surveillance System (YRBSS)<sup>5</sup>, and the National Survey on Drug Use and Health (NSDUH)<sup>6</sup>, consumption patterns are generally operationalized into three categories: lifetime use (ever tried a substance, even once), school year use (past year use when surveying adults or youth outside of a school setting), and current use (use within the past 30 days). These three categories of consumption patterns are used in the TSS to elicit self-reports from adolescents on their use and misuse of tobacco, alcohol (underage drinking), marijuana, prescription drugs, and illicit drugs. The TSS, in turn, is used as the primary outcome measure in reporting on Texas youth substance use and misuse in this needs assessment.

https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2016/NSDUH-DetTabs-2016.pdf. Accessed May 30, 2018.



 $<sup>4\,\</sup>text{Texas}\,A\&\text{M}\,\text{University}.\,\text{Texas}\,\text{School}\,\text{Survey}\,\text{of}\,\text{Drug}\,\text{and}\,\text{Alcohol}\,\text{Use:}\,2016\,\text{State}\,\text{Report.}\,2016.$ 

http://www.texasschoolsurvey.org/Documents/Reports/State/16State712.pdf. Accessed May 30, 2018.

<sup>5</sup> Texas Department of State Health Services. 2001-2017 High School Youth Risk Behavior Surveillance System Data. 2017.

http://healthdata.dshs.texas.gov/HealthRisks/YRBS. Accessed April 27, 2018.

<sup>6</sup> Substance Abuse and Mental Health Services Administration. National Survey on Drug Use and Health. 2016.

Due to its overarching and historical hold on the United States, there exists a plethora of information on the evaluation of risk factors that contribute to Alcohol Use Disorder (AUD). According to SAMHSA, AUD is ranked as the most wide-reaching SUD in the United States, for people ages 12 and older, followed by Tobacco Use Disorder, Cannabis Use Disorder, Stimulant Use Disorder, Hallucinogen Use Disorder, and Opioid Use Disorder (presented in descending order by prevalence rates). When evaluating alcohol consumption patterns in adolescents, more descriptive information beyond the aforementioned three general consumption categories is often desired and can be tapped by adding specific quantifiers (i.e., per capita sales, frequency and trends of consumption, and definitions of binge drinking and heavy drinking), and qualifiers (i.e., consequential behaviors, drinking and driving, alcohol consumption during pregnancy) to the operationalization process.

For example, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) has created very specific guidelines that are widely used in the in quantitative measurement of alcohol consumption. These standards define binge drinking as the drinking behaviors that raise an individual's Blood Alcohol Concentration (BAC) up to or above the level of .08gm%, which is typically five or more drinks for men and four or more drinks for women, within a two-hour time span. At-risk or heavy drinking, is defined as more than four drinks a day or 14 drinks per week for men and more than three drinks a day or seven drinks per week for women.

"Benders" are considered two or more days of sustained heavy drinking. See Figure 3 for the NIAAA's operational definitions of the standard drink.

<sup>8</sup> National Institute for Alcohol Abuse and Alcoholism. What is a "standard" drink? https://www.rethinkingdrinking.niaaa.nih.gov/How-much-is-too-much/What-counts-as-a-drink/Whats-A-Standard-Drink.aspx. Accessed May 24, 2018.



<sup>7</sup> Substance Abuse and Mental Health Services Administration. Substance use disorders. https://www.samhsa.gov/disorders/substance-use. Updated October 27, 2015. Accessed May 29, 2018.

Figure 3. NIAAA (2004) rubric for operationalizing the standard drink by ounces and percent alcohol across beverage type



Source: National Institute for Alcohol Abuse and Alcoholism. What is a "standard" drink? https://www.rethinkingdrinking.niaaa.nih.gov/How-much-is-too-much/What-counts-as-a-drink/Whats-A-Standard-Drink.aspx. Accessed May 24, 2018.

#### Consequences

One of the hallmarks of SUDs is the continued use of a substance despite harmful or negative consequences. The types of consequences most commonly associated with SUDs, the most severe of SUDs being addiction, typically fall under the categories of health consequences, physical consequences, social consequences, and consequences for adolescents. The prevention of such consequences has received priority attention as Goal 2 (out of four goals) on the 2016-2020 NIDA Strategic Plan titled *Develop new and improved strategies to prevent drug use and its consequences*.<sup>9</sup>

The consequences associated with SUDs tend to be developmentally, culturally, and contextually dependent and the measurement and conceptualization of such associations has proven to be quite difficult for various reasons, including the fact that consequences are not always caused or worsened by substance use or misuse. <sup>10</sup> Therefore, caution should be taken in the interpretation of the data presented in this needs assessment. Caution in inferring relationships or direction of causality should be taken, also, because only secondary data is reported out and no sophisticated analytic procedures are involved once that secondary data is obtained by the PRCs and reported out in this needs assessment, which is intended to be used as a resource.

<sup>10</sup> Martin, CS., Langenbucher, JW, Chung, Sher, KJ. Truth or consequences in the diagnosis of substance use disorders. Addiction. 2014. 109(11): 1773-1778.



<sup>9</sup> National Institute on Drug Abuse. 2016-2020 NIDA Strategic Plan. 2016.

https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/nida\_2016strategicplan\_032316.pdf. Accessed May 29, 2018.

The executive summary found at the beginning of this report will provide highlights of the report for those seeking a brief overview. Since readers of this report will come from a variety of professional fields, each yielding specialized genres of professional terms and concepts related to substance misuse and substance use disorders prevention, a glossary of key concepts can be found in Appendix A of this needs assessment. The core of the report focuses on risk factors, consumption patterns, consequences, and protective factors. A list of tables and figures can be found in Appendix B.



# Introduction

The Texas Health and Human Services Commission (HHSC) administers approximately 225 school and community-based prevention programs across 72 different providers with federal funding from the Substance Abuse Prevention and Treatment Block Grant to prevent the use and consequences of alcohol, tobacco and other drugs (ATOD) among Texas youth and families. These programs provide evidence-based curricula and effective prevention strategies identified by SAMHSA's Center for Substance Abuse Prevention (CSAP).

The Strategic Prevention Framework (SPF) provided by CSAP guides many prevention activities in Texas (see Figure 4). In 2004, Texas received a state incentive grant from CSAP to implement the Strategic Prevention Framework in close collaboration with local communities in order to tailor services to meet local needs for substance abuse prevention. This prevention framework provides a continuum of services that target the three classifications of prevention activities under the Institute of Medicine (IOM), which are universal, selective, and indicated.<sup>11</sup> The Health and Human Services Commission Substance Abuse Services funds Prevention Resource Centers (PRCs) across the state of Texas. These centers are part of a larger network of youth prevention programs providing direct prevention education to youth in schools and the community, as well as community coalitions that focus on implementing effective environmental strategies. This network of substance abuse prevention services work to improve the welfare of Texans by discouraging and reducing substance use and abuse. Their work provides valuable resources to enhance and improve our state's prevention services aimed to address our state's three prevention priorities to reduce: (1) underage drinking; (2) marijuana use; and (3) non-medical prescription drug abuse. These priorities are outlined in the Texas Behavioral Health Strategic Plan developed in 2012.

#### **Our Audience**

Readers of this document include stakeholders from a variety of disciplines such as substance use prevention and treatment providers; medical providers; school districts and higher education; substance use prevention community coalitions; city, county, and state leaders; and community members interested in increasing their knowledge of public health factors related to drug consumption. The information presented in this report aims to contribute to program planning, evidence-based decision making, and community education.

<sup>11</sup> SAMHSA. Strategic Prevention Framework. https://www.samhsa.gov/capt/applying-strategic-prevention-framework. Last updated June 5, 2017. Accessed July 30, 2017.



## **Purpose of This Report**

This needs assessment reviews substance abuse data and related variables across the state that aid in substance abuse prevention decision making. The report is a product of the partnership between the regional PRCs and HHSC. The report seeks to address the substance abuse prevention data needs at the state, county and local levels. The assessment focuses on the state's prevention priorities of alcohol (underage drinking), marijuana, and prescription drugs and other drug use among adolescents in Texas. This report explores drug consumption trends and consequences. Additionally, the report explores related risk and protective factors as identified by the Center for Substance Abuse Prevention (CSAP).



Figure 4. Strategic Prevention Framework (SPF)

Source: SAMHSA's Strategic Prevention Framework | Campus Drug Prevention. https://www.campusdrugprevention.gov/content/samhsa-strategic-prevention-framework. Accessed July 29, 2019.



# Methodology

This needs assessment is a review of data on substance misuse, substance use disorders, and related variables that will aid in substance misuse prevention decision making at the county, regional, and state level. In this needs assessment, the reader will find the following: primary focus on the state-delineated prevention priorities of alcohol (underage drinking), marijuana, prescription drugs, and other drug use among adolescents; exploration of drug consumption trends and consequences, particularly where adolescents are concerned; and an exploration of related risk and protective factors as operationalized by CSAP.

Specifically, this regional needs assessment can serve in the following capacities:

- To determine patterns of substance use among adolescents and monitor changes in substance use trends over time;
- To identify gaps in data where critical substance misuse information is missing;
- To determine county-level differences and disparities;
- To identify substance use issues that are unique to specific communities;
- To provide a comprehensive resource tool for local providers to design relevant, datadriven prevention and intervention programs targeted to needs;
- To provide data to local providers to support their grant-writing activities and provide justification for funding requests;
- To assist policy-makers in program planning and policy decisions regarding substance misuse prevention, intervention, and treatment at the region and state level.

#### **Process**

The state evaluator and the regional evaluators collected primary and secondary data at the county, regional, and state levels between September 1, 2018 and May 30, 2019. Between September and July, the State Evaluator meet with Regional Evaluators via bi-weekly conference calls to discuss the criteria for processing and collecting data. The information is primarily gathered through established secondary sources including federal and state government agencies. In addition, region-specific data collected through local law enforcement, community coalitions, school districts and local-level governments are included to address the unique regional needs of the community. Additionally, qualitative data is collected through primary sources such as surveys and focus groups conducted with stakeholders and participants at the regional level.

Primary and secondary data sources are identified when developing the methodology behind this document. Readers can expect to find information from the American Community Survey, Texas Department of Public Safety, Texas School Survey of Drug and Alcohol Use, and the



Community Commons, among others. Also, adults and youth in the region were selected as primary sources.

#### **Qualitative Data Selection**

During the year, focus groups, surveys and interviews are conducted by the Regional Evaluator to better understand what members of the communities believe their greatest need to be. The information collected by this research serves to identify avenues for further research and provide access to any quantitative data that each participant may have access to.

## **Focus Groups**

Participants for the focus groups are invited from a wide selection of professionals including law enforcement, health, community leaders, clergy, high school educators, town councils, state representatives, university professors, and local business owners. In these sessions, participants discuss their perceptions of how their communities are affected by alcohol, marijuana, and prescription drugs.

#### Interviews

Interviews are conducted primarily with school officials and law enforcement officers.

Participants are randomly selected by city and then approached to participate in an interview with the Regional Evaluator. Each participant is asked the following questions:

- What problems do you see in your community?
- What is the greatest problem you see in your community?
- What hard evidence do you have to support this as the greatest problem?
- What services do you lack in your community?

Other questions inevitably arise during the interviews, but these four are asked of each participant.

# **Longitudinally Presented Data**

In an attempt to capture a richer depiction of possible trends in the data presented in this needs assessment, data collection and reporting efforts consist of multi-year data where it is available from respective sources. Most longitudinal presentations of data in this needs assessment consist of (but are not limited to) the most recently-available data collected over three years in one-year intervals of data-collection, or the most recently-available data collected over three data-collection intervals of more than one year (e.g. data collection for the TSS is done in two-year intervals). Efforts are also made in presenting state-and national-level data with county-level data for comparison purposes. However, where it is the case that



neither state-level nor national-level date are included in tables and figures, the assumption can be made by the reader that this data is not made available at the time of the data request. Such requests are made to numerous county, state, and national-level agencies in the development of this needs assessment.



# **Regional Demographics**

In Region 10, also known as Upper Rio Grande, there is an estimated 885,023 thousand people who live in this region as of 2018. Within this six-county region, the population has increased 0.81% from 2017 to  $2018.^{12}$ 

Region 10 has six counties (see Figure 5): Brewster, Culberson, El Paso, Hudspeth, Jeff Davis, Presidio.

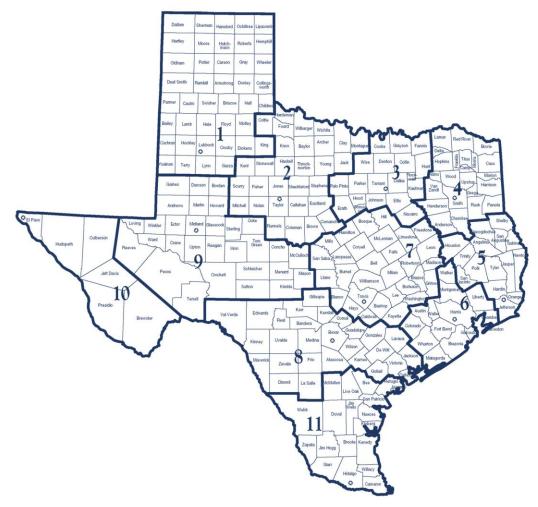


Figure 5. Regional Boundaries

Source: DFPS. Maps of DFPS Regions. https://www.dfps.state.tx.us/Contact\_Us/regional\_map.asp. Last updated 2019. Accessed May 7, 2019.



#### **Brewster County**

Brewster County was founded in 1887 and named after Henry Percy Brewster. Historical accounts place the first European to set foot in Brewster as Álvar Núñez Cabeza de Vaca in 1535. Brewster County is the largest county in Texas, located in the Trans-Pecos region of West Texas, it is the site of Big Bend National Park, the largest park in the State of Texas. Alpine City, the county city, is the largest town in Brewster County. Alpine is also home to Sul Ross University and is named after Texas Governor Lawrence Sullivan Ross. The geographical makeup of Brewster County comprises 6,169 square miles of largely rough and mountainous terrain, with elevations ranging from 1,700 to 7,825 feet above sea level. Brewster County is made up of rural communities, with abundant opportunities for outdoor recreation including rafting, fishing, and camping. Since the county's creation, mining, the railroad, wholesale trade, construction and commerce have been the principal economic activities.

## **Culberson County**

Culberson County was established in 1911 and named after David B. Culberson. Van Horn city is the county seat and organized in 1912. Ranchers settled in the county with the opening of the railways. Today Culberson County is best known for the Guadalupe Mountains National park. The county comprises 3,815 square miles varying from mountainous to nearly level elevations, ranging from 8,751 feet on Guadalupe Peak to 3,000 feet in its shallow, stony, clam and sandy loams.

# **El Paso County**

El Paso County was first established in 1850 but has been recognized in the history books since 1598 when the Spanish explorer Don Juan de Onate celebrated a Thanksgiving mass in the county. The region of El Paso was claimed by Texas as part of a treaty agreement with Mexico in 1846. El Paso County was recognized as one of the safest places to live in 2018 and continuously ranks high for the category each year. El Paso is also known for its abundance of sunshine and recognized nationally as the only county to have mined, milled and smelted tin. El Paso County is home to Fort Bliss, Texas, and several higher education universities such as the University of Texas at El Paso, Texas Tech Medical Center, and Park University. El Paso is home to a large part of the colonias established along the U.S. Mexico Border, with 90,000 people living in 200 known colonias. El Paso County is one of the largest cities geographically resting on the Mexico border with a population of 840,758. It is predominantly Hispanic (82.8%), and is also home to the Fort Bliss 1st Armored division. Fort Bliss, the 2nd largest military installation in the US Armed Forces, has 27,132 Active Duty soldiers, 2,198 Reservist, 39,790 Family members,



12,323 Civilians, 32,794 Retirees, and 38,622 Family Members Retirees on base, with a total supported population of 166,832. <sup>13</sup>

## **Hudspeth County**

Hudspeth County is located seventy miles southeast of El Paso. It is considered the Trans-Pecos region of far west Texas. It is bordered by New Mexico to the north, the Mexican State of Chihuahua to the south and El Paso to the west. Sierra Blanca was made the county seat in 1917. The county is 4,566 square miles of mountainous terrain ranging from 3,200 to 7,500 feet above sea level. During the 1800's it was a popular watering hole stop, for travelers on stagecoaches and wagons, many in route to San Antonio Texas. With the gold rush of 1849 the trails intensified and farming and ranching were the primary sources of employment, and still are today. Many of the ranches still house thousands of cattle and sheep. In 2016, 78.44 percent of the population was Hispanic and 21.56 percent non-Hispanic.

## **Jeff Davis County**

Jeff Davis County is comprised of 2,258 square mountainous miles, with numerous wildlife including mule deer, pronghorn antelope, javelin and jacksnipe to name a few. Jeff Davis is best known for their Davis Mountains and is considered the highest mountain range located directly with the state of Texas. Jeff Davis County also houses the legendary Fort Davis where many battles occurred during the Civil War. Much of the land is utilized by cattle ranchers who fill much of the wide-open spaces. Ranching and tourism continue to be the main industries for the county. The current population of Jeff Davis County is 2,200 with a predominantly Hispanic population.

# **Presidio County**

Presidio County is geographically triangular and comprises of 3,857 square miles of terrain that contrasts between plateaus and mountainous ranges. The area known as La Junta de Los Rios, is believed to be the oldest cultivated farm in Texas. Presidio County organized in 1875 and is the 4<sup>th</sup> largest county in Texas. Their economy is primarily based in agriculture for farms and cattle with 83 percent of their land used for that purpose. As of the 2010 census there are 7,304 people living in the county, with 84% of the population predominantly Hispanic. Presidio County is best known for the location of the mysterious Marfa lights.

<sup>13</sup> The National Center on Addiction and Substance Abuse at Columbia University, 2011. CASA analysis of the National Survey on Drug Use and Health, 2009 [Data file]. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration.



Data for the regional demographics came from the U.S. Census.<sup>14</sup>

## **Population**

The state of Texas continues to grow as demonstrated in Table 1 (see below). Based on 2010 Census data, Texas had a population of 25,145,561 individuals. Estimated projections have Texas growing by 14.4% by 2018, which is equivalent to 28,701,845 individuals. In comparison to the nation as a whole (5.97%), Texas' growth rate is 8.17% greater. These census estimates rank Texas as the 2<sup>nd</sup> most populous state in the nation.

Table 1 – Texas and US Population Change Projections 2010 and 2018

Geographic Area	2010 Population	2018 Population	Growth (+/-)	Growth Rate
United States	308,745,538	327,167,434	18,421,896	5.97%
Texas	25,145,561	28,701,845	3,556,284	14.14%

Source: U.S. Census Bureau, Population Division. Annual Estimates of the Resident Population for the United States. Last Updated December 2018. Accessed May, 8, 2019.

The Texas Demographics Center produces a projection report for the state of Texas. Figure 6 demonstrates population-level data at the regional level and includes data on all ages and races from 2010 to 2018. As demonstrated by the figure, Region 10 has continued to grow to about 900,000 individuals as of 2018 projections.

