

2024

Regional Needs Assessment

Region 5

Prevention Resource Center

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Executive Summary

What is the Regional Needs Assessment?

The Regional Needs assessment (RNA) is a document created by the Region 5 Prevention Resource Center’s (PRC) Data Coordinator along with Data Coordinators from PRCs across the state of Texas and supported by the Texas Health and Human Services Commission (HHSC). The Region 5 PRC serves the 15 counties of Deep and Southeast Texas.

A needs assessment is the process of determining and addressing the “gaps” between the current conditions and desired conditions in a set environment of demographic.¹ This assessment was designed to aid PRCs, HHSC, and community stakeholders in long-term strategic prevention planning based on the most current information about the unique needs of Texas’ diverse communities. This document will present summary statistics of risk and protective factors associated with substance use and misuse, consumption patterns, and public health consequences. In addition, this report will offer insight into gaps in behavioral health and substance use and misuse prevention services and data in Texas.

Who Created the RNA?

A team of Data Coordinators from all eleven PRCs has gathered national, state, regional, and local data through collaborative partnerships with diverse agencies from the CDC’s twelve sectors for community change, which are:²

- Youth and young adults
- Parents
- Business communities
- Media
- Schools
- Organizations serving youth and young adults
- Religious or fraternal organizations
- Law enforcement agencies
- Civic or volunteer groups
- Healthcare professionals and organizations
- State, local, and tribal government agencies
- Other local organizations involved in promoting behavioral health and reducing substance use and misuse such as recovery communities, Education Service Centers, and Local Mental Health Authorities

PRC 5 recognizes those collaborators who contributed to the creation of this RNA.

How is the RNA informed?

Qualitative data has been collected in the form of focus groups and interviews with key informants. Quantitative data has been collected from federal and state agencies to ensure reliability and accuracy. The information obtained through these partnerships has been analyzed and synthesized together in the form of this RNA.

Key Findings

Comparing the diversity of racial identity and ethnicity demographic make-up of Region 5 to Texas, Region 5 is not keeping pace with the changes as the rest of Texas. For Texas those that identify their race as "Asian" and those that identify their ethnicity as "Hispanic or Latino" are the fastest growing segments of the population. As a percentage of the population, for those that identify as "Hispanic or Latino" is 54.4% fewer than Texas. For those that identify as "Asian" in Region 5, is 90.4% lower than Texas.

According to the Texas School Survey, substance use among students within Region 5 has declined. From 2018 to 2022 the percentage of students consuming alcohol, tobacco, marijuana, and electronic vape products in the "Past Month" has decreased. Electronic vaping decreased by 14%, alcohol use decreased 17%, marijuana use decreased 17%, and alcohol use decreased 34%.

Data from the Texas Department of State Health Services reports that Region 5 has the highest rates of overdose deaths per 100,000 in population than any other region. In 2022, the overdose death rate for Texas was 18.4 and Region 5 was 22.7. Since 2018 the overdose death rate in Texas has been increasing and Region 5's increase has consistently remained above that of Texas.

The rate of overdose deaths reflects the use of fentanyl within Texas and Region 5. Fentanyl-related overdose death rate (8.2) is above the state's rate of 7.3. This is due in part to the increase of fentanyl-contaminated drugs that are being consumed. There is a reported increase in the number of individuals testing positive for fentanyl while they were seeking treatment for other substances. Additionally, the use of xylazine (an animal tranquilizer) with fentanyl is problematic because xylazine is not an opioid and its effects cannot be reversed with naloxone in cases of overdose.

The southern three counties of Region 5, Hardin, Jefferson, and Orange contain over 51% of the region's population, yet there are no HHSC funded substance use prevention programs or CCPs operating within these three counties. ADAC's substance use prevention programs are contracted for the northern twelve counties. Previous substance use prevention programs in the southern three counties ended or were withdrawn.

Introduction

The information presented in this report aims to contribute to program planning, evidence-based decision-making, and community education. The RNA strives to increase knowledge of factors related to substance use and misuse and behavioral health. There are several guiding key concepts throughout the RNA, including a focus on the youth and young adult population and the use of an empirical, public health framework. All key concepts are outlined within their own respective sections.

The information in this needs assessment is based on three main data categories:

1. Exploration of related risk and protective factors as defined by the Center for Substance Abuse Prevention (CSAP);
2. Exploration of drug consumption trends of adolescents with a primary focus on the state-delineated prevention priorities of alcohol (underage drinking), tobacco/nicotine, marijuana, and non-medical use of prescription drugs; and
3. Broader public health and public safety consequences that result from substance use and behavioral health challenges.

The report concludes with a collection of prevention resources in the region, an overview of the region's capacity to address substance use and other behavioral health challenges, and overall takeaways from the RNA.

Prevention Resource Centers (PRCs)

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

PRCs focus on the state's overall behavioral health and the four prevention priorities:

- Underage alcohol use;
- Underage tobacco and nicotine products use;
- Marijuana and other cannabinoids use; and
- Non-medical use of prescription drugs

PRCs have four fundamental objectives:

- Collect data relevant to the state’s prevention priorities, share findings with community partners, and ensure the sustainability of a Regional Epidemiological Workgroup (REW) focused on identifying strategies related to data collection, gaps in data, and prevention needs;
- Coordinate regional behavioral health promotion and substance use prevention trainings;
- Promote substance use prevention and behavioral health promotion with media awareness activities; and
- Conduct voluntary compliance checks on tobacco and e-cigarette retailers and provide education on state tobacco laws to these retailers.

Figure 1. Map of Public Health Service Regions serviced by a Prevention Resource Center:

| | |
|-----------|-------------------------------------|
| Region 1 | Panhandle and South Plains |
| Region 2 | Northwest Texas |
| Region 3 | Dallas/Fort Worth Metroplex |
| Region 4 | Upper East Texas |
| Region 5 | Deep East and 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 |



How PRCs Help the Community

PRCs provide information and education to other HHSC-funded providers, community groups, and other stakeholders through four core areas based on the four fundamental objectives: data, training, media, and tobacco. All core areas work together to position the PRC as a regional hub of information and resources related to prevention, substance use and misuse, and behavioral health in general. PRCs work to educate the community on substance use and misuse and associated consequences through various data products, such as the RNA, media awareness activities, training, and retailer education. Through these actions, PRCs 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.

Data

The PRC Data Coordinators serve as a primary resource for substance use and behavioral health data for their region. They lead a Regional Epidemiological Workgroup (REW), compile and synthesize data, and disseminate findings to the community. The PRC Data Coordinators also engage in building collaborative partnerships with key community members, which aid in securing access to information:

- Develop and maintain the REW;
- Conduct key informant interviews;
- Develop and facilitate at least one region-wide event based on RNA findings;
- Conduct and attend meetings with community stakeholders to raise awareness and generate support to enhance data collection efforts of substance use and behavioral health data;
- Compile and synthesize data to develop an RNA to provide community organizations and stakeholders with region-specific substance use and misuse, behavioral health, and Social Determinants of Health (SDoH) information;
- Direct stakeholders to resources regarding data collection strategies and evaluation activities; and
- Disseminate findings to the community.

Training

The Public Relations Coordinators are tasked with building the prevention workforce capacity through technical support and coordination of prevention training:

- Work directly with HHSC-funded training entities to identify training and learning needs;
- Host and coordinate training for virtual and in-person training; and
- Provide monthly updates to HHSC-funded prevention providers within the region about the availability of substance use and misuse prevention training and related training offered by HHSC-funded training entities and other community-based organizations.

Media

The Public Relations Coordinators use social media and traditional media to increase the community's understanding of substance use prevention and behavioral health promotion:

- Promote consistent statewide messaging by participating in HHSC's statewide media campaign;
- Maintain organizational social media platforms required by HHSC to post original content, share other organizations' posts, and HHSC media; and
- Promote prevention messages through media outlets including radio or television PSAs, media interviews, billboards, bus boards, editorials, and social media.

Tobacco

The PRC Tobacco Coordinators provide education and conduct activities that address retailer compliance with state law. The goal of these tobacco-related activities is to reduce minors' access to tobacco, e-cigarette, and other nicotine products. To accomplish this, Tobacco Coordinators:

- Conduct on-site, voluntary checks with tobacco and e-cigarette retailers in the region to verify compliance with state and federal regulations regarding proper signage and placement of tobacco and e-cigarette products;
- Provide education to tobacco and e-cigarette retailers in the region that require additional information on the most current tobacco and e-cigarette laws as they pertain to minor access; and
- Conduct follow-up voluntary compliance visits with all tobacco and e-cigarette retailers who have been cited for violation of tobacco and e-cigarette regulations.

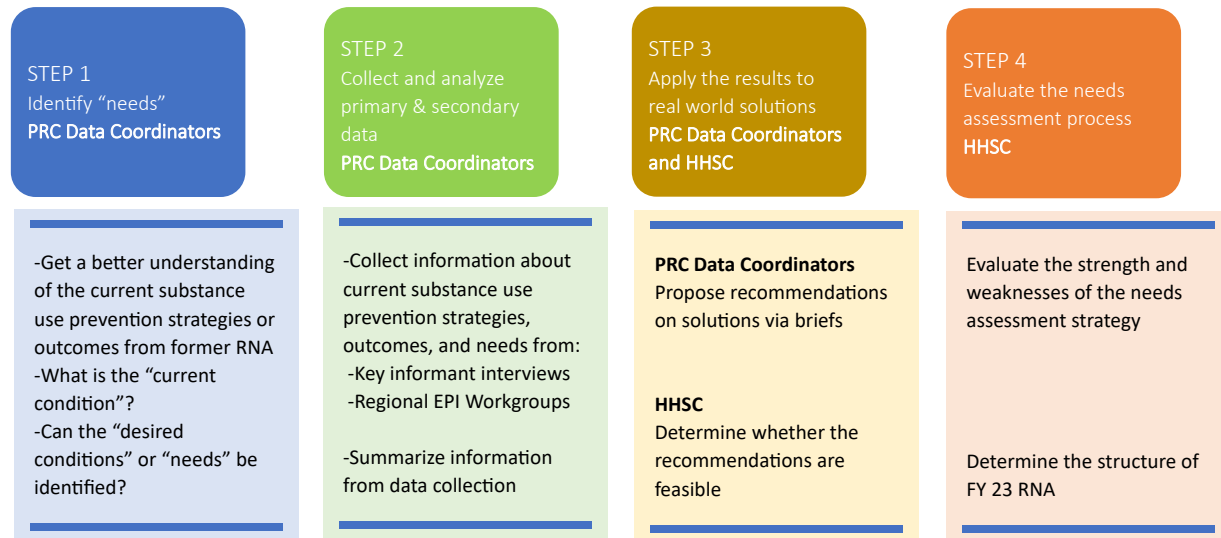
Regional Epidemiological Workgroups

Each Data Coordinator develops and maintains a Regional Epidemiological Workgroup (REW) to identify substance use and misuse patterns focused on the state's four prevention priorities at the regional, county, and local levels. Members of the REW are stakeholders that represent all twelve of the community sectors and different geographical locations within the region. The REW also works to identify regional data sources, data partners, and relevant risk and protective factors. Information related to the identification of data gaps, analysis of community resources and readiness, and collaboration on region-wide efforts comes directly from those participating in the REWs. A minimum of four REW meetings are conducted each year to provide recommendations and develop strong prevention infrastructure support at the regional level. Figure 2 below shows a visual representation of the overall steps and process of creating the RNA.

The Regional Needs Assessment (RNA)

Purpose/Relevance of the RNA

Figure 2. Steps, process, and stakeholders involved in RNA creation.



A needs assessment is a systematic process for determining and addressing "gaps" between current conditions and desired conditions.³ The RNA is a specific needs assessment that provides community organizations and stakeholders with region-specific substance use and related behavioral health information. At the broadest level, the RNA can show patterns of substance use and misuse among adolescents and adults, monitor changes in substance use trends over time, and identify substance use and behavioral health issues that are unique to specific communities. It provides data to local providers to support grant-writing activities and provide justification for funding requests and assist policymakers in program planning and policy decisions regarding substance use and misuse prevention, intervention, and treatment. The RNA can highlight gaps in data where critical substance use and behavioral health information is missing. It is a comprehensive tool for local providers to design relevant, data-driven prevention and intervention programs tailored to specific needs through the monitoring of county-level differences and disparities.

Stakeholder/Audience

Stakeholders can use the information presented in this report to contribute to program planning, evidence-based decision-making, and community education. The executive summary found at the beginning of this report provides highlights of the report for those seeking a brief overview. Since readers of this report will come from a variety of backgrounds, a glossary of key concepts at the end of this needs assessment. The core of the report focuses on risk and protective factors, consumption patterns, and public health and safety consequences.

Stakeholders within the twelve sectors both contribute to the RNA and benefit from the information within. These stakeholders participate in focus groups, qualitative interviews, Epi-Workgroup meetings, and collaborations with the PRC. The purpose of utilizing the twelve sectors is that each sector has unique knowledge of substance use along with risk and protective factors in their communities.

Regionwide Event

The Region 5 PRC was tasked by HHSC to develop and facilitate at least one region-wide event based on RNA data findings to bring targeted communities and stakeholders together to educate and promote collaboration on substance use and misuse-related issues.

In the Spring of 2024, the Region 5 PRC hosted an Impact Conference in Lufkin, Texas to address a growing concern of teenage vaping and marijuana use. The keynote speaker was U.S. Congressman Pete Sessions along with the Region 5 PRC Program Manager Kim Bartel and the Alcohol & Drug Awareness Council Executive Director Phyllis Grandgeorge. In attendance was Texas Representative Trent Ashby and various elected officials from the region which included judges, mayors, and school superintendents. The purpose of the conference was to develop an action plan that include input and participation from community stakeholders. The meeting was conducted in-person and through Zoom. Local media were also in attendance.

Methodology

This needs assessment reviews behavioral health data on substance use and misuse, substance use disorders, related risk and protective factors, and other negative public health and safety consequences that will aid in substance use prevention decision-making at the county, regional, and state levels.

Conceptual Framework

The overall conceptual framework for this report is the use of epidemiological data to show the overall distribution of certain indicators that are associated with substance use and behavioral health challenges. Broadly, these indicators consist of documented risk and protective factors, such as the Social Determinants of Health (SDoH), Adverse Childhood Experiences (ACEs), and Positive Childhood Experiences (PCEs); consumption patterns; and public health and safety consequences related to substance use and behavioral challenges. The indicators are organized by the domains (or levels) of the Social Ecological Model (SEM). For strategic prevention planning, the report attempts to identify behavioral health disparities and inequities present in the region. For more information on these various frameworks and concepts, see the “Key Concepts” section later in this report.

Process

PRCs collaborate with HHSC’s Data Specialist in the Prevention and Behavioral Health Promotion Unit, other PRC Data Coordinators, other HHSC staff, and regional stakeholders to develop a comprehensive data infrastructure for each PRC region.

HHSC staff met with the Data Coordinators via monthly conference calls to discuss the criteria for processing and collecting data. Primary data was collected from a variety of community stakeholders, and secondary data sources were identified as a part of the methodology behind this document. Readers can expect to find information from secondary data sources such as the U.S. Census, American Community Survey, Texas Department of State Health Services, Texas Department of Public Safety, and the Texas Survey of Drug and Alcohol Use, among others.

Quantitative Data Selection

Quantitative data refers to any information that can be quantified, counted, or measured, and given a numerical value. Quantitative data tells how many, how much, or how often and is gathered by measuring and counting and then analyzing using statistical analysis. Quantitative indicators were selected after doing a literature review on causal factors and consequences that are most related to substance use and non-medical use of prescription drugs. Data sets were selected based on relevance, timeliness, methodological soundness, representativeness, and accuracy. Data used in this report was primarily gathered through established secondary sources including federal and state government agencies to ensure reliability and accuracy. Region-specific quantitative data collected through local law enforcement, community coalitions, school districts, and local-level governments is included to address the unique regional needs of the community.

While the data selection process was heavily informed by research and evidence on substance use, we caution readers against drawing any firm conclusion about the consequences of substance use and misuse from the data reported here. The secondary data we have drawn from does not necessarily show a causal relationship between substance use and consequences for the community.

Longitudinal Data

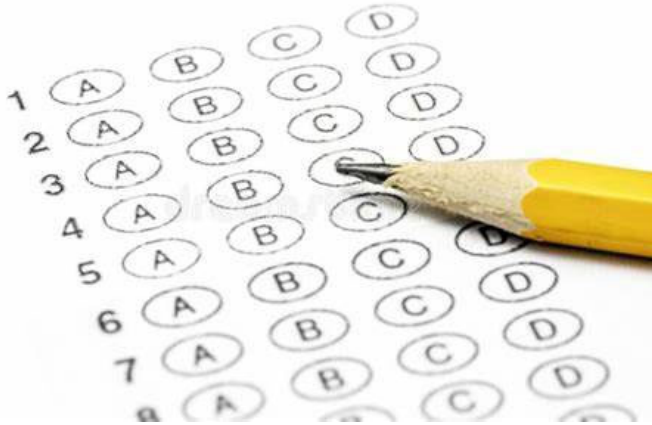
To capture a richer depiction of trends in the data, multi-year data, referred to as longitudinal data, is reported where it is available from respective sources. Longitudinal data in this needs assessment consists of the most recently available data going back to 2018. For each indicator, there are a different number of data points due to differing frequencies of data collection. However, data from before 2018 is not included in this needs assessment regardless of the number of data points available. Efforts are also made to present state-level data for comparison purposes with regional and county data. In some instances, there will be data gaps, and this is generally because the data was not available at the time of the data request.

COVID-19 and Data Quality

One of the many impacts of the COVID-19 pandemic was a direct negative effect on the data collection efforts of many organizations and agencies. This in turn has left a lasting mark on the validity and reliability of any data that was collected during this period. While this report will include data from the time of COVID-19, primarily the years 2020 and 2021, it is important to keep in mind that these data points may not be truly accurate of what was going on during that time. Therefore, no firm conclusions should be drawn from data collected during those years and we caution against making direct comparisons of these years with other years presented in this report, namely 2018 and 2022.

Texas School Survey (TSS) and Texas College Survey (TCS)

The primary sources of quantitative data for substance use behaviors for this report are the Texas School Survey of Drug and Alcohol Use (TSS) and the Texas College Survey of Substance Use (TCS). TSS collects self-reported substance use data among students in grades 7 through 12 in Texas public schools while TCS collects similar information from college students across Texas. This includes tobacco, alcohol, marijuana, non-medical use of prescription drugs, and the use of other illicit drugs. The surveys are sponsored by HHSC and administered by staff from the Department



of Public Service and Administration (PSAA) at Texas A&M University. For TSS, PSAA actively recruits approximately 20% of Texas public schools with grades 7 through 12 to participate in the statewide assessment during the spring of even-numbered years. For TCS, PSAA recruits from a variety of college institutions including both 2-year and 4-year colleges and administer the assessment every odd-numbered year.

It is important to note that during the 2019-2020 school year, schools across Texas were closed from early March through the end of the school year due to the COVID-19 pandemic. Due to this sudden and unexpected closure, many schools that had registered for the survey were unable to complete it. It is important to note that the drop in participation along with the fact that those that did complete the survey did so before March may have impacted the data. Tables 1 and 2 provide more details on the context of recruitment and the number of usable surveys from 2018 through 2022, explaining how 2020 caused a sizable drop in both campuses that participated and in usable surveys.

Table 1. Number of usable surveys included in state sample for Texas School Survey, 2018-2022.

Number of Surveys Included in State Sample for TSS

| Report Year | Original Campuses Selected | Campuses | Actual Campuses Participated | TOTAL | Usable Surveys | Number Rejected | Percent Rejected |
|-------------|----------------------------|--------------------------|------------------------------|-------------------|----------------|-----------------|------------------|
| | | Signed Up to Participate | | Non-Blank Surveys | | | |
| 2022 | 711 | 232 | 164 | 43,199 | 42,199 | 811 | 1.89% |
| 2020 | 700 | 224 | 107 | 27,965 | 27,965 | 936 | 3.2% |
| 2018 | 710 | 228 | 191 | 62,620 | 60,776 | 1,884 | 2.9% |

Source. Methodology Reports for 2018, 2020, and 2022 Texas School Survey.

Table 2. Texas School Survey distribution across grades in 2020 and 2022.

| Grade | Survey Distribution TSS 2022 | | Survey Distribution TSS 2020 | | Difference Between 2020 and 2022 TSS Number of Usable Surveys |
|----------|------------------------------|---------|------------------------------|---------|--|
| | Number of Usable Surveys | Percent | Number of Usable Surveys | Percent | |
| Grade 7 | 10,759 | 25.5% | 6,414 | 22.9% | 4,345 |
| Grade 8 | 11,056 | 26.2% | 6,472 | 23.1% | 4,584 |
| Grade 9 | 5,345 | 12.7% | 4,189 | 15.0% | 1,156 |
| Grade 10 | 5,268 | 12.5% | 4,119 | 14.8% | 1,149 |
| Grade 11 | 4,948 | 11.8% | 3,556 | 12.7% | 1,392 |
| Grade 12 | 4,823 | 11.4% | 3,215 | 11.5% | 1,608 |
| TOTAL | 42,199 | 100.0% | 27,965 | 100.0% | 14,234 |

Source. Methodology Reports for 2018, 2020, and 2022 Texas School Survey.
These reports can be accessed here: <https://www.texaschoolsurvey.org/Report>.

Qualitative Data Selection

Qualitative data is descriptive in nature and expressed in terms of language, interpretation, and meaning rather than numerical values and categorized based on traits and characteristics. Qualitative data tells the why or how behind certain behaviors by describing certain attitudes and is gathered through observation and interviews and is then analyzed by grouping data into meaningful themes or categories.

Data Coordinators conducted key informant interviews with community members about what they believe their greatest needs and resources are in the region. These qualitative data collection methods provide additional context and nuance to the secondary data and often reveal additional potential key informants and secondary data sources.

Key Informant Interviews

Data Coordinators conducted key informant interviews with stakeholders that represent the twelve community sectors across each region. Most interviews occurred between September 2021 and August 2022 and a few others up through August 2023.

Key informants are individuals with specific local knowledge about certain aspects of the community because of their professional background, leadership responsibilities, or personal experience. Compared to quantitative data, the format of interviewing allows the interviewer to ask more open-ended questions and allows the key informant to speak rather than fill in pre-selected options. This results in data with richer insights and more in-depth understanding and clarification. The interviews focused on the informant's perceptions of their communities' greatest resources and needs and to determine how their communities are affected by substance use and behavioral health challenges.

Each participant was asked the following questions:

1. What substance use concerns do you see in your community?
 - A. What do you think are the greatest contributing factors, and what leads you to this conclusion?
 - B. What do you believe are the most harmful consequences of substance use/misuse, and what leads you to this conclusion?
2. How specifically does substance use affect the (insert sector here) sector?
3. What substance use and misuse prevention services and resources are you aware of in your community?
 - A. What do you see as the best resources in your community?
 - B. What services and resources does your community lack?
4. What services and resources specifically dedicated to promoting mental and emotional well-being are you aware of in your community?
 - A. What do you see as the best resources in your community?
 - B. What services and resources does your community lack?
5. What information does the (insert sector here) sector need to better understand substance use/misuse and mental and emotional health in your community?
6. What other questions should we be asking experts in this area?

Once the interview was complete, the Data Coordinator transcribed the audio from the interviews and then used coding techniques to analyze the data.⁵ (University of Illinois, 2023) This involved categorizing the information by topics, themes, and patterns.

Key Concepts

Epidemiology

Epidemiology is defined as the study (scientific, systematic, and data-driven) of the distribution (frequency, pattern) and determinants (causes, risk factors) of health-related states or events (not just diseases) in specified populations (neighborhood, school, city, state, country, global). It is also the application of this study to the control of health problems.⁶ This definition provides the theoretical framework that this assessment uses to discuss the overall impact of substance use and misuse. Epidemiology frames substance use and misuse as a preventable and treatable public health concern. The Substance Abuse and Mental Health Services Administration (SAMHSA), the main federal authority on substance use and misuse, utilizes epidemiology to identify and analyze community patterns of substance use and the contributing factors influencing this behavior.

Risk and Protective Factors

One component shared by effective prevention programs is a focus on risk and protective factors that influence adolescents. Protective factors are characteristics associated with a lower likelihood of negative outcomes or that reduce a risk factor's impact. Examples include strong and positive family bonds, parental monitoring of children's activities, and access to mentoring. Risk factors are characteristics at the biological, psychological, family, community, or cultural level that precede and are associated with a higher likelihood of negative outcomes. Examples include unstable home environments, parental use/misuse of alcohol or drugs, parental mental illness, poverty, and failure in school performance. Risk and protective factors can exist in any of the domains of the Socio-Ecological Model, described more in the following section.⁷

Social-Ecological Model

The Socio-Ecological Model (SEM) is a conceptual framework developed to better understand the multidimensional risk and protective factors that influence health behavior and to categorize health intervention strategies.⁸ This RNA is organized using the four domains of the SEM (see Figure 3)⁹ as described below:

- **Societal Domain:** social and cultural norms and socio-demographics such as the economic status of the community.
- **Community Domain:** social and physical factors that indirectly influence youth including educational attainment of the community, community conditions like the physical built environment, experiences of poverty, the health care/services system, and retail access to substances.
- **Interpersonal Domain:** social and physical factors that indirectly impact youth including academic achievement and the school environment, family conditions and perceptions of parental attitudes, and youth perceptions of peer consumption and social access.
- **Individual Domain:** intrapersonal characteristics of youth such as knowledge, skills, attitudes, beliefs, and behaviors.

The SEM proposes that behavior is impacted by all levels of influence, from the intrapersonal to the societal, and that prevention and health promotion programs become more effective when they intervene at multiple levels. Changes at the societal and community levels will create change in individuals, and the support of relevant stakeholders and community leaders in the population is essential for implementing environmental change at the community and societal level.

Figure 3. Social-Ecological Model for substance use with examples.

| | Risk Factors | Protective Factors |
|-------------------|--|--|
| Society | <ul style="list-style-type: none"> • Impoverishment • Unemployment and underemployment • Discrimination • Pro-AOD-use messages in the media | <ul style="list-style-type: none"> • Media literacy (resistance to pro-use messages) • Decreased accessibility • Increased pricing through taxation • Raised purchasing age and enforcement • Stricter driving-under-the-influence laws |
| Community | <ul style="list-style-type: none"> • Availability of AOD • Community laws, norms favorable toward AOD • Extreme economic and social deprivation • Transition and mobility • Low neighborhood attachment and community disorganization | <ul style="list-style-type: none"> • Opportunities for participation as active members of the community • Decreasing AOD accessibility • Cultural norms that set high expectations for youth • Social networks and support systems within the community |
| School | <ul style="list-style-type: none"> • Academic failure beginning in elementary school • Low commitment to school | <ul style="list-style-type: none"> • Opportunities for prosocial involvement • Rewards/recognition for prosocial involvement • Healthy beliefs and clear standards for behavior • Caring and support from teachers and staff • Positive instructional climate |
| Family | <ul style="list-style-type: none"> • Family history of AOD use • Family management problems • Family conflict • Parental beliefs about AOD | <ul style="list-style-type: none"> • Bonding (positive attachments) • Healthy beliefs and clear standards for behavior • High parental expectations • A sense of basic trust • Positive family dynamics |
| Peer | <ul style="list-style-type: none"> • Association with peers who use or value AOD use • Association with peers who reject mainstream activities and pursuits • Susceptibility to negative peer pressure • Easily influenced by peers | <ul style="list-style-type: none"> • Association with peers who are involved in school, recreation, service, religion, or other organized activities • Resistance to negative peer pressure • Not easily influenced by peers |
| Individual | <ul style="list-style-type: none"> • Biological and psychological dispositions • Positive beliefs about AOD use • Early initiation of AOD use • Negative relationships with adults • Risk-taking propensity/impulsivity | <ul style="list-style-type: none"> • Opportunities for prosocial involvement • Rewards/recognition for prosocial involvement • Healthy beliefs and clear standards for behavior • Positive sense of self • Negative beliefs about AOD • Positive relationships with adults |

Social Determinants of Health (SDoH)

The U.S. Department of Health and Human Services, Healthy People 2030 defines the SDoH as the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.¹⁰ The SDoH are grouped into five domains (see Figure 4): economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context. SDoH's have a major impact on health, well-being, and quality of life, and they also contribute to health disparities and inequities.

Figure 4. Social Determinants of Health.



Strategic Prevention Framework

The Strategic Prevention Framework (SPF), provided by SAMHSA’s Center for Substance Prevention (CSAP), guides the development and implementation of many prevention initiatives and activities in Texas. Although these steps are intended primarily to go in a clockwise fashion starting at the “Needs Assessment” step, they are meant to be a guide and not rigid rules. It is possible to restart the circle upon reaching the fifth step, “Evaluation”, or to even be in multiple stages at once throughout the process. In addition to these five steps, there are two central concepts that should guide the use of the SPF, seen in the center of the figure: cultural competence and sustainability.

- **Cultural competence:** the ability of an individual or organization to understand and interact effectively with individuals having different values, lifestyles, and traditions based on their distinctive heritage and social relationships.
- **Sustainability:** the process of building an adaptive and effective system that achieves and maintains desired long-term results.

The SPF provides a continuum of services targeted to the three classifications of prevention activities under the National Academy of Medicine (NAM). These classifications are universal, selective, and indicated. The five steps and two guiding principles of the SPF offer a comprehensive approach to understanding and addressing substance misuse and related behavioral health problems facing our communities.

Figure 5. Strategic Prevention Framework.

Strategic Prevention Framework



Source. SAMHSA.

Assessment

Identify local prevention needs based on data.

Capacity

Build local resources and readiness to address prevention needs.

Planning

Find out what works to address prevention needs and how to do it well.

Implementation

Deliver evidence-based programs and practices as intended.

Evaluation

Examine the process and outcomes of programs and practices.

Adolescence

The American Psychological Association defines “adolescence” as a part of human development which begins at puberty (10-12 years of age) and ends with physiological and neurobiological maturity, reaching to at least 20 years of age. Brain development continues into an individual’s mid-twenties. Adolescence is a period of major changes in physical characteristics along with significant effects on body image, self-concepts, and self-esteem. Mental characteristics are also developing during this time. These include abstract thinking, reasoning, impulse control, and decision-making skills.¹¹ The World Health Organization (WHO) adds that this period of growth poses a critical point of vulnerability where the non-medical use of substances, or other risky behaviors can have long-lasting negative effects on future health and well-being.¹²

A similar but slightly different term used in the justice system is “juvenile.” The Texas Juvenile Justice System defines a juvenile as a person at least 10 years old but not yet 17 at the time he or she commits an act of “delinquent conduct” or “conduct in need of supervision.”¹³ Delinquent conduct is conduct that could result in imprisonment or jail if committed by an adult. Conduct in Need of Supervision for juveniles includes truancy and running away from home. In the context of some indicators, “juvenile” will be used instead of adolescent to define the population of interest more precisely.

Adverse Childhood Experiences (ACEs)

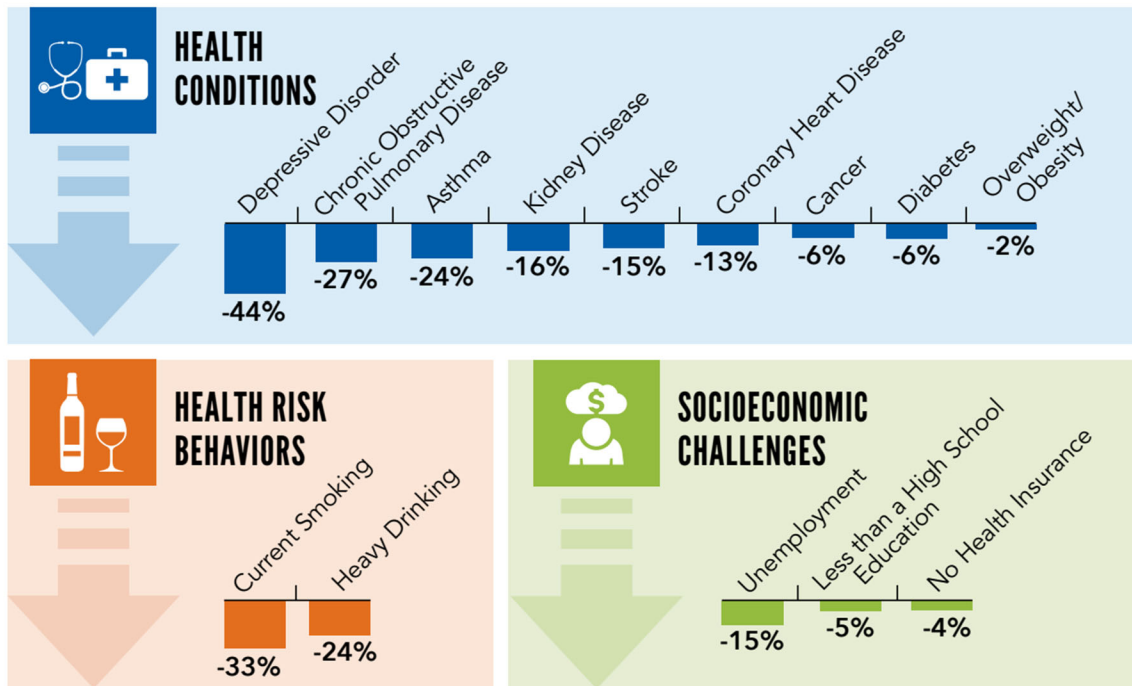
The CDC-Kaiser Permanente Adverse Childhood Experience (ACE) Study from 1998 is one of the largest investigations of childhood abuse, neglect, and household challenges, and the effects on health and well-being later in life.¹⁴ ACEs are events that occur in children 0-17 years of age. The ACE questionnaire asks about experiences such as childhood abuse, neglect, and household dysfunction across seven categories. The study showed that individuals with a score of 4 or more (meaning they experienced at least one event in four of the seven categories) have an increased risk for:

- Smoking, heavy alcohol use, and Substance Use Disorders (SUDs);
- Mental health issues, such as depression and suicidal behavior;
- Poor self-rated health;
- Sexually transmitted disease;
- Challenges with obesity and physical inactivity;
- Heart disease;
- Lung disease;
- Risk of broken bones; and
- Multiple types of cancer.

The study also showed that there is a dose-response relationship where experiencing ACEs in more categories is linked with an increased risk for the above physical and behavioral health concerns. ACEs can also negatively impact job opportunities, education, and earning potential.

ACEs are common with CDC reporting that approximately 61% of adults have experienced at least one type of ACE before the age of 18, and 1 in 6 reports having 4 or more. Women and other marginalized groups are at a higher risk for experiencing 4 or more types of ACEs. ACEs can, however, be prevented by creating safe, stable, and healthy relationships and environments. Preventing ACEs requires understanding and addressing the risk and protective factors that make these experiences more likely to occur.¹⁵ Figure 6 below describes the potential health and socioeconomic benefits in adulthood that could come from preventing ACEs in childhood.

Figure 6. Potential reduction of negative outcomes in adulthood.



Source. Accessed from <https://www.cdc.gov/vitalsigns/aces/pdf/vs-1105-aces-H.pdf>. Original source: BRFDD 2015-1017, states, CDC Vital Signs, November 2019.

Positive Childhood Experiences (PCEs)

Unlike ACEs, which have been researched for decades, Positive Childhood Experiences are still a new and explored aspect of prevention. Dr. Christina Bethell from John Hopkins, one of the leading researchers on Positive Childhood Experiences (PCEs), defines a positive childhood experience as “feeling safe in our families to talk about emotions and things that are hard and feeling support during hard times.”¹⁶ Dr. Bethell and her colleagues conducted a similar study to the ACEs study in 2019 to determine the health impacts of positive childhood experiences. In this study, they identified seven distinct PCEs:¹⁷

- The ability to talk with family about feelings;
- The sense that family is supportive during challenging times;
- The enjoyment of participating in community traditions;
- Feeling a sense of belonging in high school (this did not include those who did not attend school or were home-schooled);
- Feeling supported by friends;
- Having at least 2 non-parent adults who genuinely cared about them; and
- Feeling safe and protected by an adult in the home.

The researchers used data from adults who responded to the 2015 Wisconsin Behavioral Risk Factor Survey (BRFS) and, like the ACEs study, also found that PCEs have a dose-response relationship with adult mental and behavioral health meaning that experiencing more PCEs were associated with better outcomes. This included a lower chance of depression and poor mental health and increased odds of reporting considerable amounts of social and emotional support in adulthood. The promotion of PCEs may have a positive lifelong impact despite co-occurring adversities such as ACEs.¹⁸

Consumption Patterns

This needs assessment follows the example of the Texas School Survey (TSS), the Texas Youth Risk Behavioral Surveillance System (YRBSS), and the National Survey on Drug Use and Health (NSDUH), by organizing consumption patterns into three categories:

- Lifetime use (has tried a substance, even if only 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 consumption patterns are used in the TSS to elicit self-reports from adolescents on their use of tobacco, alcohol, marijuana, and other illicit drugs, and their none-medical use of prescription drugs. The TSS, therefore, serves as the primary outcome measure of Texas youth substance use in this needs assessment.

The Story of Data

The RNA and the data within are so much more than mere numbers, statistics, and graphs. Each number represents someone's life and the continual journey each of us take in life. Looking beyond the numbers into the faces of people is what renders this document into something far more than just a report of data collected and analyzed.

Deep within the population data is José and his family who have migrated to the region from the coastal village of Corinto, Nicaragua, who works full-time as a truck driver and his eldest daughter is attending college; the first in their family to ever do so.

In the median household income is Willie who had been misusing marijuana since he was a teenager. Today he holds a job, contributing to the economy, and has remained drug-free for over five years.

Sarah and her husband participate in prevention services across the state at schools and community events to provide the public with information about the deadly opioid, fentanyl, which killed their teenage son.

As you enter the world of data, consider the story of Brenda, who was 25 when she was involved in a car crash. After the incident she needed to see several doctors and neurologists, and one of them gave her a prescription for opioid pain medication. Brenda does not recall being warned about the risks of taking prescription opioids or the dangers of misuse.

As her pain continued – and seemed to get worse – Brenda doubled her dose one day after getting her prescription filled. That one action put her on a downward spiral.

Brenda began seeking out pills from multiple doctors, who gave her the prescriptions without hesitation. Eventually, she began buying and selling them in her community. But she still felt lonely and isolated, and her pain extended beyond the physical. Everything else took a back seat in her life, including her friends and family.

Brenda eventually moved to and became dependent on heroin; something she would never have imagined herself doing. And then the unthinkable, to Brenda, happened. She found out she was four weeks pregnant.

"Part of me wanted to keep using," she said. "But more of me wanted to stop."

She did not know where to turn, who to call, or where to go for help. It was her stepfather, who through a chance encounter was handed a brochure that offered treatment for pregnant women.

Brenda read the brochure, entered the program and delivered a healthy baby. She has now been in recovery for three years.

As you search through the data, charts, statistics, and graphs in this RNA, it is our hope that it will give you better understanding of the people that make up the fabric of the quilt that is Region 5. From those in city government, business leaders, school employees, the overall work force, to even those who are homeless and living on the streets; each person is important and adds value to the community. It is our goal to reflect this through the data reported.

Disclaimer: all personal stories within this document were derived from qualitative data collection interviews. Permission has been given by the individuals to reproduce their story.

Regional Demographics

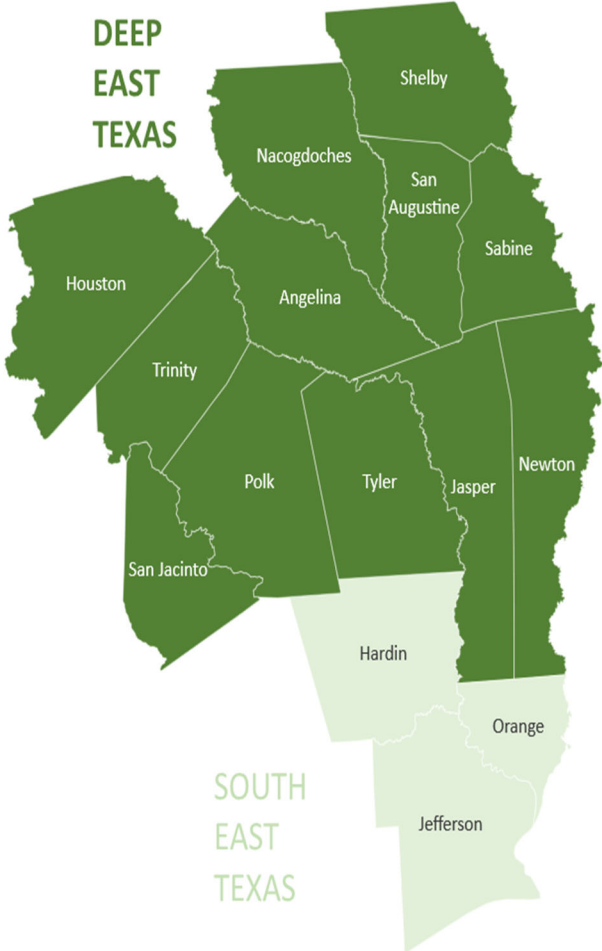
The demographics of a community provide insight into the makeup and attributes of the population. This then becomes the foundation on which additional indicators create a better understanding of attitudes and behaviors, which this assessment will seek to highlight. Basic demographic indicators include where and how many, age, race, ethnicity, education, employment, and income. The following is a basic overview of Region 5 and those who reside within its boundaries.

Overview of Region 5

Region 5 is made up of fifteen counties and divided into two major areas as seen in Figure 7. The twelve northern counties are referred to as “Deep East Texas” and in large part characterized as rural. The three southern counties are known as “Southeast Texas” and contain fifty-one percent of the region’s population.

The region encompasses 12,010.5 square miles and is known as “the pineywoods” due to the abundance of forest land used by the local lumber mill industry, producing over a billion board feet of lumber yearly. The three national forests within the borders of the region include the Angelina, Sabine, and Davy Crockett National Forests. There are five lakes within the region. Lake Livingston Reservoir is an 83,000-acre lake located just west of Livingston. Lake Rayburn Reservoir is a 114,500-acre lake located 15 miles north of Jasper. Toledo Bend Reservoir is a 181,600-acre lake 25 miles east of Jasper. The Steinhafen Reservoir is a 10,680-acre shallow-water lake 14 miles west of Jasper. Lake Sabine is a 45,320-acre saltwater lake south of Port Arthur. There are 5 major rivers running through the region: Sabine, Neches, Trinity, San Jacinto, and the Angelina.

Figure 7. The fifteen counties of Region 5.



Three institutions of higher education are within Region 5. Lamar University in Beaumont, Stephen F. Austin State University in Nacogdoches, and Angelina College in Lufkin. Each institution operates satellite campuses throughout the region to make higher education more accessible to a larger portion of the population within the region.

Population

In 2020, the U.S. Census Bureau conducted its decennial survey, also known as the Population and Housing Census. It is designed to count every resident in the United States as mandated by Article I, Section 2 of the Constitution.¹⁹ To date, the decennial census data has not been fully released. This has been the longest delay in census history for the release of data. The bureau cites COVID-19, the ensuing pandemic, and data security issues for the delay.²⁰

For the reporting of population data in this year’s RNA, two sources of data from the U.S. Census Bureau were used: the portion of the decennial report that has been released and the American Community Survey 5-Year Estimates. As seen in Table 3 below, the distinction will be noted as to which data source is utilized. The advantage of the decennial survey is consistency in comparing indicators over time. The American Community Survey offers an estimate of current conditions.

From the decennial survey, the population of Texas in 2020 was 29,145,505, and Region 5 had a population of 768,635. The American Community Survey estimates that as of July 1, 2023, Texas had a population of 29,243,342, and Region 5 was at 769083.