1,000,000 900,000 800,000 Presidio 700,000 ■ Jeff Davis 600,000 ■ Hudspeth 500,000 400,000 El Paso 300,000 Culberson 200,000 ■ Brewster 100,000 2018 2010 2011 2012 2013 2014 2015 2016 2017

Figure 6 - Region 10 - Population, 2010-2018

Source: Texas Demographic Center. Populations Projections for Texas, Report. Last Updated 2019. Accessed May, 7, 2019.



#### Age

Census Bureau data indicates that the age distribution reflected in the United States is similar to the age distribution in Texas. From the surveyed participants, individuals with ages 18 to 64 form the largest percentage of the population (see Table 2). The second largest age range is 0 to 17 at 26.2% in Texas. In the below table and other sections of the report, we will use the acronym PCT to stand for percentage.

Table 2 – Texas vs. US Population by Age Category, 2018

Age								
Geographic Are	Geographic Area Totals		0 to 17 18 to 64		64	4 65 to 80+		
	Sum	PCT	Sum	PCT	Sum	PCT	Sum	PCT
United States	323,156	100.0%	73,963	22.9%	198,113	61.3%	51,080	15.8%
Texas	28,101	100.0%	7,368	26.2%	17,191	61.2%	3,543	12.6%

Source: U.S. Census Bureau. CPS Data Collected in Year: 2018. Last Updated March 2018. Accessed May, 8, 2019.

Figure 7 describes the population breakdown of Region 10 by age. The ages are categorized into five age ranges. In Region 10, the largest age group are those less than 18 years of age and the smallest age group are individuals between the ages of 18 and 24.

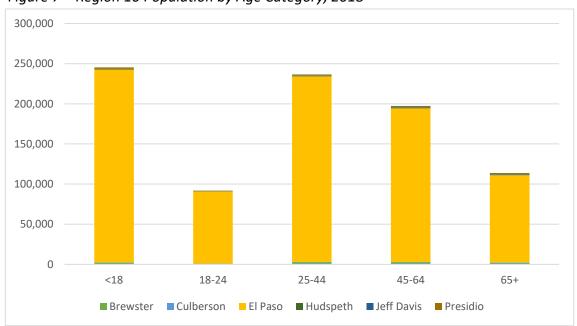


Figure 7 – Region 10 Population by Age Category, 2018

Source: Texas Demographic Center. TDC-Texas Population Projections Program. Last Updated 2019. Accessed May, 8, 2019.



#### Race/Ethnicity

Table 3 below shows Region 10 broken down by race/ethnicity for the years 2016, 2017, and 2018. Racial categories described below include White, Black, Hispanic, Asian, and Other. Individuals who chose the other group either do not identify with the other races or view themselves as a combination of different races or ethnicity. In Figure 8, we see that the majority of counties have a large number of individuals who identify as Hispanic.

Table 3 – Region 10 Population by Race and Ethnicity, 2016-2018

#### Race and Ethnicity

Year	Geographic Area	Total	White, Non- Hispanic	Black, Non- Hispanic	Hispanic	Asian, Non- Hispanic	Other
	Brewster	9,214	4,813	85	4,069	64	183
	Culberson	2,306	530	8	1,698	27	43
2016	El Paso	847,032	110,633	26,517	688,026	9,702	12,154
20	Hudspeth	3,406	647	32	2,671	13	43
	Jeff Davis	2,183	1,314	10	802	7	50
	Presidio	6,552	995	33	5,378	81	65
	Brewster	9,204	4,782	86	4,084	65	187
	Culberson	2,288	530	8	1,679	27	44
2017	El Paso	854,477	111,505	27,690	692,384	10,171	12,727
20	Hudspeth	3,399	649	33	2,660	13	44
	Jeff Davis	2,168	1,291	10	809	7	51
	Presidio	6,371	975	34	5,214	82	66
	Brewster	9,192	4,742	87	4,107	66	190
	Culberson	2,275	533	8	1,662	27	45
2018	El Paso	861,801	112,349	28,927	696,545	10,658	13,322
20	Hudspeth	3,398	650	34	2,656	13	45
	Jeff Davis	2,151	1,266	10	816	7	52
	Presidio	6,206	962	35	5,059	83	67

Source: Texas Demographic Center. TDC-Texas Population Projections Program. Accessed May, 8, 2019.



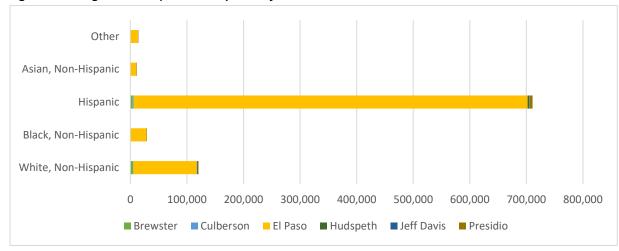


Figure 8 – Region 10 Population by Race for 2018

Source: Texas Demographic Center. TDC-Texas Population Projections Program. Accessed May, 8, 2019.

#### **Concentrations of Populations**

Per Table 4, the land area in Texas is 261,231.71 square miles and has a population density of 96.3. The state of Texas is denser than the population density for the United States. In Region 10, El Paso County has the highest population density, and Brewster County has the largest land area (6,183.73 square miles). Region 10 has a population density of 797.1 per square miles of land area, and a total land area of 21,7000 square miles.

Table 4 – Region 10 Population Density, 2010

	Geographic Area Land area – Area in square miles		Population – Density per square mile of land area		
Brewster		6,183.73	1.5		
	Culberson	3,812.80	0.6		
	El Paso	1,012.69	790.6		
Hudspeth		4,570.98	0.8		
	Jeff Davis	2,264.56	1.0		
	Presidio	3,855.24	2.0		
Region 10		21,700.00	797.1		
	Texas	261,231.71	96.3		
	United States	3,531,905.43	87.4		

Source: U.S. Census Bureau, 2010 Census. Census 2010 Summary File 1, Geographic Header Record G001. https://factfinder.census.gov/faces/nav/jsf/pages/community\_facts.xhtml. Accessed May 9, 2019.



Figure 9 below details the population density of Texas. In this density map below, El Paso is the most densely populated area in west Texas. East Texas has the highest concentrations of population in the state.

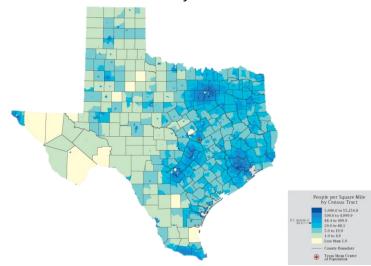


Figure 9. 2010 Census: Texas Profile

Source: U.S. Department of Commerce Economics and Statistics Administration U.S. Census Bureau. 2010 Census: Texas Profile.

https://www2.census.gov/geo/maps/dc10\_thematic/2010\_Profile/2010\_Profile\_Map\_Texas.pdf. Last updated July 2010. Accessed May 9, 2019.

The Census Bureau collected information on housing units in the 2010 survey (see Table 5). From this survey, Region 10 has both housing units in both urban and rural areas. Some counties, like El Paso (97.73%), have most of the housing units in urban areas. Other counties, like Culberson (0.00%), have none of the housing units in urban areas. Overall, the region's housing units are predominantly in urban areas (94.82%). In comparison to Texas and the United States, Region 10 has a higher percentage of its housing units in urban areas.

Table 5 – Region 10 Urban and Rural Housing Units, 2010

Geographic Area	Total Housing Units	Urban Housing Units	Rural Housing Units	PCT Urban	PCT Rural
Brewster	5,383	3,081	2,302	57.24%	42.76%
Culberson	1,137	0	1,137	0.00%	100.00%
El Paso	270,307	264,182	6,125	97.73%	2.27%
Hudspeth	1,527	0	1,527	0.00%	100.00%
Jeff Davis	1,613	0	1,613	0.00%	100.00%
Presidio	3,825	1,835	1,990	47.97%	52.03%
Region 10	283,792	269,098	14,694	94.82%	5.18%
Texas	9,977,436	8,280,411	1,697,025	82.99%	17.01%
United States	131,704,730	104,019,731	27,684,999	78.98%	21.02%

Source: U.S. Census Bureau, 2010 Census. Urban and Rural Universe: Housing units 2010 Census Summary File 1. https://factfinder.census.gov/faces/nav/jsf/pages/community\_facts.xhtml. Accessed May 9, 2019.



#### Languages

According to the 2015 American Community Survey, 28.18% of Region 10 speaks English only (see Table 6). 69.7% of Region 10 speaks Spanish. Of Spanish speaking individuals in Region 10, 29.77% report that they speak English less than "very well." In the table below, each county is broken down into the variables of English Only, Spanish Speaking, Speak English "very well," and Speak English less than "very well."

Table 6 – Region 10 English Proficiency, 2015

							Spanish -	
					Spanish -		Speak	
					Speak		English	
					English		less than	
Geographic	Speak Only		Speak		"very		"very	
Area	English	PCT	Spanish	PCT	well"	PCT	well"	PCT
Texas	15,973,189	64.97%	7,252,074	29.50%	4,256,049	17.31%	2,996,025	12.19%
Region 10	221,620	28.18%	548,164	69.70%	314,059	39.94%	234,105	29.77%
Brewster	5,356	61.64%	3,206	36.90%	2,703	31.11%	503	5.79%
Culberson	683	32.22%	1,426	67.26%	967	45.61%	459	21.65%
El Paso	212,685	27.85%	534,735	70.03%	305,583	40.02%	229,152	30.01%
Hudspeth	741	23.83%	2,342	75.33%	1,155	37.15%	1,187	38.18%
Jeff Davis	1,234	56.68%	913	41.94%	555	25.49%	358	16.44%
Presidio	921	13.64%	5,542	82.09%	3,096	45.86%	2,446	36.23%

Source: U.S. Census Bureau, 2011-2015 American Community Survey. Language Spoken at Home by Ability to Speak English for the Population. https://factfinder.census.gov/faces/nav/jsf/pages/community\_facts.xhtml. Accessed May 10, 2019.

# **Regional Socioeconomics**

In this needs assessment, socioeconomics will be examined by sharing data on household composition, employment, TANF and food stamp receipients, and free-and-reduced school lunches. These data points will help our community in understanding the social and economic factors that influence Region 10. These factors help inform the role of risk and protective factors in the region's population.



#### **Household Composition**

As a part of the County Health Rankings Model, single-parent households are households with a percentage of children that live in a family headed by a single parent. Single-parent household is an important factor because children who live in a single-parent house is a risk factor. This risk factor is often associated with a risk for substance misuse and child abuse or neglect. Figure 10 reports the percentage of single-parent households by county for the years 2017-2019. For most of the counties in Region 10, the rates remained relatively stable throughout the years. Culberson County was the only exception to this trend, and in 2019, Culberson had an 8% increase from 2018 to 2019.

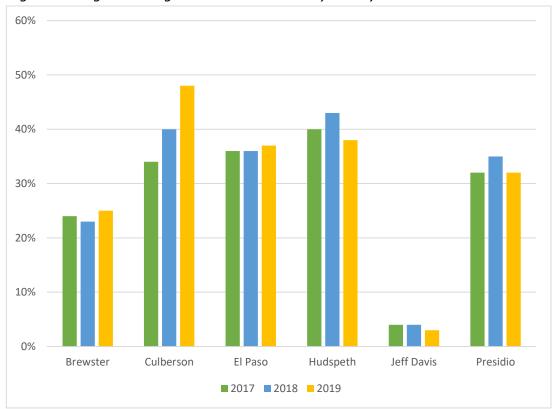


Figure 10. Region 10 Single Parent Households by County - 2017-2019

 $Source: County\ Health\ Rankings\ and\ Roadmaps,\ Single-parent\ households,\ 2017-2019.$ 

<sup>16</sup> U.S. Department of Health and Human Services. Administration on Children, Youth and Families, Children's Bureau. http://www.acf.hhs.gov/sites/default/files/cb/cm2014.pdf. Accessed May 20, 2019.



<sup>15</sup> County Health Rankings and Roadmaps. Children in single-parent households in Texas. County Health Rankings & Roadmaps. http://www.countyhealthrankings.org/app. Accessed May 20, 2019.

#### **Employment**

Employment is a protective factor against crime and other factors. <sup>17</sup> According to the Texas Labor Market Information seen in Table 7, Texas has an annual unemployment rate of 3.9% in 2018. Upon comparing yearly unemployment rates, Table 7 indicates that Region 10 has a higher unemployment rate than the state (i.e., 4.3% - Regional vs. 3.9% - Texas). The county with the highest unemployment rate is Presidio, and the county with the lowest unemployment rate is Jeff Davis.

Table 7 – Region 10 – Labor Force, Employment, and Unemployment, 2018

Geographic Area	Employed	Labor	Unemployment	Unemployment Rate
Texas	13,314,203	13,848,080	533,877	3.9
Region 10	354,262	365,975	15,713	4.3
Brewster	3,925	4,062	137	3.4
Culberson	948	979	31	3.2
El Paso	343,915	359,136	15,221	4.2
Hudspeth	1,587	1,666	79	4.7
Jeff Davis	1,050	1,082	32	3
Presidio	2,837	3,050	213	7

Source: Texas Labor Market Information. Local Area Unemployment Statistics. https://texaslmi.com/LMIbyCategory/LAUS. Accessed May 13, 2019.

The below figure demonstrates the unemployment rates of Region 10 and Texas from 2015 to 2018. This trend analysis indicates that both Texas and Region 10 have seen a decreasing trend in unemployment.

Region 10 Texas

6
4
2
0
2015
2016
2017
2018

Figure 11. Region 10 and Texas Unemployment Rates – 2015-2018

Source: Texas Labor Market Information. Local Area Unemployment Statistics. https://texaslmi.com/LMIbyCategory/LAUS. Accessed May 13, 2019.

<sup>17</sup> Duwe, G., & McNeeley, S. (2017). The Effects of Prison Labor on Institutional Misconduct, Postprison Employment, and Recidivism. Corrections, 1–20. https://doi.org/10.1080/23774657.2017.1416317



#### **TANF Recipients**

Temporary Assistance for Needy Families (TANF) provides financial assistance to families for household expenses. <sup>18</sup> The goal of the program is to help needy families achieve self-sufficiency. TANF recipients can receive TANF Basic or TANF State Program. The main difference between these two programs is the funding source. For Figure 12, TANF recipients include both TANF Basic and TANF State Program. Figure 12 also combines TANF Recipients from Brewster, Culberson, El Paso, Hudspeth, Jeff Davis, and Presidio. Based on this figure between 2014 and 2018, Region 10 has seen a significant decrease in TANF recipients. This decrease is notable because it could possibly indicate that there is less of a need for financial assistance for families within the region.

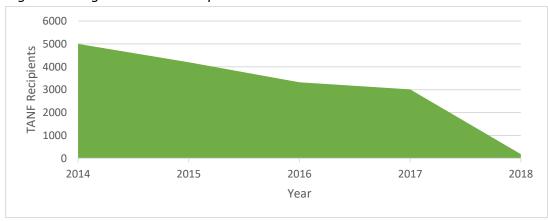


Figure 12. Region 10 TANF Recipients - 2014-2018

Source: Temporary Assistance for Needy Families. Texas Heath and Human Services Commission. https://hhs.texas.gov/about-hhs/records-statistics/data-statistics/temporary-assistance-needy-families-tanf-statistics. Accessed June 29, 2018.

#### **Food Assistance Recipients**

Individuals in Region 10 receive Supplemental Nutrition Assistance Program (SNAP) benefits by placing funds on a debit-like card that they can use at stores that accept SNAP. <sup>19</sup> Based on the SNAP website, individuals are limited to the items that can be purchased with this financial assistance. SNAP is designed to help individuals who are not able to afford nutritious food for their household. Figure 13 depicts SNAP recipients from the years 2015 to 2018. Based on the trajectory of recipients, Region 10 has seen a decrease in the number of recipients from 2015-

https://yourtexasbenefits.hhsc.texas.gov/programs/snap. Accessed May 20, 2019.



<sup>18</sup> U.S. Department of Health and Human Services. Temporary Assistance for Needy Families (TANF). Office of Family Assistance | ACF. https://www.acf.hhs.gov/ofa/programs/tanf. Accessed May 14, 2019.

<sup>19</sup> Texas Health and Human Services Commission. SNAP Food Benefits | How to Get Help.

2018. Within this time frame, Region 10 saw the lowest quantity of SNAP recipients in 2018. In comparison to Figure 13, Figure 14 highlights the trend in SNAP recipients across the state of Texas. Figure 14 shows a peak in recipients in 2017, and in 2018, Texas saw a decrease in SNAP recipients.

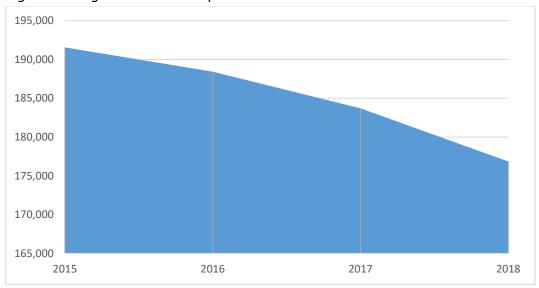


Figure 13. Region 10 SNAP Recipients – 2015-2018

Source: Supplemental Nutritional Assistance Program (SNAP) Statistics. Texas Heath and HumanServices Commission. https://hhs.texas.gov/about-hhs/records-statistics/data-statistics/supplemental-nutritional-assistance-program-snap-statistics. Accessed May 10, 2019.

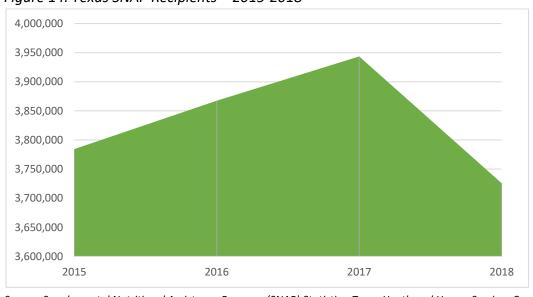


Figure 14. Texas SNAP Recipients - 2015-2018

Source: Supplemental Nutritional Assistance Program (SNAP) Statistics. Texas Heath and HumanServices Commission. https://hhs.texas.gov/about-hhs/records-statistics/data-statistics/supplemental-nutritional-assistance-program-snap-statistics. Accessed May 10, 2019.



#### Free and Reduced-Price School Lunch Recipients

National School Lunch Program (NSLP) provides over 30 million students annually with free or reduced lunches whose household income matches NSLP criteria. Researchers in education often see NSLP enrollment as a proxy for economically disadvantaged individuals. In the 2016-2017 school year, Region 10 had rates of individuals over 70% who were enrolled in the free or reduced lunch program (see Figure 15). In comparison, the state of Texas has remained relatively stable at about 60% of enrolled students from 2013 through 2017. This approximate 10% differential is an indicator of increased food insecurity and poverty in Region 10 in comparison to other parts of the state.

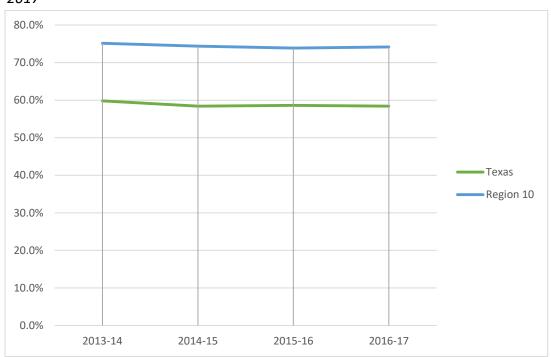


Figure 15. Region 10 and Texas Percentage of Free & Reduced Lunch Students – 2013-2017

Source: U.S. Department of Education, National Center for Education Statistics: Common Core Data. ELSI - Elementary and Secondary Information System. https://nces.ed.gov/ccd/elsi/tableGenerator.aspx. Accessed April 22, 2019.

<sup>20</sup> U.S. Department of Agriculture, Economic Research Service. (2017). National School Lunch Program. Retrieved from https://www.ers.usda.gov/topics/food-nutrition-assistance/child-nutrition-programs/national-school-lunch-program/
21 Hill C. J., Bloom H. S., Black A. R., Lipsey M. W. (2008). Empirical benchmarks for interpreting effect sizes in research. Child Development Perspectives, 2(3), 172–177.



# **Next Action**

- POLICY Data from the National School Lunch Program (NSLP) suggests that Region 10 experiences areas with food shortage and increased poverty.
- **MEDIA** Region 10 contains a large number of individuals who identify with the ethnicity Hispanic.
- ORGANIZATIONS Organizations that can support the community with employment assistance would help boost this protective factor in Region 10.
- **INDIVIDUALS** Local providers need to be mindful at the level of the client's comfort with speaking English as a significant portion of the population does not speak English very well.



# **Environmental Risk Factors**

The development of a substance use disorder is not inevitable, and in fact, some factors increase or decrease the likelihood of someone misusing substances. When a behavior increases the likelihood of substance misuse, then this is referred to as a risk factor at the individual level. Individuals do not interact with the world in isolation, and several factors, including relationships, societal, and environmental factors, impact an individual's risk for developing a substance misuse problem. The increased number of risk factors an individual has then the more likely it is that an individual will develop a substance misuse problem. Within this needs assessment, the environmental risk factors to be discussed include education, criminal activity, mental health, social factors, accessibility, and perceived risk of harm.

#### **Education**

Students spend 16,380 hours from kindergarten to high school. <sup>22</sup> One of the main focuses of education is producing academic success in students. York and colleagues define academic

success to be composed of six components: academic achievement, satisfaction, acquisition of skills and competencies, persistence, attainment of learning objectives, and career success. <sup>23</sup> Research has long supported that education is a strong predictor of health. <sup>24</sup> As such, in the following sections, we will discuss the following roles of drop out rates, school discipline, and homeless students.

Education is a strong predictor of health

#### **Dropout Rates**

The Texas Education Agency (TEA) defines graduation as the percentage of students in cohorts which graduate in the expected graduation time. <sup>25</sup> The TEA dropout rate is the percentage of

<sup>25</sup> Texas Education Agency. Completion, Graduation, and Dropouts Data Search. https://tea.texas.gov/acctres/dropcomp/years.html. Accessed June 4, 2018.



<sup>22</sup> Texas Education Code, §§ 25.081, 0811, §§ 29.0822.

<sup>23</sup> York, T., Gibson, Ch., & Rankin, S. (2015). Defining and Measuring Academic Success. Practical Assessment, Research & Evaluation, 20(5), 1-20.

<sup>24</sup> Jatrana, S., Dayal, S., Richardson, K. et al. J Pop Research (2018) 35: 417. https://doi.org/10.1007/s12546-018-9212-0

students in that cohort who do not return to public school the following fall, are not expelled, received General Education Development (GED) certificate, continue education outside the public school system, begin college, or die. Figures 16 and 17 below describe high school students from each of the counties in Region 10 from 2014 to 2017. The rates below for Region 10 are the average of graduation and dropout rates of each of the counties in the region. In 2017, Region 10 had a dropout rate of 2.7% (see Figure 16), and it had a graduation rate of 96.4% (see Figure 17). From 2014-2017, Region 10 has consistently had a lower dropout rate than the state of Texas, and a graduation rate with an upward trend (see Figure 17).

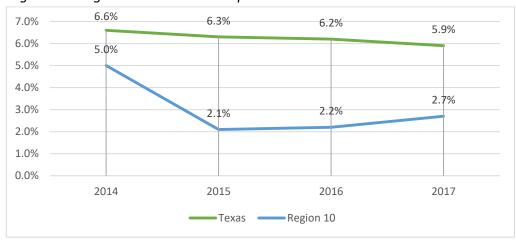


Figure 16. Region 10 and Texas Dropout Rates – 2014-2017

Source: Completion, Graduation, and Dropouts. The Texas Education Agency. https://tea.texas.gov/acctres/dropcomp/years.html. Published October 2018. Accessed April 12, 2019.

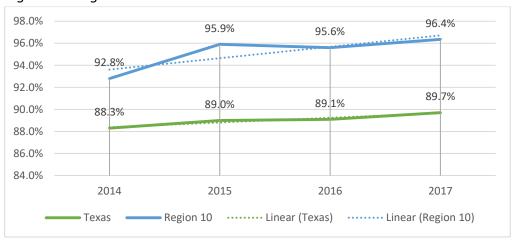


Figure 17. Region 10 and Texas Graduation Rates – 2014-2017

Source: Completion, Graduation, and Dropouts. The Texas Education Agency. https://tea.texas.gov/acctres/dropcomp/years.html. Published October 2018. Accessed April 12, 2019.



# School Discipline

The Education Service Centers (ESC) serve the state of Texas, and this education provider divides Texas into 20 geographic regions. The counties in Region 10 are served by ESC 18 and 19. The data below is derived from TEA, and it depicts information concerning suspensions in Region 10 that are based on controlled substance/drugs, alcohol violation, or tobacco. Data was obtained from the school years 2016-2017 (i.e., 2017) and 2017-2018 (i.e., 2018). Figure 18 describes the percentages of students who received an in-school suspension for the substances mentioned above. Region 10 has seen higher rates of in-school suspensions in comparison to Texas for both the 2017 and 2018 school years. Figure 19 describes the percentages of students who received out-of-school suspensions for a substance use violation. Similarly, to Figure 18, Figure 19 demonstrates that Region 10 has higher rates of suspension in comparison to the Texas rate of out-of-school suspensions.

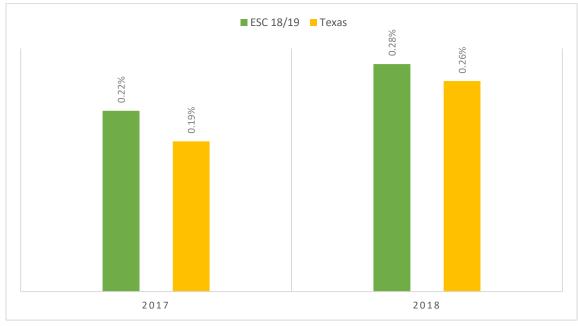


Figure 18. ESC 18/19 and Texas In-School Suspensions – 2017-2018

Source: Texas Education Agency, Counts of Students and Actions by Discipline Actions Reasons and discipline Action Groups Summary Report. PEIMS Data 2016-2017 and 2017-2018.

https://tea.texas.gov/Reports\_and\_Data/Student\_Data/Discipline\_Data\_Products/Discipline\_Action\_Group\_Summary\_R eports/. Published October 2018. Accessed June 3, 2019.

26 Source: Texas Education Agency, Counts of Students and Actions by Discipline Actions Reasons and discipline Action Groups Summary Report. PEIMS Data 2016-2017 and 2017-2018.

https://tea.texas.gov/Reports\_and\_Data/Student\_Data/Discipline\_Data\_Products/Discipline\_Action\_Group\_Summary\_Reports/. Published October 2018. Accessed June 3, 2019.



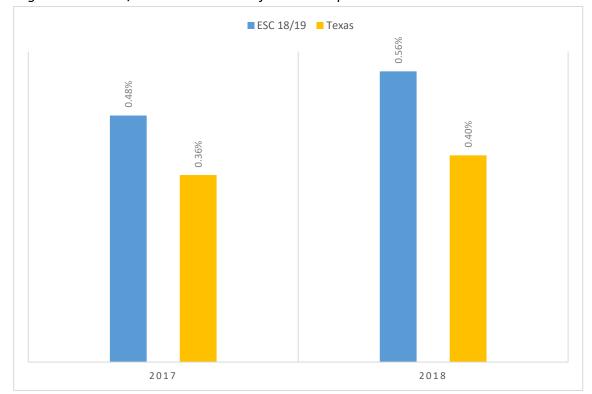


Figure 18. ESC 18/19 and Texas Out-of-School Suspensions – 2017-2018

Source: Texas Education Agency, Counts of Students and Actions by Discipline Actions Reasons and discipline Action Groups Summary Report. PEIMS Data 2016-2017 and 2017-2018.

https://tea.texas.gov/Reports\_and\_Data/Student\_Data/Discipline\_Data\_Products/Discipline\_Action\_Group\_Summary\_R eports/. Published October 2018. Accessed June 3, 2019.

#### **Homeless Students**

Homeless youth is a significant population to monitor as it relates to risk factors and substance misuse. Johnson & Chamberlain identified that homeless youth are at higher risk for developing substance abuse problems when compared to homeless adults. <sup>27</sup> Given this critical risk factor, the TEA has started recording the number of homeless students in the past three academic years. A student is considered homeless if the child does not have a permanent address, which could be the case of individuals moving from house to house or living in a shelter. As noted earlier, Region 10 is composed of ESC 18 and 19. The number of homeless students was added for ESC 18 and 19 to come up with a rate for Region 10. The average rate of homeless students has remained an average of 1.5% from 2017 to 2019 in Region 10. In comparison, the state of Texas saw a sharp increase in 2018 (i.e., 2.1%) and then a return to a lower rate (i.e., 1.3%). The



average homeless student rate for Texas is 1.6%, which is slightly higher than the rate for Region 10.

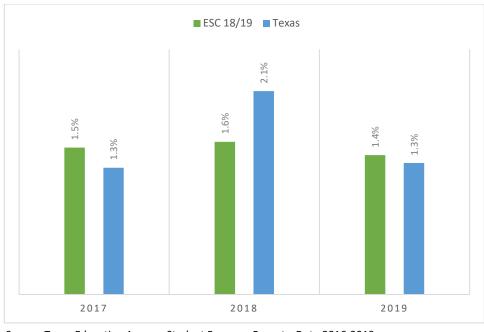


Figure 19. ESC 18/19 and Texas Percent of Homeless Students – 2017-2019

Source: Texas Education Agency, Student Program Reports. Data 2016-2019. https://rptsvr1.tea.texas.gov/adhocrpt/adspr.html. Published June 2019. Accessed June 3, 2019.

# **Criminal Activity**

Criminology research has demonstrated that there is a strong correlation between substance abuse and criminal offending. <sup>28</sup> The National Council on Alcoholism and Drug Dependence identified that 80% of criminal offenses involved alcohol or drugs and 60% of those arrested at

the time of the crime tested positive for drugs. <sup>29</sup> The following data in this assessment are not all inclusive of crime statistics for Region 10. The indicators of criminal activity discussed below include the index of violent crime, property crime,

Key Point

80% of criminal offenses involve drugs

<sup>29</sup> National Council on Alcoholism and Drug Dependence. 2015. "Facts about Alcohol." National Council on Alcoholism and Drug Dependence. Accessed December 31, 2018. https://www.ncadd.org/about-addiction/alcohol/facts-about-alcohol



<sup>28</sup> Welte JW, Barnes GM, Hoffman JH, Wieczorek WF, Zhang L. Substance involvement and the trajectory of criminal offending in young male. Am J Drug Alcohol Abuse. 2005;31(2):267-284.

abuse, assault, drug seizures, and trafficking.

#### Index Violent Crime

Data from criminal offenses were obtained through the Texas Department of Public Safety's Uniform Crime Reporting (UCR) System. <sup>30</sup> The system tracks crimes as it relates to murder, rape, and assault as demonstrated below. Table 8 describes the violent crime count by the offense in Region 10 counties. The county with the highest number of crimes was El Paso County. The county with the lowest reported violent crimes was Culberson. The third column in Table 8 describes the percent change from 2016 to 2017. A positive number in the percent change column indicates an increase, and a negative number in the percent change column indicates a decrease.

Table 8. Violent Crime Count by Offense – 2016-2017

		-							
Drowston		2016	2017	PCT Change			2016	2017	PCT Change
	Murder	1	1	0.00	Jeff	Murder	0	1	-
Brewster	Rape	5	3	-40.00	Davis	Rape	1	0	- 100.00
	Assault	59	71	20.34		Assault	3	3	0.00
	Murder	0	0	-	Presidio	Murder	0	0	-
Culberson	Rape	0	0	-		Rape	0	1	-
	Assault	0	0	-		Assault	20	10	-50.00
	Murder	23	21	-8.70	_				
El Paso	Rape	378	441	16.67	_				
	Assault	10,481	10,764	2.70	<del>-</del>				
Hudspeth	Murder	0	0	-	_				
	Rape	0	0	-	_				
	Assault	7	9	28.57	_				

Source: Texas Department of Public Safety, Crime in Texas Online. Data 2016-2017. https://txucr.nibrs.com/Home/Index. Published 2019. Accessed June 4, 2019.

<sup>30</sup> Texas Department of Public Safety, Crime in Texas Online. Data 2016-2017. https://txucr.nibrs.com/Home/Index. Published 2019. Accessed June 4, 2019.



# **Index Property Crime**

Table 9 was also pulled from the same UCR system mentioned in the previous section. In comparison to the last section, Table 9 demonstrates property crimes in Region 10 by county. El Paso County has the highest amount of property crimes in Region 10. Even though El Paso County has high counts of property crime, burglary and motor vehicle theft are down from 2016 to 2017. Again, Culberson County has the lowest number of reported property crime in Region 10.

Table 9. Property Crime Count by Offense – 2016-2017

		2016	2017	PCT Change
Brewster	Burglary	39	44	12.82%
brewster	Larceny – Theft	76	49	-35.53%
	Motor Vehicle Theft	2	8	300.00%
	Burglary	0	0	-
Culberson	Larceny – Theft	0	0	-
	Motor Vehicle Theft	0	0	-
	Burglary	1,781	1,603	-9.99
El Paso	Larceny – Theft	11,656	11,758	0.88
	Motor Vehicle Theft	928	898	-3.23
	Burglary	0	0	-
Hudspeth	Larceny – Theft	11	1	-90.91
	Motor Vehicle Theft	1	1	0.00
	Burglary	8	5	-37.50
Jeff Davis	Larceny – Theft	0	3	-
	Motor Vehicle Theft	0	1	-
	Burglary	17	6	-64.71
Presidio	Larceny – Theft	20	13	-35.00
	Motor Vehicle Theft	7	1	-85.71

Source: Texas Department of Public Safety, Crime in Texas Online. Data 2016-2017. https://txucr.nibrs.com/Home/Index. Published 2019. Accessed June 4, 2019.



#### **Domestic and Child Abuse**

Between 2003-2012, domestic violence accounted for 21% of all violent victimizations. <sup>31</sup> Domestic violence includes rape, sexual assault, robbery, and assault committed by partners, family, or other relatives. <sup>32</sup> Table 10 displays violence incidents in the state of Texas from the years 2016 to 2017. As demonstrated in Table 10, the incidents, the number of victims, and the number of offenders have seen a decrease from 2016 to 2017.

Table 10. Family Violence – 2016-2017

	2016	2017	PCT Change
Incidents	195,564	195,315	-0.6%
Victims	219,782	212,307	-3.4%
Offenders	219,785	207,231	-5.7%

Source: Texas Department of Public Safety, 2017 Crime in Texas Executive Summary. Data 2016-2017. https://txucr.nibrs.com/Home/ViewPDF?id=7. Accessed June 5, 2019.

There is a direct link between child abuse and domestic violence. <sup>33</sup> One of the most obvious connections is that offenders do not often limit violence towards their partners but also abuse children in the household. One of the risk factors associated with substance misuse includes

abuse. <sup>34</sup> There are many types of abuse and neglect that can affect children, and the Texas Department of Family Protective Services (DFPS) investigates all reported instances of abuse and neglect. The data presented below in Figure 20 was obtained from DFPS. Figure 20 indicates the number of confirmed victims of child abuse or neglect in Region 10 from 2015 – 2018 in comparison to the state of Texas. Region 10 has remained

Key Point Domestic violence accounted for 21% of all violent victimizations

<sup>34</sup> Snyder, S. M., & Medeiros, R. A. (2013). Typologies of substance use and illegal behaviors: A comparison of emerging youth with histories of foster care and the general population. Children and Youth Services Review, 35(5), 753–761. doi:10.1016/j.childyouth.2013.01.021



<sup>31</sup> Bureau of Justice Statistics, National Crime Victimization Survey, 2003–2012.

<sup>32</sup> Truman, J. L., Morgan, R. E. (2014, April). Nonfatal domestic violence, 2013-2012 (Special Report, NCJ 244697). Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

<sup>33</sup> Roberts AR, Greene GJ, eds. Social Workers' Desk Reference. Oxford; New York: Oxford University Press; 2002.

relatively stable at about 2,000 victims since 2015, and in 2018, Region 10 saw a drop in the number of confirmed victims (i.e., 1,676).

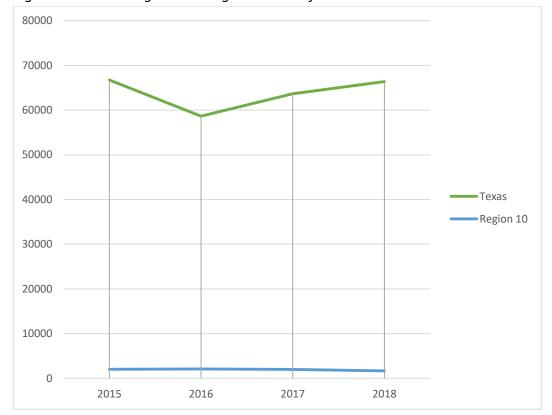


Figure 20. Abuse-Neglect Investigations – Confirmed Victims – 2015 - 2018

Source: Texas Department of Family Protective Services, Abuse/Neglect Investigations – Alleged and Confirmed Victims. Data 2015-2018. https://data.texas.gov/Social-Services/CPS-3-8-Abuse-Neglect-Investigations-Alleged-and-C/v63e-6dss/data. Accessed June 5, 2019.