Table 3. Region 5 population of decennial survey (2020) and the American Community Survey 5-Year Estimates 2018-2022 per county (with county seats).

| County (County Seat) | Population | |
|-------------------------------|--------------------------|-----------------------------------|
| | 2020 Decennial Survey | 2022 American Community Survey |
| Angelina (Lufkin) | 86,395 | 86,608 |
| Hardin (Kountze) | 56,231 | 56,576 |
| Houston (Crockett) | 22,066 | 22,107 |
| Jasper (Jasper) | 32,980 | 33,032 |
| Jefferson (Beaumont) | 256,526 | 254,942 |
| Nacogdoches (Nacogdoches) | 64,653 | 64,768 |
| Newton (Newton) | 12,217 | 12,333 |
| Orange (Orange) | 84,808 | 84,761 |
| Polk (Livingston) | 50,123 | 50,536 |
| Sabine (Hemphill) | 9,894 | 9,980 |
| San Augustine (San Augustine) | 7,918 | 7,920 |
| San Jacinto (Coldspring) | 27,402 | 27,666 |
| Shelby (Center) | 24,022 | 24,157 |
| Trinity (Groveton) | 13,602 | 13,735 |
| Tyler (Woodville) | 19,798 | 19,962 |

Source. U.S. Census Bureau: Decennial Survey and American Community Survey 5-Year Estimates 2018-2022.

From the table above it is estimated that thirteen counties have experienced an increase in population, while two are undergoing a decrease. Of the counties that are decreasing in population, Jefferson County has the largest percentage of decrease at 0.67%. The other county that is decreasing in population is Orange (0.06%). Of the counties increasing in population, Trinity County has the largest increase at 0.98%. The other counties increasing in population include San Jacinto (0.96%), Newton (0.95%), Sabine (0.87%), Tyler (0.83%), Polk (0.82%), Hardin (0.61%), Shelby (0.56%), Angelina (0.25%), Houston (0.19%), Nacogdoches (0.18%), Jasper (0.16%), and San Augustine (0.03%).

As previously noted, more than 51% of the population resides in the region's southern three counties (Hardin, Jefferson, & Orange). These counties are classified as urban and contain three of the largest five population areas within the region: Beaumont, Port Arthur, and Orange. The table below lists the top twenty population areas within the region.

Table 4. Population centers within Region 5.

| City (County) | 2022 POPULATION | City (County) | 2022 POPULATION |
|--------------------------------|------------------------|-----------------------------|------------------------|
| Beaumont (Jefferson) | 112,280 | Bridge City (Orange) | 9,588 |
| Port Arthur (Jefferson) | 55,614 | Jasper (Jasper) | 7,411 |
| Lufkin (Angelina) | 34,164 | Silsbee (Hardin) | 6,880 |
| Nacogdoches (Nac.) | 32,049 | Crockett (Houston) | 6,273 |
| Orange (Orange) | 19,067 | Livingston (Polk) | 5,784 |
| Nederland (Jefferson) | 18,198 | Center (Shelby) | 5,161 |
| Groves (Jefferson) | 16,806 | Diboll (Angelina) | 4,540 |
| Lumberton (Hardin) | 14,048 | Woodville (Tyler) | 2,421 |
| Port Neches (Jefferson) | 13,620 | Trinity (Trinity) | 2,407 |
| Vidor (Orange) | 9,706 | Corrigan (Polk) | 1,455 |

Source. U.S. Census Bureau. American Community Survey 5-Year Estimates 2018-2022.

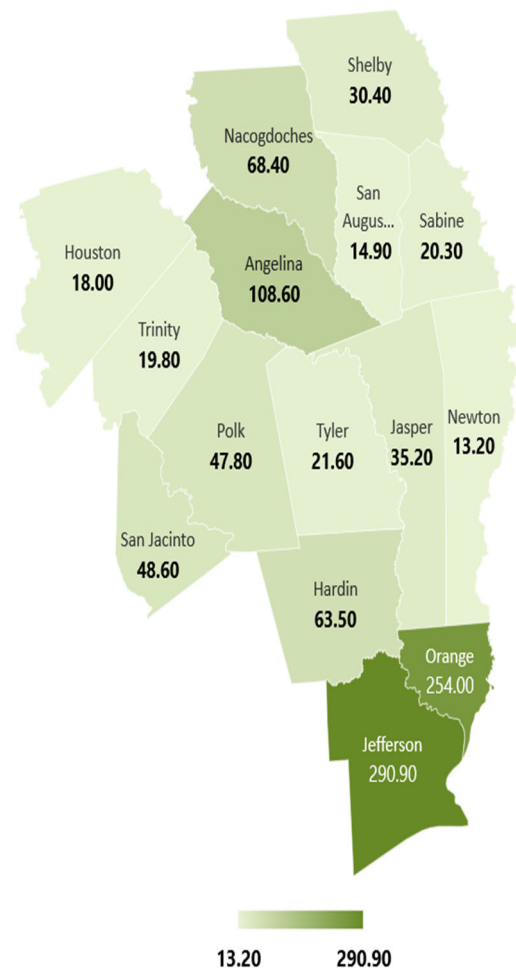
Population Density

In the area of population density, most of the population lives in the southern three counties (Hardin, Jefferson, Orange). Region 5's two largest population areas are within Jefferson County (Beaumont and Port Arthur), which is the most densely populated county in the region (290.9 persons per sq. mile). Orange County is the second most densely populated county in the region (254.0 persons per sq. mile). Angelina County of the northern twelve counties is the third most densely populated county in the region (108.6 persons per sq. mile).

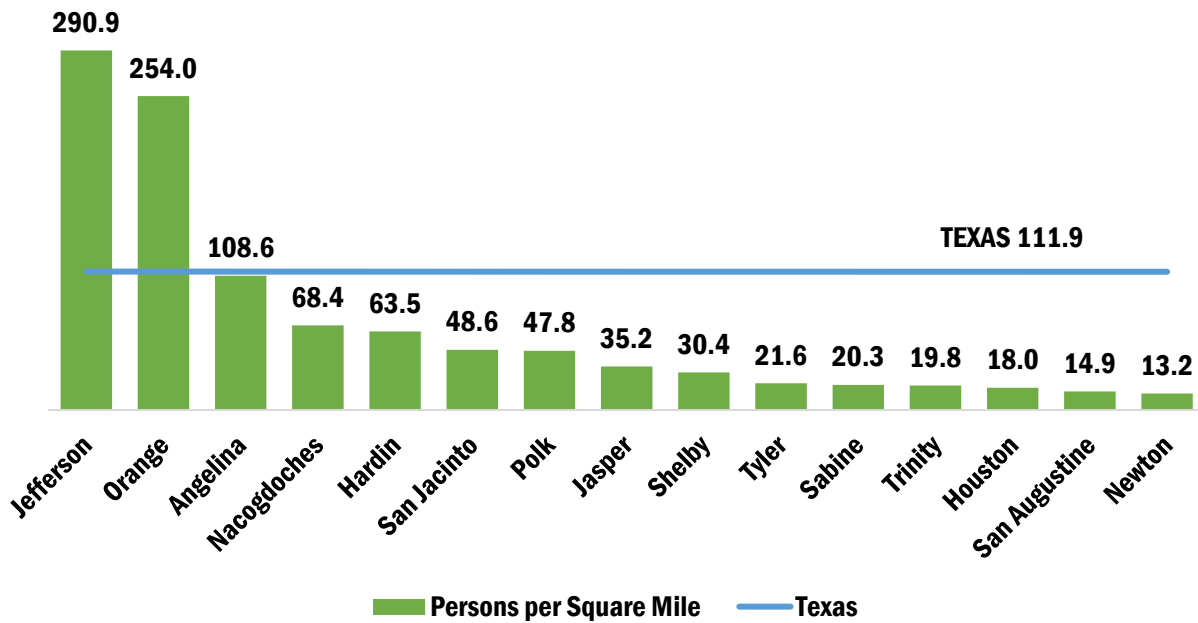
The three least densely populated counties are Newton (13.2 persons per sq. mile), San Augustine (14.9 persons per sq. mile), and Houston (18.0 persons per sq. mile). For more on population density see Figure 8 and Graph 1.

Regarding the population of Region 5 in the future, the Texas Demographic Center projects that Deep East Texas will experience a decline in population. This projection is based on the current race/ethnicity makeup of the region. Of the 254 counties in Texas, 155 are projected to increase over the next 30 years. The remaining 99 counties are expected to experience a decrease in population. The bulk of these counties are in Far West Texas and Deep East Texas.

Figure 8. Population per sq. mile.



Graph 1. Population density per square mile per county.



Source. U.S. Census Bureau. American Community Survey 5-Year Estimates 2018-2022.

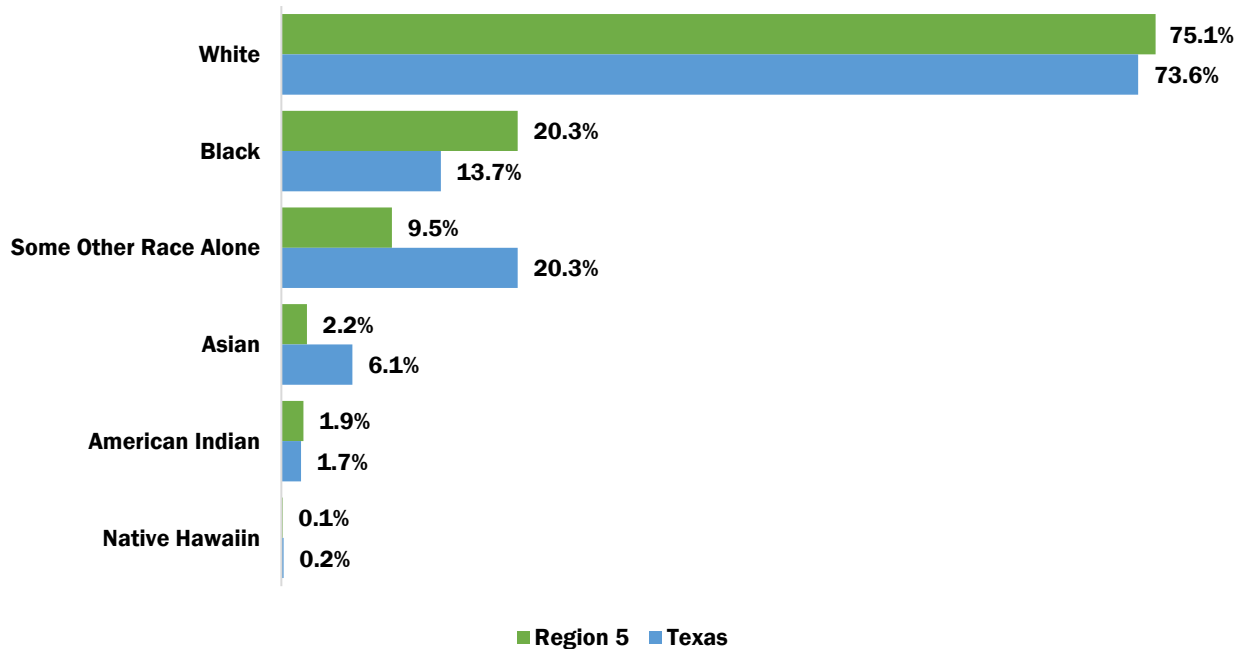
Race

Racial diversity in the United States has been increasing steadily with more people identifying as more than one race. To help account for this, the Census makes a distinction between the number of people of a given racial group “alone” or “in combination.” People counted within the “alone” category are those who identified themselves as being a part of only one group. People counted within the “in combination” category refers to anyone who identified themselves as part of a given racial group even if they also identified with more than one race. This means that Black or African American “in combination” would include both those who identified as Black or African American “alone” as well as those who identified with multiple groups. To respect individuals’ self-identification of their race(s) and to accurately capture the total number of each group, the RNA reports the number and rates of people of each race “in combination” rather than just the number of those “alone.” As a result, adding the numbers of each racial group together will be greater than the total county population since “in combination” counts individuals towards all groups with which they identified.

In the graph below (Graph 2) a comparison of race is made between Region 5 and Texas. The indicators were those of each race alone and in combination. Region 5 is above the state average in those who identified as "American Indian" (1.9% compared to Texas 1.7%), as "Black" (20.3% compared to Texas 13.7%), and as "White" (75.1% compared to Texas 73.6%). Region 5 falls significantly below the state average in those who identified as "Asian" (2.2% compared to Texas 6.1%) and those who selected "Other" (9.5% compared to Texas 20.3%). For those who identified as "American Indian," this will rest largely on those who are members of the Alabama-Coushatta Tribe of Texas, which is located within the region.

Graph 2. Percentage of identified races for Texas and Region 5.

The percentage of white & black are higher in Region 5 than Texas



Source. U.S. Census Bureau. American Community Survey 5-Year Estimates 2018-2022.

*NHPI – Native Hawaiian and Pacific Islander.

For Region 5, Jefferson County is the most racially diverse county. It has the largest percentage of those who identify as "Asian" (4.2% compared to Region 5's 2.2%), as "Black" (34.5% compared to Region 5's 20.3% and Texas' 13.7%), and as "Other" (13.2% compared to Region 5's 9.5%). For those who identify as "American Indian," six counties are above the state's average of 1.7%. Polk County, which contains a portion of the Alabama-Coushatta tribal land, is at 3.8%. Also Angelina County at 3.9% and Shelby County at 3.9%. See Table 5 below.

Table 5. Percentage of identified races for state, region, and county.

| Area | American | | | | | |
|-------------|----------|-------|-------|-------|-------|-------|
| | Indian | Asian | Black | NHPI* | Other | White |
| Texas | 1.7% | 6.1% | 13.7% | 0.20% | 20.3% | 73.6% |
| Region 5 | 1.9% | 2.2% | 20.3% | 0.1% | 9.5% | 75.1% |
| Angelina | 3.9% | 1.2% | 13.7% | -- | 11.4% | 82.7% |
| Hardin | 1.6% | 1.1% | 6.9% | -- | 4.1% | 91.8% |
| Houston | 2.3% | 0.5% | 25.2% | 0.2% | 6.6% | 71.4% |
| Jasper | 1.2% | 0.8% | 16.7% | 0.1% | 6.5% | 80.7% |
| Jefferson | 1.0% | 4.2% | 34.5% | 0.1% | 13.2% | 57.5% |
| Nac. | 1.3% | 2.0% | 18.7% | 0.1% | 10.8% | 76.9% |
| Newton | 0.6% | 0.9% | 19.8% | 0.3% | 3.4% | 80.0% |
| Orange | 1.3% | 1.4% | 9.7% | 0.1% | 5.7% | 88.9% |
| Polk | 3.8% | 1.1% | 10.2% | -- | 7.6% | 86.9% |
| Sabine | 2.3% | 2.0% | 6.4% | 0.8% | 1.6% | 90.8% |
| San Aug. | 1.7% | -- | 22.3% | -- | 5.6% | 71.3% |
| San Jacinto | 2.1% | 0.2% | 10.6% | 0.5% | 10.7% | 86.8% |
| Shelby | 3.9% | 0.5% | 17.0% | 0.7% | 9.6% | 74.8% |
| Trinity | 1.6% | 0.3% | 9.8% | -- | 7.1% | 86.9% |
| Tyler | 1.6% | 0.8% | 12.1% | -- | 4.3% | 87.1% |

Source. U.S. Census Bureau. American Community Survey 5-Year Estimates 2018-2022.

*NHPI – Native Hawaiian and Pacific Islander.

Ethnicity

To achieve a clearer picture of the population of Texas and Region 5, ethnicity is added to race to recognize the population’s connection with a group’s cultural identity or expression. Race is in reference to outward physical characteristics whereas ethnicity is an identity based on where one’s family is from and the group’s shared cultural, traditional, and familial bonds and experiences.²²

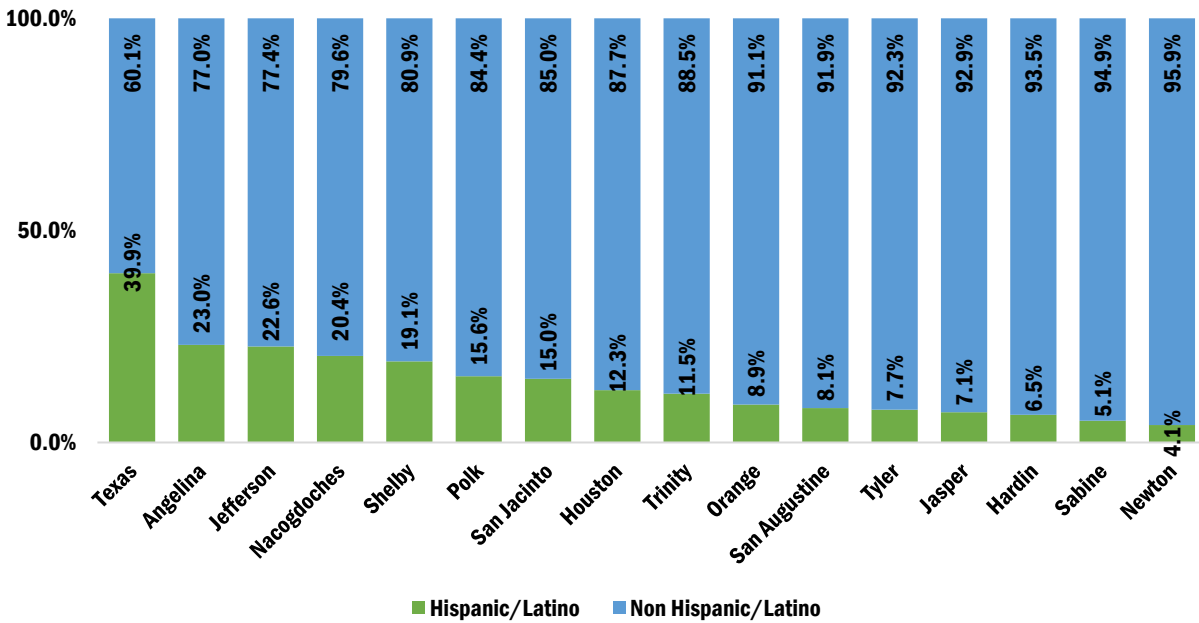
For this report, ethnicity will be divided into “Not Hispanic or Latino” and Hispanic or Latino.” Within the ethnicity, race is identified as either:

- White alone
- Black or African American alone
- American Indian and Alaska Native alone
- Asian alone
- Native Hawaiian and Other Pacific Islander alone
- Some other race alone
- Two or more races

For Texas, 39.9% identify as “Hispanic or Latino” and 60.1% as “Not Hispanic or Latino.” For Region 5 the percentages are 16.7% identify as “Hispanic or Latino” and 83.3% as “Not Hispanic or Latino.” The graph below is an illustration of ethnicity per county compared to Texas for all races.

Graph 3. Percentage of those that identify as “Hispanic or Latino” related to those who identify as “Not Hispanic or Latino” for the state compared to each county.

All counties in Region 5 are below the state's average of 39.9% that identify as "Hispanic or Latino"



Source. U.S. Census Bureau. American Community Survey 5-Year Estimates 2018-2022.

Age and Gender

The indicators of age and gender are important quantifiers of a region’s population demographic in that it provides a predictive picture for several factors. These factors include available workforce, future education needs, and healthcare expectations. Utilizing this data, businesses and governments are better equipped to determine future assets, expenditures, and investments.

For the indicator of age, Region 5 is below the state average in population of those from birth to age 44. The largest difference, as seen in Table 6 below, is in the category of those aged 65+. Region 5 is at 17.2% while the state average is 12.9%. Sabine County has the largest percentage of the population 65 and older at 30.0% followed by San Augustine at 28.2%.

Table 6. Percentage of population by age for state, region, and county.

| Area | Ages 0-19 | Ages 20-34 | Ages 35-44 | Ages 45-64 | Ages 65+ |
|-------------|-----------|------------|------------|------------|----------|
| Texas | 28.2% | 21.5% | 13.8% | 23.5% | 12.9% |
| Region 5 | 26.3% | 19.1% | 12.3% | 25.2% | 17.2% |
| Angelina | 28.3% | 18.9% | 11.9% | 24.6% | 16.3% |
| Hardin | 26.9% | 17.8% | 13.1% | 25.0% | 17.2% |
| Houston | 22.0% | 16.1% | 13.0% | 26.8% | 22.1% |
| Jasper | 25.8% | 15.7% | 11.0% | 26.9% | 20.5% |
| Jefferson | 26.7% | 20.9% | 13.3% | 24.3% | 14.9% |
| Nacogdoches | 29.6% | 23.8% | 10.7% | 20.7% | 15.3% |
| Newton | 24.8% | 14.3% | 10.0% | 28.7% | 22.2% |
| Orange | 27.1% | 19.0% | 13.3% | 24.9% | 15.7% |
| Polk | 22.0% | 17.1% | 12.4% | 29.7% | 18.8% |
| Sabine | 19.5% | 14.0% | 8.2% | 28.3% | 30.0% |
| San Aug. | 22.4% | 12.0% | 9.8% | 27.5% | 28.2% |
| San Jacinto | 23.7% | 15.7% | 10.0% | 28.9% | 21.8% |
| Shelby | 28.4% | 17.4% | 11.1% | 25.3% | 17.8% |
| Trinity | 21.6% | 14.2% | 9.4% | 28.2% | 26.4% |
| Tyler | 20.5% | 20.1% | 11.3% | 25.9% | 22.1% |

Source. U.S. Census Bureau. American Community Survey 5-Year Estimates 2018-2022.

Table 7. Percentage of population by gender per county.

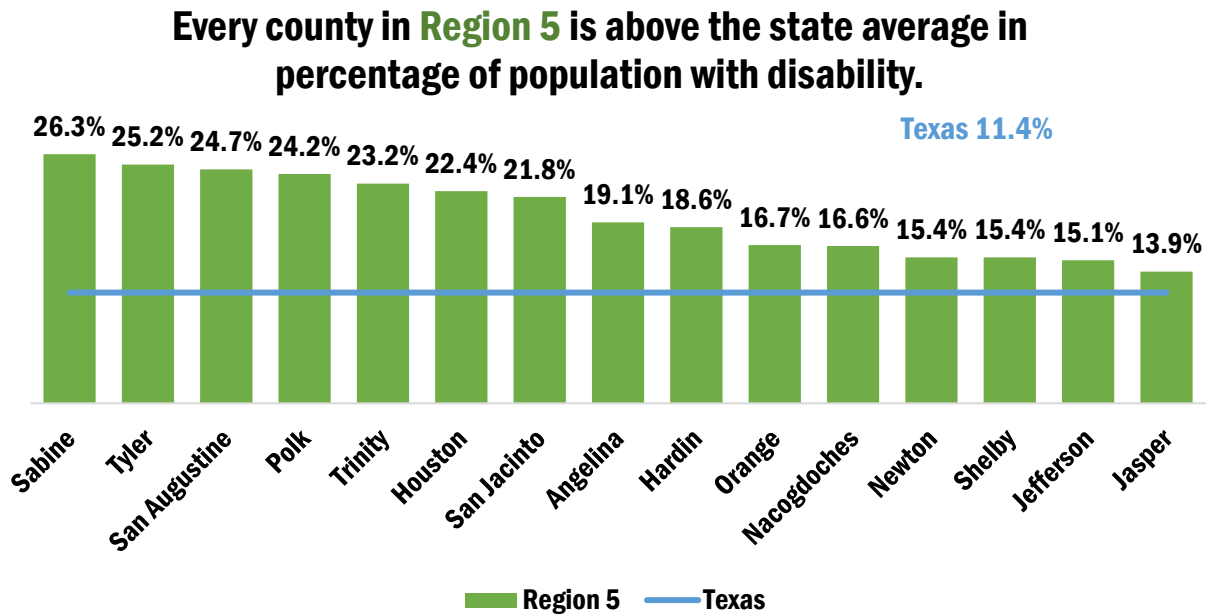
| | Male | Female | | Male | Female |
|-------------|-------|--------|-------------|-------|--------|
| Region 5 | 50.6% | 49.4% | Orange | 49.9% | 50.1% |
| Angelina | 49.2% | 50.8% | Polk | 53.9% | 46.1% |
| Hardin | 49.0% | 51.0% | Sabine | 50.0% | 50.0% |
| Houston | 54.4% | 45.6% | San Aug. | 48.3% | 51.7% |
| Jasper | 49.2% | 50.8% | San Jacinto | 49.9% | 50.1% |
| Jefferson | 51.4% | 48.6% | Shelby | 50.1% | 49.9% |
| Nacogdoches | 48.3% | 51.7% | Trinity | 49.4% | 50.6% |
| Newton | 50.1% | 49.9% | Tyler | 54.2% | 45.8% |

Source. U.S. Census Bureau. American Community Survey 5-Year Estimates 2018-2022.

Disability Status

Disability status is granted to those with long-term or short-term disabilities, which prevents someone from working or those who have been certified disabled by a physician. This indicator does not include county-level data for the institutionalized population such as incarcerated individuals, nursing home residents, etc. For Region 5, of those non-institutionalized, all counties are above the state average of 11.7% as seen in the graph below.

Graph 4. Percentage of population with disability compared to Texas.



Source. U.S. Census Bureau. American Community Survey 5-Year Estimates 2018-2022.

Limited English Language Proficiency

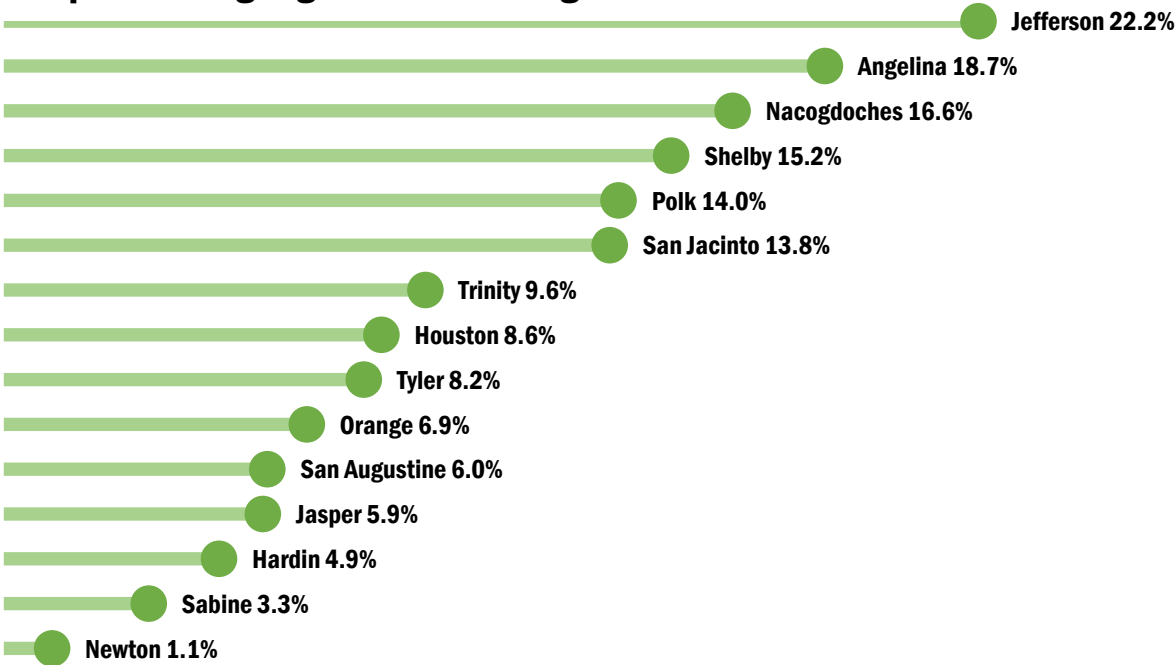
Nearly 36% of the population of Texas speaks a language other than English at home. Language barriers create gaps in prevention’s ability to communicate prevention messages. Of those that speak a language other than English, 82% speak Spanish. Efforts are being made to remove the language barrier by utilizing prevention staff that speak dual languages and printing material in English and Spanish.

English and Spanish are not the only two languages spoken within the region. Other languages spoken in Region 5 include Vietnamese, Urdu, Chinese, Swahili, Tagalog, Hindi, German, Arabic, and Korean. One language unique to Region 5 is Alabama which is a Muskogean language of the American Indian spoken by the Alabama-Coushatta tribe.²³

For Texas, 35.1% of the households have limited proficiency of the English language. For Region 5 the number is 10.3%. Jefferson County has the highest percentage of limited English at 22.2% followed by Angelina County at 18.7% as seen in the graph below.

Graph 5. Language other than English spoken at home, percent per household.

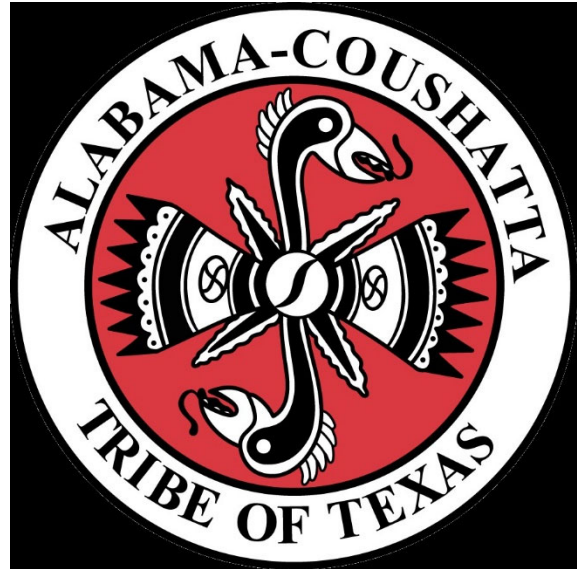
Jefferson County has the highest percentage households that speak a language other than English at home.



Source. U.S. Census Bureau. American Community Survey 5-Year Estimates 2017-2021.

Alabama-Coushatta Tribe of Texas

The Alabama-Coushatta Tribe of Texas resides within Tyler and Polk counties. The tribal land is 17 miles east of Livingston and covers 10,200 acres of land. The Alabama-Coushatta Tribe is the oldest tribal reservation in Texas. Originally the Alabama and Coushatta tribes were two separate tribes. Through a treaty negotiated with Sam Houston in 1836, reservation land was granted to both tribes if they would side with the “Texans” during the Texas War for Independence from Mexico. The tribes joined together to serve as guides for Sam Houston’s army and aided refugees fleeing Santa Anna’s army.²⁴



The following information represents demographic data collected specifically for the Alabama-Coushatta Tribe from the U.S. Department of Commerce, Economics, and Statistics and U.S. Census Bureau American Community Survey. The tables include population demographics, household income, and poverty.²⁵

Table 8. Alabama-Coushatta population and race/ethnicity.

| Race/Ethnicity | Population | Percent of Population |
|------------------------|------------|-----------------------|
| TOTAL POPULATION | 681 | |
| ONE RACE | 586 | 86.1% |
| American Indian | 519 | 76.2% |
| Asian | 31 | 4.6% |
| White | 34 | 5.0% |
| Some Other Race | 2 | 0.3% |
| TWO OR MORE RACES | 95 | 14.0% |
| HISPANIC OR LATINO | 75 | 11.0% |
| NON-HISPANIC OR LATINO | 601 | 88.3% |

Source. U.S. Census Bureau. My Tribal Area.

Table 9. Alabama-Coushatta population by age.

| | 0-19 | 20-24 | 25-44 | 45-64 | 65+ |
|---------|-------|-------|-------|-------|------|
| Number | 271 | 57 | 157 | 143 | 53 |
| Percent | 39.8% | 8.4% | 23.1% | 21.0% | 7.8% |

Source. U.S. Census Bureau. My Tribal Area.

Median (middle) Household Income

\$53,125

Mean (average) Household Income

\$65,954

Risk and Protective Factors

Assessing the risk and protective factors that are present within a community provides epidemiologist with crucial information for determining the potential for protection from or the increased likelihood of substance use. Each community possesses multiple environmental influences such as neighborhoods, schools, friends, and families that determine the level of risk and protective factors.

Critical factors that lead to the probability of substance use and misuse:

- Parental use
- Family conflict
- Emotional stre
- Economic stress
- Poor coping skills
- Poor social skills
- Sexual orientation
- Poor academic performance

Factors such as exposure to violence or an absence of parental guidance contribute to the likelihood of behavior that leads to taking risks with substances. Low-income and lower achievement in education indicates a risk factor that can tip the scale toward substance use and misuse.

Whatever the risk factors may be that lead an individual toward dependence on a substance, it is most often more than just one factor. The risk factors combine to reinforce the choices and behaviors of an individual. For prevention specialists, identifying the various risk factors provides opportunities to redirect toward protective factors.

While this RNA gives attention to alcohol, tobacco, and other drugs (ATODs), dependence and the subsequent harm stretch far beyond ATODs. The fact that something is legal, such as alcohol and tobacco, does not mean it is always safe. Food, gambling, shopping, and even social media can become problematic if it begins to cause problems for the individual or their family. The goal is to draw attention to behaviors that are detrimental to an individual's life and disclose available resources to increase protective factors.

Societal Domain

Social norms play a part in protecting or adding risk to an individual's behavior depending on how an individual is acclimating to those norms. Failing to measure up to certain norms creates a stigma in which an individual will likely personify through risky behavior. Living in poverty impacts one's overall health, including an increased risk of mortality, poor health, and increase in preventable diseases due to a lack of food and other resources. Additionally, fiscal disparities heighten differences in social status and serve as a social stressor.²⁶

Social determinants of health are the aspects of life that are typically beyond the individual's control, such as the family in which an individual was born or the neighborhood in which one grew up. The determinants include access to and quality of healthcare and education, social and community context, economic stability, and environment of the neighborhood. There has been an increase in awareness surrounding society's impact on these determinants, especially around racism. This is an important topic that is moving out of academic discussion and into the "streets" as an issue that demands attention.²⁷

Economic Conditions

Economic conditions play a crucial role in establishing social determinants of health. Those experiencing economic disparities subsequently struggle with food security, transportation, healthcare, and social class attitudes that advance a negative self-identity. The following indicators reveal positive or negative economic factors withing a community.

Income

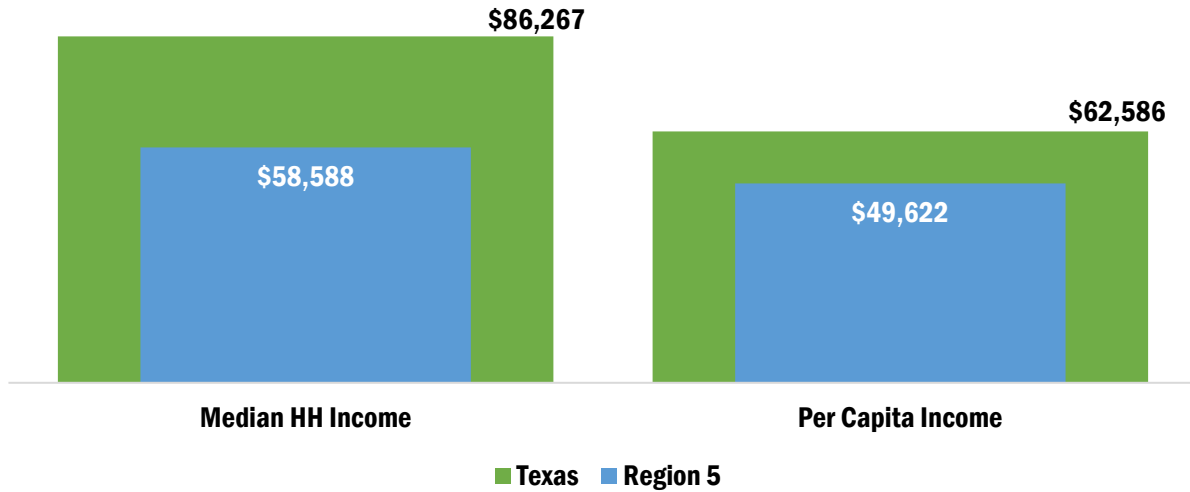
The median (middle) household income is an effective evaluator of the economic well-being of a specific population. The upper half of this indicator is a measurement of the potential buying power of those who would seek to acquire goods and services. The lower half provides an estimate of the number of households that would possibly qualify for various government programs.²⁸

The median household income for Texas is \$86,267 compared to Region 5, which is \$58,588 as seen in Graph 6 below.

As seen in Graph 7 below, Hardin County has the highest median household income at \$78,189, followed by Orange County (\$75,767) and Jefferson County (\$64,600). The counties with the lowest median household income are San Augustine County (\$48,158), Houston County (\$48,902), and Newton County (\$50,766).

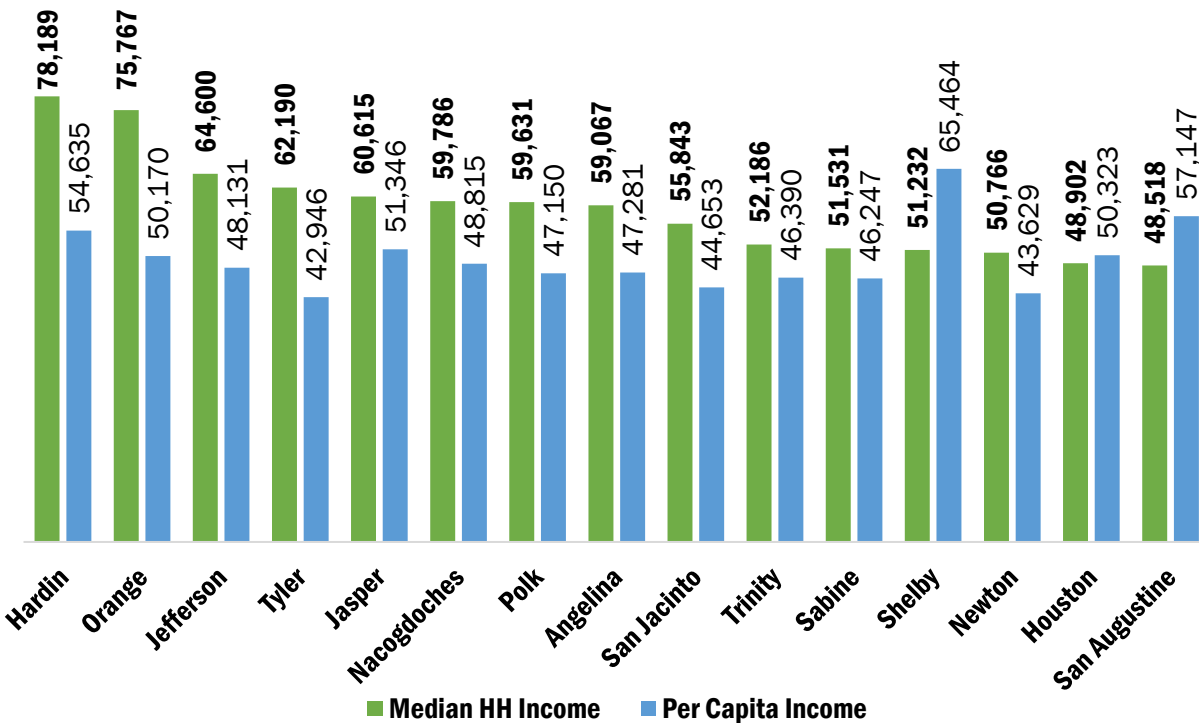
Graph 6. Median household income and income per capita compared to Texas.

Median household income and income per capita for Region 5 is below the state average.



Source. Median Household Income. U.S. Census Bureau. American Community Survey 5-Year Estimates 2018-2022.

Graph 7. Median household income and income per capita, per county.



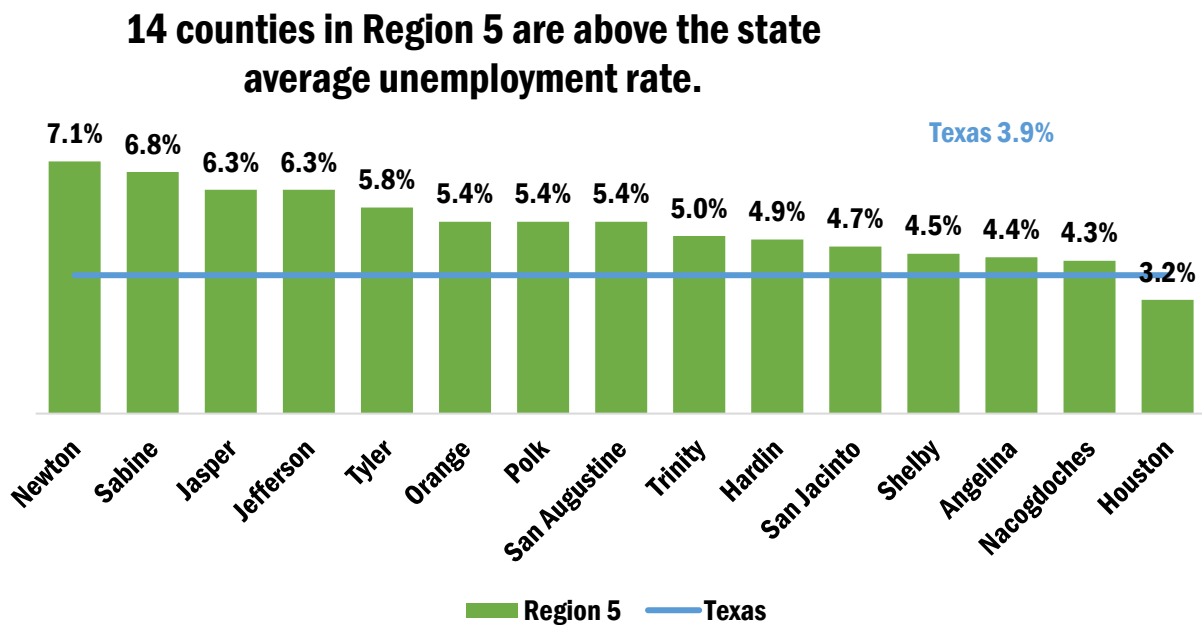
Source. Median Household Income. U.S. Census Bureau. American Community Survey 5-Year Estimates 2018-2022.

Unemployment

Unemployment rates reflect a community's economic stability. Employment not only provides financial security and an increase in the purchasing of goods and services, but it is also a source of community connection and fulfillment. Furthermore, the workplace can be a place that provides additional resources if needed.

As seen in Graph 8, fourteen counties within the region are above the state's 5-year average unemployment rate of 3.9%.²⁹ Those counties include Newton (7.1%), Sabine (6.8%), Jasper (6.3%), Jefferson (6.3%), Tyler (5.8%), Orange (5.4%), Polk (5.4%), San Augustine (5.4%), Trinity (5.0%), Hardin (4.9%), San Jacinto (4.7%), Shelby (4.5%), Angelina (4.4%), Nacogdoches (4.3%), and Houston (3.2%).

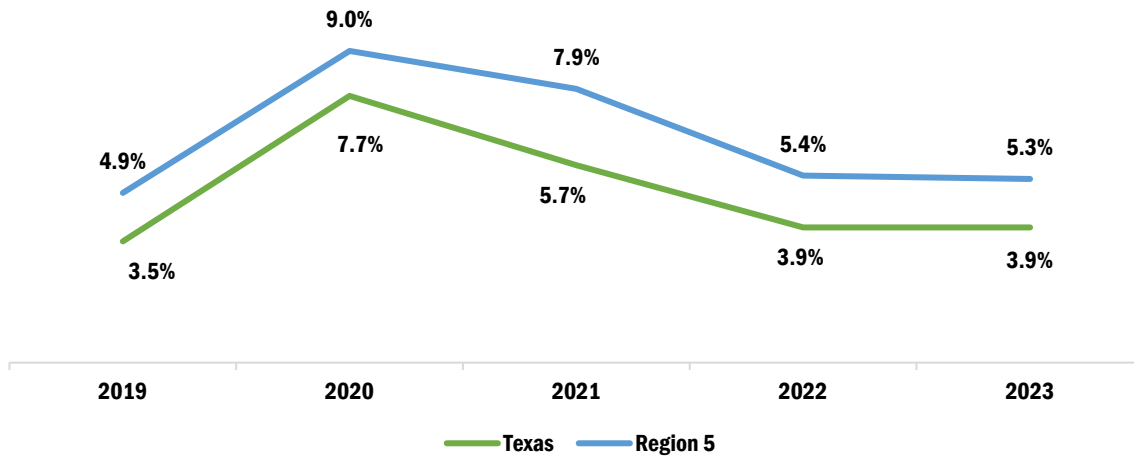
Graph 8. Unemployment rate, 5-year average, 2019-2023.