#### Sexual Assault

Sexual assault data was coalesced from obtaining data on the arresting agencies by county and then developing a list of arresting agencies in Region 10. The list of arresting agencies in Region 10 include: Alpine PD, Anthony PD, Brewster Sheriff's Office, Clint PD, Culberson Sherriff's Office, El Paso County Sheriff's Office, El Paso Community College PD, El Paso ISD PD, El Paso PD, Horizon City PD, Hudspeth Sheriff's Office, Jeff Davis Sherriff's Office, Marfa PD, Presidio Sheriff's Office, Presidio PD, San Elizario PD, Socorro ISD PD, Socorro PD, Sul Ross State University PD, and the University of Texas at El Paso PD. Multi-year data was obtained from the Sexual Assault Report from the Texas Department of Public Safety (DPS) from 2015 to 2018. Figure 21 demonstrates the incidents of sexual assaults in Region 10 for the past four years.



Using Texas Demographic Center and DPS data, the rate of sexual assaults in Texas was four assaults per 10,000 people. This state rate was double in Region 10 (i.e., eight assaults per 10,000 people).

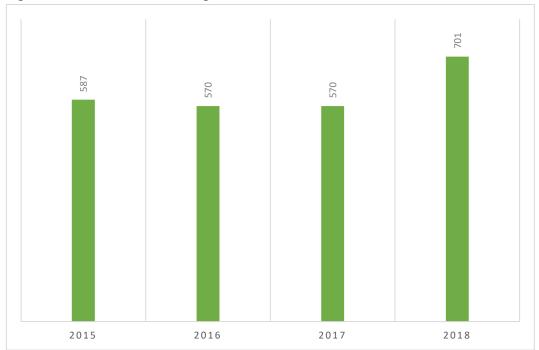


Figure 21. Sexual Assault in Region 10 – 2015 - 2018

Source: Texas Department of Public Safety, Sexual Assault Report. Data 2015-2018. https://txucr.nibrs.com/Report/SexualAssault. Accessed June 6, 2019.

# **Drug Seizures/Trafficking Arrests**

The Texas Department of Public Safety provides data on the drugs seized by agencies in Texas. Agencies were identified for Region 10 as described above and then combined to form a 2018 snapshot for Region 10 drugs seized. Based on 2018 data, the highest amount of drug taken was of packaged marijuana (i.e., 65,983 lbs.). The second most seized drug by agencies in Region 10 was heroin (i.e., 4,135 lbs.). The amount of marijuana seized is surprising,

of marijuana was seized in 2018



especially given that Texas has not legalized recreational or medicinal marijuana use. <sup>35</sup>

Table 11. Type and Quantity of Drugs Seized – Region 10 – 2018

Description	Solid Pounds	Solid Ounces	Solid Grams	Liquid Ounces	Dose Units	Items
Marijuana (Packaged)	65,983	423	0	0	0	0
Hashish (Liquid Oil)	0	0	0	372	0	0
Hashish (Solid)	272	137	306	0	0	0
Opiates (Morphine)	0	2	18	0	50	0
Opiates (Heroin)	4,135	94	162	0	0	0
Opiates (Codeine)	0	0	11	0	89	0
Cocaine (Solid)	350	184	415	0	0	0
Hallucinogens (LSD)	0	0	2	0	11	0
Hallucinogens (Mushrooms)	0	1	61	0	0	0
Hallucinogens (Designer Drugs)	0	2	62	0	0	0
Other Drugs (Barbiturates)	0	0	0	0	45	0
Other Drugs (Amphetamines)	6	32	200	0	24	0
Other Drugs (Methamphetamines)	236	149	466	0	0	0
Other Drugs (Tranquilizers)	0	0	0	0	1,891	0
Other Drugs (Synthetic Narcotics)	0	0	0	122	190	0
Clandestine Labs	0	0	0	0	0	5

Source: Texas Department of Public Safety, Type and Quantity of Drugs Seized. Data 2018. https://txucr.nibrs.com/Report/DrugSeized. Accessed June 6, 2019.

<sup>35</sup> Frietze, Gabriel; Hernandez, Nora; and Rivera, José O., "A Comprehensive Report on Marijuana: Focus on the Paso Del Norte Region" (2018). Departmental Papers (Pharmacy). 11.



# **Mental Health**

Evidence suggests that when protective factors decrease within individuals, then they have a diminished ability to self-care, and this highlights the importance of mental health. <sup>36</sup> In any given year, 1 in 5 U.S adults experiences mental illness. <sup>37</sup> Of approximately 20 million adults in

the U.S. who experience substance use disorder, at least half of them had a cooccurring mental illness. <sup>38</sup> The co-occurring nature of these disorders also leads us to the knowledge that people who experience a mental illness are more likely than people without a mental illness to have an alcohol or substance use disorder. <sup>39</sup> Despite the high prevalence of mental illness, there are options for treatment, and some individuals do recover from mental illness. Suicide, depression, and psychiatric admissions are discussed in the sections below. Following these sections, general mental health resources are available for individuals in need.

http://site.ebrary.com/id/11014777. Accessed June 17, 2019.

# **Key Point**

Almost half of adults with substance use disorder experience a cooccuring mental illness

#### Suicide

There is a strong correlation between mental health disorders and suicide. For example, patients with bipolar disorder have a high association with suicide completion. <sup>40</sup> As of 2017,

<sup>40</sup> Joyce-Beaulieu D, Sulkowski ML. Cognitive Behavioral Therapy in K-12 School Settings: A Practitioner's Toolkit. New York: Springer Publishing Company; 2015.



<sup>36</sup> Allden K, Murakami N, Maung C. Trauma and Recovery on War's Border: A Guide for Global Health Workers.; 2015.

<sup>37</sup> Any Mental Illness (AMI) Among Adults. (n.d.). Accessed June 17, 2019, from https://www.nimh.nih.gov/health/statistics/mental-illness.shtml#part\_154785

<sup>38</sup> Substance Abuse and Mental Health Services Administration, Results from the 2014 National Survey on Drug Use and Health: Mental Health Findings, NSDUH Series H-50, HHS Publication No. (SMA) 15-4927. Rockville, MD: Substance Abuse and Mental Health Services Administration. (2015). Accessed June 17, 2019 from http://www.samhsa.gov/data/sites/default/files/NSDUH-FRR1-2014/NSDUH-FRR1-2014.pdf
39 Substance Abuse and Mental Health Services Administration. Co-occurring Disorders | SAMHSA - Substance Abuse and Mental Health Services Administration. https://www.samhsa.gov/disorders/co-occurring. Accessed June 17, 2019.

suicide was the 10<sup>th</sup> leading cause of death in all ages. <sup>41</sup> Data also indicates a relationship between substance misuse and suicide. People treated for alcohol misuse or dependence are at ten times greater risk for suicide. <sup>42</sup> The data obtained in Table 12 is from CDC Wonder. In Table 12, data is indicated as suppressed when the data meets the criteria for confidential constraints. The crude death rate is the number of deaths divided by the population, multiplied by 100,000, and rates are considered unreliable when the death rates are based on counts less than twenty. <sup>43</sup>

Table 12. Suicide Rate - Region 10 - 1999-2017

County	Deaths	Population	Crude Rate
Brewster	32	171,976	18.6
Culberson	Suppressed	48,129	Suppressed
El Paso	1,146	14,572,598	7.9
Hudspeth	Suppressed	65,899	Suppressed
Jeff Davis	Suppressed	42,749	Suppressed
Presidio	11	141,329	Unreliable

Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2017 on CDC WONDER Online Database, released December, 2018. Data are from the Multiple Cause of Death Files, 1999-2017, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html on Jun 18, 2019 3:11:13 PM

# **Depression**

Individuals who attempt suicide struggle frequently with depression. Depression is a perceived loss of self-esteem that leads to behavioral changes, like lack of sleep or decreased appetite, and cognitive responses. <sup>44</sup> The relationship between substance misuse and depression is complicated, and it is unclear which one begets the other. <sup>45</sup> What can be said is that one is

<sup>45</sup> Tasman A, Kay J, Lieberman JA, First MB, Riba MB, eds. Psychiatry. Fourth edition. Chichester, West Sussex: John Wiley & Sons, Ltd; 2014.



<sup>41</sup> NIMH » Suicide. https://www.nimh.nih.gov/health/statistics/suicide.shtml. Accessed June 19, 2019.

<sup>42</sup> Center for Substance Abuse Treatment. (2009). Addressing Suicidal Thoughts and Behaviors in Substance Abuse Treatment. Treatment Improvement Protocol (TIP) Series 50. HHS Publication No. (SMA) 09-4381. Rockville, MD: Substance Abuse and Mental Health Services Administration.

<sup>43</sup> Multiple Cause of Death 1999-2017. https://wonder.cdc.gov/wonder/help/mcd.html#Top15. Accessed June 18, 2019.

<sup>44</sup> Washington CM, Leaver DT. Principles and Practice of Radiation Therapy.; 2016.

https://nls.ldls.org.uk/welcome.html?ark:/81055/vdc\_100031862089.0x0000001. Accessed June 18, 2019.

often associated with the other, which is the reason that we discuss the depression indicator. Figure 22 has information on the percentage of individuals with depression from 2011 - 2017. The two lines compare the proportion of individuals from Texas and the United States. Based on this figure, the percentage of individuals with depression has been more substantial in the United States in comparison to Texas residents.

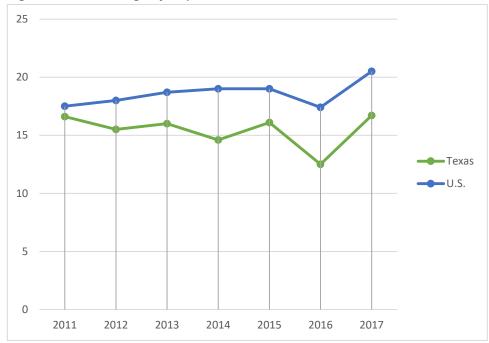


Figure 22. Percentage of Depressed Adults in U.S. vs. Texas, 2011 - 2017

Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2015. [accessed Mar 13, 2019]. URL: https://www.cdc.gov/brfss/brfssprevalence/.

# **Inpatient Hospital Admissions**

Data below was obtained from the Texas Health Data Center for Health Statistics. The data described in Figure 22 is from inpatient utilization related to mental diseases and disorders for the years 2011, 2012, and 2013. Data was not available for Culberson, Hudspeth, Jeff Davis, and Presidio counties. From the three years, the data below indicates that the average stay was 13 days and cost about \$20,000. Most of the mental health hospitalizations were covered through private health insurance, and 13,820 individuals were discharged to home or self-care. Figure 22 also indicates that the majority of individuals hospitalized were male.



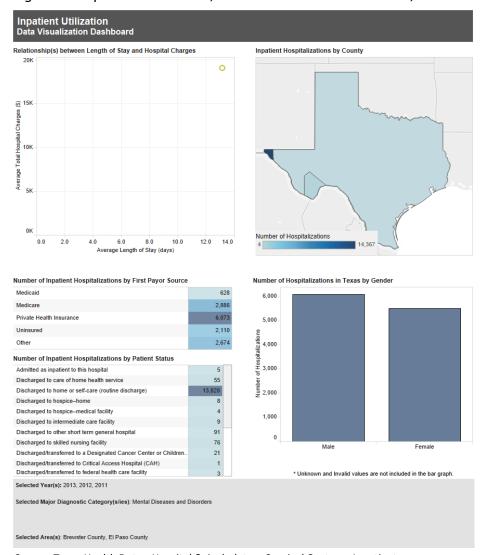


Figure 23. Inpatient Utilization, Data Visualization Dashboard, 2011 – 2013

Source: Texas Health Data - Hospital & Ambulatory Surgical Centers - Inpatient. http://healthdata.dshs.texas.gov/Hospital/InpatientUtilization. Accessed June 19, 2019.

#### **Local Mental Health Authorities**

Texas Health and Human Services contract local mental health authorities (LMHAs) to provide services to specific areas. Region 10 has two LMHAs. Each LMHA offers services to assess and intervene in times of a mental health crisis. LMHAs are available 24 hours a day, seven days a week. Brewster, Culberson, Hudspeth, Jeff Davis, and Presidio counties are served by the LMHA known as PermiaCare, formerly Permian Basic Community Centers.



If you need general information, call their main line at 432-570-3333, and for mental health emergencies contact them at 1-844-420-3964.  $^{46}$  The El Paso County LMHA is Emergence Health Network. If you need information contact them at 915-877-3410 and for emergencies call their toll free crisis line at 1-877-562-6467.  $^{47}$ 

#### **Social Factors**

Social factors impact individual health at all stages of life. <sup>48</sup> For examples, youth may be surrounded by peers who enjoy drinking alcohol, which would influence this individual to partake in underage drinking. Peer approval of substance use independently predicts future substance dependence. <sup>49</sup> Social factors can also limit access to health care. Delivery of health care may be discriminatory, making it harder for individuals because of their language, race, and age. <sup>50</sup> To get a better understanding of substance use risks, one must consider norms, peer behaviors, and culture. These topics are discussed in the below sections.

# Youth Perception of Parental Approval of Consumption

The following three sections will focus on the social norms of substance consumption. Data from these sections will be extracted from the Texas School Survey (TSS) of Drug and Alcohol use. This survey collects self-reported information on tobacco, alcohol, and other drugs from students in grades 7 through 12 in Texas public schools. <sup>51</sup> In Figure 23 and 24, the TSS asked students the following question, "How Do Your Parents Feel About Kids Your Age Using (Tobacco/Alcohol/Marijuana)?" <sup>52</sup> This question is important because some studies suggest that parents who have an authoritative parenting style help youth avoid substance misuse. <sup>53</sup> According to 2016 data from Figure 23, 66.3% of students reported that their parents strongly disapprove of kids their age using alcohol. Figure 23 indicates that parents have stronger disapproval for the use of tobacco (i.e., 81.1%) in 2016. In Figure 24, the rates of parent

<sup>53</sup> Fan R. Family-Oriented Informed Consent East Asian and American Perspectives.; 2015.



<sup>46</sup> Permia Care. https://www.pbmhmr.com/. Accessed June 18, 2019.

<sup>47</sup> Home - Emergence Health Network. https://emergencehealthnetwork.org/. Accessed June 18, 2019.

<sup>48</sup> Orlowski M. Introduction to Health Behaviors: A Guide for Managers, Practitioners & Educators. Cengage Learning; 2015.

<sup>49</sup> Taylor J, Lloyd DA, Warheit GJ. Self-Derogation, Peer Factors, and Drug Dependence Among a Multiethnic Sample of Young Adults. Journal of Child & Adolescent Substance Abuse. 2006;15:39-51. doi:10.1300/j029v15n02\_03

<sup>50</sup> Wills J, ed. Fundamentals of Health Promotion for Nurses. 2nd edition. Chichester, West Sussex: Wiley Blackwell; 2014.

<sup>51</sup> Home - Texas School Survey. https://www.texasschoolsurvey.org/. Accessed June 18, 2019.

<sup>52</sup> Texas School Survey Drug and Alcohol Use 2018. https://www.texasschoolsurvey.org/Documents/Reports/NonBorder/18Nonborder712.pdf. Accessed June 20, 2019.

disapproval for smoking (79.6%) and alcohol (63.6%) decreased in 2018. In 2018, TSS also added marijuana usage. 74.9% of students reported that parents would strongly disapprove of youth their age using marijuana.

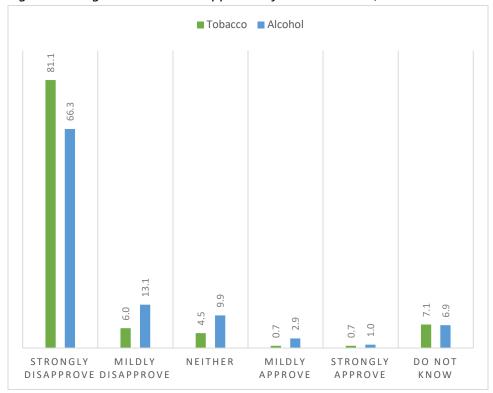


Figure 24. Region 10 Parental Approval of Substance Use, 2016

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.



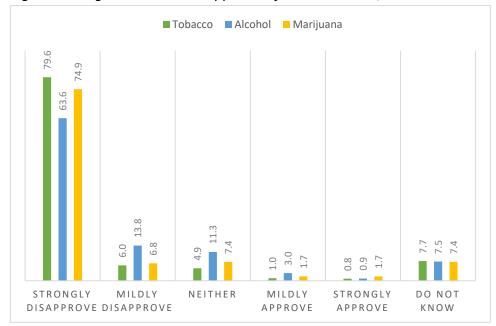


Figure 25. Region 10 Parental Approval of Substance Use, 2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

# Youth Perception of Peer Approval of Consumption

Parents have a strong influence on youth misuse, but an adolescent's peers also have a strong power on substance use. Youth who do not conform to peer norms become targets of peer teasing. <sup>54</sup> Some studies suggest that peers and adolescents influence each other bidirectionally. For example, adolescent use predicted peer substance use, and peer use predicted increases in teenage alcohol use. <sup>55</sup> As a result of this steady influence, TSS also asks students about whether or not their friends use any substances. The question is, "About how many of your close friends use (tobacco/alcohol/marijuana)?"<sup>56</sup> Figures 25 and 26 capture student beliefs of peer usage and includes all grade levels (grades 7-12) captured in the TSS. In 2016, 24.4% of students believed that a few of their friends consumed alcohol. Perceived alcohol use was the highest of all the substances. Similarly, 25.3% of students in 2018 thought that a few of their friends consumed alcohol.

<sup>55</sup> Sher KJ, ed. The Oxford Handbook of Substance Use and Substance Use Disorders. Volume 1. New York, NY: Oxford University Press; 2016.
56 Texas School Survey Drug and Alcohol Use 2018. https://www.texasschoolsurvey.org/Documents/Reports/NonBorder/18Nonborder712.pdf.
Accessed June 20, 2019.



<sup>54</sup> Nadal KL. The SAGE Encyclopedia of Psychology and Gender.; 2017.

https://ebookcentral.proquest.com/lib/UWY/detail.action?docID=4933235. Accessed June 24, 2019.

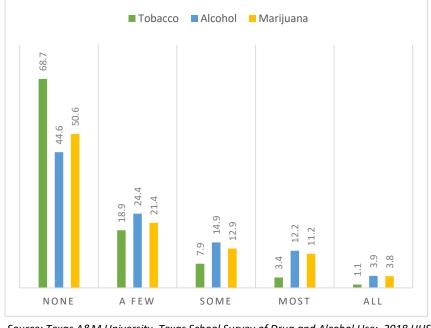


Figure 26. Region 10 Peers Using Substances, 2016

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. <a href="http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf">http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf</a>.

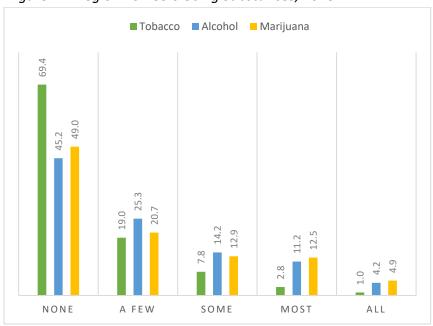


Figure 27. Region 10 Peers Using Substances, 2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.