Source. Unemployment Rate. U.S. Bureau of Labor Statistics.

Graph 9. Unemployment rate region-wide compared to Texas, 2019 to 2023.

Over the past 5 years, the region's unemployment rate has remained above the state's average unemployment rate.

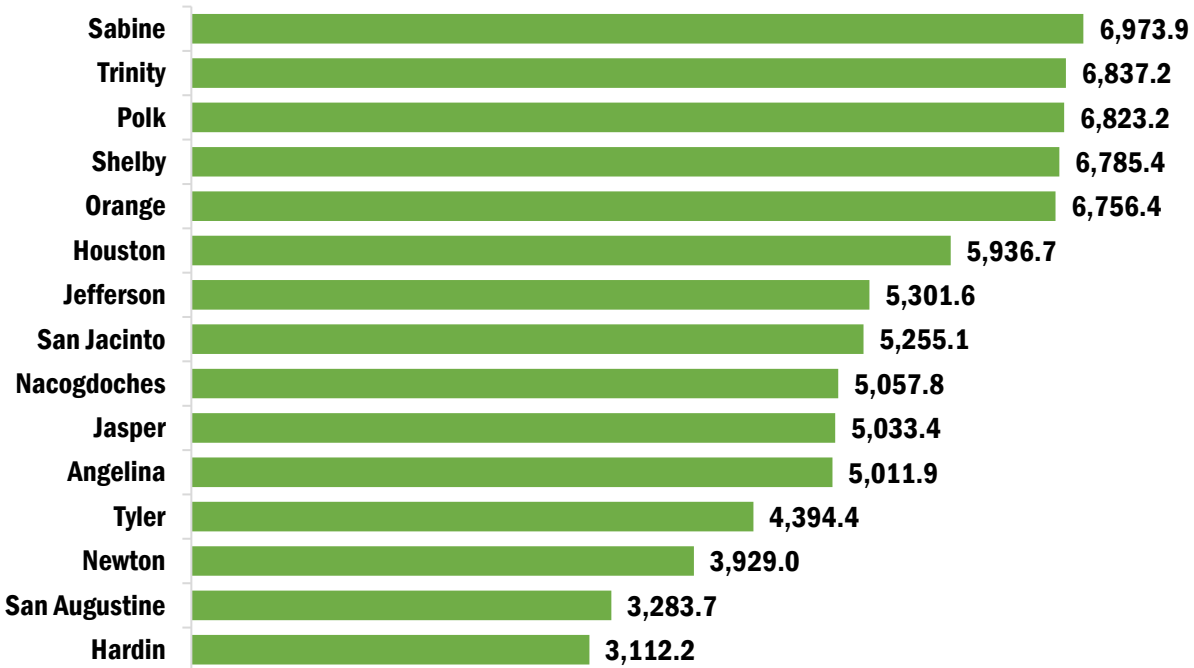


Source. Unemployment Rate. U.S. Bureau of Labor Statistics.

TANF Recipients

Temporary Assistance for Needy Families (TANF) is a federally funded government program designed to provide limited assistance to help families afford basic needs such as food, clothing, housing, and other essential items.³⁰ For Region 5, the overall amount of money distributed to families from 2020 to 2022 totaled \$1,659,973. The average payment per household for the same period was \$144.

Graph 10. Number of TANF cases per 100,000 in population per county, 2020-2022.



Source. Temporary Assistance for Needy Families (TANF). Texas Health and Human Services.

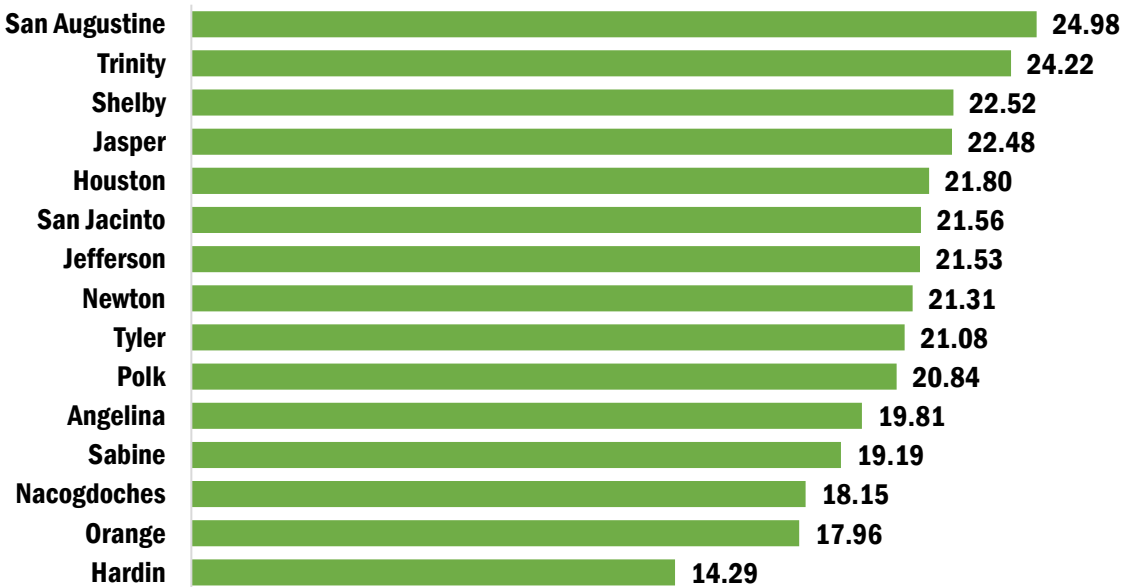
SNAP Recipients

The Supplemental Nutrition Assistance Program (SNAP) is sponsored by the U.S. Department of Agriculture to provide nutrition benefits to supplement the food budget of families that need help in providing food for their family. Without these resources, these families would be lacking in the basics needed to survive.³¹ Lacking food, clothing, and housing is a risk factor for substance misuse.

According to 2023 data from County Health Rankings and Roadmaps, all counties within Region 5 are above the state average in percentage of population that does not have a reliable source of food. The state average is 13%. For Region 5, the county experiencing the highest food insecurity is San Augustine County at 23%; followed by Newton and Sabine counties at 21%, Jasper and Tyler counties at 20%, and the remaining counties ranging from 16% to 19%.³²

For Region 5, the average yearly disbursement of SNAP for the years 2020 to 2022 was \$195,124,747, with an average monthly payment per case of \$272. San Augustine County had the highest average median monthly number of SNAP cases per 100 households per month with a rate of 24.98 followed by Trinity County with a rate of 24.22 per 100 households. Hardin County had the lowest rate at 14.29. In comparison, the average median monthly number of SNAP cases for Texas over the same period was 15.17, which places all counties, except Hardin County above the state average.

Graph 11. Average median monthly number of SNAP cases per 100 households per county, 2020-2022.



Source. Supplemental Nutritional Assistance Program. Texas Health and Human Services.

Free/Reduced Lunch

To combat food insecurity, the Food and Nutrition Service of the U.S. Department of Agriculture (USDA) has established income eligibility guidelines that apply to all schools, institutions, and facilities that participate in the National School Lunch Program, School Breakfast Program, Special Milk Program for Children, Child and Adult Care Food Program, and Summer Food Service Program. The intention is to direct benefits toward children most in need of food security.³³

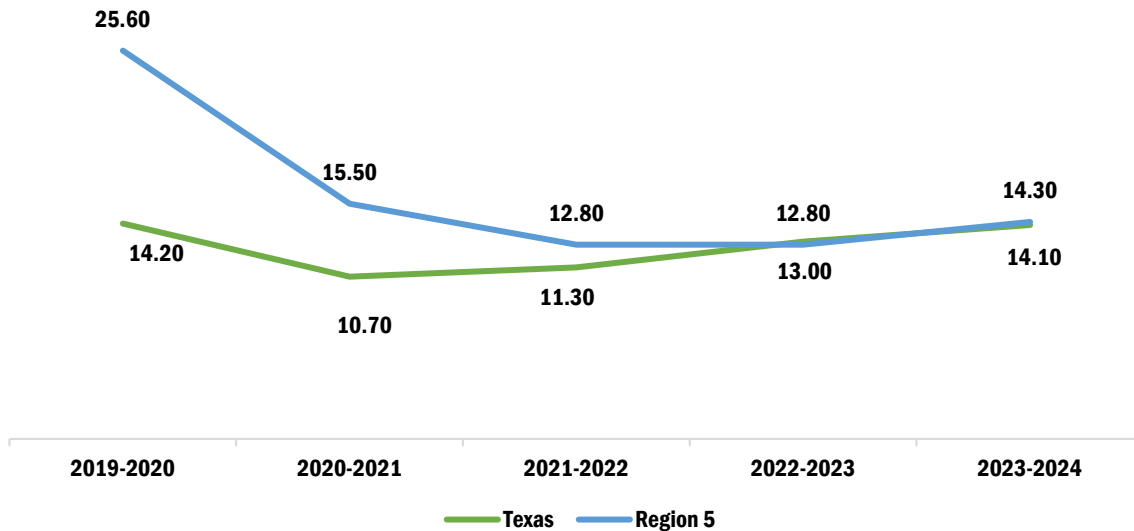
For Texas, 78% of the public-school students are eligible for free or reduced priced lunches. For the region, 67.3% of the students are eligible. San Augustine and Trinity counties have the highest percentages at 79% and 74% respectively. The lowest is Hardin County at 47%.

Students Experiencing Homelessness

Homelessness has a strong impact on a child's social, physical, and academic development. Homeless children are at a greater risk of physical, psychological, and emotional exploitation by society, family, and even themselves. The stress of being homeless is often too traumatic for the child to comprehend and tends to lead to greater emotional stress and the need to find some form of respite, which makes the child more vulnerable to substance use and misuse.³⁴

The student homeless rate for Region 5 has remained above the state average for several years as seen in Graph 12 below. The higher rate began in August of 2017 after Hurricane Harvey impacted the Gulf Coast, specifically Beaumont, Orange, and Port Arthur. The devastation left many families homeless and was reflected in higher rates of homelessness. For the school year 2017/2018, the student homeless rate per 1,000 students for the region was 80.5 compared to the rate of 12.8 for the school year of 2022/2023. The higher rate was supported by counties with significantly higher rates of homeless students: Orange (207.3), Newton (130.1), Jefferson (124.4), and Hardin (82.5).³⁵

Graph 12. Student homeless rates per 1,000 students, Texas compared to Region 5 for the school years 2019/2020 to 2023/2024.

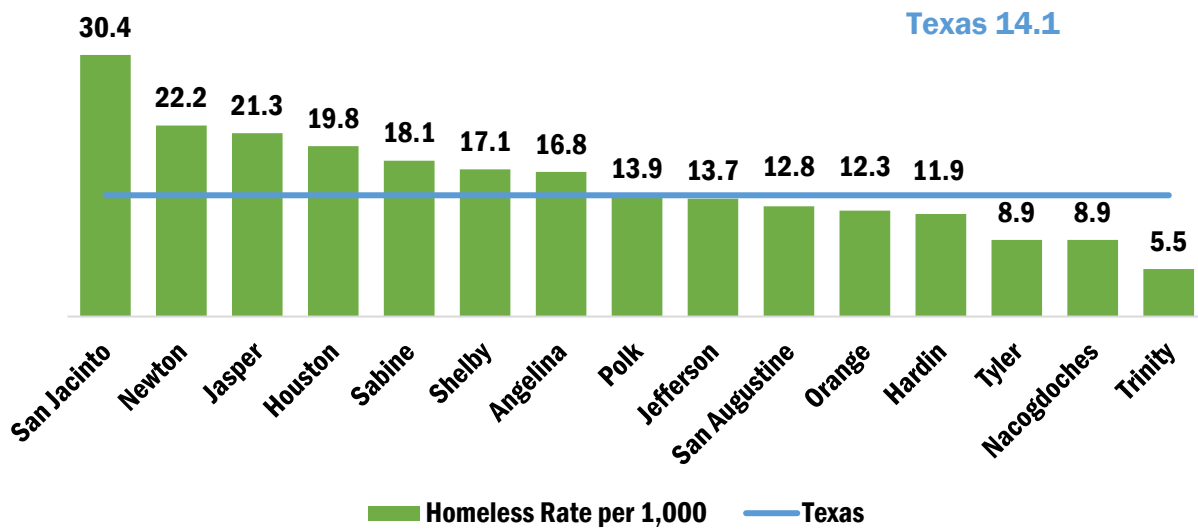


Source. Texas Education Agency. Student Program and Special Population Report.

The homeless student population for the region has elevated to the point at which it is currently above the state’s rate of 14.1 per 1,000 students while Region 5 is at 14.3. Seven of the fifteen counties within the region remain above the state average. San Jacinto County has the highest rate at 30.4 followed by Newton (22.2), Jasper (21.3), Houston (19.8), Sabine (18.1), Shelby (17.1), Angelina (16.8), and Polk County (13.9). (see Graph 13 below)

Graph 13. Student homeless rate per 1,000 students per county compared to Texas.

7 of the 15 counties in Region 5 are above the state average in the rate of homeless students per 1,000.



Source. Texas Education Agency. Student Program and Special Population Report.

Community Domain

As addressed in the Forward of this RNA, researchers have developed various models to better understand the relationship between substance use and the environment in which people live, learn, work, play, and worship. Research behind the Social Determinants of Health (SDoH) model has shown that as the various SDoH indicators deteriorate, the risk for substance use and misuse increases; therefore, demonstrating the influences the SDoH indicators have within a community. The SDoH indicators are:³⁶

- **Economic Stability** – the ability to afford health-supporting purchases, such as food and housing.
- **Education Access and Quality** – the ability to obtain a high-quality education.
- **Health Care Access and Quality** – the ability to obtain high-quality health care services.
- **Neighborhood and Built Environment** – the ability to live safely and avoid danger.
- **Social and Community Context** – the ability to have positive relationships with people around us.

Select SDoH indicators are linked to an increased risk of substance use and misuse, such as economic stability, social and community context, and health care access and quality, while others are more associated with increased stress and anxiety. This in turn increases the risk of substance use and misuse.³⁷ Therefore, having a better understanding of the SDoH of each community offers community leaders and prevention specialist the opportunity to pursue specific opportunities for impacting the communities they serve.

Indicators of the community domain in which this RNA will provide data are educational attainment, community conditions (arrest and crime rates), healthcare, access to substances, school conditions, and protective factors. While reading this section of the RNA, keep in mind (or even take notes) of policies and actions that can be taken to confront local deficiencies in the SDoH.

Educational Attainment

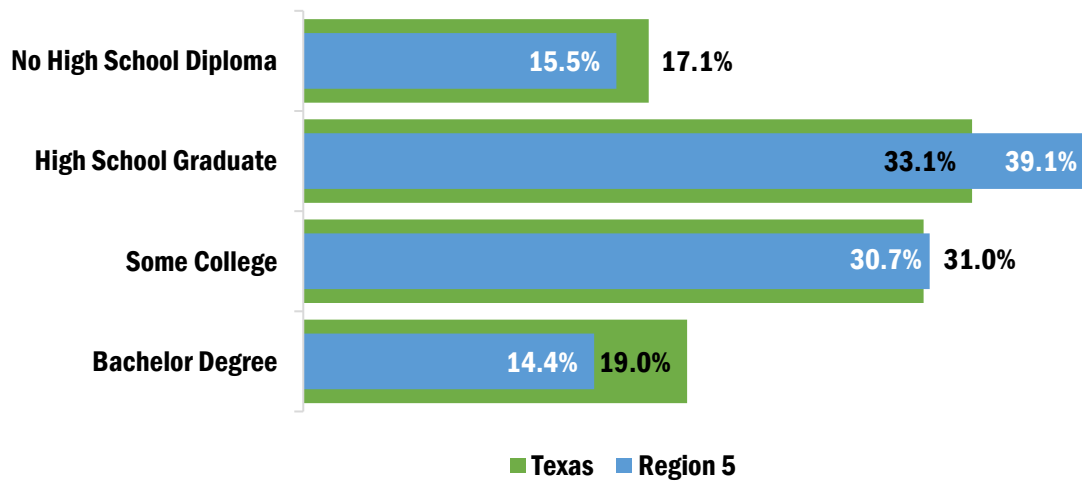
Aristotle once said, "The more you know, the more you don't know." This could also be interpreted as, "the more you learn, the more you realize how little you know." Acquiring higher levels of education can be advantageous, especially as a protective factor around substance use and misuse.

As a protective factor, educational attainment supports the individual helping them.³⁸

- Realize their true potential
- Sharpening their critical thinking skills
- Providing more opportunities
- Discover avenues for financial stability
- Support and develop their community
- Use education as a tool for empowerment

In the area of educational attainment, overall, Region 5 is below the performance of the state. For those with "No High School Diploma," Region 5 is at 15.5%, while the state is at 17.1%. Those who are "High School Graduates," Region 5 is at 39.1% and the state is at 33.1%. Where the region falls well behind the state is the number of those who have obtained a bachelor and graduate degree. (See Graph 14 below) While the state is at 19.0% for those with a bachelor's degree, Region 5 is at 14.4% for those with a bachelor's degree.³⁹

Graph 14. Percentage of educational attainment for Texas compared to Region 5.
Region 5 is below the state average in those without a High School diploma and those with a bachelors degree.



Source. U.S. Census Bureau. American Community Survey 5-Year Estimates 2017-2021.

Community Conditions

A community is made up of individuals who are linked to one another through various shared and common interests great and small. For example, simply residing within the city limits makes one a citizen of that city and a member of the overall community. Community membership also includes classifications that are less tangible such as an “academic community” or a “faith community.” Whatever the community may be in which an individual lives, works, or plays, each member’s behavior impacts the community as a whole and affects the quality of life for everyone.

In this section of the RNA, an assessment of specific indicators that tend to influence a community’s overall condition will be examined. Those indicators are:

- Overall crime
- Alcohol related arrests
- Drug related arrests
- Drug seizures and trafficking
- Violent and property crime rates
- Juvenile probation

Concerning crime reporting data, the Crime in Texas (CIT) Online Portal provides a platform for the public to access online and on demand statistical and analytical information about crime reported in the state. The portal allows users to create unique queries utilizing specific data points associated with selected contributing entities, resulting in a more intuitive way to gather statistical data that is tailored to the needs of the requestor, without the need to make a manual request to the Uniform Crime Reporting (UCR) program.

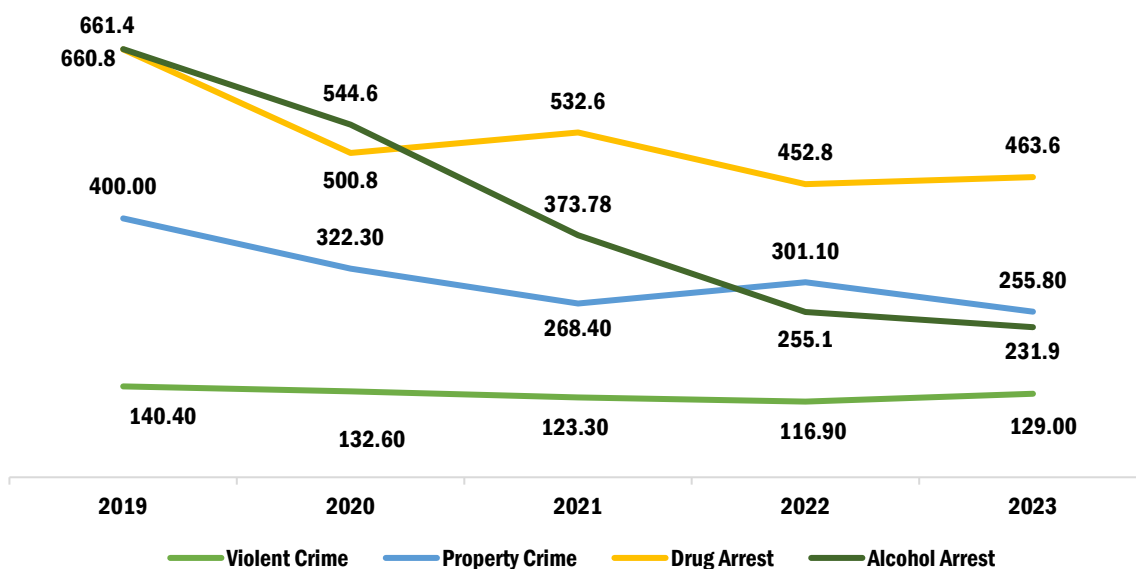
The data available via the portal is reported in either a Summary Reporting System (SRS) or National Incident Based Reporting System (NIBRS) format. Users may search the portal for either SRS data from 1981 to current year or detailed NIBRS data which is the only submission method accepted since July 1, 2021. While data from NIBRS agencies is converted and includes SRS search results, NIBRS specific queries return data sets derived only from NIBRS contributors.

It is important to note that CIT publication is an historical “point in time” document that reflects crime statistics reported to the program up to the time of publication. Crime data available through the CIT Online Portal is dynamic and reflects data that may have been reported to the program after the publication date for the CIT publication. Because of the possibility for continuous updates to the data available in the portal, users must be aware that statistics from the portal may not align with statistics published in the CIT publication for the same given time.⁴⁰

Overall Crime

For the region, the overall crime rate has been declining from 2019 to 2023 as seen in Graph 15 below. According to the Texas Department of Public Safety the largest decline was in the number of alcohol arrests.⁴¹

Graph 15. Regional crime rate per 100k from 2019 to 2023.



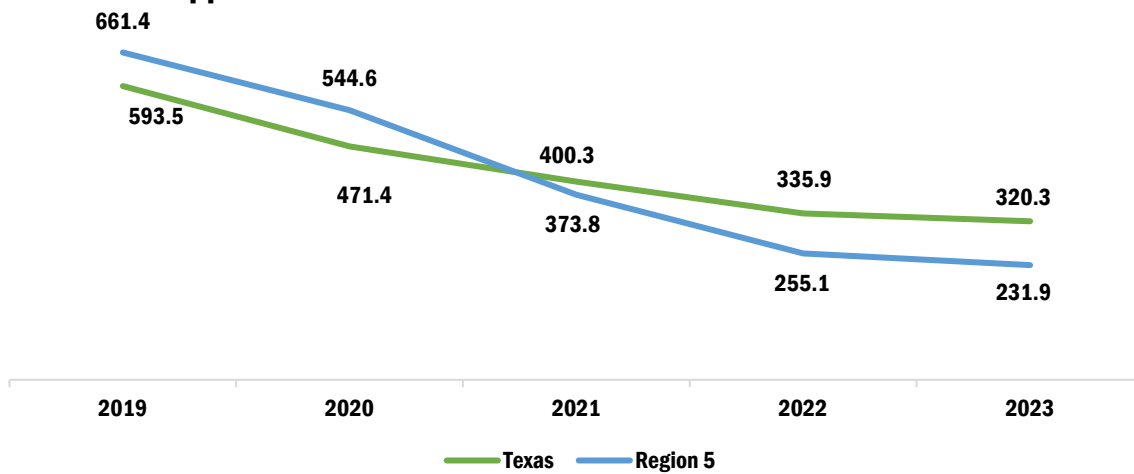
Source. Uniform Crime Reporting System. Texas Department of Public Safety.

Alcohol Related Arrests

Problems related to the use and misuse of alcohol tend to lead to various negative consequences. Driving under the influence of alcohol (DWI) increases the risk of a motor vehicle crash. Alcohol can impair coordination, which can result in an increase of accidents such as falls or drowning. In addition, cognitive impairment leads to poor decision making such as risky sexual behavior, sexual assault, and violence. Finally, there are the negative health effects of alcohol. Numerous studies by agencies and organizations from around the world have shown that not only do those who consume alcohol live shorter lives than smokers, but alcohol is the one commodity sold around the world that has the most negative health effects, even more than tobacco.⁴²

Graph 16. Alcohol related arrests rates per 100,000 for Texas and Region 5, 2019 to 2023.

Alcohol related arrests rate for Region 5 has dropped below the state rate.



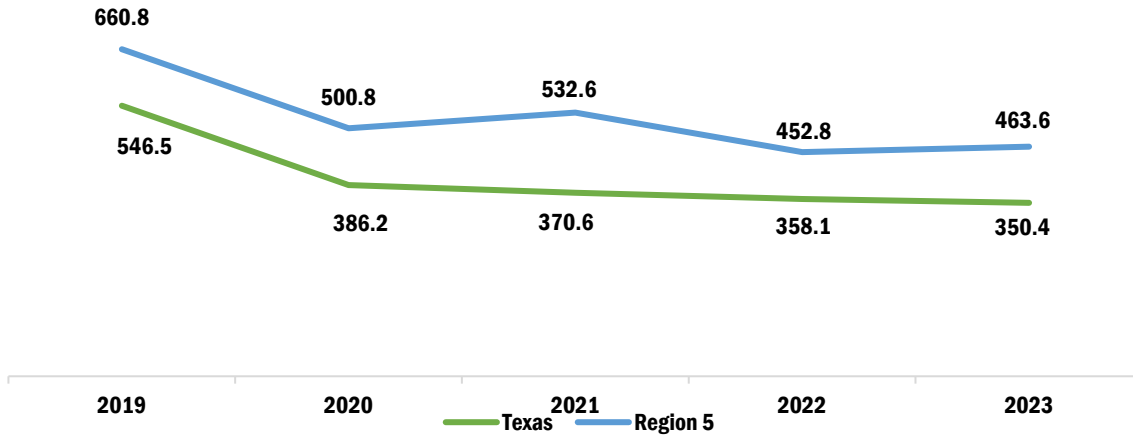
Source. Texas Department of Public Safety Uniform Crime Reporting.

Drug-Related Arrests

Drug-related arrests encompass drug law violations that include the illegal manufacturing of a substance, transporting/trafficking and distribution of an illegal substances, and the possession and/or consumption of illegal substances. Both Texas and Region 5 experienced a decrease in the rate of drug-related arrests.

Graph 17. Drug related arrest rates per 100,000 for Texas and Region 5, 2019 to 2023.

Drug related arrests rate for Region 5 are declining, yet still remain above the state average.



Source: Texas Department of Public Safety Uniform Crime Reporting.

The figures below represent the density of alcohol and drug related arrests rates per county.

Figure 9. Density alcohol related arrests, 2023.

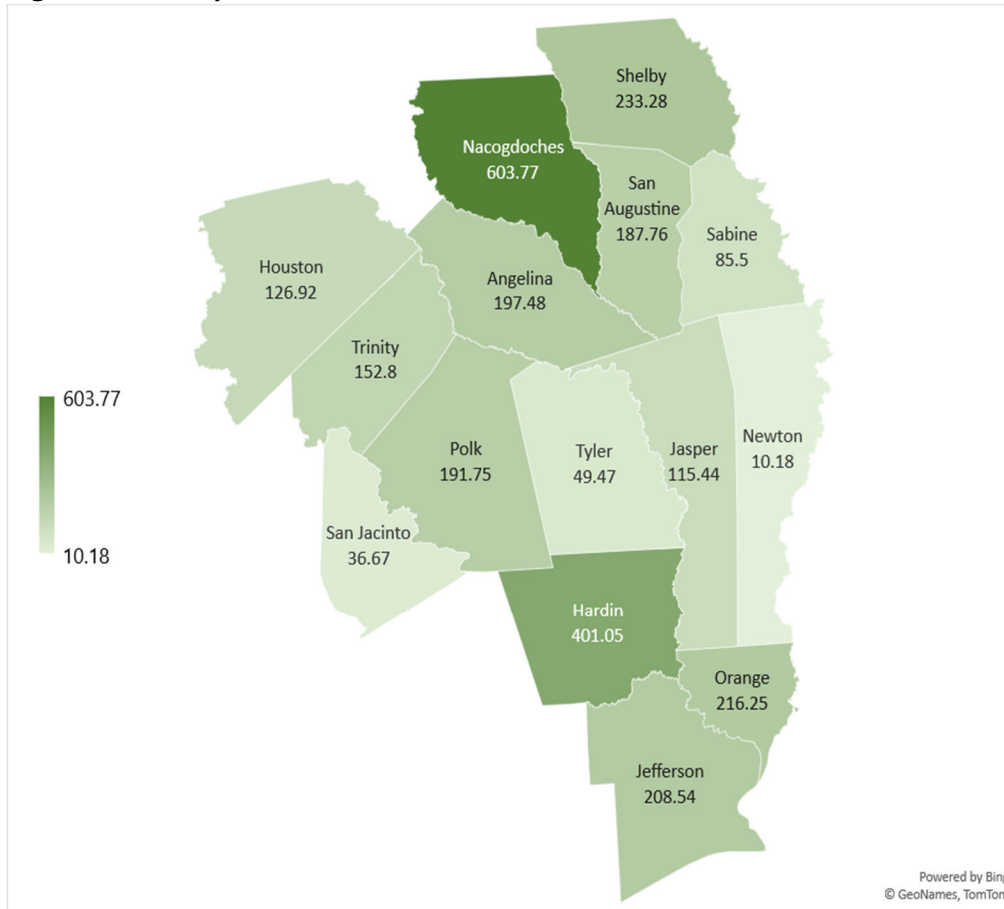
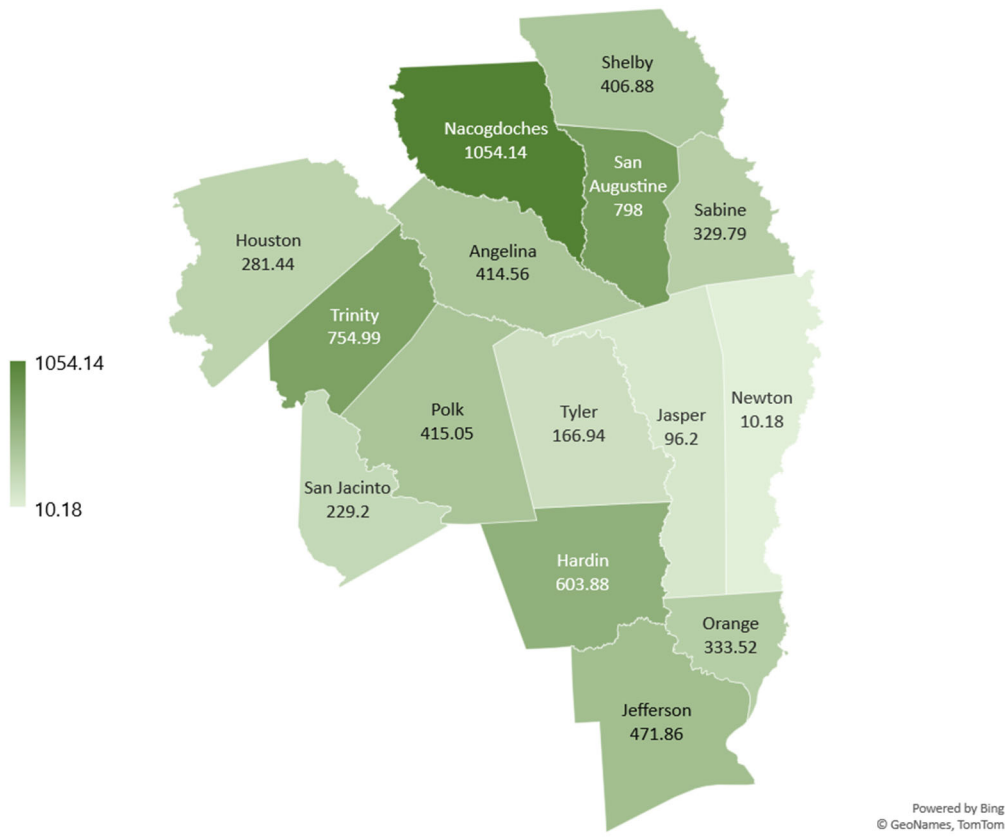


Figure 10. Density drug related arrests, 2023.

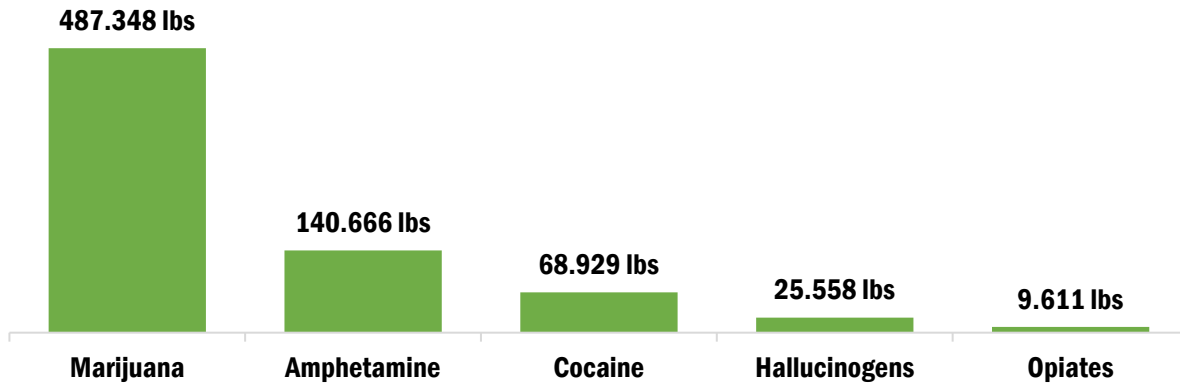


Drug Seizure/Trafficking

While there are times that drugs are seized from traffickers moving their product from Mexico to the Northeast United States, according to local law enforcement, most of the drugs seized within the region are those that were manufactured locally or brought to the area to be distributed locally.

Graph 18. Drugs seizures for Region 5 in pounds seized.

Seizure of marijuana is double all other drugs combined.



Source: Texas Department of Public Safety Uniform Crime Reporting.

Violent and Property Crime Rates

Violent and property crime within a community negatively impacts the overall health of that community. A surge in crime rates creates stress for the community which only amplifies the impact of the crimes and adversely damages the functionality of the community by:⁴⁵

- Reducing safety
- Disrupting in order and creating chaos
- Impeding community collaboration and trust
- Unsettling economic stability

Juvenile Probation

The Texas Juvenile Justice Department (TJJD) is the state’s system tasked with overseeing juveniles (ages 10 to 16) who have committed acts defined as “delinquent conduct” in need of supervision.” Delinquent conduct is any conduct that if committed by an adult, would lead to imprisonment. Conduct in need of supervision is any conduct, that if committed by an adult, would result in only a fine or behavior that is defined as a violation of law.⁴⁶

For a juvenile to be referred to juvenile detention, all three of the following conditions must exist:⁴⁷

- The juvenile has allegedly committed delinquent conduct, conduct indicating a need for supervision, or a violation of probation.
- The juvenile court served by the juvenile probation department has jurisdiction.
- The office or official designated by the juvenile board has made face-to-face contact with the juvenile and the alleged offense has been presented as the reason for this contact or the office or official has given written or verbal authorization to detain the juvenile.

For the state of Texas, as seen in Figure 11 below, the juvenile population has increased from 2,856,077 in 2018 to 2,906,377 in 2022. Despite the increase in the juvenile population in Texas, the number of referrals to juvenile probation departments decreased in 2020 as seen in Figure 12. This is due in large part to the impact of the COVID-19 response on the juvenile justice system.⁴⁸

Figure 11. Juvenile population, 2018-2022.

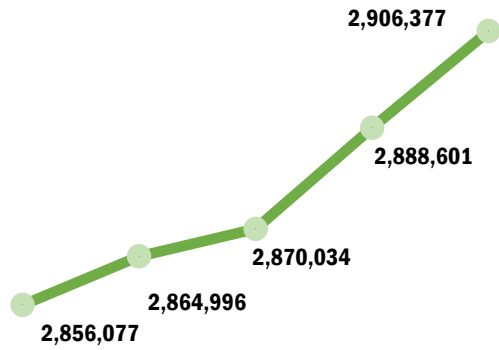
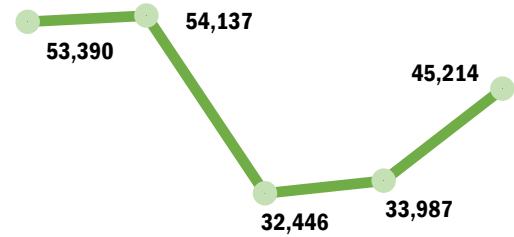


Figure 12. Juvenile referrals, 2018-2022.



2018 2019 2020 2021 2022 2018 2019 2020 2021 2022

Source. The State of Juvenile Probation Activity in Texas, 2022.

Healthcare

Historically, services for substance use and misuse have been administered apart from general health care and mental health services. However, the benefit of including substance use and misuse treatment to the overall healthcare approach appears to be more effective in the overall treatment of the individual.⁴⁹ Substance Use Disorders are most often interwoven with other health issues that involve an ever-wider range of healthcare services. This has then created the need for more integration between service providers.

The understanding of the general healthcare needs of a population is also a reflection of the substance use needs as well. For Region 5, the condition of the overall health of its population has been an issue of concern over the past several years. According to the County Health Rankings, most of the counties within the region, when compared to other counties in Texas, are consistently ranked among the bottom 50 counties.

The County Health Rankings report explores the extent and landscape of various health related indicators of each county in Texas and ranks them from the highest to the lowest in regards health outcomes and health factors. The maps of Texas below (Figures 13 & 14) represent each county's Health Outcome and Health Factors. County Health Outcomes represent the overall health of each county within the state of Texas. The ranking consists of two measures: (1) how long people live, and (2) how healthy people feel.

County Health Factors represent the influence on a county's overall health. It is based on four measures: (1) health behaviors, (2) clinical care, (3) social and economic, and (4) physical environmental factors. The healthier a county, the lighter the color.⁵⁰

Figure 13. Texas Health Outcome map, 2023.

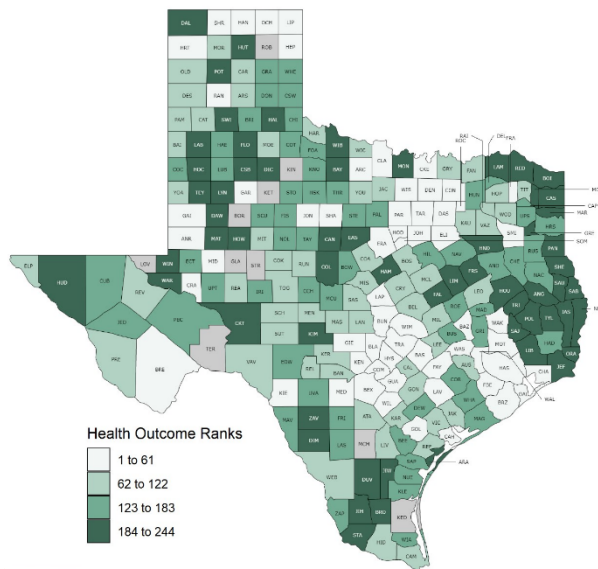
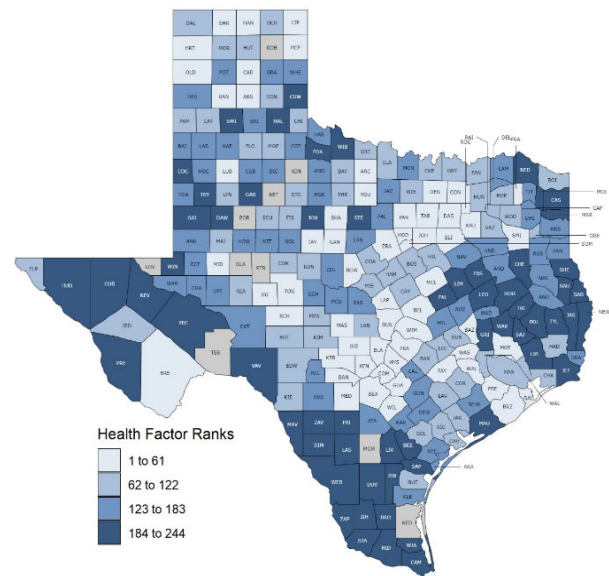


Figure 14. Texas Health Factor map, 2023

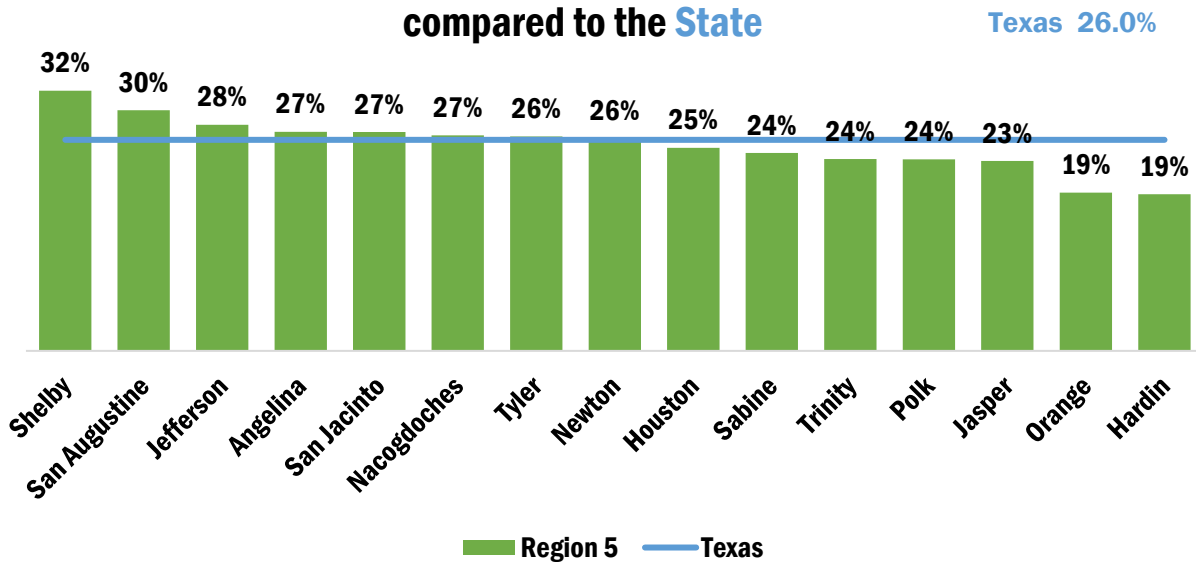


Source. County Health Rankings.