#### **Cultural Norms and Substance Abuse**

Culture influences our perspective on the world and our views of using substances. <sup>57</sup> Cultural factors can increase or decrease the likelihood for individuals to misuse substances. As described earlier in the RNA, El Paso is the densest populated area in Region 10, and Region 10 consists of a majority Latino population. The Latino community has the cultural norms of creating social gatherings with the focus on alcohol use, and often in these gatherings, parents invite their children to drink alcohol for the first time. These cultural trends lead to some point of concern for the region. In 2016, 20.6% of adults and 1 in 5 youth reported binge drinking in the previous 30 days. <sup>58,59</sup> According to the Texas Department of Transportation, El Paso County had 963 crashes related to driving under the influence in 2015, while, in 2016, 32.9% of motor vehicle crash deaths involved alcohol use. <sup>60</sup> Of particular concern is the steady increase in deaths associated with chronic liver disease and cirrhosis, which is nearly double the death rate (22.7 v 12.6) of Texas. <sup>61</sup>

#### **Adolescent Sexual Behavior**

The Youth Risk Behavior Surveillance System (YRBSS) monitors health behaviors that "...contribute to the leading causes of death and disability among youth and adults." <sup>62</sup> It is important to note that Figure 27 is not region specific and describes reported information from students who reside in Texas. This data on sexual behaviors are stated in the RNA because substance use often creates the environment for sexual activity to occur. For example, prevalence data indicate that high amounts of substance use among young adults is a risk

57 Heath DB. CULTURE AND SUBSTANCE ABUSE. Psychiatric Clinics of North America. 2001;24(3):479-496. doi:10.1016/S0193-953X(05)70242-2

58 Healthy Paso del Norte. (2018a). Healthy Paso del Norte :: Indicators :: Adults who Binge Drink :: County : El Paso, TX. Retrieved October 19,

2018, from http://www.healthypasodelnorte.org/indicators/index/view?indicatorId=58&localeId=2645

59 Paso del Norte Health Foundation. (2016). Underage Drinking in El Paso: A status report. Retrieved from

https://pdnhf.s3.amazonaws.com/documents/files/000/000/080/original/FINAL\_Underage\_drinking\_in\_El\_Paso\_-

\_a\_status\_report\_11\_1\_16\_%28002%29.pdf?1478203967

60 Healthy Paso del Norte. (2018c). Healthy Paso del Norte:: Indicators:: Alcohol-Impaired Driving Deaths:: County: El Paso, TX. Retrieved

October 21, 2018, from http://www.healthypasodelnorte.org/indicators/index/view?indicatorId=2364&localeId=2645

61 Healthy Paso del Norte. (2018b). Healthy Paso del Norte:: Indicators:: Age-Adjusted Death Rate due to Chronic Liver Disease and Cirrhosis::

County: El Paso, TX. Retrieved October 21, 2018, from

http://www.healthypasodelnorte.org/indicators/index/view?indicatorId=2339&localeId=2645

62 YRBSS | Youth Risk Behavior Surveillance System | Data | Adolescent and School Health | CDC.

https://www.cdc.gov/healthyyouth/data/yrbs/index.htm. Published March 13, 2019. Accessed July 2, 2019.



factor for acquiring a sexually transmitted infection. <sup>63</sup> Of particular importance in the figure below is the fact that since 2007, the percentage of students who have reported any sexual activity has decreased.

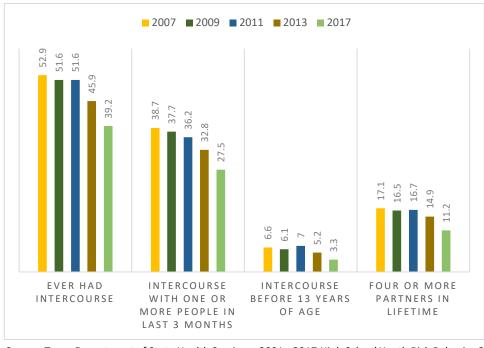


Figure 28. Texas Adolescent's Sexual Behavior, 2007-2017

Source: Texas Department of State Health Services. 2001 - 2017 High School Youth Risk Behavior Survey Data. Available at http://healthdata.dshs.texas.gov/HealthRisks/YRBS/. Accessed on March 16, 2019.

# Misunderstandings about Marijuana

The most recent data available indicates that marijuana is the most commonly used illicit drug in the United States. <sup>64</sup> The massive influx of users stems from two main factors. First, more and more states are legalizing marijuana use. Second, research has identified more medicinal purposes for marijuana. As the trend of users continues to rise, the perception of how harmful the substance is is declining. <sup>65</sup> Surprisingly, the potency or concentration of marijuana used today is much stronger than in previous years. <sup>64</sup> Despite the frequent use of the substance, it is not free from risks. Marijuana use during the developing adolescent brain increases the risk of

<sup>65</sup> maria.fleitas. Know the Risks of Marijuana. https://www.samhsa.gov/marijuana. Published March 25, 2019. Accessed July 2, 2019.



<sup>63</sup> Understanding HIV And STI Prevention For College Students. Taylor & Francis Ltd; 2016.

http://www.vlebooks.com/vleweb/product/openreader?id=none&isbn=9781134656554. Accessed July 2, 2019.

<sup>64</sup> National Survey on Drug Use and Health. 2016 National Survey on Drug Use and Health: Detailed

Tables. https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2016/NSDUH-DetTabs-2016.pdf. 2016:3263. Accessed July 2, 2019.

developing a substance use disorder. <sup>66</sup> Studies demonstrate that when individuals start using marijuana before the age of 18, the rate of addiction is one in every six adolescents. <sup>64</sup>

# **Accessibility**

When adolescents engage in substance use during brain development, the brain begins to develop differently. The substance often rewires the adolescent brain, which tricks the brain's reward system into wanting that substance. <sup>67</sup> This individual factor often changes one's perception of accessing drugs. In this RNA, accessibility refers to how one perceives the access to specific substances, and this perception is influenced by increased acceptance and availability within a community. Laws that prevent alcohol and tobacco sales to minors also affect perceived access. Other factors, like family, schools, and businesses, also may influence

perceived access. Family can negatively impact perceived access by being a social host for adolescent parties. The acceptance by peers or schools to substance use, either implicitly or explicitly, can also influence accessibility. A community can positively influence perceived access by passing a social host ordinance that limits youth access to alcohol.

Key Point 22% of youth perceive it is very easy to access alcohol

# Perceived Access of Alcohol

Alcohol is one of the most commonly used drugs worldwide. <sup>68</sup> In 2015, 86.4 percent of Americans ages 18 or older reported that they had drunk alcohol in their lifetime, and 56 percent said drinking within the past month. <sup>69</sup> Most of the usage of this substance is driven by the legality of the drug, the wide availability, and the positive physical effects. Following

66 Ammerman S, Ryan S, Adelman WP, THE COMMITTEE ON SUBSTANCE ABUSE, THE COMMITTEE ON ADOLESCENCE. The Impact of Marijuana Policies on Youth: Clinical, Research, and Legal Update. PEDIATRICS. 2015;135(3):e769-e785. doi:10.1542/peds.2014-4147 67 Califano JA, OverDrive I. How to Raise a Drug-Free Kid. Place of publication not identified: Touchstone; 2014. http://api.overdrive.com/v1/collections/v1L2BaQAAAJcBAAA1M/products/652078d3-093d-46da-88d2-7605bba12907. Accessed July 2, 2019. 68 Ware LB, Bastarache JA, Calfee CS. Acute Respiratory Distress Syndrome.; 2014. http://site.ebrary.com/id/11001131. Accessed July 2, 2019. 69 Substance Abuse and Mental Health Services Administration (SAMHSA). 2015 National Survey on Drug Use and Health (NSDUH). Table 2.41B—Alcohol Use in Lifetime, Past Year, and Past Month among Persons Aged 12 or Older, by Demographic Characteristics: Percentages, 2014 and 2015. Available at: https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTab 2015.htm#tab2-41b. Accessed 1/18/17.



ingestion, alcohol is absorbed into the blood. Once in the blood, the effects of alcohol may appear as early as 10 minutes. <sup>70</sup> Figure 28, from the TSS, highlights data on how difficult it would be for students to access alcohol. This data demonstrates the years 2016 and 2018 for students in all grades of the TSS. Of particular importance in 2018, 30.2 percent of students in Region 10 have never heard of alcohol.

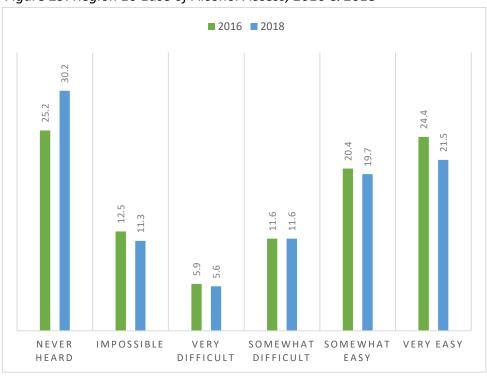


Figure 29. Region 10 Ease of Alcohol Access, 2016 & 2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

#### **Alcohol Sales Violations**

In a recent report, the economic burden of underage drinking was estimated to cost \$1.8 billion per year.  $^{71}$  A contributing factor to the above mentioned financial burden is attributed to alcohol outlet violations and sales to minors. Region 10 has a total number of 1,685 alcohol

\_a\_status\_report\_11\_1\_16\_%28002%29.pdf?1478203967. Accessed October 8, 2018.



<sup>70</sup> Marion NE, Oliver WM, eds. Drugs in American Society: An Encyclopedia of History, Politics, Culture, and the Law. Santa Barbara, Calif.: ABC-CLIO; 2015.

<sup>71</sup> Underage Drinking in El Paso: A Status Report. Paso del Norte Health Foundation; 2016.

https://pdnhf.s3.amazonaws.com/documents/files/000/080/original/FINAL\_Underage\_drinking\_in\_El\_Paso\_-

permits or establishments that are permitted to sell alcohol either on-premise or off-premise. <sup>72</sup> El Paso County has the highest amount of outlets in the region and therefore, the largest number of citations. Comparable data from the entire state was not available through the Texas Alcohol and Beverage Commission public inquiry website. The data displayed in Figure 29 consists of the total number of violations in Region 10 and the number of violations associated with alcohol sales to minors. An important point to highlight In 2018 is that 24% of violations are attributed to alcohol sales to minors.

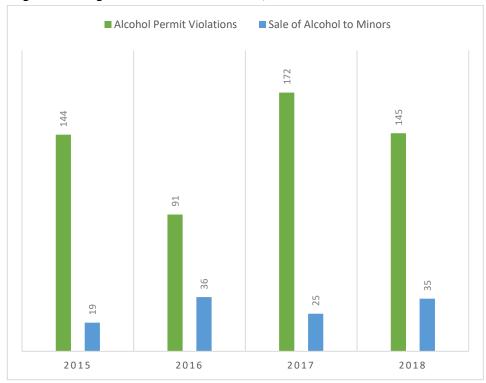


Figure 30. Region 10 Alcohol Violations, 2015-2018

Source: TABC Public Inquiry. https://www.tabc.texas.gov/PublicInquiry/AdminViolations.aspx. Accessed July 8, 2019.

# **Social Host Citations**

2016 data from the TSS states that 11.5% of youth respondents generally access alcohol through parties.<sup>73</sup> Given this access point, many communities pass local ordinances to deter parties that involve underage drinking. One of the most common prevention deterrents is a social host ordinance. A social host ordinance holds the individual owner as responsible for

http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf



 $<sup>72\</sup> Texas\ Alcoholic\ Beverage\ Commission.\ https://www.tabc.texas.gov/PublicInquiry/RosterSummary.aspx.\ Accessed\ 4/1/2019.$ 

<sup>73</sup> Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report.

allowing a gathering involving underage drinking. <sup>74</sup> El Paso, Texas was the first city in the state to pass a Social Host Ordinance in December 2017. 75 Since the passing of the ordinance to date, El Paso has had 64 citations issued for violations of the ordinance (see Figure 30). Of those individuals who received a citation, they can choose to pay a fine or have the option of taking an alcohol education class instead of the fine.



Figure 31. El Paso Social Host Citations by Month, 2017 - 2019

Source: El Paso Police Department. Social Host Accountability Ordinance Citations. Accessed July 8, 2019.

# Perceived Access of Tobacco

Tobacco is the leading cause of preventable death in the United States. <sup>76</sup> One in every five deaths in the United States is

Key Point Smoking rates have decreased by 6.9%

<sup>76</sup> U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress. A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014 [accessed 2015 Aug 17].



<sup>\*</sup> Indicates partial years tracked

<sup>74</sup> Mcconnell C, Sewing G, Barnett G. Social Host Accountability. 2017

<sup>75</sup> First city in Texas to adopt civil Social Host Ordinance | Paso del Norte Health Foundation | El Paso, Texas. https://pdnhf.org/news/first-cityin-texas-to-adopt-civil-social-host-ordinance. Accessed July 8, 2019.

attributable to cigarette smoking. <sup>77</sup> Although smoking has declined from a prevalence of 20.9% in 2005, there remains 14.0% who currently smoke as of 2017. <sup>78</sup> Smoking damages almost every organ of the body and leads to various diseases and cancers. <sup>79</sup> Given the severe toxicity of tobacco, the TSS assesses what the perceived access of smoking is. In Figure 31, the majority of students report that they have never heard of tobacco (39.1%), but there was a slight decrease in the number of students who said it was impossible or very difficult to access from 2016 to 2018.

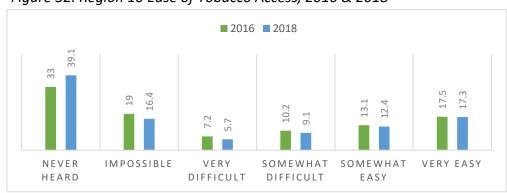


Figure 32. Region 10 Ease of Tobacco Access, 2016 & 2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

# Perceived Access of Marijuana

Marijuana is the most widely used illegal drug in the United States. <sup>80</sup> One in every ten adults will become addicted from the substance. <sup>81</sup> Marijuana affects the parts of the brain involved in

<sup>81</sup> Lopez-Quintero, C, et al. (2011). Probability and predictors of transition from first use to dependence on nicotine, alcohol, cannabis, and cocaine: results of the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC). Drug Alcohol Depend. 115(1-2): p. 120-30.



<sup>77</sup> Centers for Disease Control and Prevention. QuickStats: Number of Deaths from 10 Leading Causes—National Vital Statistics System, United States, 2010. Morbidity and Mortality Weekly Report 2013: 62(08);155 [accessed 2015 Aug 17].

<sup>78</sup> Centers for Disease Control and Prevention. Current Cigarette Smoking Among Adults—United States, 2017. Morbidity and Mortality Weekly Report 2018;67(44):1225-32 [accessed 2019 Jan 30].

<sup>79</sup> U.S. Department of Health and Human Services. How Tobacco Smoke Causes Disease: What It Means to You. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2010 [accessed 2017 Apr 20].

<sup>80</sup> Substance Abuse and Mental Health Services Administration. (2017). Key substance use and mental health indicators in the United States:

Results from the 2016 National Survey on Drug Use and HealthExternal. Rockville, MD: Center for Behavioral Health Statistics and Quality,

Substance Abuse and Mental Health Services Administration.

memory, learning, attention, decision making, coordination, emotions, and reaction time. <sup>82</sup> There is still a lot to study about the consequences or benefits of marijuana, but what is known is that more and more individuals are beginning to use this substance. Given the rise in usage, the TSS assesses the perceived access of marijuana. Figure 32 highlights that most students report never hearing about this substance (i.e., 35%). Remarkably, most students suggest that it is easier to access marijuana (i.e., 21%) than tobacco (17%).

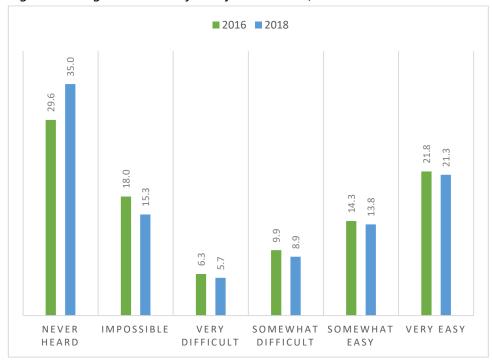


Figure 33. Region 10 Ease of Marijuana Access, 2016 & 2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

# **Tobacco and Other Nicotine Products Access**

A massive step in limiting youth access to tobacco was the passing of the T21 state bill. Through T21, Texas raised the tobacco sales age to 21 to limit youth access. <sup>83</sup> Limiting tobacco access

https://www.mdanderson.org/newsroom/2019/05/texas-raises-tobacco-sales-age-to-21-to-limit-youth-exposure-and-protect-health.html. Accessed July 9, 2019.



<sup>82</sup> Batalla A, Bhattacharyya S, Yücel M, et al. (2013). Structural and functional imaging studies in chronic cannabis users: a systematic review of adolescent and adult findings. PloS One. 8(2):e55821. doi:10.1371/journal.pone.0055821.

<sup>83</sup> Release MAN. Texas raises tobacco sales age to 21 to limit youth exposure and protect health. MD Anderson Cancer Center.

also has the benefit of limiting the likelihood of youth using other substances. <sup>84</sup> Unfortunately, due to the drastically increased use of youth using e-vapor products, this limits the considerable decreases in tobacco usage. Of note, some studies suggest that there is an association between these e-vapor products and tobacco use. <sup>85</sup> From 2009 to 2017, Texas has seen decreased rates of current tobacco users, current smokers, daily smokers, and current smokeless tobacco users (see Figure 33). During this period, the state did not see a decrease in individuals who smoked before age 13. This trend is likely a result of the popularization of e-vapor products. As a result of this increase, the YRBS started asking students if they have ever used e-vapor products. Of particular importance for the state and Region 10 is that 41.2% of students reported using e-vapor products at one point in their lifetime (see Figure 34).

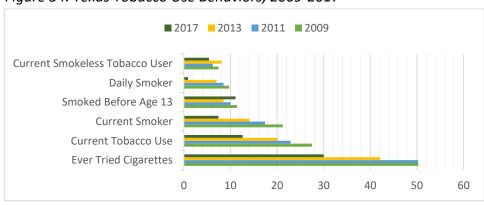


Figure 34. Texas Tobacco Use Behaviors, 2009-2017

Source Texas Department of State Health Services. 2001 - 2017 High School Youth Risk Behavior Survey Data. Available at http://healthdata.dshs.texas.gov/HealthRisks/YRBS/. Accessed on March 16, 2019.

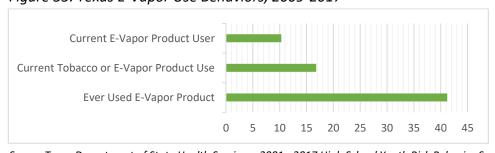


Figure 35. Texas E-Vapor Use Behaviors, 2009-2017

Source Texas Department of State Health Services. 2001 - 2017 High School Youth Risk Behavior Survey Data. Available at http://healthdata.dshs.texas.gov/HealthRisks/YRBS/. Accessed on March 16, 2019.

84 Why Nicotine is a Gateway Drug. National Institutes of Health (NIH). https://www.nih.gov/news-events/nih-research-matters/why-nicotine-gateway-drug. Published May 22, 2015. Accessed July 9, 2019.

85 Chaffee BW, Watkins SL, Glantz SA. Electronic Cigarette Use and Progression From Experimentation to Established Smoking. Pediatrics. March 2018:e20173594. doi:10.1542/peds.2017-3594



# Marijuana Access

E-vapor products not only pose a risk to increase tobacco use, but it can also be used to deliver marijuana. <sup>86</sup> One-third of the United States middle and high school students have reported using marijuana in e-cigarettes. <sup>87</sup> The rise in these e-vapor products has led to increased marijuana access. Some research suggests that people will regularly try marijuana before trying other substances. <sup>88</sup> Data from the Youth Risk Behavior Survey (see Figure 34) indicates that lifetime marijuana use, past 30-day use, and experimenting with marijuana before the age of 13 has slightly decreased since 2009.

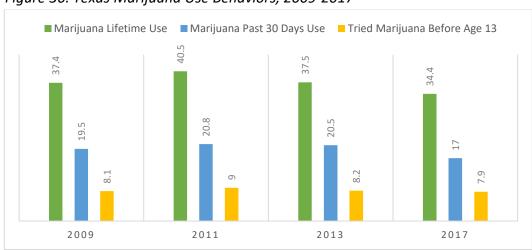


Figure 36. Texas Marijuana Use Behaviors, 2009-2017

Source Texas Department of State Health Services. 2001 - 2017 High School Youth Risk Behavior Survey Data. Available at http://healthdata.dshs.texas.gov/HealthRisks/YRBS/. Accessed on March 16, 2019.

#### Illegal Drugs on School Property

The substances mentioned above are problematic because individuals can access them at homes, parties, or other social settings. Addressing substance misuse in youth is even more troublesome because some students get their drugs at school. As a result of this and other criminal activity, many school districts have started hiring peace officers. Part of the role of peace officers in schools is to confiscate and deter youth from accessing or using substances on

<sup>88</sup> Secades-Villa R, Garcia-Rodríguez O, Jin CJ, Wang S, Blanco C. Probability and predictors of the cannabis gateway effect: a national study. Int J Drug Policy. 2015;26(2):135-142. doi:10.1016/j.drugpo.2014.07.011.



<sup>86</sup> Office of the Surgeon General. E-cigarette Use among Youth and Young Adults: A Report of the Surgeon General Cdc-pdf[PDF–8.47 MB]. Washington, DC: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2016.

<sup>87</sup> Trivers KF, Phillips E, Gentzke AS, Tynan MA, Neff LJ. Prevalence of Cannabis Use in Electronic Cigarettes Among US Youth. JAMA pediatrics. 2018;172(11):1097-1099.

campuses. One of the indicators tracked in the YRBS is the percentage of Texas students who were offered, sold, or given drugs. Figure 35 is a scatter plot from 2001 to 2017 that demonstrates a decreasing trend.



Figure 37. Percentage of Texas students who were offered, sold, or given an illegal drug on school property by someone during the past 12 months, 2001-2017

Source Texas Department of State Health Services. 2001 - 2017 High School Youth Risk Behavior Survey Data. Available at http://healthdata.dshs.texas.gov/HealthRisks/YRBS/. Accessed on March 16, 2019.

# **Perceived Risk of Harm**

Human beings are hard-wired for survival, and as such, individuals are vigilant of the things that would decrease our likelihood of survival. Based on this premise, our perception of substance use harm would be an essential determinant to the consumption of that substance. For example, the higher the perception of harm of a substance, the less likely an individual is to consume. Similarly, the less perceived harm of a substance, the more likely one is to consume a substance. Given the importance of assessing harm, the TSS asks students how they view the harm of the following substances: alcohol, tobacco, marijuana, and prescription drugs (see Figure 36). The TSS asks students, "How dangerous do you think it is for kids your age to use (alcohol/tobacco/marijuana/prescription drugs)?" Figure 36 captures the percentage of TSS respondents who stated that the substance was "very dangerous". A comparison of these drugs demonstrates that prescription drugs are perceived to be the most dangerous, and alcohol is perceived to be the least dangerous. Figure 36 also compares respondents between 2016 and 2018. Between these two years, TSS respondents showed a decrease perception of danger in



alcohol, tobacco, and marijuana. Interestingly, the perception of danger increased for prescription drugs.

ALCOHOL TOBACCO MARIJUANA PRESCRIPTION DRUGS

Figure 38. Percentage of Region 10 students who reported substances as being perceived as very dangerous, 2016-2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

# **Next Action**

- **POLICY** 41.2% of youth have used e-vapor products at some point in their lifetime.
- **MEDIA** El Paso Police Department has issued 65 citations in violation of the social host ordinance.
- ORGANIZATIONS Region 10 has higher rates of student suspension in comparison to the state as a whole.
- **INDIVIDUALS** Region 10 is experiencing double the amount of sexual assaults in contrast to rest of Texas.



# **Regional Consumption**

Understanding consumption patterns is a crucial component in preventing substance misuse. Awareness and general knowledge of consumption are of great importance for the communities public health. Data presented below comes primarily from the TSS, which is collected by the Public Policy Research Institute (PPRI) at Texas A & M University. The following sections will discuss consumption information regarding alcohol, tobacco, marijuana, prescription drugs, and other related topics.

#### **Alcohol**

Alcohol use is a natural occurrence on the border. People drink alcohol to relax, socialize, and many other reasons. The effects of alcohol vary between individuals and are influenced by how much people drink, how often, their age, their health, and family history. Excessive drinking can cause many problems such as impairment of motor coordination, decision-making, impulse control, and other functions. <sup>89</sup> Long term alcohol misuse can lead to alcohol use disorder, cancers, and other health problems. <sup>90</sup> In this needs assessment section, consumption will be evaluated by comparing the years 2016 and 2018. The reasoning for selecting these years is that TSS included an all grades category beginning in 2016, and the all grades category allows for a more straightforward method for reviewing the data below.

# Age of Initiation

Research by DeWit and colleagues describes the risks involved in early age use of alcohol. This study found that the first use of alcohol at ages 11-14 increased the likelihood of the individual progressing to an alcohol disorder. <sup>91</sup> The average age of all grades

Key Point 13.4 is the average age of first use of alcohol in Region 10

combined is 13.4 years of age. As a community, we need to find strategies to delay first use to

<sup>91</sup> DeWit DJ, Adlaf EM, Offord DR, Ogborne AC. Age at first alcohol use: a risk factor for the development of alcohol disorders. Am J Psychiatry. 2000;157(5):745-750. doi:10.1176/appi.ajp.157.5.745



<sup>89</sup> Understanding the Dangers of Alcohol Overdose. National Institute on Alcohol Abuse and Alcoholism (NIAAA).

https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/understanding-dangers-of-alcohol-overdose. Published April 25, 2019.

Accessed July 10, 2019.

<sup>90</sup> Overview of Alcohol Consumption. National Institute on Alcohol Abuse and Alcoholism (NIAAA). https://www.niaaa.nih.gov/overview-alcohol-consumption. Published September 14, 2011. Accessed July 10, 2019.

assist with preventing later problems in life. Figure 37 describes the average age of initiation for grades 7-12 in the 2018 TSS. It is important to note that the age of initiation was not surveyed in the year 2016, and as such, the below data only includes data for 2018. The youngest average age of first use is from 7<sup>th</sup> graders at 10.4 years of age.



Figure 39. Region 10 - Average Age of First Use of Alcohol, 2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

#### **Current Use**

In 2015, 7.7 million youth (ages 12-20) reported that they drank alcohol in the past month. 92 Based on this data, underage drinking is a national problem. The problem of underage drinking can lead to death, injury, assault, and many other consequences. TSS surveys students grades 7-12 and asked them if they have drunk alcohol in the past month. This data further breaks down recent month use by alcohol type. The data presented below capture data between 2016 and 2018. The most popular choice was beer at 16.9% and 14.4% in 2016 and 2018, respectively. This figure is based on 32.1% of students polled who reported that they had some type of alcohol (see Figure 38).



Figure 40. Region 10 - Past Month Alcohol Use - Grades 7-12, 2016-2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

<sup>92</sup> Substance Abuse and Mental Health Services Administration (SAMHSA). 2015 Key Substance Use and Mental Health Indicators in the United States: Results from the 2015 National Survey on Drug Use and Health. Figure 24. Rockville, MD: SAMHSA, 2016. Available at: http://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2015/NSDUH-FFR1-2015/NSDUH-FFR1-2015.htm#fig24. Accessed 1/20/17.



# Lifetime Use

Similar to the past month, most students reported drinking beer (i.e., 43.6% in 2018). In contrast to previous month use, TSS found that 54.5% of students had reported using alcohol at some point in their lifetime. Between the years 2016 and 2018, students reported cosuming less beer, wine coolers, wine, and liquor (see Figure 39). Unfortunately, about half of students in Region 10 reported drinking alcohol, and research indicates that when youth do drink, they typically consume more than 90 percent of their alcohol by binge drinking. <sup>93</sup>

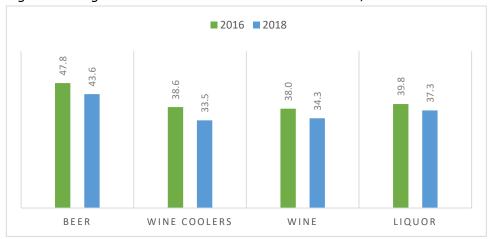


Figure 41. Region 10 - Ever Used Alcohol - Grades 7-12, 2016-2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

# Binge Drinking

National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines binge drinking as a pattern of drinking that brings a person's blood alcohol concentration to 0.08 grams percent. <sup>94</sup> NIAAA estimates that binge drinking typically occurs at five drinks for men and four drinks for women in about 2 hours. <sup>95</sup> When it comes to alcohol use, the more one drinks, the more likely it is that one will experience alcohol problems. So if one binge drinks, this puts individuals at an even higher risk of experiencing alcohol problems. Fortunately, 87% of students in 2018 reported

<sup>95</sup> National Institute on Alcohol Abuse and Alcoholism (NIAAA). NIAAA Council Approves Definition of Binge Drinking. NIAAA Newsletter, No. 3, Winter 2004. Available at: http://pubs.niaaa.nih.gov/publications/Newsletter/winter2004/Newsletter\_Number3.pdf. Accessed 9/19/16.



<sup>93</sup> Underage Drinking. National Institute on Alcohol Abuse and Alcoholism (NIAAA). https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/underage-drinking. Published April 25, 2019. Accessed July 10, 2019.

<sup>94</sup> CDC - Fact Sheets-Binge Drinking - Alcohol. https://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm. Published February 13, 2019.

Accessed July 10, 2019.

that they have never binge drank in the past 30 days (see Figure 40). This indicator is up from the previous published year in 2016 (i.e., 85.5%).

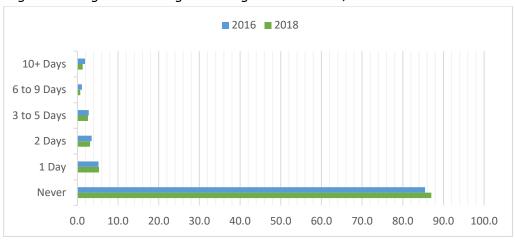


Figure 42. Region 10 - Binge Drinking - Grades 7-12, 2016-2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

#### **Tobacco**

Thanks to the community's response to tobacco use, the rates of smoking have dropped significantly within the past decades. People are seen less frequently in their hometowns, having smoke breaks or smoking in public places. Typically, individuals smoke because of the calming effects of nicotine. This short-term benefit is opposed by the negative short-term consequences of smoking, which include bad breath, fatigue, reduction in taste and smell, coughing, and shortness of breath. <sup>96</sup> As discussed in a previous section, the long-term effects of tobacco use vary greatly. In the below section, tobacco use will be evaluated by reviewing the years of 2016 and 2018.

# Age of Initiation

Kendler and colleagues published a co-twin control study in 2014. <sup>97</sup> This article looked at tobacco use in twins and found that age at onset of regular smoking predicted the level of nicotine dependence. In the most recent sample of TSS students, 13.8 was the average age of first use of tobacco. Region 10 should focus on strategies that focus on delaying or preventing

<sup>97</sup> Kendler KS, Myers J, Damaj MI, Chen X. Early smoking onset and risk for subsequent nicotine dependence: a monozygotic co-twin control study. Am J Psychiatry. 2013;170(4):408-413. doi:10.1176/appi.ajp.2012.12030321



<sup>96</sup> The Effects of Smoking and Second-Hand Smoke on Health. https://www.quebec.ca/en/health/advice-and-prevention/healthy-lifestyle-habits/smoke-free-lifestyle/the-effects-of-smoking-and-second-hand-smoke-on-health/. Accessed July 10, 2019.

tobacco use in youth. These type of plans will minimize the likelihood of nicotine dependence in youth. Similar to alcohol age of initiation, grade 7 had the lowest average age of first use of tobacco (see Figure 41). Again, the age of initiation was not asked of students in 2016.

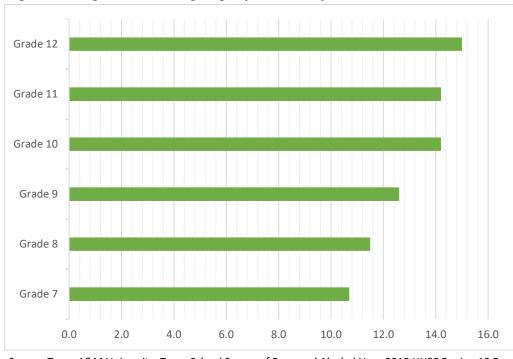


Figure 43. Region 10 - Average Age of First Use of Tobacco, 2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

# **Current Use**

In 2018, 2 of every 100 middle schoolers and 11 of every 100 high schoolers reported the use of two or more tobacco products in the past 30 days. <sup>98</sup> This national data reflects that even though public health professionals have made a dent in preventing tobacco use, there is still work to be done. Given that tobacco use is known to be highly toxic, the TSS surveys students on whether or not they have used a tobacco product in the past month. Students were also asked what type of tobacco product did they use in the past month. The data in Figure 42 depicts the years 2016 and 2018. The most popular choice of tobacco product was electronic vapor products (~10%). Past month tobacco use indicates that any tobacco, cigarettes, and smokeless tobacco had a slight decrease in use between 2016 and 2018 (see Figure 42). Unlike

<sup>98</sup> Centers for Disease Control and Prevention. Vital Signs: Tobacco Product Use Among Middle and High School Students – United States, 2011-2018. Morbidity and Mortality Weekly Report, 2019;68(06) [accessed 2019 Feb 28].



other tobacco products, electronic vapor products had a slight increase in reported use from 10.0 in 2016 to 10.3 in 2018.

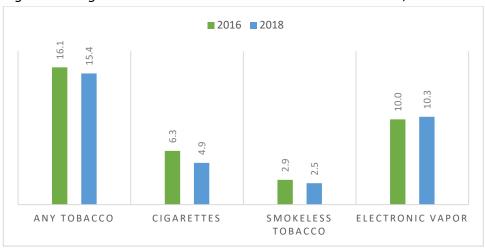


Figure 44. Region 10 - Past Month Tobacco Use – Grades 7-12, 2016-2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

# Lifetime Use

Similar to the past month tobacco use reported data, most students reported using electronic vapor products (i.e., 25.5% in 2018). In contrast to previous month use, TSS identified that 32% of all students had used a tobacco product. Between the years 2016 and 2018, students reported consuming fewer tobacco products (see Figure 43). Unfortunately, less than half of students in Region 10 still report using tobacco products.

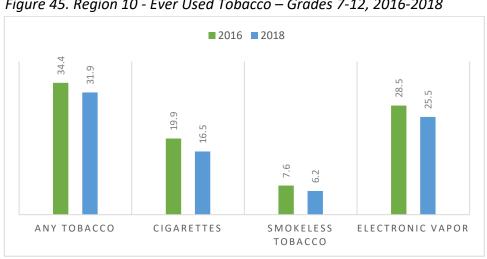


Figure 45. Region 10 - Ever Used Tobacco – Grades 7-12, 2016-2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.



#### Marijuana

A new survey from the Pew Research Center indicates that one in six Americans say that they are in favor of legalizing marijuana. <sup>99</sup> The growth in popularity continues to increase as more states legalize marijuana, and medicinal marijuana finds more benefits to aid in health ailments. The effects of cannabis vary between individuals, but it may include an altered sense of time, changes in mood, difficulty with thinking, impaired memory, hallucinations, delusions, or psychosis. <sup>100</sup> Further research is needed to determine the long-term effects of the use of this drug. Unlike alcohol and tobacco, marijuana is not broken down by types of marijuana usage (e.g., oils, edible) in the analysis below.

#### Age of Initiation

When individuals begin using marijuana earlier in life, they often will smoke more often and demonstrate some negative impact on cognitive performance. <sup>101</sup> Gruber and colleagues described the early onset of marijuana use as before the age of 16. The average age of first use of marijuana across all grades for marijuana is 14 years old. Region 10 needs to put more effort into delaying access to these products to youth. If we provide a strategic approach to addressing marijuana use, then we could decrease the usage of marijuana and deter some of the adverse cognitive effects. According to Figure 44, students in grade 7 were the youngest to start using marijuana (i.e., 11.5 years of age).

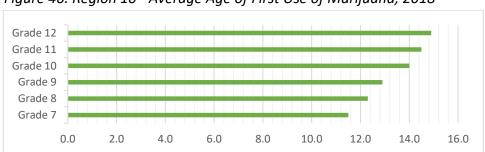


Figure 46. Region 10 - Average Age of First Use of Marijuana, 2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. <a href="http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf">http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf</a>.

99 W 1615 L. St, Suite 800Washington, Inquiries D 20036USA202-419-4300 | M-857-8562 | F-419-4372 | M. 62% of Americans favor legalizing marijuana. Pew Res Cent. https://www.pewresearch.org/fact-tank/2018/10/08/americans-support-marijuana-legalization/. Accessed July 11, 2019

<sup>101</sup> Gruber SA, Sagar KA, Dahlgren MK, Racine M, Lukas SE. Age of onset of marijuana use and executive function. Psychol Addict Behav J Soc Psychol Addict Behav. 2012;26(3):496-506. doi:10.1037/a0026269



<sup>100</sup> Abuse NI on D. Marijuana. https://www.drugabuse.gov/publications/drugfacts/marijuana. Accessed July 11, 2019.