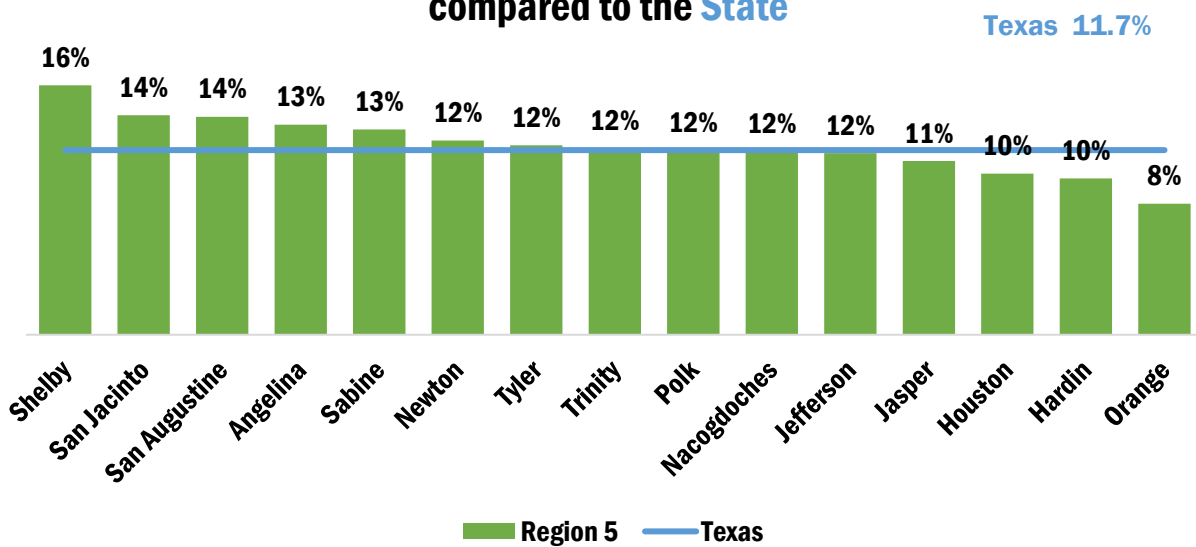
Uninsured Adults

In 2019, the federal government removed the mandatory tax penalty for not having insurance coverage. Added to this, the Texas legislature has not expanded Medicaid coverage for those that are uninsured. When medical needs arise, Texans can use low-cost services from community health centers that provide services to individuals regardless of insurance.⁵¹

Region 5 Uninsured Adults from age 19-65 in 2021 compared to the State



Region 5 Uninsured Youth under the age of 19 in 2021 compared to the State



Retail Access

According to the World Health Organization (WHO), tobacco and alcohol are leading contributors to non-communicable diseases. Consumption and related health decisions and behaviors are affected by the promotion, placement, and price of these products.⁵⁴

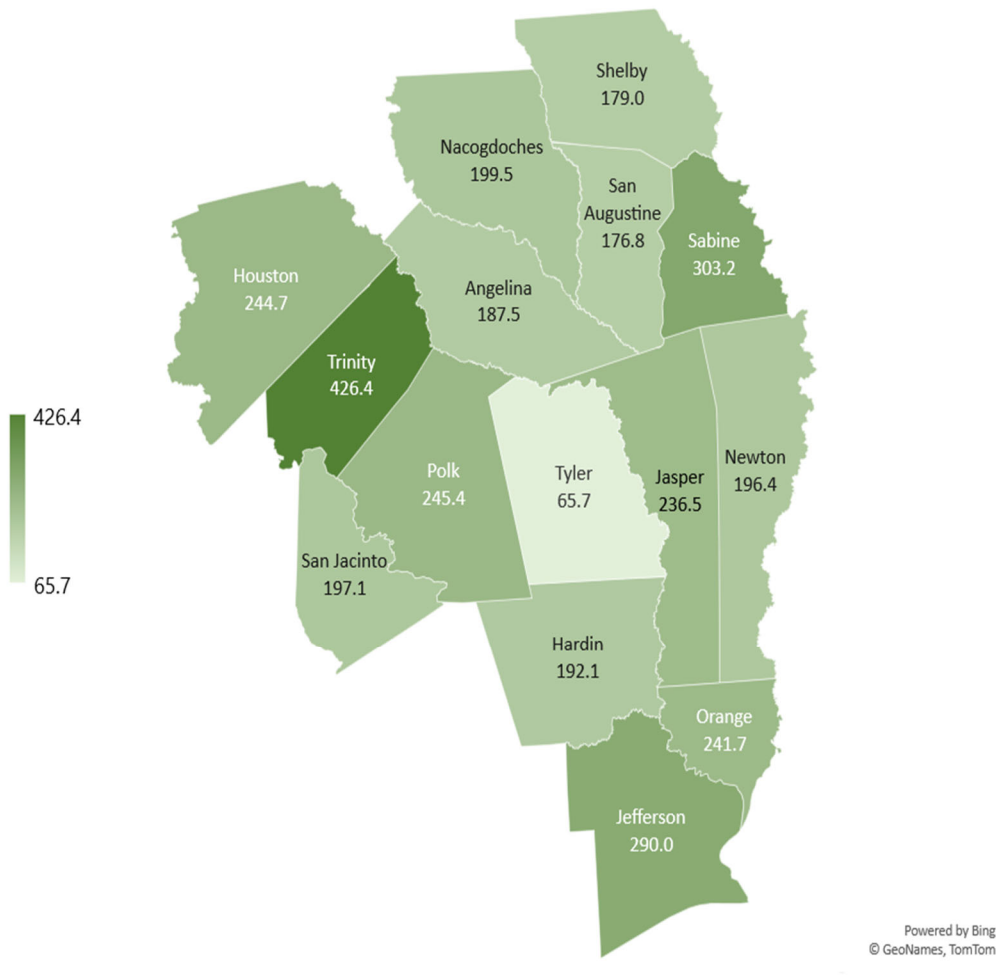
Areas with a high density of alcohol or tobacco retailers have shown to have negative effects on health behaviors. A higher density of tobacco retailers is linked to higher rates of youth tobacco use initiation, increased consumption by current smokers, and is a hinderance to those seeking to quit. A greater density of alcohol retailers has been linked to excessive alcohol consumption, and an increase in injury, crime, and violence. There are also higher rates of impaired driving and motor vehicle accidents and underage drinking. Studies also indicate that retailer density is significantly higher in low-income minority neighborhoods.⁵⁵

The following indicators will examine retailer density for alcohol, tobacco, and electronic cigarettes within the region.

Alcohol Retail Density

For 2023 For the region, Trinity County has the highest density of alcohol retailers with a rate of 426.4 retailers per 100,000 in population. This is significantly higher than the next highest, Sabine County with a rate of 303.2 retailers per 100,000 in population. Tyler County has the lowest retailer density with a rate of 65.7 retailers per 100,000 in population.

Figure 15. Alcohol retailer density for Region 5 in 2023.
Retail density per 100,000 in population:

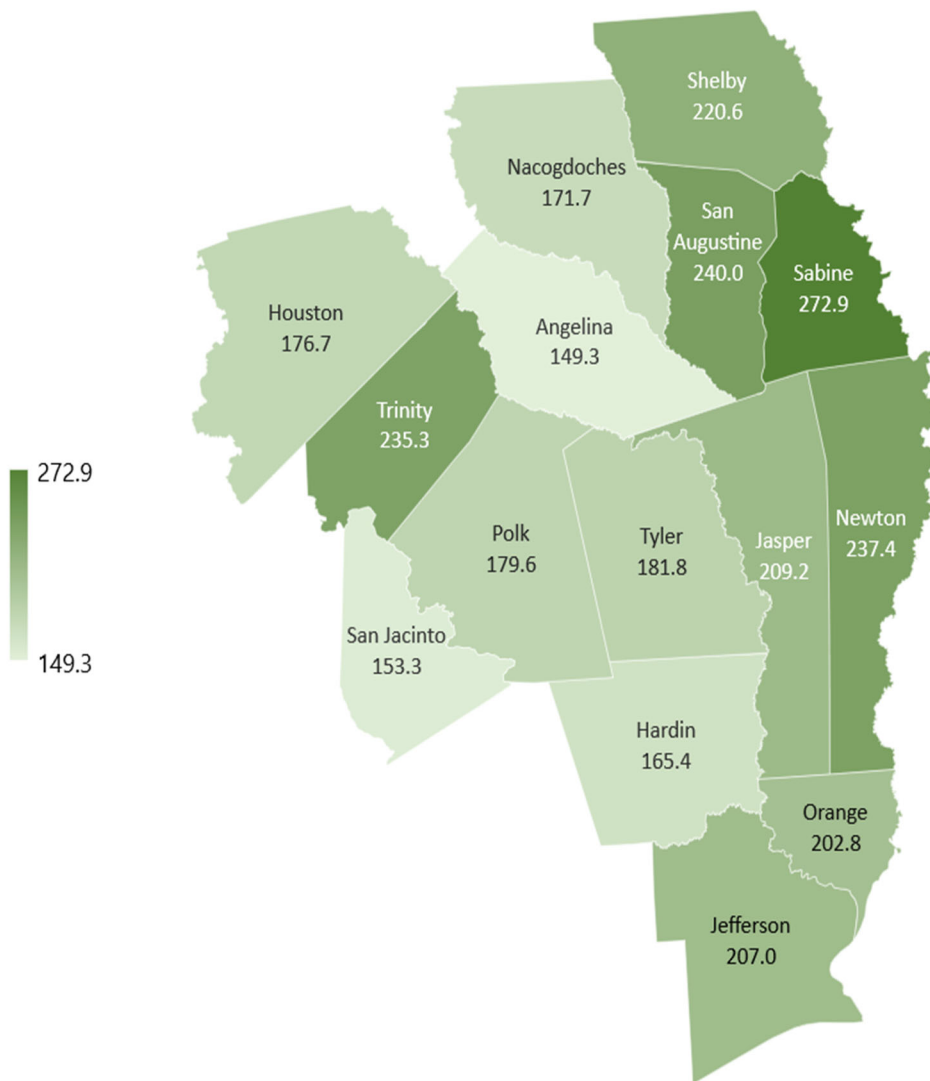


Tobacco Retail Density

In 2023, Sabine County and San Augustine County have the highest density of tobacco retailers per 100,000 in population with rates of 272.9 and 240.0, respectively. For the region, the average rate is 200.2. Angelina County has the lowest density rate at 149.3.⁵⁶

Figure 16. Tobacco retailer density for Region 5 in 2023.

Retail density per 100,000 per county:



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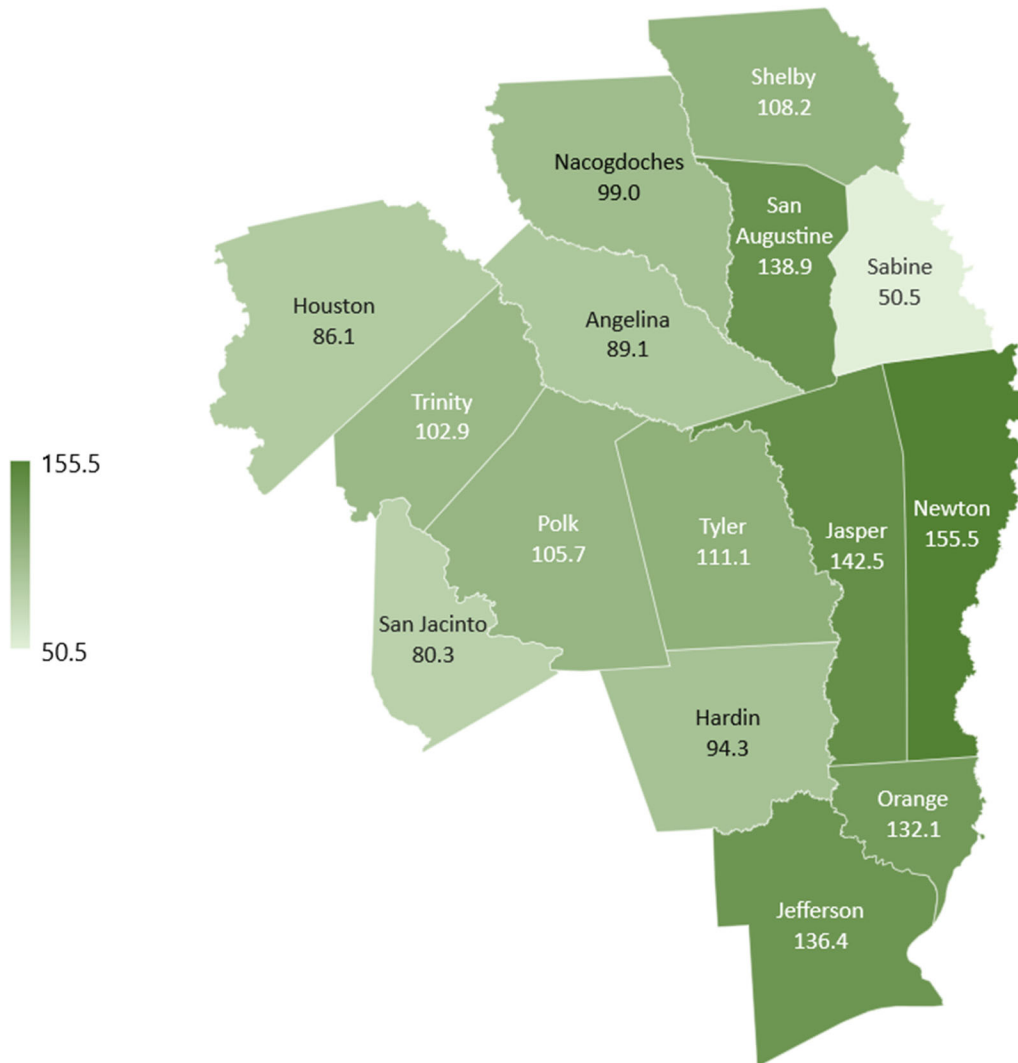
Source. Texas Comptroller of Public Accounts.

E-Cigarette Retail Density

Regarding E-cigarette retailer density for 2023, Newton County has the highest retailer density at a rate of 155.5, followed by Jasper County at 142.5, and San Augustine County at 138.9 per 100,000 in population. Sabine County has the lowest rate at 50.5⁵⁷

Figure 17. E-Cigarette retailer density for Region 5 in 2023.

Retail density per 100,000 per county:



Powered by Bing
© GeoNames, TomTom

Source. Texas Comptroller of Public Accounts.

School Conditions

Research has established that the human brain is in the development stage until their early to mid-twenties. While in development, interjecting substances such as tobacco, alcohol, or other drugs which alter the natural release of dopamine, serotonin, cortisol, and oxytocin permanently alters the brain’s normal function and reactions to everyday life. This unique modification of brain functioning acutely impacts the adolescent brain linking substance use to make poor decisions, diminished motivation, and neglect mental and physical health. The detectable result is seen in lower grades, increase absenteeism, and higher rates of school dropout. In addition, because the adolescent brain is still in the development stage, the substance use behavior becomes “programed” into the brain making it more susceptible to addiction.⁵⁸

The school setting can serve as an effective protective factor on the adolescent regarding providing a safe environment for children and adolescents to grow and learn. Consequently, a poor school environment can serve as a risk factor, giving students the occasion to engage in risky behavior that can lead to experimentation and incorrect conclusions concerning substance use.

Students Offered Drugs

To measure conditions at school, data has been collected from surveys inquiring of students how often drugs are offered, sold, or given out on school property.

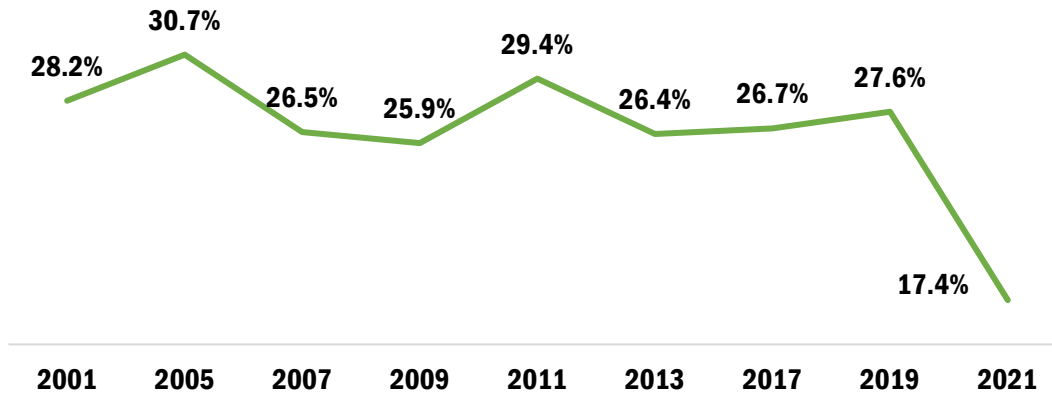
Table 10. Percentage of students who were offered, sold, or given drugs on school property for Texas for the years 2017, 2019, and 2021.

| | | 2021 | 2019 | 2017 |
|-----------------------|----------|-------|-------|-------|
| Texas | Total | 17.4% | 27.6% | 26.7% |
| Age | <=15 | 17.2% | 27.6% | 28.0% |
| | 16-17 | 17.6% | 28.3% | 27.2% |
| | 18+ | 16.5% | 25.4% | 22.8% |
| Grade | Grade 9 | 16.8% | 27.4% | 27.6% |
| | Grade 10 | 18.7% | 28.3% | 27.7% |
| | Grade 11 | 16.4% | 28.6% | 24.2% |
| | Grade 12 | 17.4% | 25.8% | 26.5% |
| Race/Ethnicity | Black | 9.9% | 21.4% | 25.3% |
| | Hispanic | 18.9% | 30.1% | 29.0% |
| | Other | 12.9% | 28.1% | 26.4% |
| | White | 19.4% | 25.6% | 24.5% |
| Sex | Female | 18.0% | 26.5% | 26.0% |
| | Male | 16.9% | 28.5% | 27.5% |

Source. Youth Risk Behavior Survey. Texas Department of State Health Services.

The Texas Youth Risk Behavior Surveillance System (YRBSS), initiated in 1991, is a federally funded, classroom-based, paper survey conducted every two years on odd numbered years to monitor priority health risk behaviors that contribute substantially to the leading causes of death, disability, and social problems among youth and adults in the United States.⁵⁹

Graph 19. Percentage of illicit drugs sold on school property in Texas, 2001 to 2021.



Source. Center for Disease Control and Prevention. High School YRBSS.

Protective Factors

Protective factors surround the lives of individuals to provide the opportunity for positive outcomes in someone’s life and reduce the likelihood of negative consequences. Protective factors appear in numerous forms and serve to actively support the individual regarding being a positive influence.

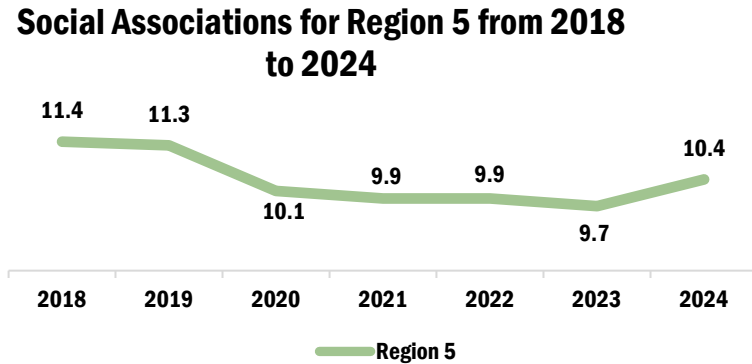
Even though Rita’s father is dependent upon alcohol, and lives in a low-income neighborhood, there are protective factors in her life that increase her capacity to overcome the risk factors that surround her. She is a member of the student council at school. She is actively involved in the youth ministry at her church. She has a teacher that has mentored her and assisted her in earning a scholarship to college to earn a degree in Human Development and Family Studies. These protective factors have provided Rita with hope and a plan for her future. They serve to motivate her in a positive direction in her life.

To measure protective factors, a study of social associations will be made. Additionally, indicators such as the prescription drug monitoring program and the number of mental health providers serve as protective factors for the region.

Social Associations

Having a sense of belonging to various social groups meets a basic psychological need: a need to feel needed. A decline in social associations can lead individuals to feel more isolated and less important. Social associations positively impact the association, its members, and the community. Membership in civic, sports, and religious organizations have been shown to have the greatest positive influence on minority and low social and economic individuals.⁶⁰

Figure 18. Rate of social associations for Region 5.



Source. County Health Rankings and Roadmaps. County Business Patterns.

In measuring social associations, the numerator is the total number of membership associations in a county. The associations include membership organizations such as civic organizations, bowling centers, golf clubs, fitness centers, sports organizations, religious organizations, political organizations, labor organizations, business organizations, and professional organizations.

In Texas there were 7.4 membership organizations per 10,000 people. For Region 5, these associations have been declining since 2018 as seen in Figure 18. The largest decline occurred from 2019 to 2020. this could be attributed to the government-mandated “lockdowns” in response to the pandemic.⁶¹

Prescription Drug Monitoring Program

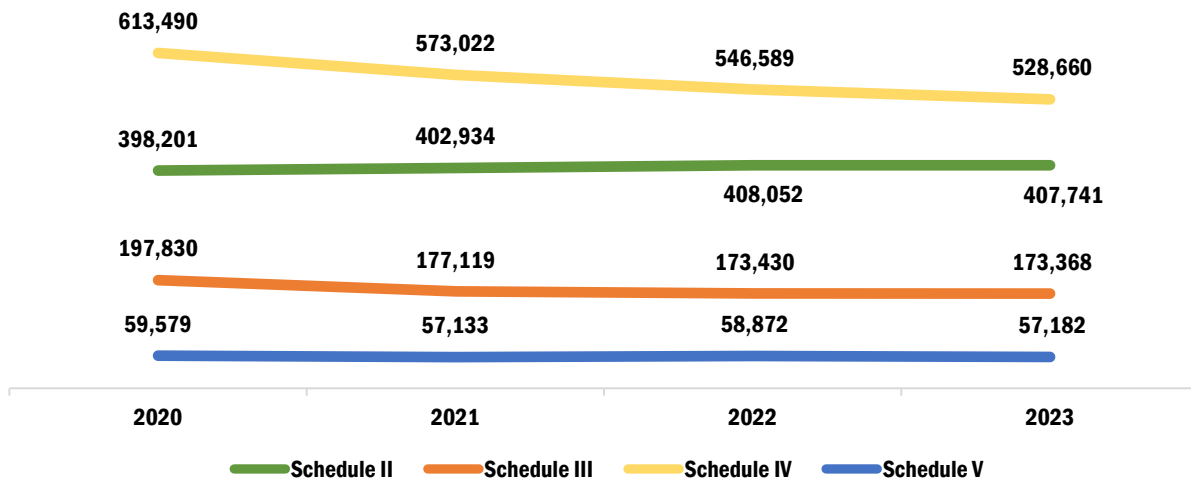
The Texas Prescription Monitoring Program (PMP) collects and monitors prescription data for all Schedule II, III, IV, and V Controlled Substances (CS) dispensed by pharmacies in Texas or to a Texas resident from a pharmacy located in another state. It provides a database for monitoring patient prescription history for practitioners and the ordering of Texas Schedule II Official Prescription Forms. All pharmacies licensed in Texas are required to report all dispensed controlled substances records to the PMP.⁶²

The purpose of the PMP is to assist pharmacists in monitoring and eliminating duplicating and/or overprescribing of controlled substances. By knowing the history of a patient’s-controlled substance prescriptions, the pharmacist can identify possible misuse of controlled substances by their patients.

The Drug Enforcement Administration (DEA) has classified drugs, substances, and certain chemicals into five distinct categories or schedules. The schedules are based on the drug's acceptable medical use and its potential for abuse or dependency. Schedule I drugs have a high potential for abuse, which includes psychological and/or physical dependency, and no current FDA approved medical use. As the schedule increases in number the misuse potential decreases. The DEA drug scheduling includes:⁶³

- **Schedule I** – heroin, lysergic acid diethylamide (LSD), marijuana (cannabis), 3,4-methylenedioxyphenol (ecstasy), methaqualone, and peyote.
- **Schedule II** - combination products with less than 15 milligrams of hydrocodone per dosage unit (Vicodin), cocaine, methamphetamine, methadone, hydromorphone (Dilaudid), meperidine (Demerol), oxycodone (OxyContin), fentanyl, Dexedrine, Adderall, and Ritalin.
- **Schedule III** – Products containing less than 90 milligrams of codeine per dosage unit (Tylenol and codeine), ketamine, anabolic steroids, testosterone.
- **Schedule IV** – Xanax, Soma, Darvon, Darvocet, Valium, Ativan, Talwin, Ambien, Tramadol.
- **Schedule V** – cough preparations with less than 200 milligrams of codeine or per 100 milliliters (Robitussin AC), Lomotil, Motofen, Lyrica, Parepectolin.

Rate of controlled substances prescribed for Region 5.



Mental Health Providers

A mental health disorder affects all aspects of an individual's life, disrupting a person's ability to study, work, care for themselves, or maintain healthy relationships with friends and family. The Mayo Clinic has reported that mental health disorders are the leading cause of disability in the United States and Canada.⁶⁴

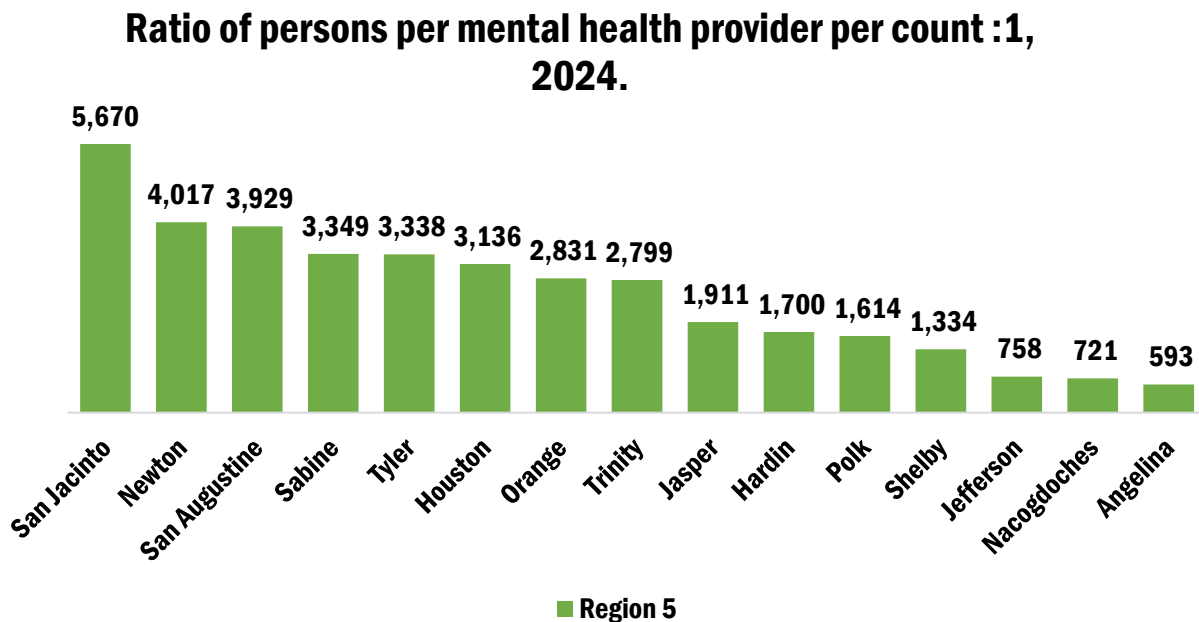
Mental health providers serve as a vital protective factor for the overall health of a community. Services provided by the region's Local Mental Health Authorities (LMHA) include counseling, crisis hotlines, treatment and intervention, Mental Health Emergency Clinic (MHEC), services for individuals with intellectual and developmental disabilities, early childhood intervention, and mental health first aid.

Region 5 is serviced by two LMHAs; Burke, located in Lufkin and Spindletop, located in Beaumont. Burke serves the northern 11 counties that include: Angelina, Houston, Nacogdoches, Newton, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, and Tyler counties. Spindletop serves the southern 4 counties that include: Hardin, Jasper, Jefferson, and Orange counties.

Mental health providers are psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol and other drug misuse, and advanced practice nurses specializing in mental health care.

The ratio of mental health providers represents the number of individuals served by one mental health provider per county, if the population was equally distributed across all providers. For example, if a county has a population of 50,000 and has 20 mental health providers, the ratio would be 2,500:1. As seen in the graph below, Angelina County has a ratio of 593:1 of mental health providers compared to San Jacinto which has a ratio of 5,670:1.

Graph 20. Ratio of persons per mental health provider per county, 2024.



Source. County Health Rankings.

Interpersonal Domain

The realm of the interpersonal domain is focused on the interactions people have with each other. Healthy relationships serve as a strong protective factor that provide the needed physical, mental, and emotional support throughout the various stages of human development. The reverse is also true. Unhealthy relationships or the lack of critical associations become risk factors, which often result in poor decisions and unhealthy behaviors.

Christopher, his two older brothers and his mother recently moved to East Texas from out of state to start a new life following a contentious divorce. Christopher and his brothers were physically and emotionally abused by their father resulting in his arrest and imprisonment. Due to the family dynamics, Chris took on the survivor role of the "Lost Child" in which he became passive, choosing to remain isolated and withdrawn from others. At school, he only developed a friendship with another boy with similar personality traits. Reflecting on his life Christopher stated that "All I wanted was to be with my brothers, hoping they would help me feel secure, but they had their own issues, which left me feeling even more alone and like an outcast."

Over the next few years, the pain of his isolation, depression, and the fear of abandonment led him to experiment with various substances. His drug of choice was marijuana, which he would buy from other students at school. He called it his "medicine." At 17 he dropped out of school, ran away from home, and began living in the streets of Beaumont. It was here that he was introduced to heroin and quickly developed a dependence. He is now in treatment for the fourth time, "Will it work? Will I stay clean? I hope so, but who knows? If I can just make it through today, I'd say that I'm doing good."

Like Christopher, the risk factors were just too overwhelming. Living with a single-parent, violence in the home, a father in prison, low self-esteem, drugs sold at school, and a school dropout proved to be too much. These are risk factors that prevention specialists work to mitigate in the lives of individuals.

Family Environment

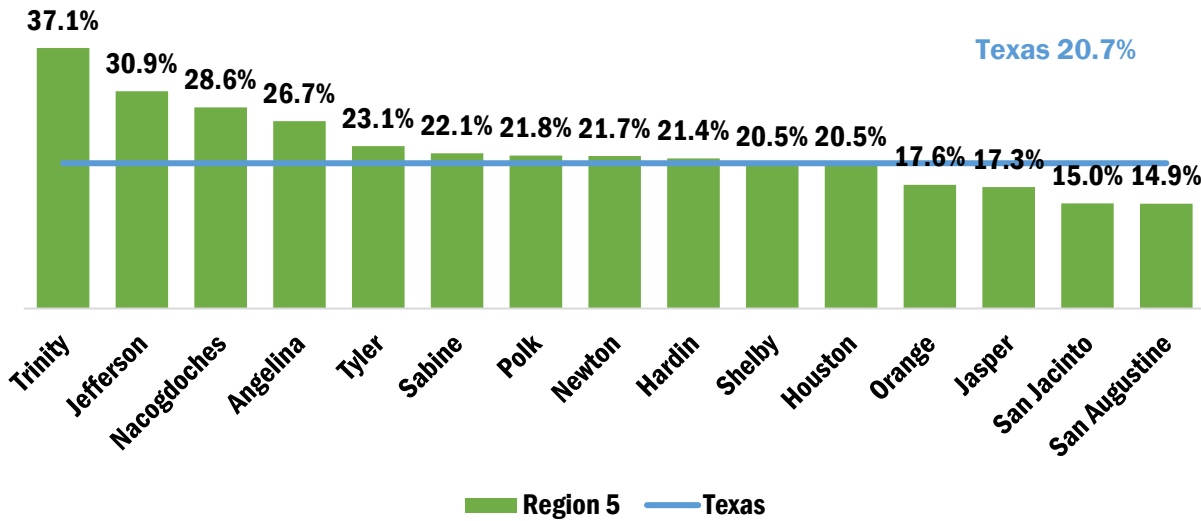
Primarily, an individual's interpersonal development is most impacted by their family. Either positive or negative, a person's family established world views, coping mechanisms, and an estimation of self-worth are based on their home environment. For prevention specialists, it is vital to not underestimate the influence of one's family on an individual's future development and decision-making ability.⁶⁵ Indicators that will be examined here are single-parent households, family violence, children abused or neglected, children in foster care, and adult depression.

Single-Parent Households

For the state of Texas 20.7% of households are single-parent households. For Region 5 the percentage is 25.2%. San Augustine County has the lowest percentage of single-parent households at 14.9% and Trinity County has the highest at 37.1%.

Graph 21. Percentage of single-parent households per county compared to Texas, 2022.

9 Counties in Region 5 are above the state average of 20.7% single parent households.



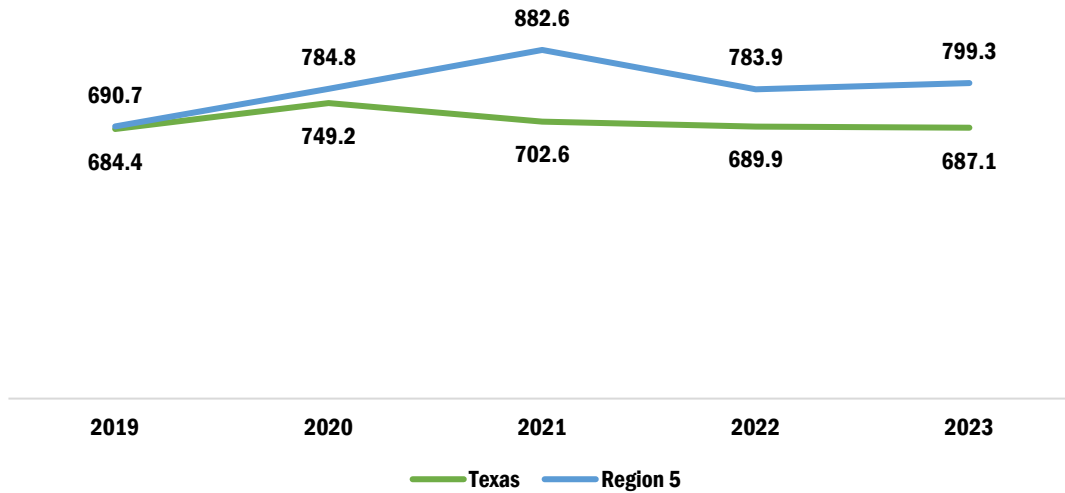
Source. U.S. Census Bureau. American Community Survey 5-year Estimates.

Family Violence

The impact of violence within a family and its lingering effects that disintegrate the family members' physical and emotional wellbeing cannot be overstated. The devastating consequences often lead to emotional and psychological trauma that is expressed through anger, shame, depression, and suicide. Additionally, it significantly increases the risk of substance use and misuse as a means of dealing with the pain.⁶⁶

The rate of family violence for Region 5 has remained above the state rate for the past five years.

Graph 22. Rate of family violence per 100,000 in population for Texas and Region 5, 2019 to 2023.



Source. Texas Department of Public Safety. Texas Family Violence Report.

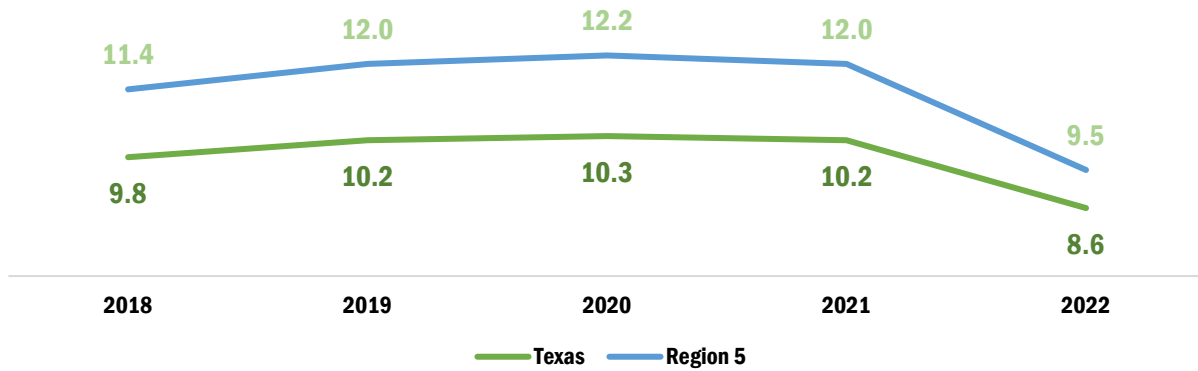
Children Abused or Neglected

Childhood is intended to be a time of growth and security. These early years of life are critical for an individual’s emotional maturation as well as their overall health and development. Having a safe and nurturing environment builds the foundation for the rest of life.⁶⁸ When these basic needs are not met, it increases the likelihood of future risky behavior. As the severity of childhood trauma increases, so do the risk factors.

National data on child abuse and neglect gathered from the National Children’s Alliance report that in 2021 two-thirds of all abuse cases involved sexual abuse (65%). This is followed by physical abuse at 20%, neglect, witness to violence, and other at 8%, and drug endangerment at 3%.⁶⁹

Region 5 and Texas have been paralleling a similar trend in the rates of child abuse and neglect as seen in the figure below. However, Region 5 rates have remained above the state rates.⁷⁰

Graph 23. Rate of child victims of abuse/neglect per 1,000 children for Texas and Region 5..

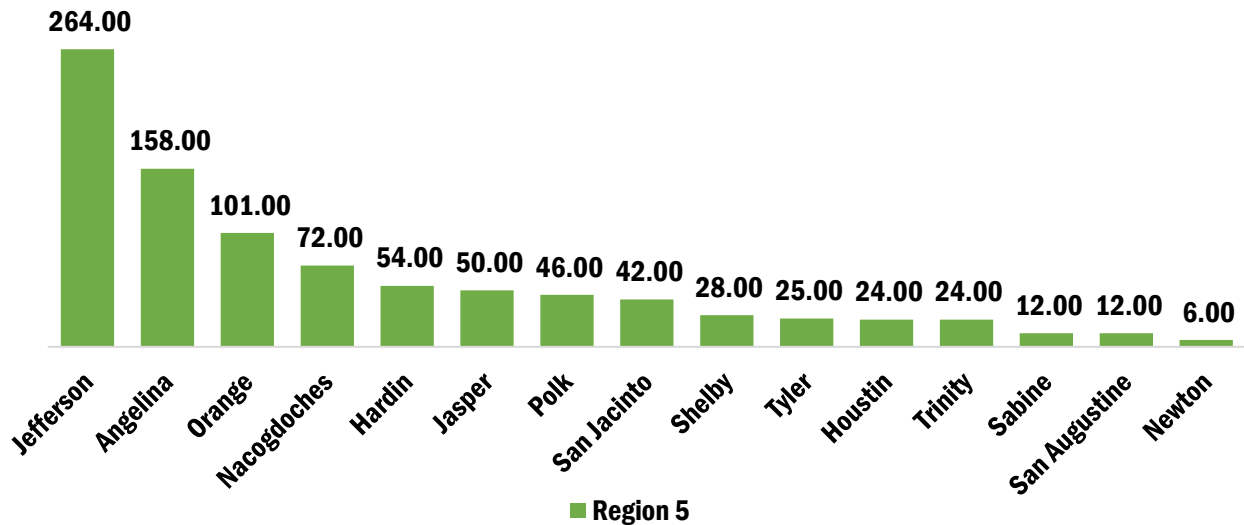


Source. Texas Department of Family and Protective Services.

Children in Foster Care

Children that are in foster care are at risk for substance use and misuse due to distressing experiences early in their lives that lead them to be under the care of the state. Research shows that stressors early in life create neurobiological changes that lead to children internalizing their problems resulting in improper coping behavior.⁷¹

Graph 24. Placement of Children under the age of 18 in substitute care as of August 31,2023 in Region 5.



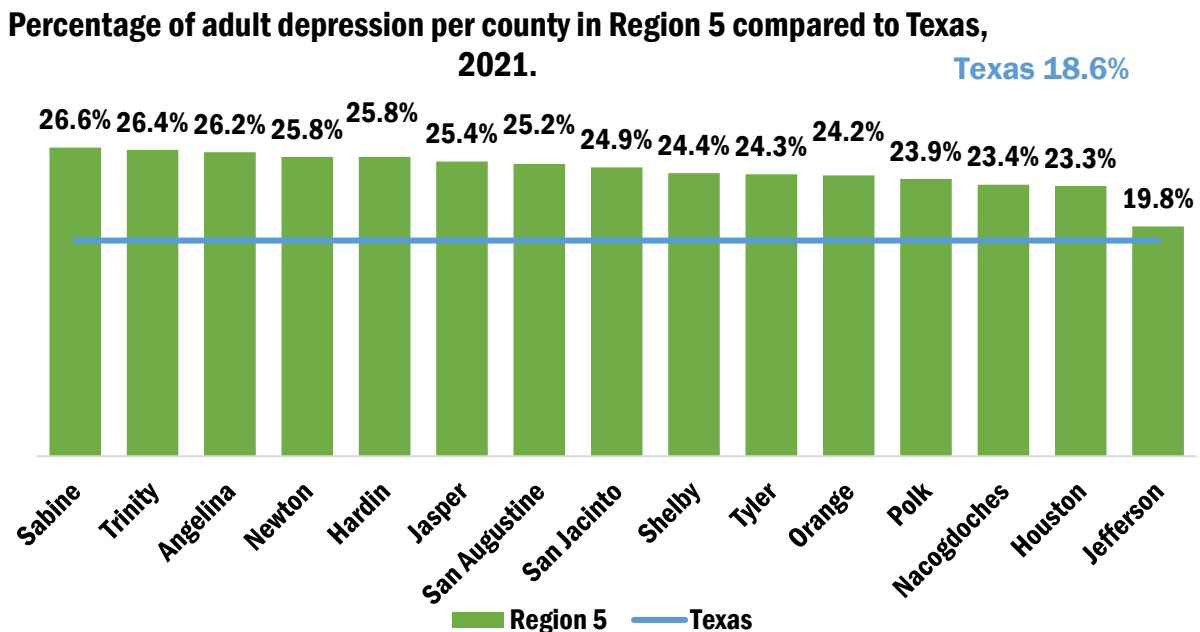
Source. Texas Department of Family and Protective Services.

*"Placed with Non-Relative" can include basic childcare, CPA non-relative foster home, DFPS non-relative foster home, emergency shelter, residential treatment, other foster care, and other substitute centers.

Adult Depression

Nation-wide, adult depression rates have been increasing since 2011 according to the CDC. In 2011 the national rate of adult depression was 17.5% and had risen to 19.6% in 2020. This data is collected through the Behavioral Risk Factor Surveillance System (BRFSS). The measure of adult depression is indicated as a percentage of the number of respondents that report having poor mental health for 14 or more days in the past month. This data is collected every other year.⁷²

Graph 25. Percentage of adult depression per county, 2021.



Source. Centers for Disease Control and Prevention. PLACES Data.

Perception of Parental Attitudes

Parents often mistakenly assume that their child's greatest influence to engage in risky behavior is due to the pressure of their peers. That is simply not true. Research has shown that an adolescent's greatest influence concerning behavior, no matter the age of the child, is primarily sought by their parents. However, "if the parents abdicate their responsibility to have that dialogue, their children will default to their peer group."⁷³

The influence parents maintain on the lives of their children cannot be overstated. Eight out of ten teenagers believe that their parents have substantial influence in their response to peer pressure. Seven out of ten teenagers wish their parents had better prepared them for the pressures in life. Four out of ten teenager feel that everyone else is handling the pressures of life better than them.⁷⁴

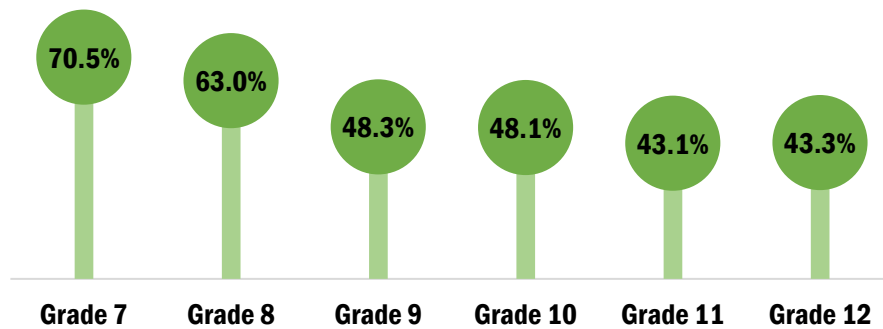
The Texas School Survey asked the respondents concerning their perception of their parent's attitude toward substance use and their responses can be found in graphs 26 through 28. Teens

are less likely to consume alcohol, smoke, or use drugs if they feel their parents have shown or expressed the importance of not consuming these various substances. This reinforces the need for parental interaction with their children concerning substance use as a key to prevention.

Parents practicing healthy behaviors can be the most important protective factor in a child's life. This protective factor can also be credited to grandparents, aunts and uncles, older siblings, mentors, teachers, and coaches. When any adult in the realm of an adolescent's life has conversations, clearly stating the harmful effects of substance use, teens are less likely to use it. As seen in the graphs below, the student's perception of their parent's disapproval of using a particular substance decline as the grade level increases.

Graph 26. TSS response to "How do your parents feel about kids your age using alcohol?"