#### **Current Use**

One of the recent trends in administring drugs is the use of vaping or e-vapor products. Data from monitoring the future indicates that five percent of students in the 12th grade have vaped marijuana in the past 30 days. <sup>102</sup> These products have continued the illicit use of marijuana in many states. In Texas, marijuana is still illegal. As such, many young people are being charged with possession or distribution charges. These charges will often translate to a misdemeanor

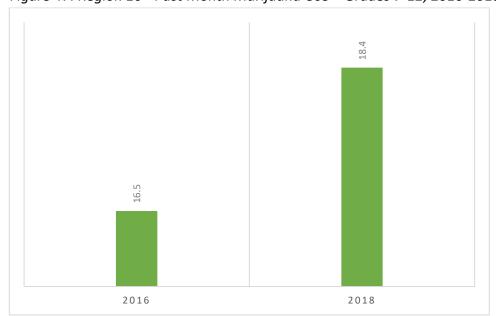
and in some cases a felony, which limits the youth's opportunities for work and school.

Despite these reprecussions, students are still reporting using the substance. 2018 TSS data depicts that there has been an increase in current use (past 30 days) of marijuana between 2016 and 2018 (see Figure 45). In comparison to other substances described in this needs assessment, marijuana usage is on the rise.

Key Point

18.4% of students currently use marijuana

Figure 47. Region 10 - Past Month Marijuana Use - Grades 7-12, 2016-2018



Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

<sup>102</sup> Johnston, L. D., Miech, R. A., O'Malley, P. M., Bachman, J. G., Schulenberg, J. E. & Patrick, M.E. (2018). Monitoring the Future national survey results on drug use, 1975-2017: Overview, key findings on adolescent drug use. Ann Arbor: Institute for Social Research, The University of Michigan. Retrieved from http://www.monitoringthefuture.org/pubs/monographs/mtf-overview2017.pdf



#### Lifetime Use

Similar to the current use of marijuana, there was a slight increase in marijuana lifetime use between 2016 and 2018. 27.% of students reported using marijuana in 2018, and 27% of students reported using marijuana in 2016 (see Figure 46). Despite the negative consequences of using marijuana, more than a quarter of students still say they use or have used marijuana.

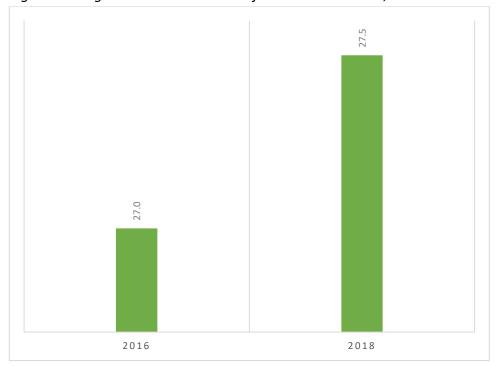


Figure 48. Region 10 - Ever Used Marijuana – Grades 7-12, 2016-2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

## **Prescription Drugs**

Overdose deaths are the highest they have ever been in the United States. <sup>103</sup> The most common reason for these overdose deaths is prescription opioids. <sup>104</sup> The following sections will describe the current and lifetime use of prescription drugs among youth (grades 7-12). The assessment will be reviewing the years 2016 and 2018. The below data is pulled from the TSS, and there is no information on the TSS concerning prescription drugs age of initiation. For the

<sup>104</sup> Rudd RA, Seth P, David F, Scholl L. Increases in drug and opioid-involved overdose deaths—United States, 2010-2015. MMWR Morb Mortal Wkly Rep. 2016;65(5051):1445-1452.



<sup>103</sup> Centers for Disease Control and Prevention National Vital Statistics System 2016 Multiple Cause of Death File. Hyattsville, MD: US Department of Health and Human Services, Centers for Disease Control and Prevention; 2017.

following figures, it is essential to describe what is meant by TSS prescription drugs. Opioids include OxyContine, Percodan, Percocet, Oxycodone, Vicodin, Lortab, Lorcet, or Hydrocodone. Benzodiazepines include Valium, Diazepam, Xanax, or others of this class. Lastly, amphetamines include Adderall, Ritalin, Dexedrine, Concerta, or Focalin.

#### **Current Use**

Recent data that nearly one in two Americans (46%) used prescription drugs in the past 30 days. <sup>105</sup> This number is staggering when you consider that unlike other epidemics, prescription drugs have not been isolated to a specific segment of the population. Despite this massive figure, Monitoring the Future data indicates that opioid misuse has dropped significantly, and this is in part due to youth access to prescription drugs. <sup>106</sup> Figure 47 highlights students polled from grades 7–12 between the years 2016 and 2018. The TSS data states that there was a decrease in prescription drug use from 2016 to 2018. Also, 2018 TSS data indicates that only 1.4% of students reporting using opioids in the past month. The most common type of prescription drug misuse in Region 10 is codeine cough syrup.

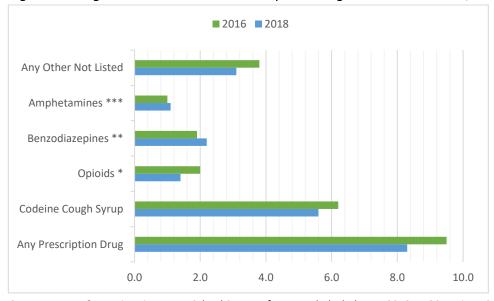


Figure 49. Region 10 - Past Month Prescription Drug Use – Grades 7-12, 2016-2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf.

https://www.drugabuse.gov/publications/drugfacts/monitoring-future-survey-high-school-youth-trends. Accessed July 11, 2019.



<sup>105</sup> National Center for Health Statistics. National Health and Nutrition Examination Survey 1988–2016 data documentation, codebook, and frequencies: Prescription medications–drug information (RXQ\_DRUG). 2019.

<sup>106</sup> Abuse NI on D. Monitoring the Future Survey: High School and Youth Trends.

#### Lifetime Use

Data from the TSS looks different when you look at lifetime use of prescription drugs. Students were asked if they had ever used (prescription drugs/codeine cough syrup/opioids/benzodiazepines/amphetamines/ other). Figure 48 indicates that reported lifetime use remained about the same from 2016 to 2018. In some cases, data on particular prescription drugs, like codeine cough syrup, increased from one year to the next.

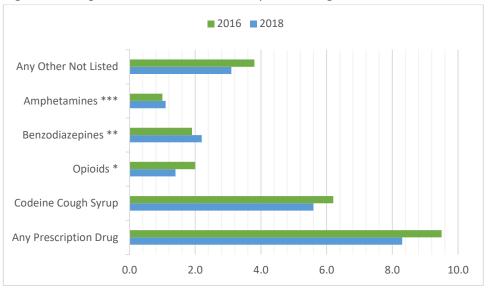


Figure 50. Region 10 - Ever Used Prescriptions Drugs - Grades 7-12, 2016-2018

Source: Texas A&M University. Texas School Survey of Drug and Alcohol Use: 2018 HHSC Region 10 Report. <a href="http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf">http://www.texasschoolsurvey.org/Documents/Reports/Region/18Region10.pdf</a>.

## **College Student Consumption**

A study by O'Malley and Johnston who reviewed national college surveys found that about two of five American college students were heavy drinkers. <sup>107</sup> This data point is consistent with the

findings of PPRI. The Texas College Survey of Substance Use collects self-reported data twice a year on substance use and other factors. Data reviewed below include information on the current use of Texas college students. All drugs are not included in the figure below because they were less

Key Point

More than half of college students use alcohol

107 O'Malley PM, Johnston LD. Epidemiology of alcohol and other drug use among American college students. J Stud Alcohol Suppl. 2002;(14):23-39.



than 3.5% of college students who reported using the substance. These removed substances include synthetic marijuana, cocaine, stimulants, sedatives, hallucinogens, heroin, other narcotics, and MDMA. Figure 49 describes the most commonly used substance is alcohol, followed by tobacco, and then finally, marijuana. As highlighted in figure 49, the differences between years are minimal.

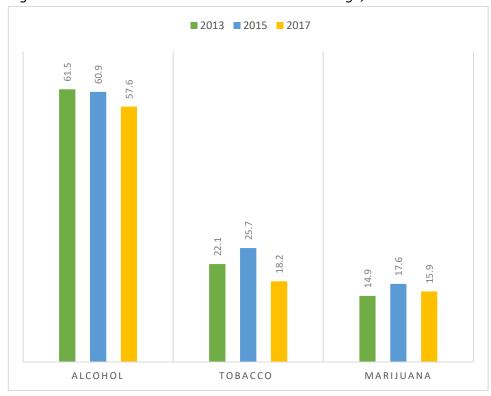


Figure 51. Texas - Past Month Substance Use – College, 2013-2010

Source: M.P. Trey Marchbanks III, PhD. Texas College Survey. Public Policy Research Institute (PPRI). https://texascollegesurvey.org. Published August 2017. Accessed March 27, 2019

## **Special Topic: Update on Opioids Epidemic**

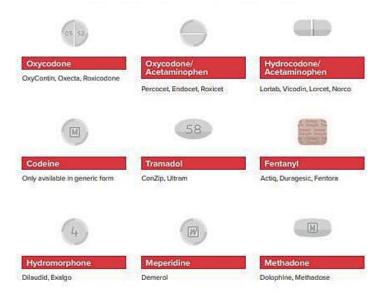
Approximately 130 citizens of the United States die every day from an opioid overdose. <sup>108</sup> Opioids are a medication class that is used to decrease pain. <sup>109</sup> The medications do this by attaching to the body's pain receptors, which blocks the sensation of pain. The image below describes commonly known opioids. <sup>110</sup>

<sup>109</sup> Opioid Basics | Drug Overdose | CDC Injury Center. https://www.cdc.gov/drugoverdose/opioids/index.html. Accessed July 11, 2019. 110 Common-Opioids-2.jpg (526×812). https://www.opidemic.org/wp-content/uploads/2019/04/Common-Opioids-2.jpg. Accessed July 11, 2019.



<sup>108</sup> Wide-ranging online data for epidemiologic research (WONDER). Atlanta, GA: CDC, National Center for Health Statistics; 2017. Available at http://wonder.cdc.gov.

#### Prescription Opioids - Common Opioids



Source: Common-Opioids-2.jpg (526×812). https://www.opidemic.org/wp-content/uploads/2019/04/Common-Opioids-2.jpg. Accessed July 11, 2019.

To end the opioid crisis, the Texas State Board of Pharmacy created the Texas Prescription Monitoring Program (PMP). The PMP, "...collects and monitors prescription data for all Schedule II, III, IV, and V Controlled Substances (CS) dispensed by a pharmacy in Texas or to a Texas resident from a pharmacy located in another state." <sup>111</sup> Between the years of 2017 to 2018, prescription drug dispensing has decreased as highlighted in Table 13. The Texas State Board of Pharmacy did not have data on Culberson, Hudspeth, and Jeff Davis. As such, Region 10 totals are not available.

Table 13. PMP Dispensing by County – Region 10 – 2018

	2017 2018		Grand
	2017	2016	Total
Brewster	13,867	13,227	27,094
El Paso	752,068	710,712	146,2780
Presidio	1,387	1,745	3,132
Grand Total	767,322	725,684	1,493,006

Source: Texas State Board of Pharmacy. Open Records Request. PMP by County and DEA Schedule. Published May 2019. Accessed June 6, 2019.

111 Texas Prescrption Monitoring Program (PMP). https://www.pharmacy.texas.gov/PMP/. Accessed July 11, 2019.



#### **Emerging Trend – E-Cigarettes**

Initially, the vaping epidemic was taken up by adult hobbyist. As vaping devices evolved, the U.S. started to see a migration of users. Unexpectedly, U.S. youth has seen an increase in vaping rates. The rapid rise in youth users has led to a public health dilemma. This debate has, on the one hand, a potential tool to help adult smokers quit, and on the other hand, vaping can potentially grab hold of a hold new generation of youth users.

Within the past year, the Prevention Resource Center (PRC) has seen an increase in requests for presentations on vaping. Schools and parents alike are wondering what is vaping. According to the U.S. Department of Health and Human Services, vaping manufacturers spent 125 million dollars in advertising in 2014. These same manufacturers have created more than 7,000 vaping flavors. Lastly, vaping manufacturers have also increased the concentration of nicotine found in these devices, which increases the likelihood of dependence.

The market and environmental factors have led to 3.6 million teens vaping, according to the Center for Disease Control. The Texas School Survey indicates that 25.5% of 7-12 grade students have vaped at some point in their life. With these alarming numbers, what should be the approach of public health professionals?

The short answer is that it depends on the audience. For adults, the message should be that these vaping devices are not FDA approved cessation devices. Although there is some anecdotal evidence that smokers have been using them to quit. The second message for adults is that vaping is less harmful, in terms of carcinogens and chemicals, than traditional cigarettes, but they pose other risks. Vaping is not recommended for youth usage under any circumstances. This message may seem stringent, but public health professionals need to take into account that nicotine can lead to dependence, brain development issues, and could prime the teen for other addictions. The other risks to consider is some of the chemicals found in vaping devices that have been known to cause adverse health effects.

The vaping epidemic will require public health service providers to unite in message and practice. The PRC invites the community to take advance of its free services, which include data collection and distribution, information dissemination, and strengthening regional substance use services through collaborations, trainings, and other mechanisms. To contact us call 915-782-4000 ext. 1322 or visit the PRC website www.prc10tx.org.



## **Next Action**

- **POLICY** More than half of college students in Region 10 report drinking alcohol.
- MEDIA E-cigarettes have led to an increase in tobacco, marijuana, and other substance use.
- **ORGANIZATIONS** Based on TSS data, students in grades 7-12 reported using marijuana in the past 30 days (18.4%).
- INDIVIDUALS The average age of alcohol first use in Region 10 is 13.4 years old.



# Consequences

Substance use and misuse will often lead to addiction. Addiction is a brain disease that is characterized by compulsive substance use regardless of consequences. <sup>112</sup> Although some of these consequences are intentional to satisfy the craving, others may likely be unintended. Consequences, as described below, are adverse health, social, or safety problem related to substance misuse. The consequences described below include mortality, legal issues, hospitalization, economic issues, and others. Often the consequences affect the individual using substances, but these consequences will then trickle into complications in the family, school, and the community.

#### Mortality

Death is the most severe and final of the consequences. Unfortunately, people dying from substance misuse is not an uncommon occurence. As devastating as the loss of a loved one to substance use can be, the damages permeate beyond the deceased and negatively impact the family and friends of the departed. The following data describes death as a result of substance misuse in Region 10.

#### **Overdose Deaths**

Overdose by substance use is a leading contributor to premature death. <sup>113</sup> Table 14 describes the data extracted from the CDC WONDER system. This table represents the counties in Region 10 and states the deaths associated with drugs and alcohol. The crude rate is calculated based

on the number of deaths per 100,000 individuals. When the table indicates suppressed, this means the data meets the criteria for confidential constraints. Also, rates are entered as unreliable when the rate is calculated with a numerator of 20 or less. The county with the highest overdose deaths was El Paso County. 3.3% of the total deaths in this county are attributable to drug overdoses between the years 1999 to 2017.

Key Point El Paso County attributes 3.3% of deaths to overdoses

<sup>113</sup> Drug overdose deaths\*. County Health Rankings & Roadmaps. https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/health-behaviors/alcohol-drug-use/drug-overdose-deaths. Accessed July 23, 2019.



<sup>112</sup> What Is Addiction? https://www.psychiatry.org/patients-families/addiction/what-is-addiction. Accessed July 23, 2019.

Table 14. 1999-2017 Drug and Alcohol Related Deaths

County	Deaths	Crude Rate Per 100K	% of Total Deaths	Population
Brewster County	46	26.7	0.10%	171,976
Culberson County	Suppressed	Suppressed	Suppressed	48,129
El Paso County	2,418	16.6	3.30%	14,572,598
Hudspeth County	Suppressed	Suppressed	Suppressed	65,899
Jeff Davis County	Suppressed	Suppressed	Suppressed	42,749
Presidio County	13	Unreliable	0.00%	141,329

Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death. 1999-2017 on CDC WONDER Online Database, released December, 2018. Data are from the Multiple Cause of Death Files, 1999-2017, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html on Apr 17, 2019 8:22:21 PM

#### **Legal Consequences**

Legal consequences have ramifications that alter an individual's entire life. One example of a legal consequence is a Driving While Intoxicated (DWI) offense. The DWI offense is often reserved for adults over the age of 21 who drive and have a blood alcohol content (BAC) at or above 0.08%. <sup>114</sup> In 2016, 10,497 individuals who died in alcohol-impaired driving crashes,

accounting for 28% of all traffic-related deaths in the United States. <sup>115</sup> A DWI offense has a range of consequences depending on the number of crimes. For example, a third offense DWI can lead an individual to have a \$10,000 fine, two to ten years in prison, loss of driver's license, and an annual fee of \$1,000-\$2,000 for three years. <sup>116</sup> The data in the below sections include alcohol and drug-related incarcerations. This data was provided by the

Key Point In Texas, a DWI can cost an individual up to 2-10 years in prison

<sup>116</sup> Driving While Intoxicated (DWI). https://www.txdot.gov/inside-txdot/division/traffic/safety/sober-safe/intoxication.html. Accessed July 23, 2019.



<sup>114</sup> Difference Between a DUI and DWI in Texas | Board Certified DWI Lawyer. https://www.dougmurphylaw.com/dui-dwi-differences. Accessed July 23, 2019

<sup>115</sup> National Highway Traffic Safety Administration. Traffic Safety Facts 2016 data: alcohol-impaired driving. U.S. Department of Transportation, Washington, DC; 2017 Available at: https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812450External Accessed 16 April 2018.

Texas Department of Criminal Justice, which is the entity that records the type of incarcerations being made in each county.

#### **Adult Alcohol Related Incarcerations**

Figure 50 comes from data on inmates in the prison population who are incarcerated as a result of a DWI. Since 2015, Region 10 has seen an average of 173 inmates per year. From 2015 to 2018, we see a trend that has increased and decreased between these four years. When we compare the average number of Texas inmates with a DWI incarceration (i.e., 6,722), we see that Region 10 ranges between 2.5% -2.9% of the total population. Although 2018 is not as high as 2016, Figure 50 highlights that between 2017 to 2018, there was an increase in individuals incarcerated with a DWI.



Figure 52. Region 10 – Percentage of Incarcerations in Comparison to Texas

Source: Texas Department of Criminal Justice, Drug and Alcohol Incarcerations, 2014 – 2016.

#### **Adult Drug Use Incarcerations**

Table 15 compares drug-related incarcerations for Texas and Region 10. Drug-related incarcerations include drug delivery, drug possession, and other drug incarcerations. When comparing the type of incarcerations, drug possession is the largest between the three categories in both Texas and Region 10. When comparing all kinds of drug-related incarcerations, there is an increase in incarcerations between the years 2015 – 2018.

Table 15. Total Drug Incarcerations, 2015-2018

	2015	2016	2017	2018
Texas	23,577	23,558	23,631	23,963
Region 10	261	246	273	347

Source: Texas Department of Criminal Justice, Drug and Alcohol Incarcerations, 2014 – 2016.