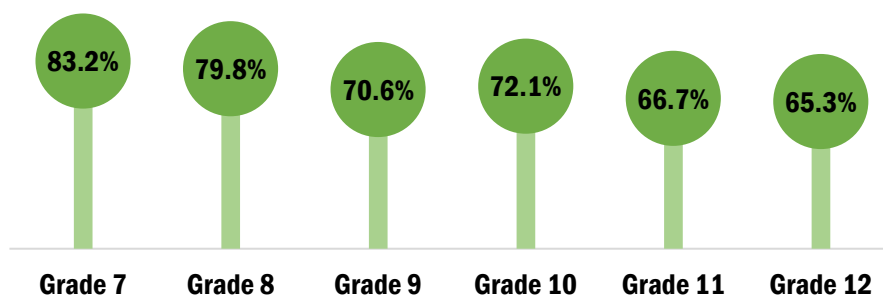
Teens perception of their parents that "strongly" disapprove of them using alcohol.



Source. 2022 Texas School Survey.

Graph 27. TSS response to "How do your parents feel about kids your age using tobacco?"

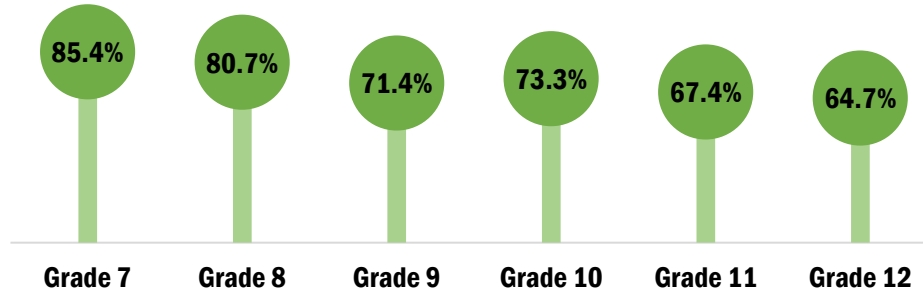
Teens perception of their parents that "strongly" disapprove of them using tobacco.



Source. 2022 Texas School Survey.

Graph 28. TSS response to “How do your parents feel about kids your age using marijuana?”.

**Teens perception of their parents that
"strongly" disapprove of them using marijuana.**



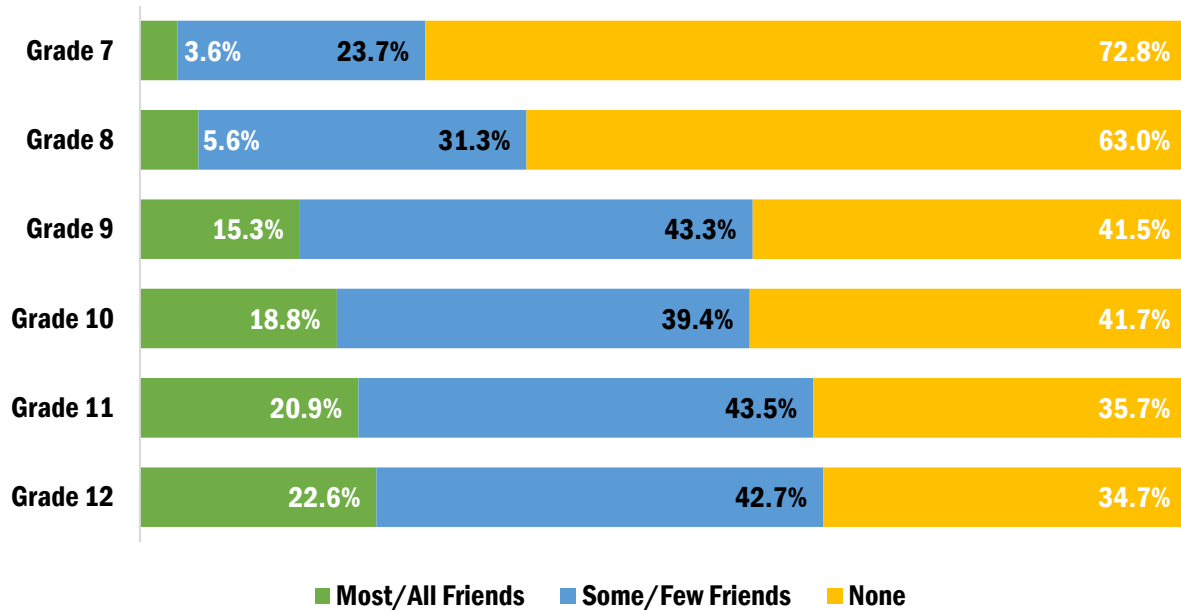
Source. 2022 Texas School Survey.

Perception of Peer Use

As discussed in the previous section, a teenager’s foundational influence concerning substance use is derived from their parents. Moving from there, teens then lean on what their peers not only say but do concerning substance use.

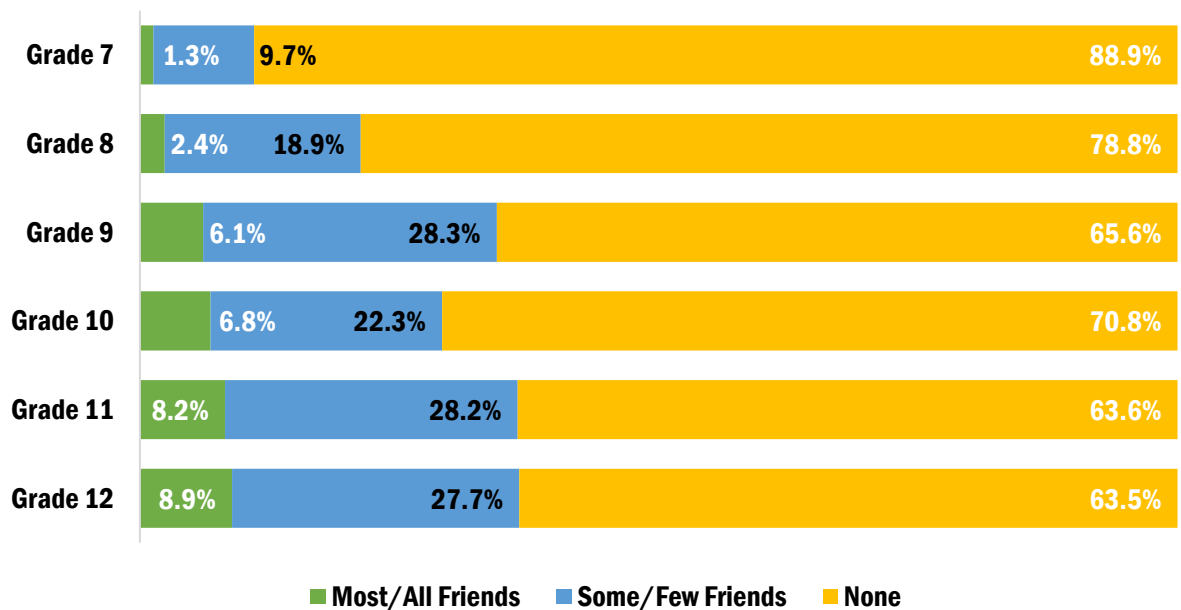
One of the most difficult aspects of researching peer influence upon the behaviors of teenagers is that it is based on the respondent’s “perception” of their peers’ attitudes and beliefs. These perceptions are often skewed by the adolescents’ own beliefs and influence from other sources such as their parents. Other risk factors include environmental and psychological influences. In the end, an adolescent’s peer group does exact a measure of influence and teenagers tend to change their substance use behavior in the same direction as their peers.⁷⁶

Graph 29. TSS response to “About how many of your close friends use alcohol?”.
Teens perception of how many of their friends use alcohol.



Source. 2022 Texas School Survey.

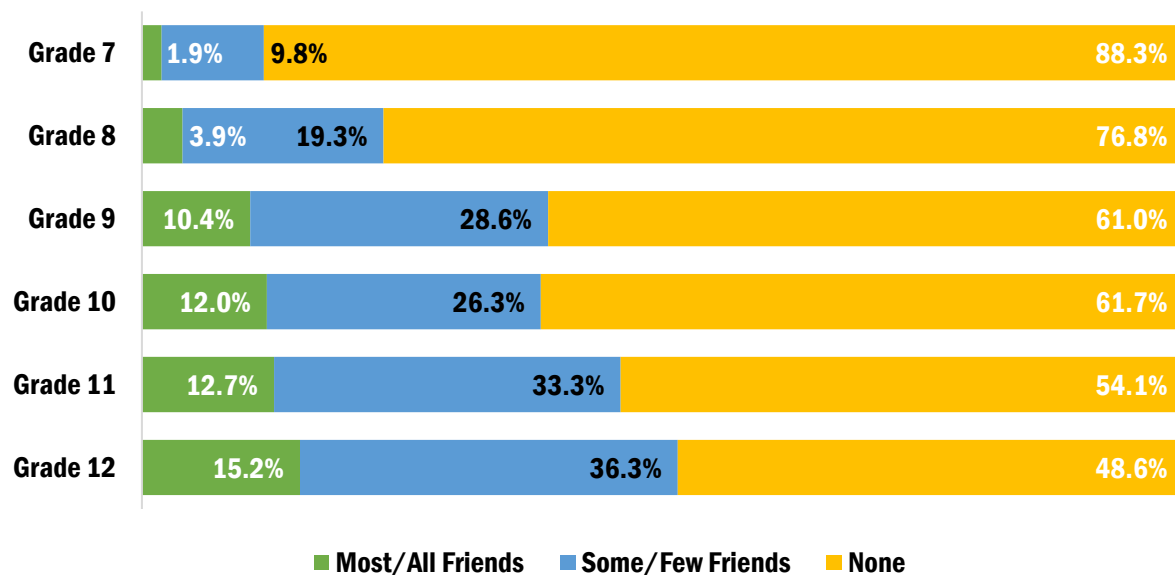
Graph 30. TSS response to “About how many of your close friends use tobacco?”.
Teens perception of how many of their friends use tobacco.



Source. 2022 Texas School Survey.

Graph 31. TSS response to “About how many of your close friends use marijuana?”.

Teens perception of how many of their friends use marijuana.



Source. 2022 Texas School Survey.

Perceived Substance Availability

The risk of substance use in relation to the availability of substances had been made all too clear from the opioid epidemic that has enveloped the nation. As U.S. pharmacies more than triple the number of opioids being prescribed, overdose deaths more than quadrupled from 1991 to 2012. Since then, the Mexican Cartels supply of heroin into the U.S. has continued to increase.⁷⁷ As the supply of prescription opioids decreased, many of those dependent on them began using heroin. The accessibility of heroin has been identified as a major factor for their decision to use heroin.⁷⁸

Further research has shown that teens will seek out friends whose substance use beliefs and behavior resembles their own beliefs concerning substance use. This is especially true during early adolescents as they transition from childhood and seek to strengthen their bonds with their peers. Additionally, the influence of each peer’s substance use will, over time, begin to shape each other’s substance use, so that they become more alike in use.⁷⁹

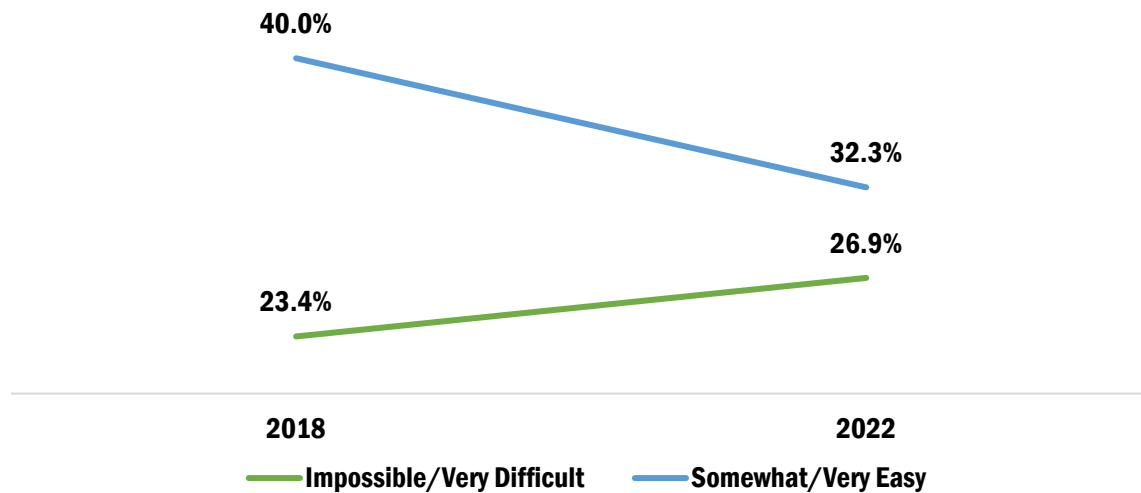
Social Access

Concerning access to various substances, the following graphs below from the TSS reflect the respondent’s perception of how easy or difficult it is to gain access to substances. Overall, the “somewhat easy to very easy” access for all substances declined from 2018 to 2022 from 40.0% to 32.3%. At the same time the “impossible to very difficult” access rose from 23.4% to 26.9% for the

same period. Accessing substances by grade levels shows an increase in the ease of access as the grade level increases. Accessing alcohol increased the soonest and the highest while accessing marijuana had its greatest increase from grade 10 to 11.

Graph 32. TSS perception of ease of access for alcohol, tobacco, and marijuana, 2018 to 2022.

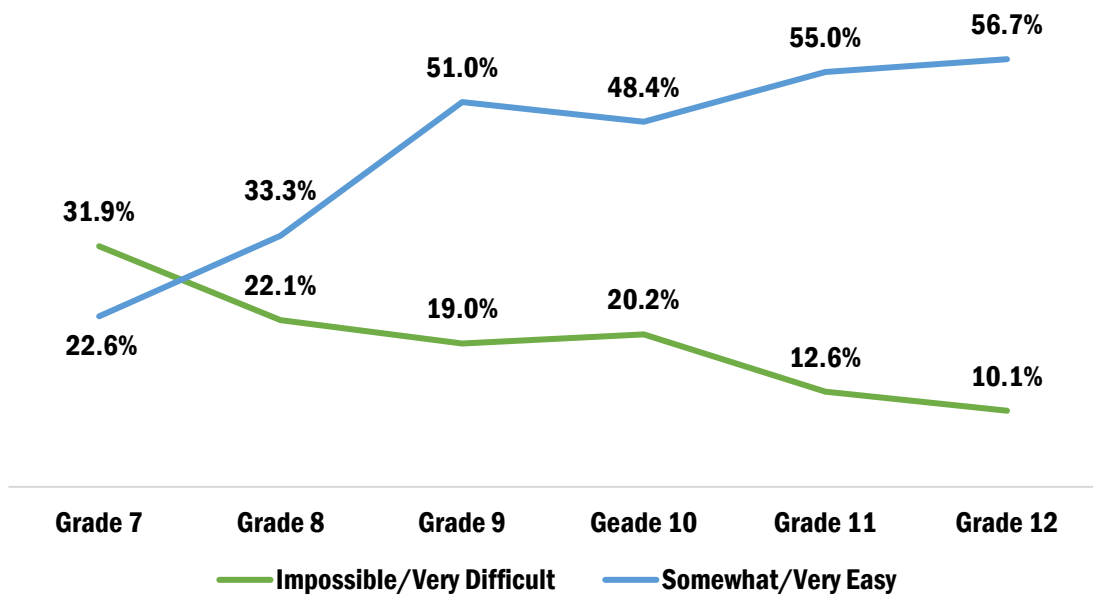
Ease of access has declined for all substances from 2018 to 2022.



Source. Texas School Survey.

Graph 33. TSS response to “If you wanted some, how difficult would it be to get alcohol?”.

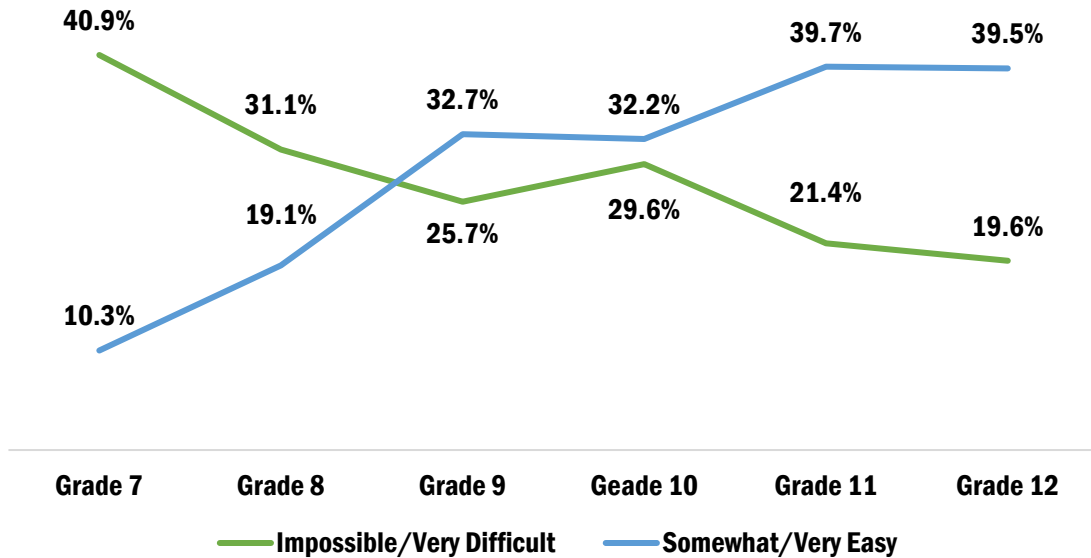
Teens perception concerning the ease of accessing alcohol.



Source. 2022 Texas School Survey.

Graph 34. TSS response to “If you wanted some, how difficult would it be to get tobacco?”.

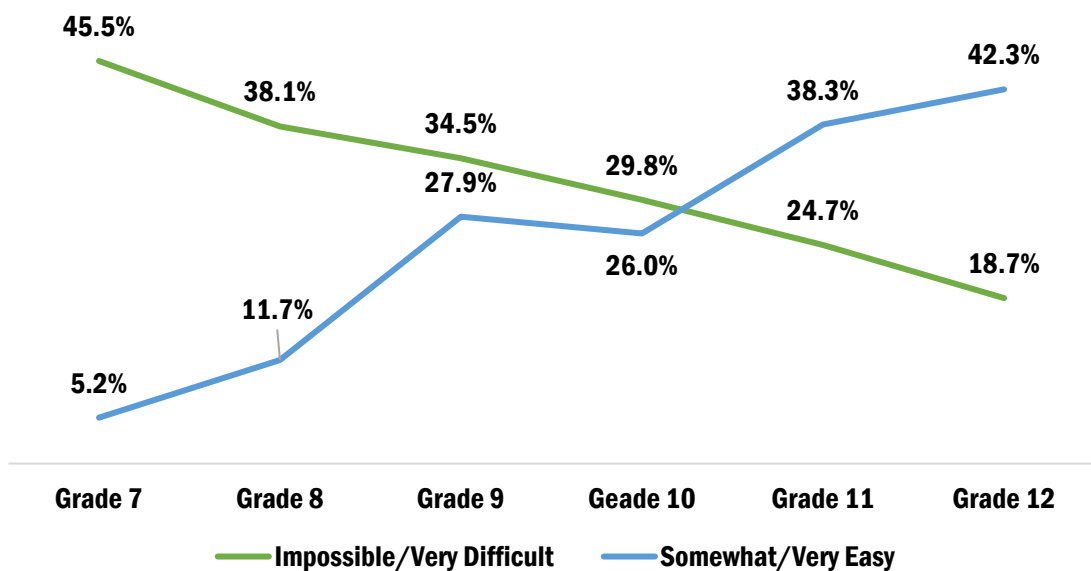
Teens perception concerning the ease of accessing tobacco.



Source. 2022 Texas School Survey.

Graph 35. TSS response to “If you wanted some, how difficult would it be to get marijuana?”.

Teens perception concerning the ease of accessing marijuana.



Source. 2022 Texas School Survey.

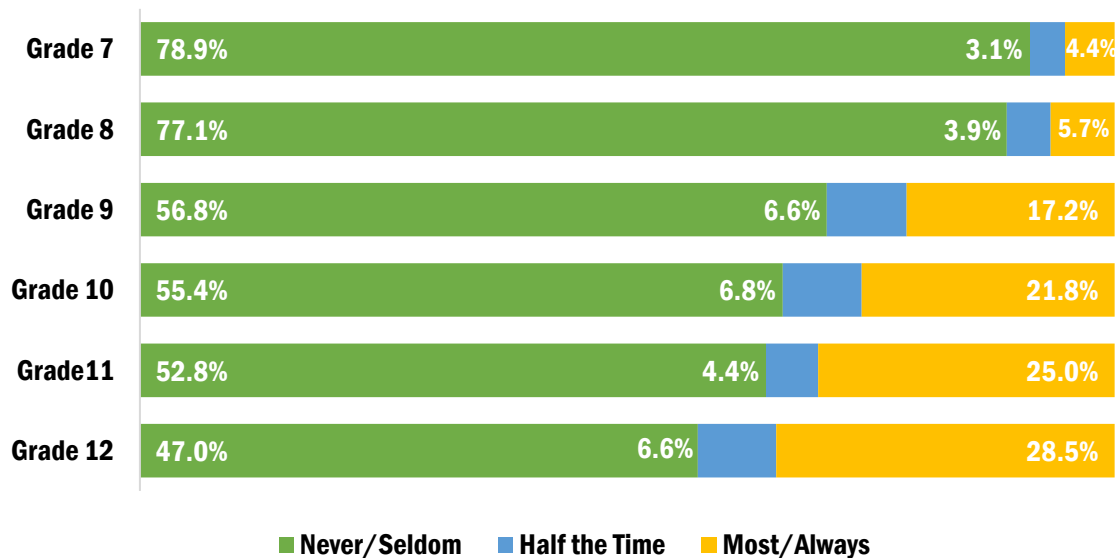
Presence of a Substance at Parties

Parties provide the opportunity for access to various substances that might not be available in other settings. This is especially true if the party is unsupervised by adults or by adults who are indifferent to the consumption of substances by adolescents.

The following graphs from the TSS show that the availability of alcohol and marijuana increases as the grade levels increase. Additionally, alcohol is the most prevalent of the two at parties.

Graph 36. TSS response to “Thinking of parties you attended this school year, how often was alcohol used?”.

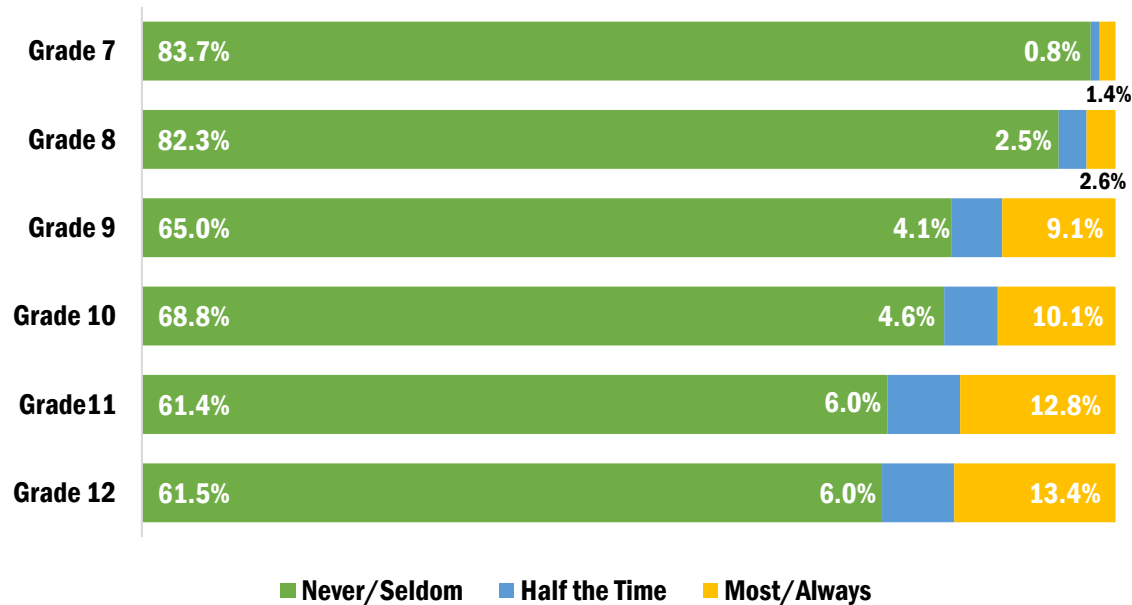
Access to alcohol at parties.



Source. 2022 Texas School Survey.

Graph 37. TSS response to “Thinking of parties you attended this school year, how often was marijuana used?”.

Access to marijuana at parties.



Source. 2022 Texas School Survey.

Individual Domain

Understanding basic human development is beneficial in interpreting the individual domain. Over time there have been varying theories concerning human development. From Jean Piaget’s Cognitive-Development theory to Abraham Maslow’s Hierarchy of Needs theory, to Erik Erikson’s Psychosocial Development theory they all have something in common; stages. Additionally, each stage is built upon the other. While the completion of each stage widely varies from child to child, the disruption of the missing out of a stage can be a cause for concern and increase various risk factors.⁸⁰

When Alberto was three, he and his family immigrated to East Texas from Columbia. When it was time to enter school, he still knew little English and struggled to learn because it was not spoken at home. He had very few friends but a very close family. Even though his father drank alcohol daily, he did not consider him to be an alcoholic. From Alberto’s point of view, “that’s just the way he was, and as I got older, Papa would give me a beer or two when we had cookouts or a party.”

“Drinking was no big deal” Alberto recalled, “I was probably 10 or 11 when I had my first drink.” Alberto’s drinking increased over the years, and he began vaping and smoking marijuana as well. School did not interest him, so he dropped out at the age of 15 and began working with his father. On the night of his 25th birthday Alberto received his second DWI charge. He recalls his probation officer informing him that if he were to receive another DWI, it would result in mandatory prison time, “I didn’t care what he had to say, I wasn’t about to let him tell me what to do.” Disregarding his probation officer’s advice to seek treatment, Alberto continued to drink and smoke marijuana. Interestingly, he commented, “I couldn’t read or write, and I saw myself as an idiot, and I hid from my thinking the only way I knew how.”

His third DWI resulted in an auto accident with injuries. After being released from prison and still on parole, Alberto is working on his recovery. He recalls that his self-loathing was vital to his substance misuse. Alberto ended his interview with “I hated myself and my life, and I still struggle with that. I’m depressed most days and that makes this even harder.”

Critical risk factors in Alberto’s life included an early introduction to alcohol, tobacco, marijuana and dropping out of school. Even after he sought treatment, a higher level of intervention is required to overcome the substance use dependency and the mental health issues in his life.

In the individual domain an analysis of five areas will be made. Those areas include academic achievement, youth mental health, youth perception of risk and harm, early initiation of use, and protective factors.

Academic Achievement

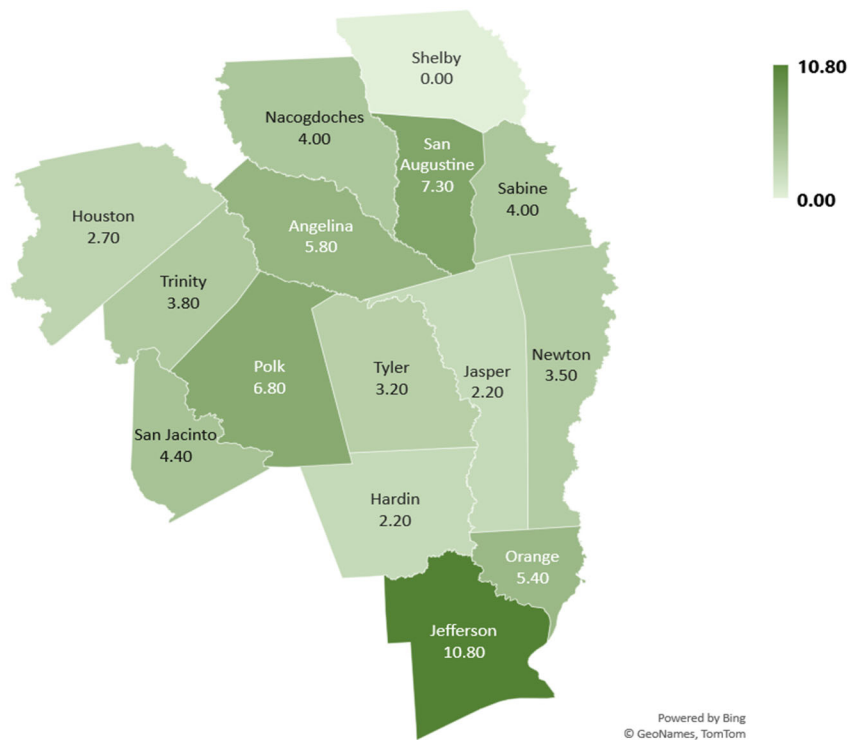
Academic achievement signifies personal accomplishments of specific goals that implies beneficial decisions and efforts regarding one’s personal life. This benefits not only the individual but also expands to the community and society as well.⁸¹

For academic achievement, the indicators are the high school dropout rate and absenteeism.

High School Dropout

In 2022, the national high school dropout rate was 5.3. For Region 5, the rate was 4.4. A study known as *Substance Use Among 12th Grade Aged Youth by Dropout Status* found that 12th grade aged youth who dropped out of school were more than twice as likely than similarly aged youth to use tobacco.⁸² They were also more likely to use and/or misuse alcohol, binge alcohol, any illicit drug, marijuana, and non-medical use of prescription drugs. The statistics point to a correlation between dropout rates and substance use and misuse. This only increases the impact on public health due to poverty, lack of healthcare coverage, and an increased number of health-related problems and illnesses.⁸³

Figure 19. Rate of high school dropouts per county, 2023.



Graduation rates are calculated as a four-year longitudinal graduation rate as a percentage of students beginning in ninth grade of those who graduated on their anticipated graduation date, or within four years of beginning ninth grade.

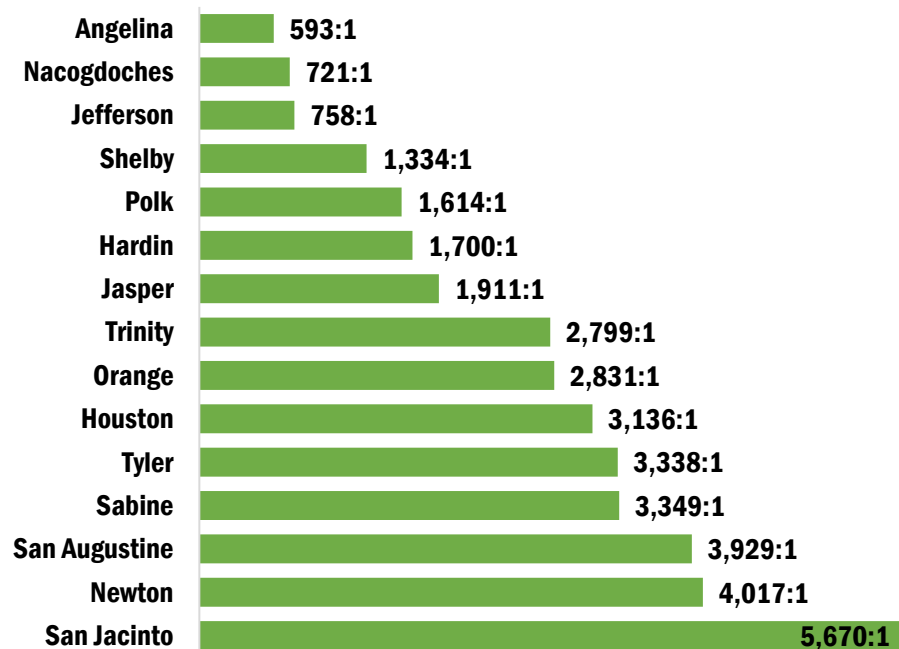
Youth Mental Health

For children and youth, it is normal to encounter a variety of developmental and emotional tension as they mature. The complexities of human development often feel overwhelming until certain stages of development are mastered or at least brought under control. Some of those difficulties unique to adolescents include:⁸⁶

- Developing meaningful relationships
- Adapting to changes (both physically and emotionally)
- Developing appropriate coping mechanisms
- Recognize their possibilities
- Having their needs met
- Acquiring the needed skills to occupy various environments

In times when these developmental stages become too much to cope with, guidance from a Local Mental Health Authority (LMHA) may be needed. The graph below provides a ratio of the number of youths per mental health provider per county. For Texas the ratio is 638:1. For Region 5 the ratio climbs to 2,513:1.⁸⁷

Graph 38. Ratio of individuals aged 18 or younger per mental health provider per county.



Source. CMS National Provider Information.

Adolescent Depression

The measure of adolescent depression was taken from the Youth Risk Behavior Study. It measures the percentage of respondents who reported that they had stopped doing usual activities for two weeks or more because they felt sad or hopeless. The study revealed that for teenagers in Texas in 2017, 34.2% met the standard for depression within a 12-month period. The percentage increased in 2019 to 38.3%, and post pandemic in 2021, the percentage increased to 44.6%.⁸⁸

In the table below is a report on adolescent depression by age, grade, race/ethnicity, and gender. Of interest in the table is the reported differences between male and female adolescents. A much higher percentage of female consistently reported feeling sad and hopeless than males.

Table 11. Percentage of adolescent depression for Texas for the years 2017, 2019, and 2021.

| | | 2021 | 2019 | 2017 |
|-----------------------|----------|-------|-------|-------|
| Texas | Total | 44.6% | 38.3% | 34.2% |
| Age | <=15 | 40.7% | 34.7% | 34.3% |
| | 16-17 | 47.4% | 38.3% | 35.6% |
| | 18+ | 47.8% | 39.0% | 29.5% |
| Grade | Grade 9 | 38.0% | 29.1% | 33.7% |
| | Grade 10 | 48.3% | 38.8% | 37.6% |
| | Grade 11 | 46.4% | 40.7% | 33.0% |
| | Grade 12 | 45.9% | 43.2% | 32.2% |
| Race/Ethnicity | Black | 41.3% | 33.8% | 30.5% |
| | Hispanic | 45.9% | 37.9% | 34.8% |
| | Other | 48.8% | 38.8% | 35.8% |
| | White | 42.0% | 40.8% | 34.7% |
| Sex | Female | 57.2% | 48.6% | 43.7% |
| | Male | 32.1% | 28.3% | 24.7% |

Source. Youth Risk Behavior Survey. Texas Department of State Health Services.

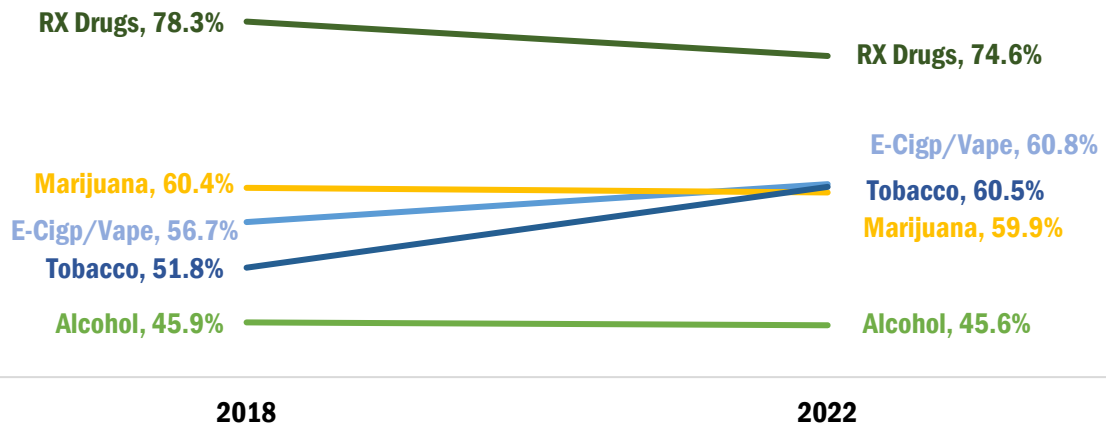
Youth Perception of Risk/Harm

The more something is perceived as harmful, the more likely it is that an individual will take steps to avoid the harmful consequences. The graph below shows that the perception of harm among school age youth declined for prescription drugs, marijuana, and alcohol from 2018 to 2022. Tables 12 through 16 are a report on how dangerous the TSS respondents felt about alcohol, tobacco, electronic vape products, marijuana, and prescription drugs.

It is interesting to note that the "Not at All Dangerous" responses tended to increase by grade level but remained within 2 to 4 percentage points of each other. This was not true for marijuana. It went from a range of 1.3% of 7th graders feeling it was not dangerous to 16.8% of 12th graders. The loss of the perception of harm increases the risk of experimentation of marijuana.

Graph 39. TSS response to "How dangerous do you think it is for kids your age to use...?"

Perception of harm declined for Rx Drugs, Marijuana, and Alcohol from 2018 to 2022.



Source. 2022 Texas School Survey.

Table 12. TSS response to “How dangerous do you think it is for kids your age to use alcohol?”

| Grade | Very Dangerous | Somewhat Dangerous | Not Very Dangerous | Not at All Dangerous | Don't Know |
|------------|----------------|--------------------|--------------------|----------------------|------------|
| All Grades | 45.6% | 30.7% | 16.1% | 3.2% | 4.4% |
| Grade 7 | 54.0% | 28.5% | 12.6% | 2.4% | 2.5% |
| Grade 8 | 53.2% | 25.7% | 14.2% | 2.8% | 4.0% |
| Grade 9 | 36.9% | 32.5% | 22.2% | 3.0% | 5.5% |
| Grade 10 | 44.3% | 32.1% | 16.7% | 2.8% | 4.0% |
| Grade 11 | 42.6% | 30.4% | 16.4% | 4.6% | 6.0% |
| Grade 12 | 41.8% | 35.8% | 13.6% | 4.1% | 4.7% |

Source. 2022 Texas School Survey.

Table 13. TSS response to “How dangerous do you think it is for kids your age to use tobacco?”

| Grade | Very Dangerous | Somewhat Dangerous | Not Very Dangerous | Not at All Dangerous | Don't Know |
|------------|----------------|--------------------|--------------------|----------------------|------------|
| All Grades | 60.5% | 23.9% | 7.8% | 2.2% | 5.7% |
| Grade 7 | 75.0% | 16.1% | 4.4% | 0.8% | 3.7% |
| Grade 8 | 66.5% | 20.0% | 7.5% | 1.6% | 4.4% |
| Grade 9 | 52.0% | 29.8% | 8.8% | 2.5% | 6.9% |
| Grade 10 | 60.5% | 23.5% | 8.5% | 1.6% | 5.9% |
| Grade 11 | 52.0% | 26.8% | 9.9% | 3.4% | 7.8% |
| Grade 12 | 55.5% | 28.0% | 7.7% | 3.4% | 5.4% |

Source. 2022 Texas School Survey.

Table 14. TSS response to “How dangerous do you think it is for kids your age to use electronic vape products?”

| Grade | Very Dangerous | Somewhat Dangerous | Not Very Dangerous | Not at All Dangerous | Don't Know |
|------------|----------------|--------------------|--------------------|----------------------|------------|
| All Grades | 60.8% | 18.3% | 10.0% | 5.2% | 5.6% |
| Grade 7 | 71.8% | 17.3% | 4.5% | 2.8% | 3.6% |
| Grade 8 | 68.2% | 14.4% | 9.4% | 3.5% | 4.5% |
| Grade 9 | 52.9% | 22.7% | 11.7% | 6.4% | 6.3% |
| Grade 10 | 63.1% | 16.9% | 10.1% | 5.0% | 4.9% |
| Grade 11 | 54.4% | 17.6% | 12.0% | 8.4% | 7.6% |
| Grade 12 | 52.8% | 21.4% | 12.7% | 5.8% | 7.2% |

Source. 2022 Texas School Survey.

Table 15. TSS response to “How dangerous do you think it is for kids your age to use marijuana?”

| Grade | Very Dangerous | Somewhat Dangerous | Not Very Dangerous | Not at All Dangerous | Don't Know |
|------------|----------------|--------------------|--------------------|----------------------|------------|
| All Grades | 59.9% | 14.2% | 10.5% | 9.3% | 6.1% |
| Grade 7 | 81.5% | 9.0% | 3.2% | 1.3% | 4.9% |
| Grade 8 | 72.0% | 11.6% | 6.0% | 5.1% | 5.2% |
| Grade 9 | 52.8% | 17.0% | 13.5% | 9.3% | 7.4% |
| Grade 10 | 57.8% | 13.2% | 12.3% | 11.2% | 5.5% |
| Grade 11 | 50.2% | 16.0% | 13.1% | 14.0% | 6.7% |
| Grade 12 | 40.5% | 19.1% | 16.7% | 16.8% | 6.9% |

Source. 2022 Texas School Survey.

Table 16. TSS response to “How dangerous do you think it is for kids your age to use Rx drugs?”

| Grade | Very Dangerous | Somewhat Dangerous | Not Very Dangerous | Not at All Dangerous | Don't Know |
|------------|----------------|--------------------|--------------------|----------------------|------------|
| All Grades | 74.6% | 12.9% | 3.3% | 1.4% | 7.8% |
| Grade 7 | 80.8% | 11.6% | 2.5% | 0.4% | 4.8% |
| Grade 8 | 76.8% | 11.6% | 3.7% | 1.7% | 6.3% |
| Grade 9 | 68.9% | 15.7% | 4.9% | 2.2% | 8.2% |
| Grade 10 | 76.7% | 10.9% | 3.1% | 0.6% | 8.7% |
| Grade 11 | 72.5% | 13.1% | 2.4% | 2.5% | 9.5% |
| Grade 12 | 71.4% | 14.8% | 3.2% | 0.7% | 9.9% |

Source. 2022 Texas School Survey.

Early Initiation of Use

From childhood to adulthood, many changes are taking place. Not only is the body physically changing, but the brain continues development until the mid-twenties. During adolescence it is the prefrontal cortex that is experiencing the greatest amount of growth. This area of the brain is

linked to critical thinking and decision making. It is during this time of human development that the brain is most susceptible to outside influences such as alcohol, tobacco, and other drugs.

By introducing substances into the developing brain of an adolescent, the brain “reprograms” to accommodate the substance. Simply put, the brain begins to make permanent changes, as if the substance will always be present. This then can lead to dependency. Once dependency develops, the individual will be directed by their brain to make that substance a top priority in their life. They will then compulsively seek to use substances even though its use brings devastating consequences to their life.⁸⁹

Knowing that adolescence is the worst possible time to consume ATODs due to brain development, the measure of “first use” provides a glimpse into possible future levels of substance use dependency. For Region 5, the average age of first use of alcohol is 12.7 years old. For tobacco it is 12.6 years of age, marijuana is 13.8 years, and prescription drug misuse is 13.6. The tables below are a comparison of the age of first use by grade of 2018 to 2022.

Age of First Use Alcohol



Age of First Use – Alcohol

451:

Region 5

Table 17. Age of first use of alcohol per grade

| Grade | 2018 | 2022 |
|----------|------|------|
| Grade 7 | 10.6 | 10.3 |
| Grade 8 | 11.2 | 11.1 |
| Grade 9 | 12.0 | 12.1 |
| Grade 10 | 13.1 | 12.9 |
| Grade 11 | 13.4 | 13.9 |
| Grade 12 | 14.5 | 14.1 |

Source. 2022 Texas School Survey.

Age of First Use Tobacco

Region 5



Age of First Use – Tobacco

4 5 19

Table 18. Age of first use of tobacco per grade.

| Grade | 2018 | 2022 |
|----------|------|------|
| Grade 7 | 10.8 | 10.4 |
| Grade 8 | 11.1 | 11.2 |
| Grade 9 | 12.0 | 12.1 |
| Grade 10 | 12.9 | 12.4 |
| Grade 11 | 13.3 | 13.5 |
| Grade 12 | 14.5 | 13.5 |

Source. 2022 Texas School Survey.