#### **Adolescent Treatment**

Texas HHS provided data on youth treatment services. This data reports information concerning state-funded treatment provided for youth between the ages of 12-17 years of age. The counts

described below are unduplicated counts, which means that each youth serviced is not counted more than once in subsequent service years. Despite this unduplicated count process, youth serviced can receive multiple service types. Between 2014 and 2018, Region 10 has seen a decrease in youth served through state-funded treatment, as seen in Figure 51.

Since 2014, less youth are being treated through state funds



Figure 53. Region 10 Youth Served

Source: Texas Department of State Health Services, Youth Substance Abuse Treatment 2014-2018, Received April 2019.

From the youth that was served in state-funded treatment, Figure 52 describes the same population categorized by kind of drug. In this data, clients could report up to three types of drugs. The stimulant category includes cocaine, methamphetamine, crack, and amphetamine. Opioids include heroin, opiates and synthetics, vicodin, and codeine. Region 10 did not have any youth treated for opioids between the years 2014 to 2018. Also some categories like



benzodiazepines and stimulants had some years where no juveniles were treated for these substances. Most state-funded youth treatment services were for marijuana, as indicated in the figure below.

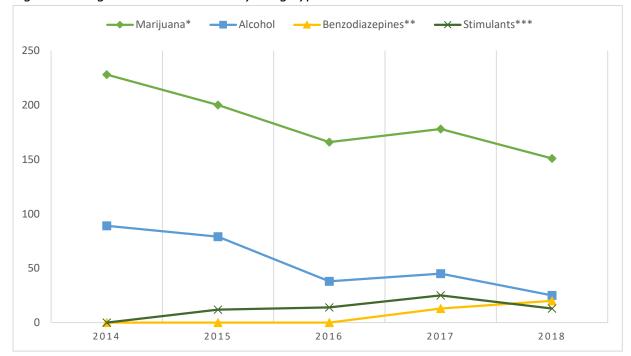


Figure 54. Region 10 Youth Served by Drug Type

 $Source: Texas\ Department\ of\ State\ Health\ Services,\ Youth\ Substance\ Abuse\ Treatment\ 2014-2018,\ Received\ April\ 2019.$ 

## **Next Action**

- **POLICY** The majority of drug incarcerations are a result of drug possession.
- **MEDIA** Between 2014 and 2018, Region 10 has seen a decrease in the number of youth being treated through state funded programs.
- ORGANIZATIONS A third DWI offense can lead an individual to serve two to ten years in prison.
- INDIVIDUALS 3.3% of deaths in El Paso County are attributable to drug overdoses.



## **Environmental Protective Factors**

There is a multitude of opportunities for addressing behavioral health problems and disorders. By increasing the number of evidence-based practices in our community, the more likely we increase protective factors. Prevention is at the core of providing a continuum of care, and part of a comprehensive approach to behavioral health. Prevention strategies are focused on helping develop knowledge, attitudes, and skills to help individuals make good choices and change harmful behaviors. <sup>117</sup> Prevention is an attempt to reach individuals before the onset of a disorder and is intended to prevent or reduce the risk of developing a behavioral health problem. Region 10 is striving to provide services to individuals across the continuum of care and create opportunities for individuals to succeed.

#### **Community Domain**

PRC 10 currently collaborates with many HHSC-funded and non-funded community coalitions, agencies, individuals, and organizations working in prevention services focused on the three state priorities of underage drinking, marijuana, and prescription medication. The mobilization efforts address the needs of populations identified by each of the related sectors. Their goal is to implement evidence-based practices utilizing the Strategic Prevention Framework in promoting the activities related to substance use issues and healthy living in their communities. Many of the partnerships are mentioned below. Future collaborations can only be beneficial in promoting awareness of the substance use issues affecting the counties of Region 10.

#### **Community Coalitions**

HHSC funds Community Coalition Programs (CCP) throughout the state. The coalitions address community concerns regarding the prevention and reduction of the illegal and harmful use of alcohol, tobacco, and other drugs in target counties. <sup>118</sup>

El Paso Advocates for Prevention Coalition is locally known as the El Paso APC. El Paso APC is a community coalition partnership (CCP) serving the communities rural areas of El Paso County. The El Paso APC works towards prevention and reduction of the illegal and harmful use of alcohol, tobacco, and other drugs in El Paso County, amongst youth and adults, by promoting and conducting community-based and evidence-based prevention strategies with key stakeholders.

<sup>118</sup> Texas Department of State Health Services, Substance Abuse Prevention Services: Community Coalition Programs (CCP).



<sup>117</sup> SAMHSA, Prevention of Substance Abuse and Mental Illness, Prevention Strategies.

The **Rio Grande Safe Communities Coalition** (RGSCC) is funded through a Community Coalition Prevention (CCP) through the Texas Department of State Health Services, and is managed and coordinated by UMC's Level I Trauma Center to link local agencies and organizations with local community needs. RGSCC organizes a local coalition composed of community members representing a minimum of 12 sectors (youth, parents, businesses, media, schools, youth-serving organizations, law enforcement agencies, religious or fraternal organizations, civic and volunteer groups, healthcare professionals, state, local or government agencies with expertise in the field of substance abuse, and other organizations involved in reducing substance abuse).

#### **School Domain**

The Texas Department of Health and Human Services has funded several programs to provide service throughout Region 10. These programs not only focus on the individual, but they also create environmental change that supports healthy behaviors. These services are offered through Universal, Selective, and Indicated programming:

- Universal (YPU) Prevention programs that are designed to reach the entire population, without regard to individual risk factors and are intended to reach a vast audience.
- Selective (YPS) Prevention programs that target subgroups of the general population that are determined to be at risk for substance abuse.
- Indicated (YPI) Prevention-intervention programs that identify individuals who are
  experiencing early signs of substance abuse and other related problem behaviors
  associated with substance abuse.

#### **Youth Programs**

**PRIDES** (i.e., YPU) is an acronym for Prevention and Intervention of Drug Abuse through the Enhancement of Self Esteem. The PRIDES program provides universal prevention services that promote a process of addressing health and wellness for individuals, families, and communities in the El Paso County and Culberson County that increase knowledge, skills, and attitudes necessary for making positive life choices. PRIDES services include outreach to the community, linkages to behavioral health services throughout Far West Texas, and the use of Life Skills Training for families to increase pro-social behaviors among that promote healthy and drugfree lifestyles.

With a particular focus on youth ages 12 to 16, **Strengthening Families** (i.e., YPS) is a family-based prevention program that promotes healthy living, awareness of risks related to alcohol, tobacco, and other drugs, and community involvement through activities that are educational, fun and inspiring for everyone in the family. Strengthening Families addresses risks related to substance abuse and other risks factors associated with school failure, delinquency, social



problems and violence at home, school, or in the community, poverty, gang involvement, and other issues.

**IMASTAR** (i.e., YPI) stands for: I'm Motivated to learn, I'm Achieving my goals, I'm Staying drug and alcohol-free, I'm Thinking about my future, I'm Active in my School, I'm Responsible for my success. IMASTAR is a prevention program that has been serving youth in El Paso County since 1994. The program addresses involvement in substance abuse and other high-risk behavior such as poor grades, excessive unexcused absenteeism, tardiness, disruptive behavior, gang activity, repeated suspensions, social problems, and family dysfunction.

Youth in IMASTAR are provided with comprehensive screening and service planning, prevention education skills training, prevention counseling, referral support, AOD presentations, and tobacco presentations. Participants are also engaged in fun activities that are culturally relevant and offset attraction to the use of alcohol, tobacco, or other drugs. The program fosters bonding with peers, family, school, and community.

The **Ysleta Pueblo del Sur** (YDSP) Alcohol and Substance Abuse Program (ASAP) utilizes the Positive Action (PA) curriculum developed by the Center for Substance Abuse Prevention (CSAP). PA is an evidence-based program focused on character development and academic improvement. This program has demonstrated strong evidence of positive effect in prevention and intervention strategies for Native American youth, ages 6-12. When used in an intervention setting, such as counseling, it promotes an intrinsic interest in becoming a better person by encouraging a positive self-concept, educational advancement, and responsible citizenship. **CHOICES Program** is a drug and alcohol prevention program. The goal of the "Choices" program is the prevention of violence, alcohol, tobacco, and other drug use among the youth of El Paso, specifically the CIS targeted areas. CIS provides the Choices program weekly in 8 schools in the Ysleta and Socorro Independent School Districts. CIS Choices provides services for other CIS campuses every month through a presentation, information dissemination, alternative drugfree activities, and career/health fairs.

## **Trends of Declining Substance Use**

Region 10 is experiencing an increase in tobacco use, as well as the increased use of vaping products among youth compared to previous years. A decrease in prescription medication among youth is identified through the survey results of the Texas School Survey. Further trends include the increase of methamphetamine use by adults and prescription medication among the senior population. The information is derived from treatment organizations and coalitions collecting data via surveys and stakeholder discussions.



# **Region in Focus**

Due to its size and location, Region 10 is secluded from the rest of Texas. The need for services in the vast and rural counties is evident when reviewing the data in the regional needs assessment. The region has found ways to be innovative in their approach to substance use treatment services out of the necessity to provide adequate services. The regional data that was collected and contained in this local needs assessment is a glimpse into the region's challenges in the prevention of substance abuse. Further data on Region 10 is available from each section, and additional data related to other topics outside of the realm of substance abuse is available through the PRC-10 upon request.

We hope that organizations, community stakeholders, foundations, or anyone interested in providing services to Region 10 will find this RNA useful in their efforts.

### **Gaps in Services**

The most significant barrier to receiving services is our lack of transportation throughout the region. El Paso County provides a large number of services that are available to the region, yet travel from areas such as Presidio or Marfa takes hours. Furthermore, our colonias in Region 10 suffer from deplorable road conditions where in some cases the roadways are unpaved and flood during even small amounts of rain.

Areas in the region such as Presidio County have expressed to the PRC-10 that services for substance abuse prevention are needed. Rural community stakeholders expressed the need for treatment services for substance misuse because the nearest facility is located in El Paso County, which is 250 miles away. This situation is the case for most of Region 10 when seeking out services for family members for substance abuse and mental health services in the rural counties.

#### **Gaps in Data**

While this assessment is considered comprehensive, the reporting and selection of the measures cannot represent all aspects of health in the community, nor do we serve all populations of interest. As a community, we must recognize the data gaps might, in some ways, limit the ability to assess a community's health needs.

For example, we recognize that certain populations groups were not identified in the assessment by any survey data. It is often difficult to locate other populations by independent analysis such as pregnant women, the LGBT community, and undocumented residents. In terms of content, the Regional Needs Assessment was designed to provide a comprehensive picture of the community's health. However, there are certainly a significant number of behavioral health conditions that were not explicitly addressed.



Our targets for data collection are in the areas of drug abuse treatment and prevention/intervention programs, local hospitals, county and local health departments, medical examiner's office, poison control centers, drug helplines, mental health centers, HIV/STD outreach programs, pharmaceutical associations, county forensic labs, criminal justice/police reports, drug seizures - drug cost/purity, education/school districts, recreation centers, and university researchers.

#### **Regional Partners**

The Prevention Resource Center in Region 10 has found the collaboration of prevention providers a massive success as outlined in the data collected for the RNA, as well as for activities and outcomes for the recent year. Below are some of the successes experienced by the PRC-Region 10 along with its regional partners.

#### **Regional Successes**

The Rise Up Region 10 Task Force was convened in March 2017 to tackle the issue of prescription medication misuse effectively. The Task Force is spearheaded by the Region 10 Prevention Resource Center in El Paso, Texas. Its members effectively monitor any trends in substance use. Region 10 covers the six counties of Brewster, Culberson, El Paso, Hudspeth, Jeff Davis, and Presidio. The Task Force and its members for the recent year participated in conferences, media events, billboard campaigns, and advocacy issues focused on the priority areas. The Task Force has plans to continue their work and focus on the drug trends facing the communities in Region 10.

The Task Force is currently working on strategies that will be applied to campaigns of marijuana and prescription medication to lower the rates of addiction among individuals in Region 10. In doing so, billboards, and other media activities will be marketed to the communities in the six counties.

The Task Force has taken the recommendations from the community, statewide recommendations, and national evidenced-based strategies of the Prescription Monitoring Program and established several drop boxes in the area, educated schools, and created positive prevention materials. Each member of the Task Force is passionate about the issue of substance misuse in their community. Many task force members have been working in substance misuse for many years and have committed their time and efforts to solving our substance use problems. The collaboration of partners has helped to develop relevant prevention messages, the planning of events, and creating media campaigns that continue to air via several media outlets.

Our task force has also created several town hall meetings to discuss substance misuse problems in our community. We have partnered with the El Paso Police Department and the El



Paso Fire Department to place Deterra Medication Disposal Bags in El Paso, Texas. Also, we continue providing prevention education to as many school districts on all related drug trends. Region 10 is fortunate to have such dedicated professionals and leaders to continue working on the prescription drug misuse issue for the healthy success of our communities.

The agencies represented in the Task Force include:

- El Paso Independent School District
- El Paso Police Department
- Rio Grande Safe Communities
- Smoke-Free Paso del Norte
- University of Texas at El Paso
- West Texas Poison Control
- Drug Enforcement Administration
- Trinity Homeward Bound Treatment Services
- Community in Schools
- Emergence Health Network
- Advocates for Prevention
- Paso del Norte Health Foundation
- El Paso Behavioral Health
- West Texas High-Intensity Drug Trafficking Agency
- Community Youth Development Coalition
- Alliance of Border Collaboratives
- Alcohol Impact Network

The PRC10 will continue to expand its outreach and partnerships in the areas of substance use and behavioral health. The prevention work that has occurred in our community would not be possible without our partners throughout our six counties. The PRC-10 looks forward to the privilege of serving the community through people, prevention, and partnerships.



## **Conclusion**

The Regional Needs Assessment report yielded a wealth of information about the health status, behaviors, and needs for our population. A distinct advantage of the RNA is the ability to have a broad focus on the primary and chronic disease needs and other health issues of vulnerable populations, such as uninsured persons and racial/ethnic minority groups.

Based on the findings of the RNA, the community must address issues related to alcohol, marijuana, and prescription drug abuse. The Collective Impact Model, used in Region 10, creates synergy between organizations. Instead of an organization competing against others to obtain the most significant change, though collective impact, organizations work together toward the same goal. <sup>119</sup>

Our community will experience change when we address all risk factors. <sup>120</sup> For collective impact to work, it is vital to identify key players that can converge and organize their goals to align with each other. To achieve this, the PRC-10 will serve the community by facilitating dialogue between key players, managing data collection and analysis, coordinating community outreach, and mobilizing strategies for funding.

#### **Key Findings**

Alcohol is still an issue that needs to be addressed in Region 10. Given the more than 50% of underage drinking, public health providers should continue to support efforts at limiting access to alcohol in our community. Tobacco and prescription drug use have seen a decrease from previous years. Despite this positive indicator, Region 10 has seen an increase in marijuana use. The rise in youth usage of marijuana is likely a result of e-cigarettes. This new form of administering marijuana has led to increased usage. Youth substance use still requires many prevention activities in Region 10. This data suggest that providers should gather their resources and work collaboratively to prevent youth substance misuse. PRC-10 invites regional providers to contact the offices to explore further collaborative approaches to prevention.

<sup>120</sup> Kania, John, and Mark Kramer. "Collective impact." (2011): 36-41.



<sup>119</sup> Hanley Brown, Fay, John Kania, and Mark Kramer. "Channeling change: Making collective impact work." Stanford Social Innovation Review 20 (2012): 1-8.

### **Moving Forward**

The Prevention Resource Center 10 is continuously seeking new and up-to-date data that is relevant to the region as well as the state. The RNA is filled with data that individuals, organizations, and agencies may like to examine more in-depth. Data requests or submissions can be made by contacting:

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# **Glossary of Terms**

30 Day Use	The percentage of people who have used a substance in the 30 days before they participated in the survey.
ATOD	Alcohol, tobacco, and other drugs.
Adolescent	An individual between the ages of 12 and 17 years.
DSHS	Department of State Health Services
Epidemiology	Epidemiology is concerned with the distribution and determinants of health and diseases, sickness, injuries, disabilities, and death in populations.
Evaluation	Systematic application of scientific and statistical procedures for measuring program conceptualization, design, implementation, and utility; making comparisons based on these measurements; and the use of the resulting information to optimize program outcomes.
Incidence	A measure of the risk for new substance abuse cases within the region.
PRC	Prevention Resource Center
Prevalence	The proportion of the population within the region found to already have a certain substance abuse problem.
Protective Factor	Conditions or attributes (skills, strengths, resources, supports or coping strategies) in individuals, families, communities or the larger society that help people deal more effectively with stressful events and mitigate or eliminate risk in families and communities.



Risk Factor	Conditions, behaviors, or attributes in individuals, families, communities or the larger society that contribute to or increase the risk in families and communities.
SPF	Strategic Prevention Framework. The idea behind the SPF is to use findings from public health research along with evidence-based prevention programs to build capacity and sustainable prevention. This, in turn, promotes resilience and decreases risk factors in individuals, families, and communities.
Substance Abuse	When alcohol or drug use adversely affects the health of the user or when the use of a substance imposes social and personal costs. Abuse might be used to describe the behavior of a woman who has four glasses of wine one evening and wakes up the next day with a hangover.
Substance Misuse	The use of a substance for a purpose not consistent with legal or medical guidelines. This term often describes the use of a prescription drug in a way that varies from the medical direction, such as taking more than the prescribed amount of a drug or using someone else's prescribed drug for medical or recreational use.
Substance Use	The consumption of low and/or infrequent doses of alcohol and other drugs such that damaging consequences may be rare or minor. Substance use might include an occasional glass of wine or beer with dinner, or the legal use of prescription medication as directed by a doctor to relieve pain or to treat a behavioral health disorder.
SUD	Substance Use Disorder
TPII	Texas Prevention Impact Index
TSS	Texas Student Survey



#### **VOICES**

Volunteers Offering Involvement in Communities to Expand Services. Essentially, VOICES is a community coalition dedicated to create positive changes in attitudes, behaviors, and policies to prevent and reduce at-risk behavior in youth. They focus on changes in alcohol, marijuana, and prescription drugs.

**YRBS** 

Youth Risk Behavior Surveillance Survey



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## **Regional Contributors**

Since 2014 the Prevention Resource Center for Region 10 has published a Regional Needs Assessment report. Each year the report becomes more inclusive as to the type of data the community needs for prevention programming. HHS supports the required assessment and the completion of the report, but local county data for several indicators are difficult to acquire each year. Given the unique landscape of region 10 with its urban, rural and farming communities, and shared demographics, the PRC still needs data for much of the counties for an accurate snapshot of health and outcome behaviors. If you would be interested in contributing to the Regional Needs Assessment, please contact the Regional Evaluator at (915) 782-4000, to learn what information would be most helpful for the next report. The PRC for Region 10 is committed to a unified and strategic way of using data to address population needs in the region to ultimately achieve health equity!



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