Age of First Use Marijuana

Region 5



Age of First Use – Marijuana

4 6 1;

Table 19. Age of first use of marijuana per grade.

| Grade | 2018 | 2022 |
|----------|------|------|
| Grade 7 | 11.5 | 11.3 |
| Grade 8 | 12.3 | 12.4 |
| Grade 9 | 13.2 | 12.9 |
| Grade 10 | 13.9 | 13.5 |
| Grade 11 | 14.2 | 14.6 |
| Grade 12 | 14.8 | 15.0 |

Source. 2022 Texas School Survey.

Age of First Use Illicit Drugs

Region 5



Age of First Use – Illicit Drugs

4 6 19

Table 20. Age of first use of illicit drug per grade.

| Grade | 2018 | 2022 |
|----------|------|------|
| Grade 7 | 11.1 | 10.8 |
| Grade 8 | 12.0 | 12.2 |
| Grade 9 | 13.0 | 12.8 |
| Grade 10 | 13.8 | 13.4 |
| Grade 11 | 14.2 | 14.7 |
| Grade 12 | 14.8 | 14.8 |

Source. 2022 Texas School Survey.

Protective Factors

The importance of education and the role schools have in developing protective factors in children cannot be understated. From elementary school through high school and into college, children through young adults, relationships are critical for the student's development. Protection factors schools provide include:

- Positive youth and parental involvement
- Accommodations matched to need
- Positive and care school climate

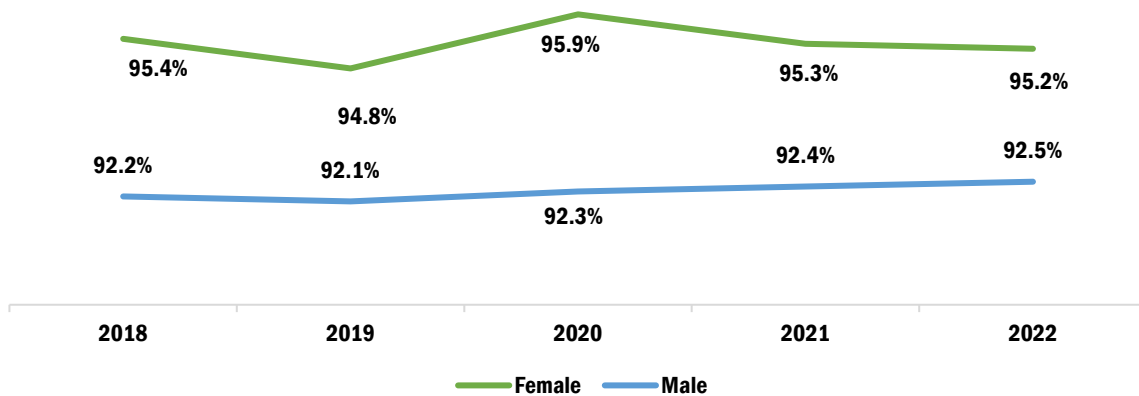
- Realistic and achievable expectations
- Clear rules and consequences
- Positive relationships with adults

High School Graduation

The more education an individual obtains, the greater the protection factors. This is critical in choices made in the present that can either negatively or positively impact future behaviors, attitudes, and overall wellbeing. The graph below shows that females within the region tend to graduate high school at a higher rate than males.

Graph 40. Percentage of male and female students that graduate high school, 2018 to 2022.

Females graduate High School at a higher rate than males for Region 5.



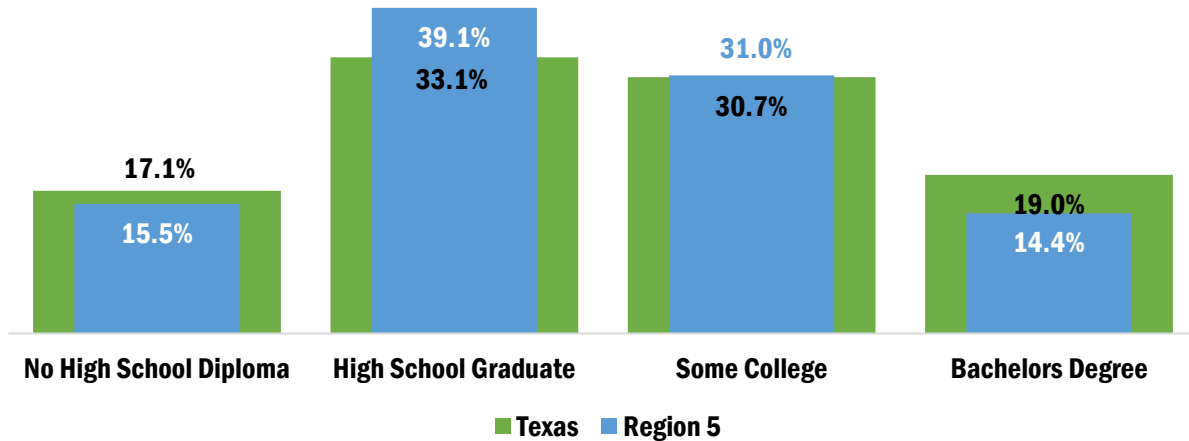
Source. Texas Education Agency. Division of Research and Analysis Program.

As a protective factor a college degree offers several opportunities to the individual to offset risk factors. Some of the benefits of a college degree include:

- Long-term financial gain
- Job stability
- Career satisfaction
- Intellectual and social preparation for career and life
- Higher-paying career options

Region 5 exceeds the state average in the percentage of high school graduates, those with some college experience, and those with no high school diploma as seen in the graph below. Concerning those with a bachelor's or graduate degree, the region is well below the state's average percentage.

Graph 41. Percentage of the educational attainment for Texas and Region 5, 2022.
Reigon 5 is below the state average in those with no High School Diploma and with a Bachelors Degree.



Source. U.S. Census Bureau. 2018-2022 American Community Survey, 5-Year Estimates.

Spirituality

Studies have observed that participation in religious activities by youth serves as a protective factor to prevent substance use. It is the positive impact of the peer group built in religious organizations that tends to inhibit youth from experimenting with ATODs. Additionally, the positive teachings from spiritual organizations assist in creating a positive self-image that gives adolescents the resolution to choose healthier options in life.⁹¹

The data collected for this indicator comes from the U.S. Census Bureau Religion Census. It collects data on the number of congregations, members, adherents, and attendees. These data are aggregated to the county level for each group participating. Participating groups are welcome to use their own definitions to determine what and/or who is counted. Each group is asked to explain its definitions concerning the items for which they submit data, and to comment on U.S. Religion Census procedures for estimating adherents if the group is not providing adherent figures. Not all groups collect or report all items.

Congregations may be churches, mosques, temples, or other meeting places. A congregation may be defined as a group of people who meet regularly (typically weekly or monthly) at a pre-announced time and location.⁹²

Table 21. Percent and per 100,000 in population of those who are adherent to religious organizations.

| Area | Congregations | Adherents | Adherents Per 100,000 in population | Adherents as percentage of population |
|---------------|---------------|------------|-------------------------------------|---------------------------------------|
| Texas | 29,746 | 16,045,251 | 275.5 | 63.3% |
| Region 5 | 1,658 | 455,030 | 284.4 | 52.6% |
| Angelina | 206 | 60,776 | 238.4 | 70.4% |
| Hardin | 99 | 26,611 | 176.1 | 47.3% |
| Houston | 91 | 12,764 | 412.4 | 57.8% |
| Jasper | 102 | 22,141 | 309.3 | 67.1% |
| Jefferson | 408 | 179,404 | 159.0 | 70.0% |
| Nacogdoches | 158 | 36,093 | 244.4 | 55.8% |
| Newton | 41 | 4,268 | 335.6 | 35.0% |
| Orange | 141 | 49,587 | 166.3 | 58.5% |
| Polk | 98 | 17,092 | 195.5 | 34.1% |
| Sabine | 37 | 6,721 | 374.0 | 68.0% |
| San Augustine | 38 | 3,909 | 479.9 | 49.4% |
| San Jacinto | 45 | 5,841 | 164.2 | 21.3% |
| Shelby | 89 | 12,853 | 370.5 | 53.5% |
| Trinity | 48 | 6,547 | 352.9 | 48.1% |
| Tyler | 57 | 10,423 | 287.9 | 52.6% |

Source. Religious Congregations & Adherents Study. 2020 U.S. Religion Census.

Consumption Patterns

This section of the RNA is focused on the patterns of consumption of legal and illegal substances. The National Center for Drug Abuse Statistics (NCDAS) compiled the following statistics concerning substance use in the United States.⁹³

- 23% of American males used drugs in 2023
- 18% of American females used drugs in 2023
- 5% of individuals in rural areas compared to more than 20% of individuals in metropolitan areas have used illegal drugs
- 47% of youth have tried an illicit drug before they graduate high school
- 60% of adults increased their alcohol use during the COVID-19 lockdown
- 18.1% of people who die from alcohol use are younger than 25 years of age

The sample audience for this portion is separated by youth, college students, and adults. The substances that will be observed are alcohol, tobacco, electronic vape, marijuana, prescription drug, and illicit drug use. The consumption patterns are divided into three categories:

1. Lifetime use (has tried a substance, even if only once)
2. School year use (past year use when surveying adults or youth outside of a school setting)
3. Current use (use within the past 30 days)

Youth Substance Use

Adolescents who consume alcohol, tobacco, and other drugs during such a sensitive time in their development could put their future health at risk. The danger of developing substance use may increase each time they consume ATODs.

Becky, who is a junior in high school, finds herself at a crossroad in life and is uncertain which path to take. She and her friends have been drinking and going to parties for less than a year where alcohol is served. Becky wants to apply for college in pursuit of her dream of becoming a fashion designer. However, the college she wants to attend is out of state, far away from her friends. Her friends, however, continue to put pressure on her to attend the local college so they can continue to drink and party together.

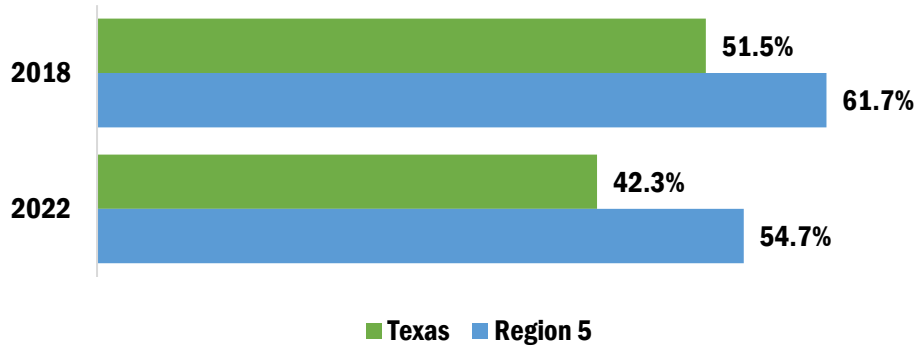
The more time she spends with her friends drinking and going to parties, the stronger the bond will become with her friends and lifestyle and the harder it will be to leave it behind. Continuance in her current lifestyle only increases the probability of developing a substance use dependency at which time she will no longer be able to logically make a choice that would benefit her but choose that which will reinforce her loyalty to the substance.

Alcohol

According to the TSS, alcohol consumption by the region's youth declined by 11% from 2018 to 2022. However, the percentage of students who have consumed alcohol is still above the state's average. Of all substances measured in the survey, alcohol is the most used substance. Table 24 is a report of the percentage of alcohol consumed by grade and type of alcohol. Table 23 is a report of the percentages pertaining to drinking and driving and other difficulties.

Graph 42. Percentage of students who have “ever used” alcohol in Texas and Region 5.

**Of those who have "ever used" alcohol,
Region 5 is above the state average.**



Source. 2022 Texas School Survey.

Region 5

Table 22: TSS response to “During the past twelve months, how many times (if any) have you...”.

| | None | 1-3 Times | 4-9 Times | 10+ Times |
|---|-------|-----------|-----------|-----------|
| Driven a car when you have had a good bit to drink? | | | | |
| High School | 96.2% | 2.7% | 0.6% | 0.5% |
| Grade 9 | 97.0% | 1.7% | 0.9% | 0.4% |
| Grade 10 | 96.6% | 2.8% | 0.6% | 0.1% |
| Grade 11 | 96.7% | 2.7% | 0.1% | 0.5% |
| Grade 12 | 94.0% | 4.1% | 0.7% | 1.2% |
| Had difficulties of any kind with your friends because of your drinking? | | | | |
| All | 96.2% | 3.2% | 0.4% | 0.3% |
| Grade 7 | 96.8% | 2.0% | 0.5% | 0.7% |
| Grade 8 | 96.1% | 3.4% | 0.2% | 0.3% |
| Grade 9 | 95.3% | 4.5% | 0.1% | 0.0% |
| Grade 10 | 95.1% | 4.4% | 0.4% | 0.1% |
| Grade 11 | 96.4% | 2.8% | 0.5% | 0.2% |
| Grade 12 | 97.6% | 1.8% | 0.3% | 0.2% |

Source. 2022 Texas School Survey.

Region 5

Table 23. TSS response to “How recently, if ever, have you used...”, 2022.

| | | Past Month | School Year | Ever Used | Never Used |
|---------------|------------|------------|-------------|-----------|------------|
| Any Alcohol? | All Grades | 30.4% | 35.8% | 54.7% | 45.3% |
| | Grade 7 | 19.5% | 21.9% | 39.7% | 60.3% |
| | Grade 8 | 20.2% | 23.7% | 41.5% | 58.5% |
| | Grade 9 | 35.6% | 41.4% | 63.4% | 36.6% |
| | Grade 10 | 34.1% | 41.2% | 62.0% | 38.0% |
| | Grade 11 | 34.2% | 40.9% | 58.7% | 41.3% |
| Beer? | All Grades | 41.3% | 49.0% | 65.3% | 34.7% |
| | Grade 7 | 10.4% | 15.8% | 41.0% | 59.0% |
| | Grade 8 | 4.5% | 6.6% | 26.9% | 73.1% |
| | Grade 9 | 6.6% | 11.2% | 31.9% | 68.1% |
| | Grade 10 | 10.7% | 17.3% | 47.6% | 52.4% |
| | Grade 11 | 13.7% | 18.9% | 45.5% | 54.5% |
| Wine Coolers? | All Grades | 13.6% | 20.1% | 43.9% | 56.1% |
| | Grade 7 | 14.8% | 22.2% | 52.1% | 47.9% |
| | Grade 8 | 9.3% | 14.7% | 35.5% | 64.5% |
| | Grade 9 | 3.7% | 5.7% | 17.3% | 82.7% |
| | Grade 10 | 5.4% | 8.2% | 23.0% | 77.0% |
| | Grade 11 | 9.6% | 16.0% | 41.7% | 58.3% |
| Liquor? | All Grades | 11.6% | 17.9% | 42.8% | 57.2% |
| | Grade 7 | 12.7% | 21.1% | 42.9% | 57.1% |
| | Grade 8 | 13.9% | 21.6% | 48.9% | 51.1% |
| | Grade 9 | 10.6% | 17.5% | 39.4% | 60.6% |
| | Grade 10 | 3.3% | 6.2% | 18.1% | 81.9% |
| | Grade 11 | 5.1% | 9.1% | 25.3% | 74.7% |
| | Grade 12 | 11.4% | 17.6% | 45.1% | 54.9% |
| | Grade 12 | 14.6% | 23.7% | 47.6% | 52.4% |
| | Grade 11 | 14.0% | 23.2% | 48.0% | 52.0% |
| | Grade 12 | 16.7% | 28.3% | 56.0% | 44.0% |

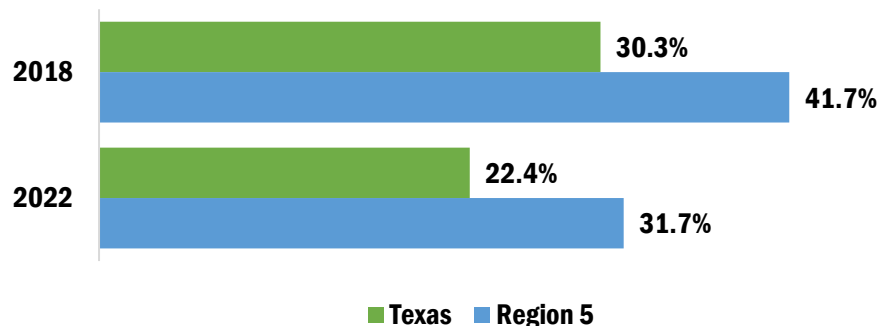
Source. 2022 Texas School Survey.

Tobacco

Tobacco use by TSS respondents from the region has declined by 24% from 2018 to 2022. However, the percentage of students who use any tobacco product is still above the state’s average. Table 24 is a report of the percentage of tobacco use by grade and type of tobacco product.

Graph 43. Percentage of students who have “ever used” tobacco in Texas and Region 5.

Of those who have "ever used" tobacco, Region 5 is above the state average.



Source. 2022 Texas School Survey.

Region 5

Table 24. TSS response to “How recently, if ever, have you used...”, 2022.

| | | Past Month | School Year | Ever Used | Never Used |
|--------------------|------------|------------|-------------|-----------|------------|
| Any Tobacco? | All Grades | 15.3% | 18.6% | 31.7% | 68.3% |
| | Grade 7 | 6.3% | 7.1% | 16.7% | 83.3% |
| | Grade 8 | 9.0% | 11.8% | 22.8% | 77.2% |
| | Grade 9 | 18.1% | 21.7% | 37.2% | 62.8% |
| | Grade 10 | 18.1% | 24.3% | 37.2% | 62.8% |
| | Grade 11 | 19.9% | 22.7% | 37.5% | 62.5% |
| | Grade 12 | 22.4% | 26.1% | 41.2% | 58.8% |
| Cigarettes? | All Grades | 2.3% | 3.8% | 11.6% | 88.4% |
| | Grade 7 | 0.7% | 1.1% | 5.2% | 94.8% |
| | Grade 8 | 1.8% | 3.0% | 8.5% | 91.5% |
| | Grade 9 | 2.0% | 3.9% | 13.2% | 86.8% |
| | Grade 10 | 2.4% | 3.5% | 12.4% | 87.6% |
| | Grade 11 | 3.6% | 5.8% | 15.8% | 84.2% |
| | Grade 12 | 3.7% | 6.0% | 15.3% | 84.7% |
| Smokeless Tobacco? | All Grades | 2.4% | 3.3% | 7.3% | 92.7% |
| | Grade 7 | 0.7% | 0.9% | 2.8% | 97.2% |
| | Grade 8 | 1.3% | 1.8% | 4.7% | 95.3% |
| | Grade 9 | 3.3% | 4.4% | 9.5% | 90.5% |
| | Grade 10 | 2.7% | 3.7% | 7.8% | 92.2% |
| | Grade 11 | 3.1% | 4.3% | 8.7% | 91.3% |
| | Grade 12 | 3.8% | 4.9% | 10.8% | 89.2% |

Source. 2022 Texas School Survey.

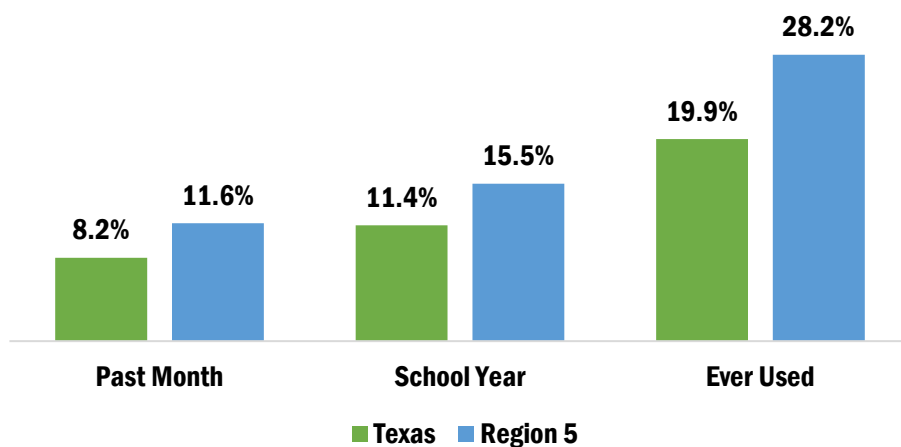
Electronic Vape Products

The popularity and use of electronic vape products has significantly increased over the past few years across Texas and the nation. For Region 5, however, according to TSS, electronic vape product use has declined from 2018 to 2022. In 2018, “past month” use was 13.6%, “school year” use was 18.6%, and “ever used” was 31.6%. In 2022, “past month” use was 11.6% (a decline of 14.7%), “school year” use was 15.5% (a decline of 16.7%), and “ever used” was 28.2% (a decline of 10.8%).

Even with an overall decline in electronic vape product use, Region 5 is above the state average in all categories. Table 25 is a report of the percentage of electronic vape product use by grade.

Graph 44. Percentage of students using electronic vapor products in Texas and Region 5.

E-Cigarette use in Region 5 is above the state in all categories.



Source. 2022 Texas School Survey.

Region 5

Table 25. TSS response to “How recently, if ever, have you used electronic vapor products?”, 2022

| Grade | Past Month | School Year | Ever Used | Never Used |
|------------|------------|-------------|-----------|------------|
| All Grades | 11.6% | 15.5% | 28.2% | 71.8% |
| Grade 7 | 4.3% | 5.6% | 13.8% | 86.2% |
| Grade 8 | 7.3% | 10.1% | 18.9% | 81.1% |
| Grade 9 | 13.0% | 16.7% | 33.8% | 66.2% |
| Grade 10 | 15.1% | 22.3% | 34.6% | 65.4% |
| Grade 11 | 14.9% | 18.3% | 32.8% | 67.2% |
| Grade 12 | 16.7% | 21.8% | 37.6% | 62.4% |

Source. 2022 Texas School Survey.

Marijuana

Research has shown that marijuana use affects adolescent brain development. Marijuana use by teenagers and young adults brain impairment includes:⁹⁴

- Difficulty in thinking and problem solving
- Problems with memory and learning
- Reduced coordination
- Difficulty maintaining attention
- Problems with school and social life

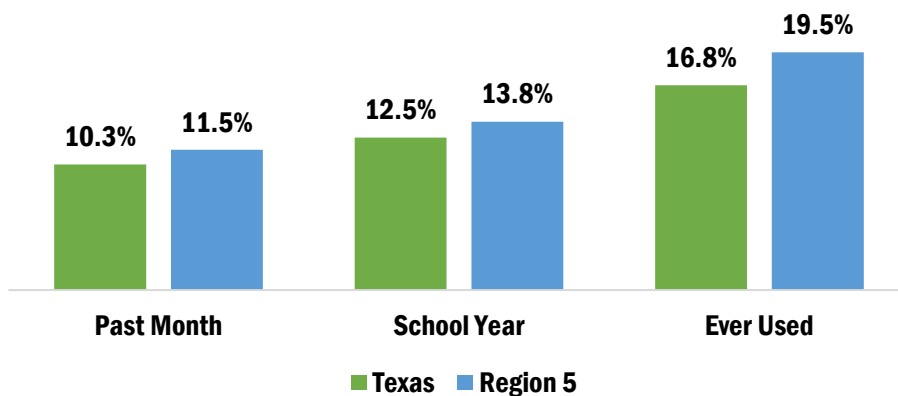
The main psychoactive (mind altering) chemical in marijuana is delta-9-tetrahydrocannabinol (THC). The chemical is found in resin produced by the leaves and buds primarily of the female cannabis plant. The plant also contains more than 500 other chemicals, including more than 100 compounds that are chemically related to THC, called cannabinoids.⁹⁵

Contrary to what many believe, dependency to marijuana can develop and it is known as "Marijuana Use Disorder." Research shows that:⁹⁶

- 1-in-10 adults who use marijuana will become dependent
- 1-in-6 who start using before the age of 18 will become dependent

Graph 45. Percentage of students using marijuana in Texas and Region 5.

Marijuana use in Region 5 is above the state in all categories.



Source. 2022 Texas School Survey.

While marijuana use in Region 5 has declined from 2018, the percentage of those who report using marijuana is still slightly above the state's percentage. According to the TSS, 'past month' use has declined by 17%, "school year" use declined by 18%, and "ever used" declined by 17%.

Region 5

Table 26. TSS response to "How recently, if ever, have you used...", 2022.

| | | Past Month | School Year | Ever Used | Never Used |
|----------------------|------------|------------|-------------|-----------|------------|
| Marijuana? | All Grades | 11.5% | 13.8% | 19.5% | 80.5% |
| | Grade 7 | 3.3% | 3.8% | 4.8% | 95.2% |
| | Grade 8 | 6.5% | 7.4% | 11.2% | 88.8% |
| | Grade 9 | 13.8% | 16.4% | 20.1% | 79.9% |
| | Grade 10 | 13.4% | 15.6% | 22.2% | 77.8% |
| | Grade 11 | 13.8% | 17.6% | 28.0% | 72.0% |
| | Grade 12 | 19.7% | 24.0% | 34.5% | 65.5% |
| Synthetic Marijuana? | All Grades | 1.0% | 1.5% | 2.9% | 97.1% |
| | Grade 7 | 0.0% | 0.0% | 0.9% | 99.1% |
| | Grade 8 | 1.3% | 1.6% | 3.1% | 96.9% |
| | Grade 9 | 1.9% | 2.9% | 4.5% | 95.5% |
| | Grade 10 | 0.7% | 2.0% | 3.7% | 96.3% |
| | Grade 11 | 0.9% | 1.1% | 2.4% | 97.6% |
| | Grade 12 | 0.8% | 1.1% | 2.6% | 97.4% |
| Delta 8? | All Grades | 4.4% | 6.0% | 8.9% | 91.1% |
| | Grade 7 | 0.4% | 0.8% | 2.7% | 97.3% |
| | Grade 8 | 2.6% | 4.1% | 6.2% | 93.8% |
| | Grade 9 | 4.4% | 6.7% | 8.5% | 91.5% |
| | Grade 10 | 6.2% | 7.8% | 11.8% | 88.2% |
| | Grade 11 | 6.4% | 7.7% | 11.8% | 88.2% |
| | Grade 12 | 6.9% | 9.5% | 14.0% | 86.0% |

Source. 2022 Texas School Survey.

Prescription Drugs

Prescription drug use refers to the use of medication in a manner or dose other than what has been prescribed. This includes taking higher dosages of medication than the recommended amount or using medication that is prescribed to someone else.

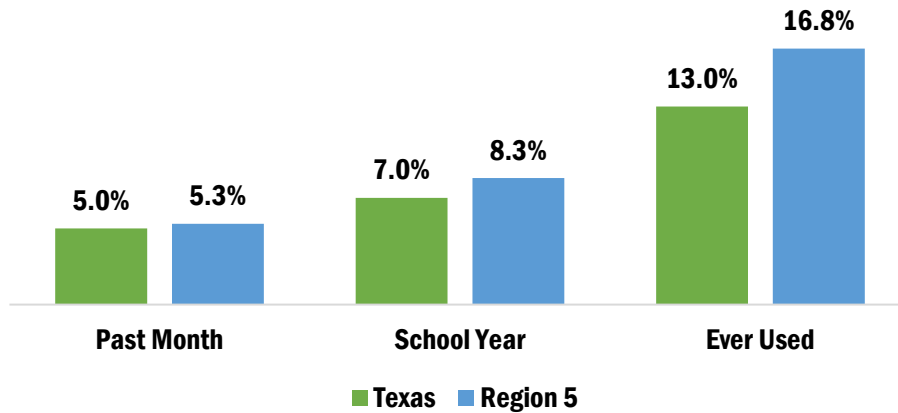
The "non-medical" use of prescription drugs; misusing prescription medication to relieve pain or to feel euphoria, is a contributing factor to the rise in overdose deaths across the nation.⁹⁷ The three classes of medication most misused are:⁹⁸

- Opioids are typically prescribed for the treatment of pain
- Central Nervous System (CNS) depressants to treat anxiety and sleep disorders
- Stimulants are often prescribed to treat attention-deficit hyperactivity disorder (ADHD)

The non-medical use of prescription drugs in Region 5 is above the state level according to the 2022 TSS. However, the percentage of use has declined since 2018. In 2018, “past month” use was 10.1%, “school year” use was 14.6%, and “ever used” was 24.6%. In 2022, “past month” use was 5.3% (a decline of 47.5%), “school year” use was 8.3% (a decline of 43.2%), and “ever used” was 16.8% (a decline of 31.7%). Table 92 in the Appendix separates the non-medical use of prescription medication from the TSS into the percentage of use by class.

Graph 46. Percentage of students using prescription drugs not prescribed to the individual in Texas and Region 5.

Prescription drug misuse in Region 5 is above the state in all categories.



Source. 2022 Texas School Survey.

Region 5

Table 27. TSS response to “How recently, if ever, have you used prescription drugs not prescribed to you?”, 2022

| Grade | Past Month | School Year | Ever Used | Never Used |
|------------|------------|-------------|-----------|------------|
| All Grades | 5.3% | 8.3% | 16.8% | 83.2% |
| Grade 7 | 4.0% | 6.8% | 13.6% | 86.4% |
| Grade 8 | 6.3% | 8.4% | 16.3% | 83.7% |
| Grade 9 | 6.0% | 9.2% | 18.3% | 81.7% |
| Grade 10 | 6.8% | 9.9% | 17.7% | 82.3% |
| Grade 11 | 4.3% | 7.8% | 16.3% | 83.7% |
| Grade 12 | 4.0% | 7.6% | 18.9% | 81.1% |

Source. 2022 Texas School Survey.

Illicit Drugs

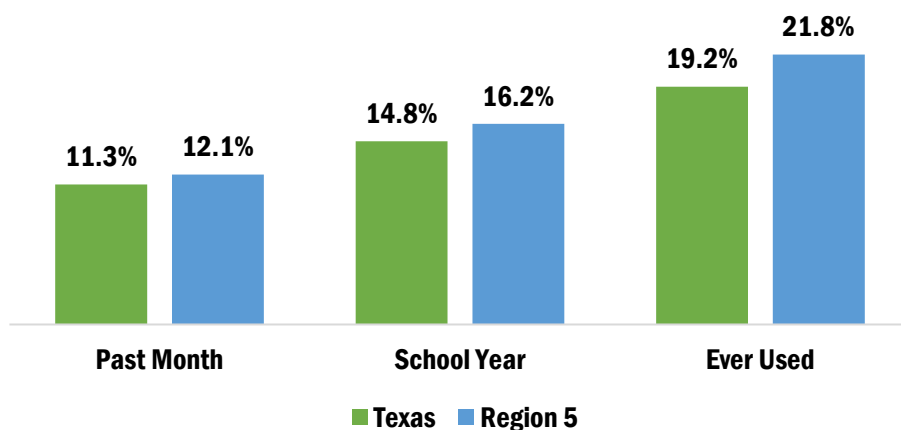
Illicit drugs are divided into two categories. The first category is those mentioned above; the non-medical use and misuse of prescription medication. The second category, which will be addressed here, is comprised of drugs that are illegal to possess, sell, and consume. These drugs include marijuana, cocaine, crack, steroids (non-medical use of), ecstasy, heroin, methamphetamine, and synthetic marijuana.⁹⁹

A new danger has arisen for today's youth that use illicit drugs. Fentanyl has entered the illicit drug market resulting in individuals unknowingly consuming a substance that drastically increases the risk of overdose and death. Fentanyl is showing up not only in illicit drugs to increase the potency, but also in counterfeit medication.

Like other substances examined here, the percentage of use in Region 5 is above the state level according to the 2022 TSS. Like other substances, the percentage of use in Region 5 has declined since 2018. In 2018, "past month" use of any illicit drug was 14.4%, "school year" use was 18.8%, and "ever used" was 24.9%. In 2022, "past month" use was 12.1% (a decline of 16.0%), "school year" use was 16.2% (a decline of 13.8%), and "ever used" was 21.8% (a decline of 12.4%).

Graph 47. Percentage of students using illicit drugs in Texas and Region 5.

Illicit Drug use in Region 5 is above the state in all categories.



Source. 2022 Texas School Survey.

Region 5

Table 28. TSS response to “How recently, if ever, have you used illicit drugs?”, 2022

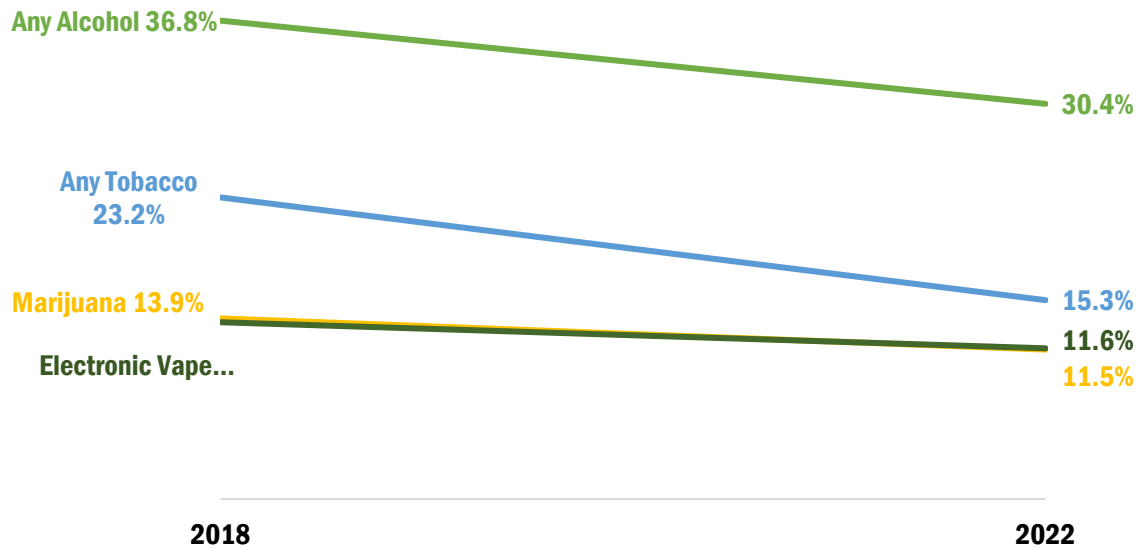
| Grade | Past Month | School Year | Ever Used | Never Used |
|------------|------------|-------------|-----------|------------|
| All Grades | 12.1% | 16.2% | 21.8% | 78.2% |
| Grade 7 | 4.0% | 6.1% | 8.4% | 91.6% |
| Grade 8 | 7.2% | 10.2% | 13.7% | 86.3% |
| Grade 9 | 14.0% | 18.4% | 22.1% | 77.9% |
| Grade 10 | 14.1% | 18.9% | 24.8% | 75.2% |
| Grade 11 | 14.8% | 20.2% | 30.4% | 69.6% |
| Grade 12 | 20.2% | 25.5% | 34.7% | 65.3% |

Source. 2022 Texas School Survey.

Reviewing the TSS consumption data, Region 5’s percentage of consumption is consistently above the state’s average percentage. This has been true since the 2014 TSS. While the percentage of consumption may be higher than the state’s average, from 2018 to 2022 the percentage of consumption within Region 5 has declined in the categories of alcohol, tobacco, marijuana, and electronic vape products.

The significance of this report is that the survey’s for 2018 and 2022 were of Region 5 distinctly and not combined with other regions. This reflects a more accurate picture of the students within the region and their substance use patterns.

Graph 48. Percentage of student consumption in Region 5 from 2018 to 2022.



Source. 2018 & 2022 Texas School Survey.

College Student Consumption

The consumption of mood-altering substances by college students is often excused as a “rite of passage” or simply a “stage” in life, but it also creates long-term negative consequences. Substance use by college students is associated with lower academic performance, a higher probability of unemployment after graduation, and an increased risk of committing or experiencing sexual assault.¹⁰⁰



Upon entering her first year of college, Jennifer was beginning a four-year degree plan in communications. Leaving a high school with less than a hundred in her graduating class to a campus of more than two thousand was exactly the challenge she was eager to face.

She had experienced drinking alcohol on occasions while attending parties in her hometown but had never suffered any negative consequences. However, it was at her first party at college that she fell victim to an assault that set her on a path of self-destruction. She remembers drinking alcohol, but not too much to feel intoxicated. She has no other memories of the evening. What she does remember was the discovery the next day that she had been sexually assaulted.

It was determined by the campus police that she was “drugged” and then taken to a different location. After an investigation by the police, her assailants were arrested and convicted. She did attend counseling, but as Jennifer recalls “it was too little too late for me. The embarrassment, the shame, the disappointment I saw in everyone’s eyes just overwhelmed me.” Jennifer took the rest of the semester off to “get her life reorganized.” Unfortunately, her semester break has been ongoing for the past three years.



In this portion of the RNA, an examination of the percentage of substance consumption is derived from the Texas College Survey. The areas of focus are alcohol, tobacco, marijuana, and illicit drug use.

The challenge of addressing substance use on college campuses is in its normative tradition and fabric of college life. Data has shown that “past month” and “past year” use among full-time college students is higher than age-matched cohorts who do not attend college.¹⁰¹ While some students enter college with more experience drinking alcohol than others, aspects unique to college life such as unstructured time, widespread availability, inconsistent enforcement of underage drinking laws, and limited interaction with parents and other adults can be problematic.

Research has shown that the strongest protective factor for college students is the continual influence of their parents. Students who choose not to drink often do so because their parents have talked with them concerning alcohol use and the negative consequences.¹⁰²

The tables below show that there has been a decline in use of alcohol, tobacco, and marijuana from 2019 to 2021 among Texas college students. For alcohol, the decline was 4.6%, for tobacco the decline was 10.5%, and for marijuana the decline was 2.1%.

Alcohol

Table 29. Percentage of alcohol use by Texas College students, 2019 and 2021.

| | | 2021 | 2019 |
|-------------|--------|-------|-------|
| Ever Used | Total | 73.2% | 76.8% |
| | Male | 71.7% | 75.1% |
| | Female | 74.5% | 78.0% |
| Current Use | Total | 50.8% | 54.8% |
| | Male | 49.6% | 53.7% |
| | Female | 51.9% | 55.6% |

Source. 2019 & 2021 Texas College Survey.

Tobacco

Table 30. Percentage of tobacco use by Texas College students, 2019 and 2021.

| | | 2021 | 2019 |
|-------------|--------|-------|-------|
| Ever Used | Total | 39.9% | 44.6% |
| | Male | 42.8% | 50.0% |
| | Female | 37.6% | 40.7% |
| Current Use | Total | 17.4% | 22.2% |
| | Male | 20.9% | 27.6% |
| | Female | 14.5% | 18.2% |

Source. 2019 & 2021 Texas College Survey.

Marijuana

Table 31. Percentage of marijuana use by Texas College students, 2019 and 2021.

| | | 2021 | 2019 |
|-------------|--------|-------|-------|
| Ever Used | Total | 37.7% | 38.5% |
| | Male | 36.6% | 40.3% |
| | Female | 38.3% | 37.2% |
| Current Use | Total | 15.3% | 15.7% |
| | Male | 15.0% | 16.9% |
| | Female | 15.2% | 14.8% |

Source. 2019 & 2021 Texas College Survey.

Illicit Drugs

Table 32. Percentage of illicit drug use by Texas College students, 2021.

| | | Cocaine | Hallucinogen | Sedatives | Simulants |
|-------------|--------|---------|--------------|-----------|-----------|
| Ever Used | Total | 5.1% | 10.7% | 7.4% | 3.2% |
| | Male | 6.0% | 13.8% | 7.4% | 4.3% |
| | Female | 4.3% | 8.2% | 7.2% | 2.2% |
| Current Use | Total | 0.8% | 1.8% | 1.5% | 0.9% |
| | Male | 0.8% | 2.2% | 1.3% | 1.3% |
| | Female | 0.8% | 1.4% | 1.7% | 0.5% |

Source. 2019 & 2021 Texas College Survey.

Adult Substance Use

There are common effects that substance use produces on the physical and mental wellbeing of individuals. While the average age of first use is during adolescents, the effects of substance use tend to become more pronounced in early and middle-aged adulthood.¹⁰³

When adolescents begin using mood-altering substances, they characteristically experience short-term effects such as changes in mood, cognition, and behavior. But it is the long-term effects such as organ damage, cognitive decline, mental health problems, heart disease, stroke, and cancer that are most prominent in adulthood.¹⁰⁴

The stories of the effects of substance use on adults are numerous. For example, Jamar is currently receiving treatment for HIV that he contracted from an infected needle while he was living in the streets of Beaumont using heroin. Rick who is stage four liver failure after more than forty years of heavy alcohol use. And Becky, who is suffering from severe memory loss after years of marijuana and kratom use.

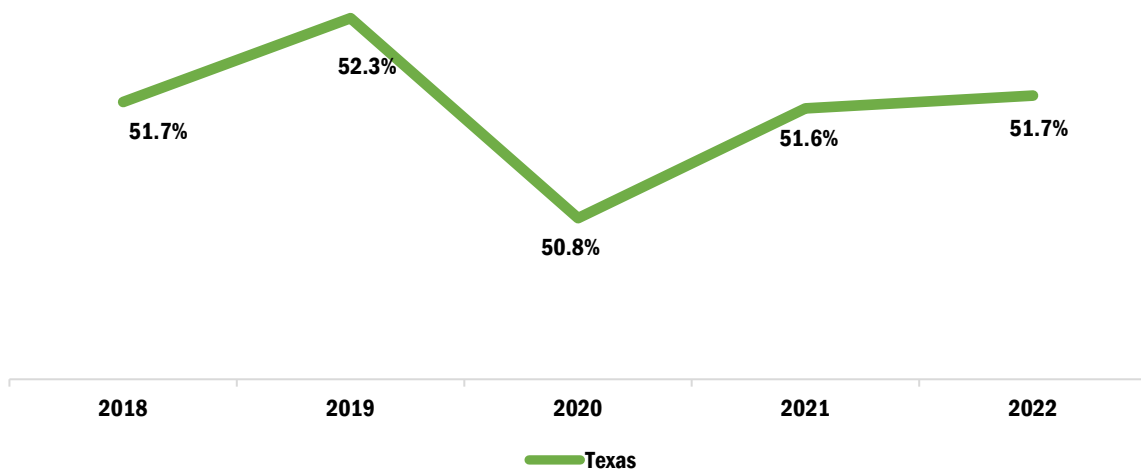
It is these stories and the countless others who are suffering physical and mental health problems due to their substance use that not only change the wellbeing of their own lives, but it also impacts the community. It is this very issue that will be examined here and in the next section of the RNA; adult substance use and its impact on public health and safety.

Current Use alcohol

According to the CDC, the average percentage of adults who consumed alcohol in Texas was 51.8% from 2018 to 2021. Interestingly, the highest percentage of consumption occurred in 2019 (52.5%), just prior to the lockdowns for COVID-19. The lowest percentage occurred in 2020 (51.0%), which was the first year of the lockdowns. Once lockdowns were removed alcohol consumption began to rise again in 2021-2022.

Graph 49. Percentage of adults who have had at least one drink of alcohol within the past 30 days in Texas, 2018 to 2022.

Texas adult alcohol consumption, 2018-2022.



Source. Centers for Disease Control and Prevention. BRFSS Prevalence and Trend Data.

Adult Binge Drinking

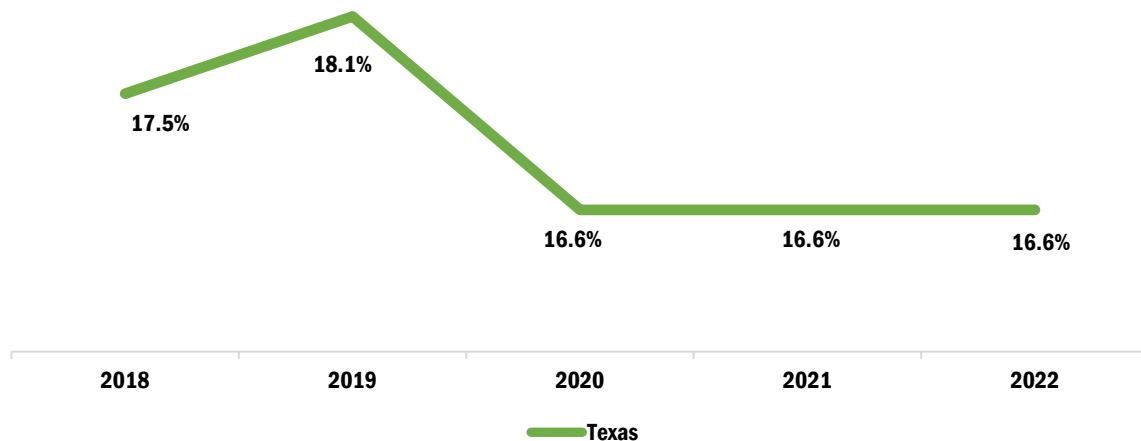
The National Institute on Alcohol Abuse and Alcoholism identifies binge drinking as the consumption of alcohol that raises one's blood alcohol concentration (BAC) to .08 (.08 grams of alcohol per deciliter) or higher. Typically, this equates to five or more drinks for males or four or more drinks for females in about two hours.¹⁰⁶

The justification for addressing the topic of binge drinking is that an estimated one in six adults in the U.S. binge drink and 25% of those do so weekly. Although binge drinking is just one pattern of excessive drinking, it accounts for nearly all excessive drinking. Of those who expressed that they consume an excessive amount of alcohol, 90% reported binge drinking.¹⁰⁷

According to the CDC, the average percentage of adults' binge drinking in Texas was 17.1% from 2018 to 2022. Like alcohol consumption, the highest percentage of consumption occurred in 2019 (18.1%), just prior to the lockdowns for COVID-19. The lowest percentage occurred in 2020 (16.6%) due to lockdowns, and has remained consistent throughout 2022.¹⁰⁸

Graph 50. Percentage of adults' binge drinking in Texas, 2018 to 2022.

Texas adult binge drinking, 2018-2022.



Source. Centers for Disease Control and Prevention. BRFSS Prevalence and Trend Data.

Adult Smoking

Tobacco use and its subsequent negative health effects are well known because of public education campaigns over the past thirty years. However, nicotine dependence persists as well as the impact on health. An estimated sixteen million Americans are living with a disease that was caused by smoking.¹⁰⁹

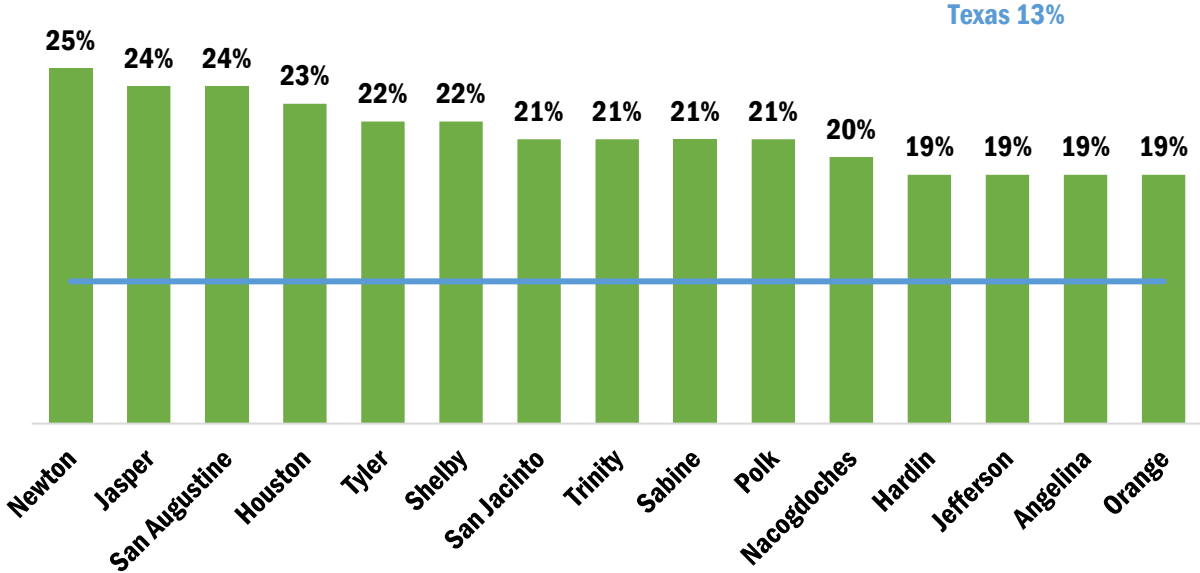
While the percentage of adults who smoke is less than the percentage of adults that drink alcohol, smoking is the number one cause of preventable disease and death worldwide. The numbers are staggering considering that diseases related to smoking claim more than 480,000 lives in the U.S. each year. Key facts about smoking:¹¹⁰

- Cigarette smoke contains more than 7,000 chemicals, at least 69 of which are known to cause cancer. Smoking is directly responsible for approximately 90% of lung cancer deaths and approximately 80% of deaths caused by chronic obstructive pulmonary disease (COPD), including emphysema and chronic bronchitis.
- Among adults who smoke daily, 78% had smoked their first cigarette by the time they were 18 years of age, and 94% had by age 21.
- Among current smokers, 73% of their diagnosed smoking-related conditions are chronic lung diseases. Even among smokers who have quit, chronic lung disease still accounts for 50% of smoking-related conditions.
- Smoking harms nearly every organ in the body and is a main cause of lung cancer and COPD. It also is a cause of coronary heart disease, stroke and a host of other cancers and diseases.

The overall percentage of adult smokers in Texas in 2022 was 13%. The average percentage of smokers for Region 5 was 21.3%. Graph 50 below is the percentage of smokers per county in Region 5.

Graph 51. Percentage of adult smokers compared to Texas.

All counties in Region 5 are above the state average in the percentage of smokers.



Source. County Health Rankings and Roadmaps.

Public Health and Public Safety

The use and misuse of substances remains a challenge for public health and safety. The concern is not only illicit substance use but legal substances as well. Just because something is legal does not necessarily make it safe.

Thousands of people die each year from overdosing on prescription medication, alcohol-related injuries, and tobacco use. States that have legalized marijuana are now having to confront the increasing number of negative health effects related to marijuana use and misuse.

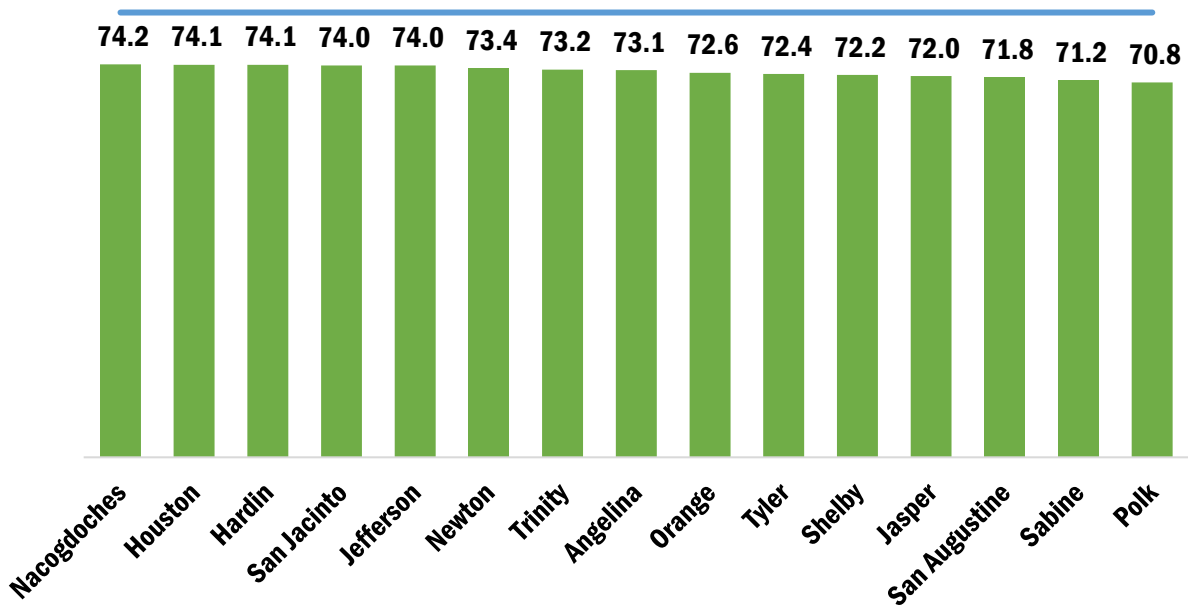
Multiple factors have a bearing on public health and safety and substance use and misuse is a major influence. As noted earlier concerning alcohol, no other commodity sold for ingestion, not even tobacco, has such a wide-range adverse effect on the body. When tobacco and illicit drug use is combined with alcohol consumption, a population's overall health is greatly impacted.

County Health Rankings provides an indicator on life expectancy in years. Substance use along with other poor health indicators such as diabetes, obesity, and a lack of exercise contribute to a population's lower life expectancy since these conditions can lead to premature death. As seen in Graph 52 below, the average life expectancy for Texas is 77.2 years while the life expectancy for Region 5 is 72.9 years. All the counties within Region 5 are below the state level. Nacogdoches County has the highest rate at 74.2 and Polk County has the lowest rate at 70.8.

Graph 52. Rate of life expectancy in years compared to Texas.

All counties in Region 5 are below the state average in Life Expectancy.

Texas 77.2



Source. County Health Rankings and Road Maps.

Consequences of Substance Use/Misuse

Ron, a member of Narcotics Anonymous (NA), tells anyone who will listen of his journey and the consequences of substance use and misuse. His wife filed for a divorce due to his manipulating, abusive and “drunken” behavior. Within three months of their divorce, Ron had received three DWI’s and a short time in jail. Jail-time did not get his attention.

A few weeks out of jail, Ron was introduced to the mix of meth and ecstasy (MDMA). After he started abusing these substances, he was in and out of jail and the hospital, suffering three near-death overdoses. He did whatever he needed to do to stay “high”, which included lying, manipulating, and stealing.

During one of Ron’s drug binges, he was driving to a friend’s house to acquire more drugs when he failed to stop at an intersection. The result was a three-vehicle accident with one fatality: a mother of two children. Sentenced to twenty years in prison and the guilt of taking someone’s life, Ron attempted suicide on several occasions. “It was the longest and most difficult part of my life” Ron recalled “that took me down a path to the very bottom of my life.”

While in prison Ron began working on his recovery. After his release he has continued with NA, eager to share his story in hopes of preventing a repeat of his by anyone else “unfortunate enough to trip the trap of drugs and alcohol.” Unfortunately, his story is not unique. Others find themselves on similar journeys and continue to negatively impact public health and safety.

Mortality

The misuse of psychoactive substances puts an individual at a higher risk of death and other harms. Due to the interaction of the substance and the brain, individuals are more likely to engage in risky behavior, make poor decisions, and react slower than normally to potential harmful situations.

For this indicator, data for alcohol-related vehicular fatalities, overdose deaths, and suicide deaths will be examined.

Alcohol-Related Vehicular Fatalities

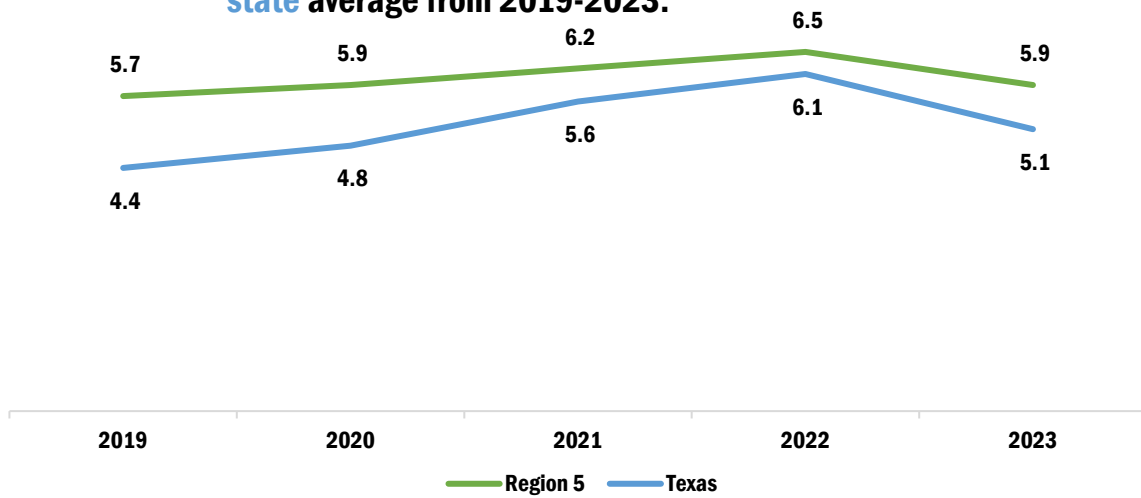
Driving while intoxicated or under the influence of a psychoactive substance impairs the driver’s ability to operate the vehicle safely. Not only is the driver and other occupants in the vehicle at risk of injury, but everyone else that is in their vicinity at risk as well.

Alcohol-impaired driving is defined as the number of fatalities from vehicle crashes involving a person with a blood alcohol concentration of at least 0.08 g/dl. by the National Traffic Safety Administration (NHTSA). Fatalities can be either the driver, an occupant of a vehicle, or a non-occupant.¹¹¹

Data for Texas and Region 5 show that the rate of alcohol-related vehicular fatalities increased from 2019 to 2022, with a small decrease for 2023. For Region 5, the rate went from 5.7 in 2019 per 100,000 and peaked in 2021 at 6.5.

Graph 53. Rate of alcohol-related fatalities per 100,000 compared to Texas, 2019 to 2023.

Alcohol- related fatalities in Region 5 have remained above the state average from 2019-2023.



Source. Texas Department of Transportation. Annual Texas Motor Vehicle Crash Statistics.

Table 33. Number of alcohol-related fatalities per county for Region 5, 2021 to 2023.

| County | 2023 | 2022 | 2021 |
|---------------|------|------|------|
| Angelina | 5 | 5 | 5 |
| Hardin | 2 | 1 | 1 |
| Houston | 3 | 0 | 1 |
| Jasper | 3 | 0 | 6 |
| Jefferson | 6 | 17 | 14 |
| Nacogdoches | 6 | 3 | 3 |
| Newton | 0 | 6 | 0 |
| Orange | 5 | 6 | 2 |
| Polk | 7 | 5 | 4 |
| Sabine | 2 | 0 | 3 |
| San Augustine | 0 | 0 | 3 |
| San Jacinto | 3 | 3 | 2 |
| Shelby | 3 | 2 | 1 |
| Trinity | 0 | 1 | 1 |
| Tyler | 0 | 1 | 2 |

Source. Texas Department of Transportation. Annual Texas Motor Vehicle Crash Statistics.

Overdose Deaths

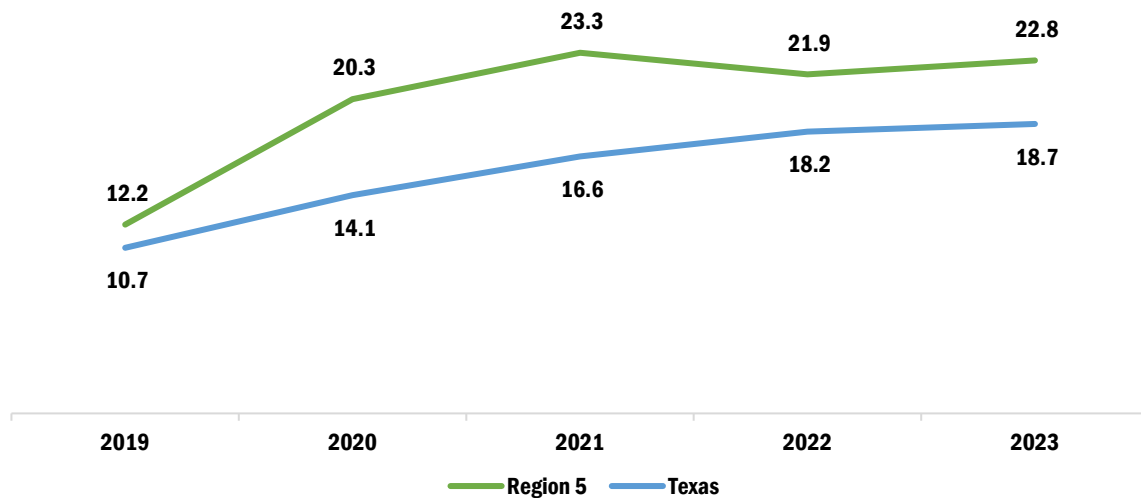
Opioids are currently the main cause of overdose deaths with nearly 88% of all opioid-involved overdose deaths are from the use of synthetic opioids such as fentanyl, hydrocodone, oxycodone, and hydromorphone. According to the CDC, fentanyl is the number one cause of death for adults aged 18 to 45 years old.¹¹²

In 2023 the rate of Fentanyl overdose related deaths in Texas per 100,000 was 8.0 and for Region 5 the rate was 8.3. Tracking fentanyl-related overdose deaths has limitations because fentanyl-related poisonings are a subset of synthetic opioid drug deaths. Currently, records where the cause of death is suspected to be fentanyl, the word "fentanyl" must be written in addition to the CDC code.

For overall overdose deaths in 2023, Region 5 had the highest rate of overdose deaths, 22.8 per 100,000, compared to the other ten regions in Texas. Region 6, Houston area, had the next highest overdose death rate at 20.3 per 100,000.

Graph 54. Rate of overdose deaths per 100,000 compared to Texas.

Overdose deaths per 100k are higher in Region 5 than Texas.



Source. Drug-Related Poisonings. Texas Department of State Health Services.

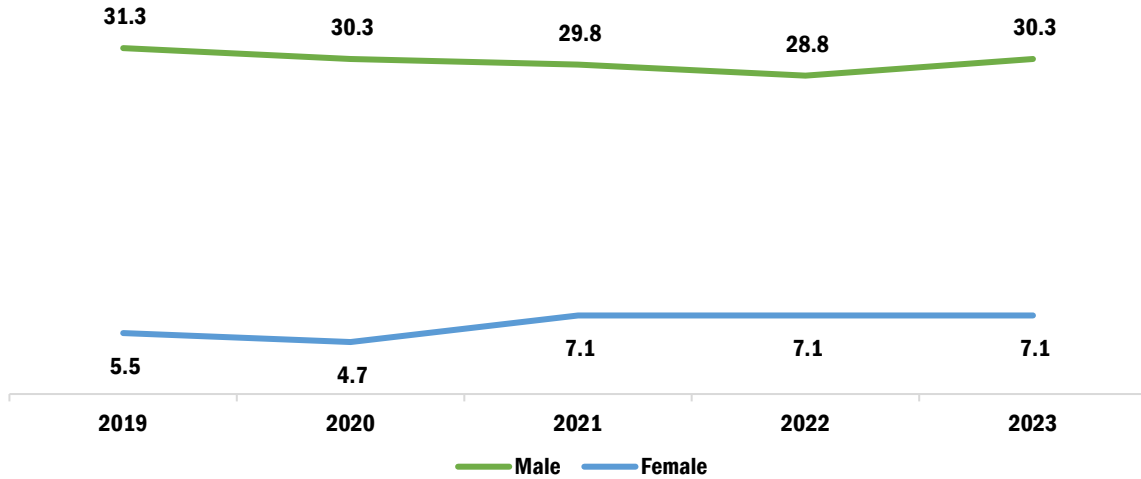
Suicide Deaths

Research has shown a link between substance misuse and suicide. Intentional self-harm is the leading cause of death among people with a Substance Use Disorder (SUD). Alcohol is a depressant and adding its mood-altering effects while in an emotionally depressed state will only increase the risk for adverse behavior, such as suicide. When compared to the general population, people treated for alcohol abuse or dependence are at a ten times greater risk for suicide.¹¹³

In 2023, the suicide rate per 100,000 for Texas was 14.7 and the rate for Region 5 was 18.7. The following graphs highlight suicide rates per gender and a comparison to the state rate.

Graph 56. Rate of suicide deaths per 100,000 by gender, Region 5, 2019 to 2023.

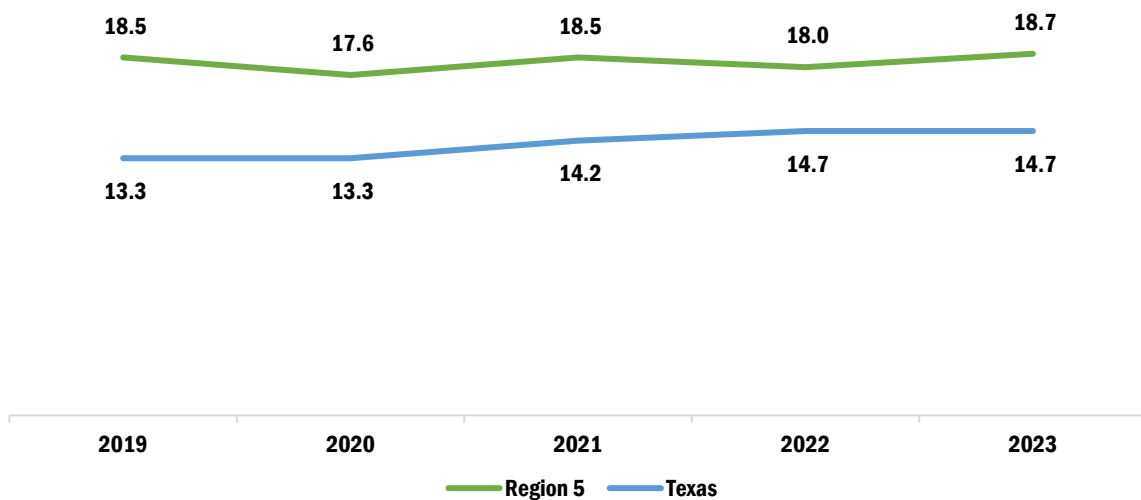
Suicide rates for males consistently exceed the rate for females in Region 5.



Source. Texas Department of State Health Services. Center for Health Statistics.

Graph 57. Rate of suicide deaths per 100,000 compared to Texas, 2018 to 2022.

Suicide rates are higher in Region 5 than Texas from 2019-2023.



Source. Texas Department of State Health Services. Center for Health Statistics.

Healthcare

Substance use and misuse not only impact the health of an individual, but it puts a strain on the healthcare system. Substance use disorders are strongly associated with other medical conditions and these conditions are increasingly more dependent on the substance use issue being confronted and treated alongside efforts to treat medical conditions.¹¹⁴ Medical conditions resulting from substance use and misuse include:¹¹⁵

- Lung disease, such as chronic bronchitis, emphysema, or cancer
- Decreased brain capacity, such as impaired memory, attention, judgment, or coordination
- Infections, such as HIV, hepatitis, or tuberculosis
- Liver damage, such as cirrhosis, fibrosis, or cancer
- Heart disease, such as high blood pressure, arrhythmia, or stroke
- Digestive system issues, such as ulcers, inflammation, or bleeding
- Unbalanced hormones, such as reduced fertility, sexual dysfunction, or mood disorders

Since SUD treatment is vital to an overall health care plan, the following indicators will assess substance use screenings, assessments, and referrals, and the number of individuals that are in treatment.

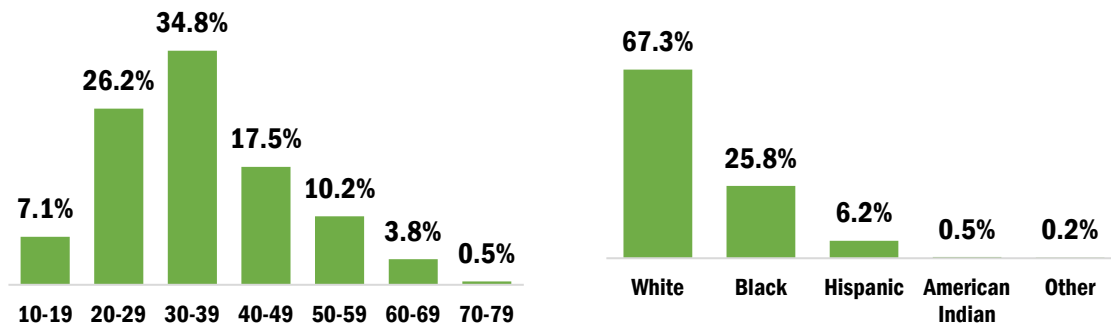
OSAR

Outreach, Screening, Assessment, and Referral (OSAR) is a service available for all Texans seeking information or help concerning substance use. It is the first step for anyone who wants help concerning substance use and misuse. Each of the eleven Texas Health and Human Services regions provide OSAR. The only requirement for services is to be a Texas resident. Within Region 5, OSAR services are offered through the Alcohol & Drug Awareness Council (ADAC) out of their offices in Lufkin (Angelina County), Nacogdoches (Nacogdoches County), Beaumont (Jefferson County), Livingston (Polk County), and Crockett (Houston County).

In the fiscal year 2021/2022, Region 5 provided 2,636 OSAR screenings. The largest percentage of the screenings (36.5%) were for stimulant use. Stimulants include methamphetamine, crystal meth, dextroamphetamine (Adderall®, Dexedrine®), and methylphenidate (Ritalin®, Concerta®). See Table 34 below for the percentage of substance type used by ADAC clients from 2019 to 2022.

Those seeking treatment for various substance use disorders presented to OSAR to determine their level of dependency and treatment options. The figures below are a division by percentages for those seeking treatment by age and race/ethnicity.

Figure 20. OSAR age distribution, 2021-2022. **Figure 21.** OSAR race/ethnicity, 2021-2022.



Source. ADAC. Prevention Resource Center.

Table 34. Percentage of substance types used by OSAR clients for Region 5, 2019-2022.

| Substance | 2021-2022 | 2020-2021 | 2019-2020 |
|---------------|-----------|-----------|-----------|
| Alcohol | 20.3% | 17.3% | 18.1% |
| Opioids | 4.7% | 4.9% | 6.1% |
| Cannabis | 23.9% | 22.5% | 19.9% |
| Sedative | 1.4% | 2.1% | 2.0% |
| Cocaine | 8.3% | 9.3% | 8.4% |
| Stimulant | 36.5% | 37.4% | 39.3% |
| Hallucinogens | 4.8% | 6.3% | 6.3% |

Source. ADAC. Prevention Resource Center.

Substance Use Treatment

Substance use treatment includes detoxification, outpatient, and inpatient treatment. Treatment can take place in or out of the region or even out of state depending on availability.

Residential treatment, also known as outpatient, involves taking up temporary residence at a supervised facility. Stays at the facility range from thirty to ninety days depending on the level or severity of dependence. Some residential treatment facilities have detoxification available in-house. Near the end of treatment some facilities allow residents to leave during the day for work and return in the evening.

Detoxification (or detox) provides medical supervision during the period of withdrawal from the substance used. This is designed to allow for a slow return to normal physiological function for the client. Ambulatory detox utilizes medication without being confined to a bed during the time of withdrawal. This too is dependent upon the level and severity of the dependency.

Outpatient treatment is for those who don't need to detox or supervised care. It typically takes place in the evenings and/or the weekends. This allows the patient to continue to work and live at home. However, it is important that the patient's social system and home environment is supportive of their sobriety. The main element of outpatient treatment involves group sessions with the individual and support for family members.

Region 5

Figure 22. Number in SUD treatment.

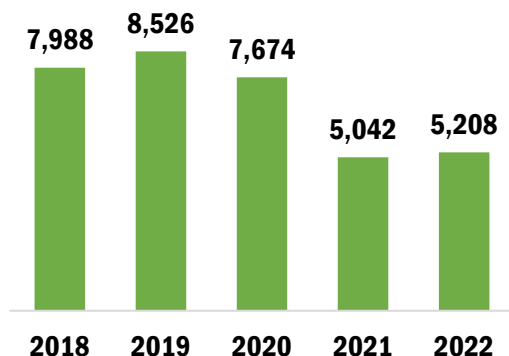
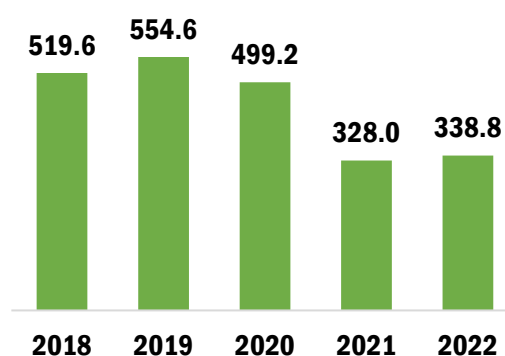


Figure 23. Rate per 100K in SUD treatment.



Source. Number Served with Substance Use Treatment. HHSC.

Table 35. Rate per 100K of those in substance use treatment per county, 2018 to 2022.

| County | 2022 | 2021 | 2020 | 2019 | 2018 |
|-------------|---------|-------|---------|---------|---------|
| Angelina | 1,093.8 | 892.4 | 1,304.5 | 1,152.8 | 1,025.5 |
| Jasper | 379.0 | 309.3 | 394.2 | 539.7 | 585.2 |
| Jefferson | 386.7 | 423.3 | 666.2 | 895.0 | 870.9 |
| Nacogdoches | 256.8 | 346.5 | 541.4 | 448.5 | 411.4 |
| Orange | -- | -- | 130.9 | 161.5 | 185.1 |
| Polk | 750.2 | 674.3 | 598.5 | 534.7 | 472.8 |
| Shelby | -- | -- | 457.9 | 408.0 | 87.4 |

Source. Number Served with Substance Use Treatment. HHSC.

"--" suppressed data.

The list below highlights substance abuse treatment programs available within Region 5 and their numbers for fiscal year 2022/2023:

- ✚ OSAR (Outreach, Screening, Assessment, Referral)
 - Number screened 2,866
 - Referred to treatment 2,411
- ✚ SAFP-AC (Substance Abuse Felony Punishment Aftercare Program)
 - Placed in aftercare 141
- ✚ SAFP-IOP (Substance Abuse Felony Punishment Intensive Outpatient Treatment Program)
 - Number in program 21
- ✚ SACP (substance Abuse Counseling Program)
 - Number in program 102
- ✚ TAIP (Treatment Alternative to Incarceration Program)
 - Number in program 50

- ✚ AOP (Adult Outpatient Treatment Program)
 - Number in program 200
- ✚ TRY (Youth Outpatient Treatment Program)
 - Number in program 103
- ✚ RSS (Recovery Support Services)
 - Long-term recovery 73
 - Received services 270
- ✚ YRC (Youth Recovery Community)
 - Active participation 132
- ✚ DOEP (Drug Offender Education Program)
 - Students enrolled 75
- ✚ DWI Education Program
 - Students enrolled 186
- ✚ DWI Intervention Program
 - Students enrolled 54
- ✚ Drug Court Phases I, II, III
 - Number in treatment 59

Economic

The economic costs of substance use and misuse can be staggering. Nation-wide it is estimated that substance misuse cost society more than \$820 billion each year and is expected to continue to rise. That is equivalent to 6% of the nation's income. The cost of alcohol, tobacco, and prescription medication misuse which results in disease, premature death, loss of productivity, theft, violence, and rape as well as the cost of interdiction, law enforcement, prosecution, incarceration, parole, and probation are, however, greater than the value of the sales and tax revenue of these addictive substances.¹¹⁶

For Texas, the estimated cost of substance use disorders is nearly \$350 million per year. Entering the hospital through the emergency room due to an opioid overdose cost on average \$35,908 per overnight hospital admission.¹¹⁷

Substance use prevention has proven to be cost effective. For every dollar spent on substance use disorder treatment saves \$7 in criminal justice cost. Texas funded recovery coaching saved an estimated \$3,260,464 in healthcare costs. The benefits associated with prevention programs range from \$1.61 to more than \$64 for every dollar invested. Substance use prevention programs positively impact social, emotional, and behavioral outcomes.¹¹⁸

Emerging Trends

The Drug Enforcement Administration (DEA) has established eight classes of drugs. Those classes are narcotics, stimulants, depressants, hallucinogens, steroids, marijuana/cannabis, inhalants, and designer drugs. In this section a closer examination will be made of the drug classes that are impacting Texas in general, and Region 5 specifically, and the trends that the data is showing.

Narcotic refers to opium, opium derivatives, and their semi-synthetic and synthetic substitutes. Narcotics affect the body by dulling the senses and relieving pain. Narcotics include:

- Fentanyl
- Heroin
- Hydromorphone
- Methadone
- Morphine
- Opium
- Oxycodone

The most important trend currently is in the increase in opioid overdoses. In 1996, OxyContin was released and from 1999 to 2010 it was aggressively marketed for pain relief. While it did offer pain relief, it was also highly addictive due to its chemical similarity to heroin. This resulted in thousands of individuals becoming addicted to the medication and an increase in opioid-related overdose deaths. In 2010, tighter regulations were introduced making it more difficult to obtain pain medication. In 2013, the DEA began to see a rise in the seizure of fentanyl and fentanyl contaminated substances and overdoses due to synthetic opioids drastically rose.

Most opioid-related overdoses were east of the Mississippi River and Texas remained relatively unaffected. In 2020, this trend changed for Texas and for Region 5. In Texas the number of Emergency Department (ED) visits for opioid-related overdoses had been trending downward until 2021 when the rate per 100,000 for opioid-related ED visits rose from 90.8 to 98.6.

The fact that Region 5's rate of fentanyl-related overdose deaths per 100,000 (8.3) is above the state rate of 8.0, and overall drug-related overdose deaths for the region (22.8) is the highest across all eleven regions is a cause for pause. A continuing rise in these rates could have a devastating effect on the region.

The main concern is the proliferation of fentanyl being "cut" into such a large variety of substances. From Methamphetamine to Adderall, fentanyl-contaminated drugs are becoming more common. Treatment centers within the region are reporting that when they drug test incoming clients, they

are testing positive for fentanyl and the clients are unaware that their drugs have been contaminated. At a recent Townhall host by the Region 5 PRC, the DEA reported that 8 out of 10 drugs obtained over the Internet are counterfeit and that 6 out of 10 of the counterfeit drugs contain a lethal dose of fentanyl.

An additional alarming trend related to opioid misuse is the inclusion of xylazine (“Tranq”), an extremely strong sedative intended as an animal tranquilizer and not intended for human consumption. Xylazine can not only increase the risk of an overdose, but because it is not an opioid naloxone (Narcan) cannot reverse the effects of an overdose because Narcan only works with opioid overdoses. The DEA reported that in 2022 approximately 23% of fentanyl powder and 7% of fentanyl pills seized contained xylazine. Local medical personnel in Texas have noted an increase of xylazine in overdose cases.¹¹⁹

Stimulants increase the heart rate, blood pressure, and body temperature. Stimulants include:

- Amphetamine
- Methamphetamine
- Khat
- Cocaine
- Adderall
- Ritalin
- Nicotine

Methamphetamine and nicotine are the most used stimulants within the region. Methamphetamine is the number one drug threat in Texas according to three DEA Field Divisions in Texas. Mexican drug organizations continue to supply substantial quantities of the methamphetamine into and through Texas and Region 5. The availability is high, and the price is low. The increased availability is due to the movement of methamphetamine in a solution that looks like an icy sludge (“liquid meth”) and then local conversion laboratories (“dry houses”) in Texas are used to reconstitute the drug from liquid to crystalline form.¹²⁰

The alarming trend is the number of overdose deaths resulting from methamphetamine use in Texas. In 2001, there were under a hundred methamphetamine-related overdose deaths. In 2020, there were over one thousand methamphetamine-related overdose deaths. The risk of death is only increasing as fentanyl-contaminated drugs continue to increase.¹²¹

An additional trend in methamphetamine use is the gender of the users. In 1994, 40% of the methamphetamine users were female. In 2020, the percentage of female users rose to 55%. Research is showing that females are using methamphetamine for energy, for weight loss, and to counter depression.¹²²

Alcohol, Tobacco, marijuana, and electronic vape use have all declined in use by students within the region from 2018 to 2022 according to the Texas School Survey. For "Past Month" use, electronic vape use decreased 14.7%, alcohol used decreased 17.4%, marijuana use decreased 17.3%, and tobacco use decreased 34.1%. While the percentage of use of these four substances in Region 5 is above the state average, it is a positive trend to see a decline in use.

An increasing trend throughout the nation and in Texas is that of harm reduction. Aspects of harm reduction are controversial due to the perceived underlying message of approval and support for an individual's substance use. Harm reduction involves providing syringes and other drug use supplies, "safe use" sites, and education on how to properly use and dispose drug paraphernalia. Other portions of harm reduction are beneficial for the user and integrate soundly with prevention efforts such as providing naloxone to assist in case of an overdose, referrals for substance use counseling, and medical assistance. The goal of substance use treatment is to move an individual from misuse to no use. Using harm reduction comes down to each community's desire and acceptance of methods used to confront substance misuse.

Region 5 in Focus

Prevention Specialists within the region work to provide children and adults with the tools and knowledge for making choices that will positively impact their mental and physical health. Regardless of circumstances in life, there is always a choice.

Charlotte has been a Prevention Specialist for five years and provides prevention curriculum to first through third graders. She focuses her work on building a strong foundation for the children. "I always want them to know their own worth. Knowing that they will be stronger and better equipped to resist peer pressure and other negative influences in their lives. Secondly, I want them to know that kindness is a choice and always matters. Be kind to each other."

Working with the children in a school setting is not the only job of a Prevention Specialist. They also participate in other settings that involve adults and parents. When speaking with parents, Charlotte states that her primary message is "that their children are watching them closely and they don't miss a thing; that habits are learned behaviors and their children will repeat it."

Advertisers that are promoting the effectiveness of a product often include the phrase "results may vary." This is also true in prevention work. Numerous factors influence the lives of individuals and the messages they respond to. An example of this was conveyed by an adult who recalled a time when he was in elementary school and ADAC's prevention services changed his family's future. Prevention specialist brought to his school what is known as "Mr. Gross-Mouth" to demonstrate the effects of smokeless tobacco within the mouth. After seeing and learning of the negative consequences of smokeless tobacco, he then went home to share what he had learned with his father, who in turn stopped using smokeless tobacco. It is stories such as this that make prevention so vital to the health and welfare of communities throughout the region and across the state.

Prevention Resources and Capacities

Regardless of how much or how hard a Prevention Specialist may work, prevention is not a job that can be accomplished alone. The community is an essential aspect of all prevention efforts. From emotional to financial support and even hands-on participation, without community backing prevention efforts would be wasted.

Consider the work of the CCPs. Not only are they working to make environmental changes to positively impact the community, but they are also seeking to alter social norms away from the acceptance of substance use toward no use. The following is a list of the various groups, agencies and organizations that are important to the field of prevention.

Community Programs and Services

Organizations and agencies working with youth assist the community through mentoring, life-skills training, and physical activities with adolescents which serve as protective factors for youth.

Within Region 5, these organizations and agencies include:

- 4-H
- FFA
- YMCA
- Trail Life
- Junior League
- Boys and Girls Clubs
- Boy Scouts of America
- Girl Scouts of the U.S.
- Little League Baseball
- Parks and Recreation

Regional Services

Social services are public services provided by government, private, and non-profit organizations that seek to assist in building stronger communities, family stability, and promote equality and opportunity. Social services within Region 5 include:

- Alzheimer's Association
- American Cancer Society
- Buckner Children & Family Services
- Burke
- Community Resource Coordination Groups (CRCG)
- Deep Eat Texas Council of Government and Economic Development District (DETCOG)
- Goodwill
- Head Start
- Texas A&M AgriLife Extensions
- Texas Department of Assistive & Rehabilitative Services
- Texas Department of Family & Protective Services
- Texas Education Agencies
- Texas Health & Human Services Commission
- Texas Health Steps
- Texas Workforce Commission
- The Salvation Army
- United Way
- Veterans Assistance (VA)
- Workforce Solutions

Local social services and the counties they serve include:

- Brown Family Health Center (*Angelina, Houston, Jasper, Nacogdoches, Newton, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, Tyler*)
- Childrenz Haven (*Polk*)
- Community Rx Help (*Angelina, Nacogdoches, San Augustine, Shelby*)
- Family Crisis Center of East Texas (*Angelina, Houston, Nacogdoches*)
- Family Services of Southeast Texas (*Hardin, Jasper, Jefferson, Newton, Orange, Tyler*)
- GRACE Pregnancy Outreach (*Polk*)
- Harold's House (*Angelina, Nacogdoches, Sabine*)
- Human Trafficking Resource Center (*Hardin, Jasper, Jefferson, Newton, Orange, Tyler*)
- Julie Rogers "Gift of Life" Program (*Hardin, Jefferson, Orange*)
- LGBTQ+ Equality Caucus – SFA (*Nacogdoches*)
- LGBTQ+ Students of Lamar University (*Jefferson*)
- Legacy Community Health (*Hardin, Jefferson, Orange*)
- Pineywoods Pride Coalition (*Nacogdoches*)
- Pregnancy Help Center of Lufkin (*Angelina*)
- Sexual Assault & Abuse Free Environment (SAAFE House) (*Polk, San Jacinto, Trinity*)
- Solid Foundation (*Nacogdoches*)
- Solomon's House of Hope (*Trinity*)
- Southeast Texas Regional Planning Commission (*Hardin, Jefferson, Orange*)
- The Coalition
- The Men's Field House (*Angelina*)
- The Mosaic Center (*Angelina*)
- The Rose (*Jefferson*)
- Triangle Area Network (TAN) (*Hardin, Jefferson, Orange*)
- Village Nacogdoches (*Nacogdoches*)

Faith Community

A major influence within East Texas is the faith community. Not only churches, but spiritual leaders are invested and personally involved in the prevention of substance use and misuse as well as the recovery of those with SUD. Local churches provide people, facilities, prayer, and even financial support to aid in the development of community protective factors.

Treatment Facilities

Mental health and substance misuse facilities within the region provide a place for individuals to go to get the help they need. Not every county has a designated facility. However, mental health and substance use services are available in all fifteen counties.

Table 36. Region 5 mental health and substance abuse facilities.

| County | Treatment Type | Facility | City |
|---------------|----------------|---|---------------|
| Angelina | SA | MedMark Treatment Centers | Lufkin |
| Angelina | MH | Burke | Lufkin |
| Angelina | MH | Oceans Behavioral Hospital | Lufkin |
| Angelina | SA | Alcohol & Drug Abuse Council | Lufkin |
| Houston | MH | Burke | Crockett |
| Jasper | MH | Spindletop | Jasper |
| Jasper | SA | Alcohol & Drug Abuse Council | Jasper |
| Jefferson | SA | Alcohol & Drug Abuse Council | Beaumont |
| Jefferson | SA | Woodlands Recovery Centers | Beaumont |
| Jefferson | SA | Texas Treatment Services | Beaumont |
| Jefferson | SA | Land Manor | Beaumont |
| Jefferson | SA | Recovery Council of Southeast Texas | Beaumont |
| Jefferson | SA | Jefferson County COADA | Beaumont |
| Jefferson | SA | Unity Treatment Center | Beaumont |
| Jefferson | MH | Baptist Hospitals of Southeast Texas | Beaumont |
| Jefferson | MH | Spindletop | Beaumont |
| Jefferson | SA | Franklin House South | Beaumont |
| Jefferson | SA | ADAPT Programs | Beaumont |
| Jefferson | MH | Medical Center of Southeast Texas | Port Arthur |
| Jefferson | SA | Spindletop South County Alcohol & Drugs | Port Arthur |
| Jefferson | SA | Best Recovery Healthcare | Port Arthur |
| Nacogdoches | MH | Burke | Nacogdoches |
| Nacogdoches | SA | Alcohol & Drug Abuse Council | Nacogdoches |
| Orange | MH | Spindletop | Orange |
| Orange | SA | Spindletop | Orange |
| Orange | SA | Right Choice | Orange |
| Polk | MH | Burke | Livingston |
| Polk | SA | Alcohol & Drug Abuse Council | Livingston |
| San Augustine | MH | Burke | San Augustine |
| Shelby | SA | MedMark Treatment Centers | Center |
| Tyler | SA | Cypress Lakes Lodge | Woodville |

Source. SAMHSA.

Note. SA=Substance Abuse/MH=Mental Health.

Community Coalition Partnership

Community Coalition Partnerships (CCP) are designed as community programs that seek to encourage community mobilization to implement evidence-based environmental strategies by changing public policies and social norms. The CCPs within Region 5 are listed below with the number served in 2022/2023.

There are two HHSC-funded CCPs within the region; NAC-CAN in Nacogdoches and Polk County CIA in Livingston.

NAC-CAN & Polk County CIA

ADAC's CCP programs in Nacogdoches (NAC-CAN) and the Polk County CIA (Community In Action) work with each community to implement evidence-based environmental strategies related to substance use and misuse prevention and behavioral health promotion.

- ✚ Community activities and number served for Nacogdoches and Polk counties
 - Community based presentations and events: 193
 - Number of youth served: 5,378
 - Number of adults served: 7,954
 - Number of media awareness: 224
 - Number of social media postings: 552
- ✚ Number of Environmental Strategies:10: (7) Vape Secure Storage Kits delivered to Nacogdoches/Polk County School Resource Officers for a secure, safe environment to store confiscated vapes until destruction.
 - 1-Permanant Prescription Drop Box installed Corrigan Police Department
 - 2-Prescription Take Back events hosted Polk County
- ✚ Marijuana prevention efforts in Nacogdoches and Polk counties
 - Prevention of marijuana and other cannabinoids – total served: 1,123
 - Number of media awareness: 43
 - Number of social media postings: 30
- ✚ Prescription drug misuse prevention efforts in Nacogdoches and Polk counties
 - Prevention of prescription drug misuse – total served: 2,172
 - Number of media awareness: 55
 - Number of social media postings: 71
 - Rx drugs collected from permanent drop-box (Sept.-Aug.): 275
 - Deterra pouches distributed: 482
- ✚ Tobacco prevention efforts in Nacogdoches and Polk counties
 - Prevention of tobacco and nicotine products – total served: 1,177
 - Number of media awareness: 50
 - Number of social media postings: 37
- ✚ Alcohol prevention efforts in Nacogdoches and Polk counties
 - Prevention of alcohol/underage drinking – total served: 1,186
 - Number of media awareness: 49
 - Number of social media postings: 62

Youth Prevention Programs

Youth Prevention (YP) programs are community-based programs funded by HHSC that utilizes evidence-based curriculum, provide AOD presentations, and offer positive alternative activities for community members and organizations. Prevention Specialist are trained by the state of Texas in age specific material. ADAC provides YP programming to the northern twelve counties of the region.

Youth Prevention Universal (YPU)

The Youth Prevention Universal program targets students in an elementary setting (first through third grade). The curriculum used by YPU is Too Good that builds on the student's resiliency by teaching them how to be socially competent and autonomous problem solvers. The curriculum is presented in a classroom setting to both male and female students in the twelve northern counties. Those counties are Angelina, Houston, Jasper, Nacogdoches, Sabine, San Augustine, San Jacinto, Shelby, Trinity, and Tyler. During fiscal year 2022/2023, YPU presented curriculum to 2,353 students and provided "alternative activities" to 6,619 youth.

Youth Prevention Selective (YPS)

The Youth Prevention Selective program targets students in grades four through six. The curriculum used by the YPS staff is known as Curriculum Based Support Group (CBSG). Its goal is to teach a set of essential life-skills to help the students learn how to cope with difficult family situations, resist negative peer pressure, respect themselves and others, set and achieve goals, make healthy choices, and refuse ATODs. The counties in which YPS presents curriculum include Angelina, Houston, Jasper, Nacogdoches, Newton, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, and Tyler. During the fiscal year of 2022/2023, YPS presented curriculum to 899 students and provided "positive activities" to 6,532 youth.

Youth Prevention Indicated (YPI)

The Youth Prevention Indicated program targets students in sixth through twelfth grade. The curriculum used by YPI is known as Positive Action. It is designed to help students develop life-skills such as self-esteem, self-control, communication, decision making/improved decision-making skills, acquire resources that help them resist drug use, and develop the motivation not to use drugs. (National Registry of Evidence-Based Programs and Practices). The counties in which YPI presents curriculum include Angelina, Houston, Jasper, Nacogdoches, Newton, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, and Tyler. During fiscal year 2022/2023, YPI presented curriculum to 403 students and provided "positive activities" to 3,162 youth.

PARTY

PARTY (Preventing Abuse by Reaching Today's Youth) is a program of ADAC that provides education services to children and adolescents on alcohol, tobacco, and other drugs. Through puppet shows, presentations, and appearances by Leo, the Drug Free Lion, PARTY promotes a healthy, drug free lifestyle to the children, youth, and adults.

Leo, the Drug Free Lion has been a part of ADAC for many years. His message is: "Drug free is the way to be." Leo and the PARTY department provide services in the northern twelve counties within the region. Services are provided to schools, community health fairs, retirement centers, day care centers, head start programs, faith-based communities, the Boys & Girls Clubs, civic groups, housing authorities, and college campuses.



PADREs

The Parenting Awareness and Drug Risk Education Program (PADREs) offers two types of courses for parents who are expecting and parents with children under the age of six. One is specifically for fathers, utilizing Nurturing Fathers curriculum. The other curriculum, Nurturing Skills for Families, is for mothers and couples. Both curriculum cover topics that include understanding discipline, fathering without violence or fear, substance use, managing stress and anger, and teamwork between parents.

Table 37. Number of youth and adults served by regional prevention programs, 2022/2023.

| County | | YPU | YPS | YPI | PARTY | PADREs |
|---------------|-------|--------|--------|-------|--------|--------|
| Region 5 | Adult | 3,303 | 3,689 | 1,748 | 21,473 | 565 |
| | Youth | 17,538 | 11,760 | 6,736 | 73,335 | 781 |
| Angelina | Adult | 1,974 | 2,012 | 1,001 | 14,636 | 271 |
| | Youth | 9,785 | 4,829 | 2,184 | 30,958 | 338 |
| Houston | Adult | 27 | 77 | 84 | 303 | |
| | Youth | 181 | 269 | 825 | 2,353 | |
| Jasper | Adult | 45 | 201 | 60 | 352 | |
| | Youth | 697 | 1,441 | 694 | 2,037 | |
| Nacogdoches | Adult | 574 | 190 | 68 | 2,246 | 202 |
| | Youth | 2,079 | 602 | 976 | 7,378 | 308 |
| Newton | Adult | 63 | 6 | | 100 | |
| | Youth | 633 | 82 | | 1,696 | |
| Polk | Adult | 212 | 258 | 184 | 783 | 92 |
| | Youth | 1,828 | 950 | 507 | 6,740 | 135 |
| Sabine | Adult | 113 | 164 | 109 | 250 | |
| | Youth | 591 | 477 | 393 | 2,962 | |
| San Augustine | Adult | 20 | 186 | 29 | 486 | |
| | Youth | 302 | 869 | 667 | 3,445 | |
| San Jacinto | Adult | 60 | 61 | 101 | 263 | |
| | Youth | 79 | 23 | 220 | 2,421 | |
| Shelby | Adult | 204 | 175 | 26 | 1,228 | |
| | Youth | 1,185 | 1,046 | 106 | 6,477 | |
| Trinity | Adult | 5 | 313 | 9 | 440 | |
| | Youth | 152 | 834 | 91 | 3,145 | |
| Tyler | Adult | 6 | 46 | 77 | 782 | |
| | Youth | 26 | 338 | 73 | 3,723 | |

Source. ADAC. PRC.

Gaps in Services

Transportation to and from social services and treatment remains the number one issue among clients within the region. The rural setting of East Texas also makes possible solutions such as Telehelp challenging due to limitations in internet availability and cell phone service.

The southern three counties of Region 5, Hardin, Jefferson, and Orange contain over 51% of the region's population, yet there is currently no HHSC funded substance use prevention programs such as Youth Prevention or CCPs operating within these three counties. ADAC's substance use prevention programs are contracted for the northern twelve counties. Previous substance use prevention programs in the southern three counties ended or were withdrawn. Region 5 does however have a Prevention Resource Center that does cover all 15 counties.

Gaps in Data

Collecting and reporting overdose data has been problematic over the years. Statistically it can be challenging to determine substance use behavior in real-time. The quantitative data is limited to availability and reliability of information. Accurate data can take years before it is available for publication. Add to this the amount of data that is suppressed due to privacy concerns. Qualitative data, on the other hand, reflects what individuals are seeing and experiencing in real-time.

Qualitatively and quantitatively ADAC is not experiencing any noticeable level of increase in clients seeking treatment for opioid misuse. However, the data on overdose death rates for the region are the highest in the state. Are overdoses unrelated to opioids? Is fentanyl and/or xylazine involved in overdoses and not being reported? These and other questions have yet to be answered.

The Texas School Survey has been collecting data from schools since 2006. Only in 2018 and 2022 has Region 5 received a survey report on Region 5 alone. All the other years the regional reports have been combined with other regions. When results from the TSS are combined with other regions the results will be skewed due to regional differences. For example, Region 5 is typically combined with Region 6 (Houston) and Region 4 (Tyler/Longview).

Should legislation be offered making school participation mandatory? Should there be greater incentives offered to make participation more likely? Regional school participation is crucial to obtain a truthful reflection of students within each region concerning ATOD use.

Key Findings

Comparing the diversity of racial identity and ethnicity demographic make-up of Region 5 to Texas, Region 5 is not keeping pace with the changes as the rest of Texas. For Texas those that identify their race as "Asian" and those that identify their ethnicity as "Hispanic or Latino" are the fastest growing segments of the population. As a percentage of the population, for those that identify as "Hispanic or Latino" in Region 5 is 16.7% while Texas is 39.9%. For those that identify as "Asian" in Region 5, is 2.2% while the rest of Texas is 6.1%.

According to the Texas School Survey, substance use among students within Region 5 has declined. From 2018 to 2022 the percentage of students consuming alcohol, tobacco, marijuana, and electronic vape products in the "Past Month" has decreased. Electronic vaping decreased by 14%, alcohol use decreased 17%, marijuana use decreased 17%, and alcohol use decreased 34%.

Data from the Texas Department of State Health Services reports that Region 5 has the highest rates of overdose deaths per 100,000 in population than any other region. In 2023, the overdose death rate for Texas was 18.7 and Region 5 was 22.8. Since 2018 the overdose death rate in Texas has been increasing and Region 5's increase has consistently remained above that of Texas.

The rate of overdose deaths reflects the use of fentanyl within Texas and Region 5. Fentanyl-related overdose death rate (8.3) is above the state's rate of 8.0. This is due in part to the increase of fentanyl-contaminated drugs that are being consumed. There is a reported increase in the number of individuals testing positive for fentanyl while they were seeking treatment for other substances. Additionally, the use of xylazine (an animal tranquilizer) with fentanyl is problematic because xylazine is not an opioid and its effects cannot be reversed with naloxone in cases of overdose.

The southern three counties of Region 5, Hardin, Jefferson, and Orange contain over 51% of the region's population, yet there is currently no HHSC funded substance use prevention programs operating within these three counties. ADAC's youth substance use prevention programs are contracted for the northern twelve counties. Previous substance use prevention programs in the southern three counties ended or were withdrawn. ADAC's Prevention Resource Center does cover all 15 counties of Region 5.

Works Cited

- ¹ Watkins, R., et al. (2012). *A guide to assessing needs: Essential tools for collecting information, making decisions, and achieving results*. World Bank Open Knowledge Repository. Retrieved June 8, 2023. <https://openknowledge.worldbank.org/server/api/core/bitstreams/d5b31363-42c4-5027-a5fab7d6e8e88fe4/content>.
- ² Centers for Disease Control and Prevention. (2021). *Drug-free communities support program*. Drug-Free Communities Support Program, Drug Overdose, CDC Injury Center. Retrieved June 8, 2023. <https://www.cdc.gov/drugoverdose/drug-free-communities/about.html>.
- ³ Watkins. (2012).
- ⁴ Centers for Disease Control and Prevention. (2021).
- ⁵ University of Illinois Urbana-Champaign Library. (2023). *LibGuides: Qualitative data analysis: Coding*. Coding – Qualitative Data Analysis – LibGuides at University of Illinois at Urbana-Champaign. Retrieved Jun 8, 2023. <https://guides.library.illinois.edu/qualitative/coding>.
- ⁶ Centers for Disease Control. (2012). *Lesson 1: Introduction to epidemiology*. Principles of Epidemiology, Lesson 1 – Section 1. Retrieved June 8, 2023. <https://www.cdc.gov/csels/dsepd/ss1978/lesson1/section1.html>.
- ⁷ Substance Abuse and Mental Health Services. (2019). *Risk and protective factors*. Retrieved June 8, 2023. <https://www.samhsa.gov/sites/default/files/20190718-samhsa-risk-protective-factors.pdf>.
- ⁸ Centers for Disease Control and Prevention. (2022). *The Social-Ecological Model: A Framework for Prevention*. The Social-Ecological Model: A Framework for Prevention, Violence Prevention, Injury Center, CDC. Retrieved June 8, 2023. <https://www.cdc.gov/violenceprevention/about/social-ecologicalmodel.html>.
- ⁹ D'Amico, EJ, et al. (2016). Prevention and intervention in the school setting. In KJ Sher (Ed.), *The Oxford Handbook of Substance Use and Substance Use Disorders* 2nd ed. (p. 678) Oxford University Press.
- ¹⁰ Healthy People 2030, U.S. Department of Health and Human Services, Offices of Disease Prevention and Health Promotion. (2023). *Social Determinants of Health*. Social Determinants of Health – Healthy People 2030, health.gov. Retrieved June 8, 2023. <https://health.gov/healthypeople/priority-areas/social-determinants-health>.
- ¹¹ American Psychological Association. (2023). *APA Dictionary of Psychology*. Retrieved June 8, 2023. <https://dictionary.apa.org/adolescence>.
- ¹² World Health Organization. (2023). *Adolescent health*. Retrieved June 8, 2023. https://www.who/int/health-topics/adolescent-health#tab=tab_1.
- ¹³ Texas Juvenile Justice Department. (2021). *The State of Juvenile Probation Activity in Texas: Statistical and Other Data on the Juvenile Justice System in Texas for Calendar Year 2021*. Shandra Carter, Executive Director (Interim), Report Number RPT-STAT-2021. Retrieved

- June 7, 2023. <https://www.tjtd.texas.gov/index.php/doc-library/send/334-state-of-juvenile-probation-activity/3201-the-state-of-juvenile-probation-activity-in-texas-2021>.
- ¹⁴ Felitti, VJ, et al. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*, 14(4) 245-258. Retrieved June 8, 2023. [https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8).
- ¹⁵ Centers for Disease Control and Prevention. (2022). *Fast facts: Preventing adverse childhood experiences*. Fast Facts: Preventing Adverse Childhood Experiences, Violence Prevention, Injury Center, CDC. Retrieved June 8, 2023. <https://www.cdc.gov/violenceprevention.aces/fastfacts.html>.
- ¹⁶ Kreitz, M. (2023). *Positive Childhood Experiences*. Positive Childhood Experiences (PCEs) – Pinetree Institute. Retrieved June 8, 2023. <https://pinetreeinstitute.org/positive-childhood-experiences/>.
- ¹⁷ Pinetree Institute. (2023). Positive Childhood Experiences (PCEs). Retrieved June 8, 2023. <https://pinetreeinstitute.org/positive-childhood-experiences/>.
- ¹⁸ Bethell, C. (2019). Positive childhood experiences and adult mental and relational health in a statewide sample: Associations across adverse childhood experiences levels. *JAMA Pediatrics*, 173(11):e193007. Retrieved June 8, 2023. <https://doi.org/10.1001%2Fjamapediatrics.2019.3007>.
- ¹⁹ U.S. Census Bureau. (2023). Our Censuses. Retrieved June 16, 2023. <https://www.census.gov/programs-surveys/censuses.html#:~:text=Also%20known%20as%20the%20Population%20and%20Housing%20Census%2C,the%20Constitution%20and%20takes%20place%20every%2010%20years>.
- ²⁰ Wines, Michael. (2023). "What Did the 2020 Census Teach Us? We Might Know Until 2023", *New York Times*, April 29, 2022. Retrieved June 16, 2023. <https://www.nytimes.com/2022/04/29/us/2020-census-release.html#:~:text=The%20bureau%20said%20this%20week%20that%20it%20would,questions%20C%20must%20wait%20until%20at%20least%20August%202023>.
- ²¹ Texas Demographic Center. (2018). Lloyd Potter, State Demographer. Texas Population Projections. 2018 Sex and Race/Ethnicity Population. Retrieved October 18, 2022. <https://demographics.texas.gov/Data/TPEPP/Projections/>.
- ²² Merriam-Webster Dictionary. (n.d.). *The Difference between 'Race' and 'Ethnicity': How they differ and overlap*. <https://www.merriam-webster.com/words-at-play/difference-between-race-and-ethnicity>. Accessed June 30, 2023.
- ²³ Native Languages. (2019). *Alabama Indian Language (Alibamu, Albama)*. Retrieved July 7, 2023. <https://www.native-languages.org/alabamas>.
- ²⁴ Alabama-Coushatta Tribe of Texas. (n.d.). Our History. The Tribe's Triumph in Texas History. Retrieved July 7, 2023. <https://www.alabama-coushatta.com/about-us/our-history/>.
- ²⁵ U.S. Census Bureau. (2021). American Community Survey 5-Year Estimates 2017-2021. My Tribal Area. Retrieved July 7, 2023. <https://www.census.gov/tribal/?st=48&aianihh=0050>.
- ²⁶ Pickett, K.E., Wilkerson, R.G. (2015). *Income Inequality and Health: A Casual Review*. Social Science and Medicine.

- ²⁷ Evans, Arthur C. PhD., Akbar, Maysa PhD. (2021). *Addressing the Behavioral Health Consequences of the COVID-19 Pandemic on Communities of Color*. American Psychological Association. Biden-Harris Administration COVID-19 Health Equity Task Force.
- ²⁸ U.S Census Bureau, Household Income: (2021). Retrieved July 6, 2023. <https://www.census.gov/library/publications/2022/acs/acsbr-011.html>.
- ²⁹ U.S. Bureau of Labor and Statistics. (2022). Unemployment Rate. Retrieved April 6, 2023. <https://www.bls.gov/lau/tables.htm#cntyaa>.
- ³⁰ Temporary Assistance for Needy Families. (2022). Texas Health and Human Services. Retrieved April 11, 2023. <https://www.hhs.texas.gov/about/records-statistics/data-statistics/temporary-assistance-needy-families-tanf-statistics>.
- ³¹ Supplemental Nutritional Assistance Program. (2022). Texas Health and Human Services. Retrieved April 13, 2023. <https://www.hhs.texas.gov/about/records-statistics/data-statistics/supplemental-nutritional-assistance-program-snap-statistics>.
- ³² University of Wisconsin Population Health Institute. (n.d.). *Data and Resources*. County Health Rankings and Roadmaps. Food Environment Index. Retrieved July 10, 2023. <https://www.countyhealthrankings.org/explore-health-rankings/texas?year=2023&tab=1&measure=Food+Environment+Index>.
- ³³ U.S. Department of Agriculture, Food and Nutrition Services. (2023). Child Nutrition Programs Income Eligibility Guidelines (2022-2023). Retrieved July 10, 2023. <https://www.fns.usda.gov/cn/fr-021622>.
- ³⁴ Texas Homeless Network. (2023). Texas Homeless Data Sharing Network. Retrieved July 10, 2023. <https://www.thn.org/thdsn/>.
- ³⁵ Texas Education Agency. (n.d.). Student Program and Special Population Report. Retrieved May 5, 2023. <https://rptsvr1.tea.texas.gov/adhocrpt/adspr.html>.
- ³⁶ Carnevale Associates. (2021). *Addressing the Social Determinants of Health in Substance Use Prevention*. What are the Social Determinants of Health. Retrieved July 11, 2023. <https://www.thenationalcouncil.org/wp-content/uploads/2021/11/SDOH-in-SU-Prev-2021.pdf?daf=375ateTbd56>.
- ³⁷ Ibid.
- ³⁸ iSchoolConnect. (n.d.). Why is education important. The importance of education. Retrieved July 11, 2023. <https://ischoolconnect.com/blog/the-importance-of-education-reasons-why-we-need-it/#:~:text=Why%20is%20education%20important%3F%201%201.%20Realizing%20your,...%208%20Equal%20opportunities%20...%20More%20items>.
- ³⁹ U.S. Census Bureau. (2018). American Community Survey 5-Year Estimates. 2018 Educational Attainment. Retrieved March 6, 2023. <https://data.census.gov>.
- ⁴⁰ Texas Department of Public Safety. (2022). Uniform Crime Reporting System. Retrieved July 12, 2023. <https://txucr.nibrs.com>.
- ⁴¹ Ibid.

- ⁴² Babor, T.F., Casswell, S., Graham, K., Huckle, T., Livingston, M., Österberg, E., Rehm, J., Room, R., Rossow, I., Sornpaisarn, B. (2023). *Alcohol: No Ordinary Commodity*. Research and Public Policy. Third Edition. Oxford University Press. P. 14.
- ⁴³ University of Wisconsin Population Health Institute. (n.d.). *Data and Resources*. County Health Rankings and Roadmaps. Retrieved July 12, 2023. <https://www.countyhealthrankings.org/explore-health-rankings/texas/data-and-resources>. Source data. Texas Department of Public Safety's Uniform Crime Reporting.
- ⁴⁴ Ibid.
- ⁴⁵ Universal Class. (n.d.). *The Impact of Crime on Community Development*. Retrieved July 13, 2023. <https://www.universalclass.com/articles/business/the-impact-of-crime-on-community-development.htm>.
- ⁴⁶ Texas Juvenile Justice Department. (n.d.). *The Juvenile Justice System in Texas*. Retrieved June 8, 2023. <https://www.tjjd.gov/index.php/juvenile-system#important-definitions>.
- ⁴⁷ Ibid.
- ⁴⁸ Texas Juvenile Justice Department. (2021). *The State of Juvenile Probation Activity in Texas: Statistical and Other Data on the Juvenile System in Texas for Calendar Year 2021*. Shandra Carter, Executive Director (Interim). Report Number RPT-STST-2021. Published August 2022. p. 6.
- ⁴⁹ Surgeon General Report. (2016). *Health Care Systems and Substance Use Disorders*. Retrieved July 18, 2023. <https://addiction.surgeongeneral.gov/executive-summary/report/health-care-systems-and-substance-use-disorders#:~:text=While%20services%20for%20the%20prevention%20and%20treatment%20of,t%20improve%20access%20to%20and%20quality%20of%20treatment>.
- ⁵⁰ University of Wisconsin Population Health Institute. (n.d.). *Data and Resources*. County Health Rankings and Roadmaps. Retrieved July 12, 2023. <https://www.countyhealthrankings.org/explore-health-rankings/texas/data-and-resources>.
- ⁵¹ Texas Health Insurance. (n.d.). Texas.gov. Retrieved July 18, 2023. <https://www.texas.gov/health-services/texas-health-insurance/>.
- ⁵² U.S. Census Bureau. (n.d.). Small Area Health Insurance Estimates, 2018-2020. Retrieved July 13, 2023. https://www.census.gov/data-tools/demo/sahie/#/?s_year=2020,2019,2018&s_statefips=48&s_agecat=0&s_searchtype=sc.
- ⁵³ U.S. Census Bureau. (2021). *Changes in Children's Health Coverage Varied by Poverty Status From 2018 to 2020*. Resource Library. Retrieved July 24, 2023. <https://www.census.gov/library/stories/2021/09/uninsured-rates-for-children-in-poverty-increased-2018-2020.html>.
- ⁵⁴ Counter Tobacco.org. (n.d.). Healthy Retail. Retrieved July 24, 2023. <https://countertobacco.org/resources-tools/evidence-summaries/healthy-retail/>.
- ⁵⁵ Ibid.
- ⁵⁶ Source. Active Cigarette/Tobacco Retailers. (2023). Texas Comptroller of Public Accounts. Retrieved July 14, 2023. <https://data.texas.gov/See-Category-Tile/All-Cigarette-and-Tobacco-Retailers/yrkr-maw5/data>.

- ⁵⁷ Ibid.
- ⁵⁸ California School-Based Health Alliance. (n.d.). *School-Based Health Centers Help Prevent & Treat Substance Use*. Substance Use. Retrieved July 25, 2023. <https://www.schoolhealthcenters.org/resources/student-impact/substance-use/#:~:text=Substance%20use%20is%20linked%20to%20lower%20grades%2C%20student,still%20developing%20making%20it%20more%20susceptible%20to%20addiction.>
- ⁵⁹ High School YRBSS. (2021). Center for Disease Control and Prevention. Retrieved July 20, 2023. <https://healthdata.dshs.texas.gov/dashboard/surveys-and-profiles/youth-risk-behavior-survey#>.
- ⁶⁰ Duke University. (2021). Social Impact: Definition and Why is Social Impact Important? Retrieved July 25, 2023. <https://careerhub.students.duke.edu/blog/2021/09/03/social-impact-definition-and-why-is-social-impact-important/>.
- ⁶¹ County Business Patterns. (2023). County Health Rankings and Roadmaps. Retrieved July 18, 2023. <https://www.countyhealthrankings.org/explore-health-rankings/texas?year=2023&measure=Social+Associations>.
- ⁶² Texas Prescription Monitoring Program. (2023). Texas State Board of Pharmacy. Retrieved July 25, 2023. <https://www.pharmacy.texas.gov/PMP/>.
- ⁶³ U.S. Drug Enforcement Administration. (n.d.). Drug Scheduling. Retrieved July 26, 2023. <https://www.dea.gov/drug-information/drug-scheduling>.
- ⁶⁴ Mental Health First Aid. (n.d.). *How Protective Factors Can Promote Resilience*. Mental Health First Aid, News, Self-Care. Retrieved July 26, 2023. <https://www.mentalhealthfirstaid.org/2022/01/how-protective-factors-can-promote-resilience/>.
- ⁶⁵ Parenting for Brain. (2023). Li, P. *The Importance of Family (5 Powerful Reasons)*. Retrieved July 28, 2023. <https://www.parentingforbrain.com/why-is-family-important/>.
- ⁶⁶ NSW Government. (n.d.). *The Effects of Domestic and Family Violence*. Communities and Justice. Retrieved August 3, 2023. <https://dcj.nsw.gov.au/children-and-families/family-domestic-and-sexual-violence/about-domestic-and-family-violence/the-effects-of-domestic-and-family-violence.html>.
- ⁶⁷ Texas Department of Public Safety. (2022). *Texas Family Violence Report 2018-2022*. Retrieved August 3, 2023. <https://txucr.nibrs.com/Report/TXFamilyViolenceReport>.
- ⁶⁸ Centers for Disease Control and Prevention. (n.d.). Child Development Basics. Retrieved July 28, 2023. <https://www.cdc.gov/ncbddd/childdevelopment/facts.html>.
- ⁶⁹ National Children's Alliance. (n.d.). National Statistics on Child Abuse. Retrieved July 28, 2023. <https://www.nationalchildrensalliance.org/media-room/national-statistics-on-child-abuse/>.
- ⁷⁰ Texas Department of Family and Protective Services. (2022). CPI 3.8 Abuse/Neglect Investigations – Alleged and Confirmed Victims By County FY2013-FY2022: Open Data Portal. Retrieved July 28, 2023. <https://data.texas.gov/dataset/CPI-3-8-Abuse-Neglect-Investigations-Alleged-and-C/v63e-6dss>.
- ⁷¹ Blake, A.J., Tung, I., Langley, A.K., Waterman, J.M. (2018). *Substance Use in Youth Adopted from Foster Care: Developmental Mechanisms of Risk*. Children and Youth Services Review. Vol. 85, January 2018, p. 264-272. Science Direct. Retrieved August 3, 2023. [https://www.sciencedirect.com/science/article/abs/pii/S019074091730765X#:~:text=Children%](https://www.sciencedirect.com/science/article/abs/pii/S019074091730765X#:~:text=Children%20)

[20who%20enter%20foster%20care%20are%20at%20unique,early%20neurobiological%20changes%20that%20create%20chronic%20internalizing%20problems.](#)

- ⁷² Centers for Disease Control and Prevention. (2022). PLACES: Local Data for Better Health, County Data 2020-2022 release. Retrieved August 3, 2023. <https://chronicdata.cdc.gov/500-Cities-Places/PLACES-Local-Data-for-Better-Health-County-Data-20/swc5-untb>.
- ⁷³ Caron. (2019). *Parental Pressure and Behavior May Put Teens at Risk for Substance Use and Abuse*. Retrieved July 31, 2023. <https://www.caron.org/press-releases/parental-pressure-may-put-teens-at-risk-for-substance-use>.
- ⁷⁴ Ibid.
- ⁷⁵ Texas School Survey of Drug and Alcohol Use. (2022). Marchbanks, Miner P., Peairson, Shannon. Rhodes, Stacy. The Texas Department of Public Service and Administration: The Bush School of Government and Public Policy, Texas A&M University.
- ⁷⁶ Current Psychology. (2023). Watts, L.L., Hamza, E.A., Dedeway, D.A., Moustafa, A.A. A *Meta-analysis Study on Peer Influence and Adolescent Substance Use*. Retrieved July 31, 2023. <https://link.springer.com/article/10.1007/s12144-023-04944-z>.
- ⁷⁷ National Institute on Drug Abuse (NIH). (n.d.). Prescription Opioids and Heroin Research Report. *Increased Drug Availability is Associated with Increased Use and Overdose*. Retrieved July 31, 2023. <https://nida.nih.gov/publications/research-reports/prescription-opioids-heroin/increased-drug-availability-associated-increased-use-overdose>.
- ⁷⁸ Cicero, T.J., Ellis, M.S., Surratt, H.L., Kurtz, S.P. (2014). *The Changing Face of Heroin Use in the United States: A Retrospective Analysis of the Past 50 Years*. JAMA Psychiatry. 2014;71(7):821-826. Retrieved July 31, 2023. <https://nida.nih.gov/publications/research-reports/prescription-opioids-heroin/increased-drug-availability-associated-increased-use-overdose>.
- ⁷⁹ Lansfor, J.E. (2021). *How Friends Influence Teens' Long-Term Drug and Alcohol Use*. Psychology Today. Retrieved July 31, 2023. <https://www.psychologytoday.com/us/blog/parenting-and-culture/202109/how-friends-influence-teens-long-term-drug-and-alcohol-use>.
- ⁸⁰ Fraser-Thill, R. (2021). *Major Domains in Child Development*. Very Well Family. Retrieved July 31, 2023. <https://www.verywellfamily.com/definition-of-domain-3288323>.
- ⁸¹ Steinmayr, R., Miebner, A. Weidinger, A.F., Wirthwein, L. (2015). *Academic Achievement*. Oxford Bibliographies. Retrieved August 1, 2023. https://www.researchgate.net/publication/351870823_Academic_Achievement.
- ⁸² National Survey on Drug Use and Health. (2013). *Substance Use Among 12th Grade Aged Youth by Dropout Status*. The NSDUH Report. Retrieved June 21, 2023. <https://www.samhsa.gov/data/sites/default/files/NSDUH036/NSDUH036/SR036SubstanceUseDropouts.htm>.
- ⁸³ Teen Mental Health & Substance Abuse Treatment Centers. (2013). *High School Dropout Rates Linked to Substance Abuse*. Retrieved June 6, 2023. <https://www.newportacademy.com/resources/substance-abuse/high-school-dropout-rates/>.

- ⁸⁴ Osuafor, G.N. (2021). *Alcohol and Drug use as Factors for High School Learners' Absenteeism in the Western Cape*. South African Journal of Psychiatry. Retrieved August 1, 2023. <https://sajp.org.za/index.php/sajp/article/view/1679/2343>.
- ⁸⁵ Texas Education Agency. (2022). Total Absences 2019-2022. Retrieved May 10, 2023. <https://tea.texas.gov/>.
- ⁸⁶ Youth.Gov. (n.d.). Mental Health. Retrieved August 1, 2023. <https://youth.gov/youth-topics/youth-mental-health>.
- ⁸⁷ CMS, National Provider Information. (n.d.). Retrieved July 18, 2023. http://download.cms.gov/nppes/NPI_Files.html.
- ⁸⁸ Youth Risk Behavior Survey. (2021). Texas Health Data. Texas Department of State Health Services. Retrieved April 7, 2023. <https://healthdata.dshs.texas.gov/dashboard/surveys-and-profiles/youth-risk-behavior-survey-2021>.
- ⁸⁹ Drug Enforcement Administration. (2023). *How Drugs Alter Brain Development and Affect Teens*. Get Smart About Drugs. Retrieved August 2, 2023. <https://www.getsmartaboutdrugs.gov/consequences/how-drugs-alter-brain-development-and-affect-teens>.
- ⁹⁰ Texas Education Agency. (n.d.). Division of Research and Analysis Program. Retrieved July 19, 2023. <https://stud/completion/requests/FY23/C423008>.
- ⁹¹ Wilkerson, J., Velten, J., Ph.D. (2016). *The Role of Faith in Addiction Counseling: A Qualitative Study of Program Viability*. International Journal of Humanities and Social Services. Vol. 6, No. 7: July 2016. Retrieved August 2, 2023. https://www.ijhssnet.com/journals/Vol_6_No_7_July_2016/6.pdf#:~:text=Hodge%2C%20Cardenas%2C%20and%20Montoya%20%282001%29%20reported%20that%20in,a%20positive%20self-image%2C%20which%20itself%20inhibits%20substance%20use.
- ⁹² U.S. Religion Census: Religious Congregations & Adherents Study. (2020). Association of Statisticians of American Religious Bodies. Retrieved July 15, 2023. <https://www.usreligionscensus.org/node/1639>.
- ⁹³ National Center for Drug Abuse Statistics. (n.d.). Drug Abuse Statistics. Retrieved August 2, 2023. <https://drugabusestatistics.org/>.
- ⁹⁴ Centers for Disease Control and Prevention. (n.d.). Marijuana and Public Health: Teens. Retrieved August 3, 2023. <https://www.cdc.gov/marijuana/health-effects/teens.html#How%20Marijuana%20Can%20Impact%20A%20Teen%E2%80%99S%20Life>.
- ⁹⁵ National Institute on Drug Abuse (NIH). (n.d.). Cannabis (Marijuana) Research Report: What Is Marijuana? Retrieved August 3, 2023. <https://nida.nih.gov/publications/research-reports/marijuana/what-marijuana>.
- ⁹⁶ Ibid.
- ⁹⁷ NIH. (n.d.). Misuse of Prescription Drugs Research Report. Retrieved August 4, 2023. <https://nida.nih.gov/publications/research-reports/misuse-prescription-drugs/overview>.
- ⁹⁸ Ibid.
- ⁹⁹ CDC. (n.d.). Health, United States, 2020-2021. Retrieved August 4, 2023. <https://www.cdc.gov/nchs/hus/sources-definitions/substance-use.htm>.

- ¹⁰⁰ Welsh, J.W., Shentu, Y., Sarvey, D.B. (2019). *Substance Use Among College students*. Focus: American Psychiatric Publication. Spring 2019; 12(2): 117-127. National Library of Medicine. Retrieved August 4, 2023.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6527004/#:~:text=Substance%20use%20among%20college%20students%20is%20associated%20with,increased%20risk%20of%20committing%20and%20experiencing%20sexual%20assault.>
- ¹⁰¹ Ibid.
- ¹⁰² NIH. (n.d.). College Drinking. Retrieved August 7, 2023.
https://www.niaaa.nih.gov/sites/default/files/publications/NIAAA_CollegeDrinking_Oct2020.pdf
- ¹⁰³ Medical News Today. (n.d.). What Are the Effects of Drug Misuse? Retrieved August 8, 2023.
<https://www.medicalnewstoday.com/articles/effects-of-drug-abuse.>
- ¹⁰⁴ Dorwart, L. (2022). *The Effects of Drug Addiction on the Brain and Body*. Very Well Health. Mental Health. Substance Use Disorder and Addiction. Retrieved August 8, 2023.
<https://www.verywellhealth.com/the-effects-of-drug-addiction-5214343.>
- ¹⁰⁵ CDC. (n.d.). Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data Retrieved August 8, 2023. <https://www.cdc.gov/brfss/brfssprevalence/>.
- ¹⁰⁶ NIH. (n.d.). *Drinking Levels Defined*. Alcohol's Effects on Health: Research-Based Information on Drinking and Its Impact. Retrieved August 8, 2023. <https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking.>
- ¹⁰⁷ CDC. (n.d.). *Binge Drinking*. Alcohol and Public Health. Retrieved August 8, 2023.
<https://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm.>
- ¹⁰⁸ CDC. (n.d.). Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data Retrieved August 8, 2023. <https://www.cdc.gov/brfss/brfssprevalence/>.
- ¹⁰⁹ CDC. (n.d.). *Health Effects*. Smoking and Tobacco Use. Retrieved August 8, 2023.
https://www.cdc.gov/tobacco/basic_information/health_effects/index.htm.
- ¹¹⁰ American Lung Association. (n.d.). Health Effects of Smoking. Retrieved August 10, 2023.
<https://www.lung.org/quit-smoking/smoking-facts/health-effects/smoking.>
- ¹¹¹ U.S. Department of Transportation. (n.d.). Alcohol Impaired Fatalities. Retrieved August 14, 2023. <https://www.transportation.gov/mission/health/alcohol-impaired-fatalities.>
- ¹¹² CDC. (n.d.). Drug Overdose Deaths. Retrieved August 15, 2023.
<https://www.cdc.gov/drugoverdose/deaths/index.html.>
- ¹¹³ SAMHSA. (n.d.). Suicide and Suicidal Behavior. Retrieved August 15, 2023.
<https://www.samhsa.gov/mental-health/suicidal-behavior.>
- ¹¹⁴ Surgeon General's Report on Alcohol, Drugs, and Health. (2020). Health Care Systems and Substance Use Disorders. Retrieved August 15, 2023.
<https://addiction.surgeongeneral.gov/executive-summary/report/health-care-systems-and-substance-use-disorders.>

- ¹¹⁵ Slivinski, N. (2023). *Health Risks of Chronic Heavy Drinking*. WebMD. May 15, 2023. Retrieved August 15, 2023. <https://www.webmd.com/mental-health/addiction/addiction-heavy-drinking>.
- ¹¹⁶ Georgetown University. (n.d.). *Substance Abuse: Facing the Cost*. Health Policy Institute. Retrieved August 15, 2023. <https://hpi.georgetown.edu/abuse/>.
- ¹¹⁷ Agency for Healthcare Research and Quality. (n.d.). Healthcare Cost and Utilization Project (HCUP). Retrieved August 25, 2023. <https://www.ahrq.gov/data/hcup/index.html>.
- ¹¹⁸ Surgeon General's Report on Alcohol, Drugs, and Health. (2016). *Facing Addiction in America*. National Library of Medicine. Retrieved August 15, 2023. <https://www.ncbi.nlm.nih.gov/books/NBK424857/>.
- ¹¹⁹ Smith, M. (2023). Xylazine, A sometimes Deadly Animal Tranquilizer Detected in Texas Supply. KXAN. Retrieved August 17, 2023. <https://www.kxan.com/news/texas/xylazine-a-sometimes-deadly-animal-tranquilizer-detected-in-texas-supply/>.
- ¹²⁰ Maxwell, J.C., Ph.D. (2021). *Drug Trends in Texas 2021: A Report to the National Drug Early Warning System*. The University of Texas at Austin Addiction Research Institute Steve Hicks School of Social Work. Retrieved August 16, 2023. <https://socialwork.utexas.edu/wp-content/uploads/2021/07/texas-drug-trends-2021.pdf>.
- ¹²¹ Ibid.
- ¹²² Ibid.

Glossary of Terms

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| 30 Day Use | The percentage of people who have used a substance in the 30 days before they participated in the survey. |
| ACEs | Adverse Childhood Experiences. Potentially traumatic events that occur in childhood (0-17 years) such as experiencing violence, abuse, or neglect, witnessing violence in the home; having a family member attempt or die by suicide. Also included are aspects of the child's environment that can undermine their sense of safety, stability, and bonding such as growing up in a household with substance use and/or misuse, mental health problems, or instability due to parental separation or incarceration of a parent, sibling, or other member of the household. Adverse community experiences – such as concentrated poverty, segregation from opportunity, and community violence – contribute to community trauma, which can exacerbate adverse childhood experiences (ACEs). |
| Adolescent | An individual between the ages of 12 and 17 years. |
| ATOD | Alcohol, tobacco, and other drugs. |
| BRFSS | Behavioral Risk Factor Surveillance System. Health-related telephone survey that collects state data about U.S. residents regarding their health-related behaviors, chronic health conditions, and use of preventive services. |
| Counterfeit Drugs | A medication or pharmaceutical item which is fraudulently produced and/or mislabeled and then sold with the intent to deceptively represent its origin, authenticity, or effectiveness. Counterfeit drugs include drugs that contain no active pharmaceutical ingredient (API), an incorrect amount of API, an inferior quality API, a wrong API, contaminants, or repackaged expired products. |
| DSHS | Department of State Health Services. A state agency of Texas that assists Texans who need services or help. The agency's mission is to improve the health, safety, and well-being of Texans through good stewardship of public resources and a focus on core public health functions |
| Drugs | A medicine or other substance which has a physiological effect when ingested or otherwise introduced into the body. Drugs can affect how the brain and the rest of the body and cause changes in mood, awareness, thoughts, feelings, or behavior. |
| Epidemiology | The study (scientific, systematic, and data-driven) and analysis of the distribution (who, when, and where), patterns, and determinants of health and disease conditions in defined populations. |
| Evaluation | Systematic application of scientific and statistical procedures for measuring program conceptualization, design, implementation, and the use of the resulting information to optimize program outcomes. The primary purpose is to gain insight to assist in future change. |

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| HHS | Health and Human Services. The mission of the U.S. Department of Health and Human Services is to enhance the health and well-being of all Americans, by providing effective health and human services and by fostering sound, sustained advances in the sciences underlying medicine, public health, and social services. |
| Incidence | The occurrence rate or frequency of a disease, crime, or something else that is undesirable. A measure of the risk for new substance use and misuse cases within a region. |
| LGBTQIA+ | An inclusive term referring to people of marginalized gender identities and sexual orientations, such as lesbian, gay, bisexual, transgender, non-binary, questioning, queer, intersex, asexual, pansexual, and their allies. |
| MAT/MOUD | Medication-Assisted Treatment. The use of medication, in combination with counseling and behavioral therapies, provides a “whole patient” approach to the treatment of substance use disorders. |
| Neurotoxin | Synthetic or naturally occurring substances that damage, destroy, or impair nerve tissue and the function of the nervous system. They inhibit communication between neurons across a synapse. |
| Person-Centered Language | A language that puts people first. A person’s identity and self-image are closely linked to the words used to describe them. Using person-centered language is about respecting the dignity, worth, unique qualities, and strengths of every individual. It reinforces the idea that people are so much more than their substance use disorders, mental illness, or disability. |
| PRC | Prevention Resource Center. Prevention Resource Centers provide information about substance use to the general community and help track substance use problems. They provide training, support community programs and tobacco prevention activities, and connect people with community resources related to drug and alcohol use and misuse. |
| 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. |
| Recovery | A process of change through which individuals improve their health and wellness, live a self-directed life and strive to reach their full potential. |
| Risk Factor | Conditions, behaviors, or attitudes in individuals, families, communities, or the larger society that contribute to or increase the risk in families and communities. |
| Self-Directed Violence | Anything a person does intentionally that causes injury to self, including death. |
| 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.

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| Stigma | The stigma of substance use and misuse – the mark of disgrace or infamy associated with the disease – stems from behavioral symptoms and aspects of substance use disorder. The concept of stigma describes the powerful, negative perceptions commonly associated with substance use and misuse. Stigma has the potential to negatively affect a person’s self-esteem, damage relationships with loved ones, and prevent those suffering from substance use and misuse from accessing treatment. |
| SDOH | Social Determinants of Health. The economic and social conditions that influence individual and group differences in health status. |
| Substance Abuse | When alcohol or drug use and misuse adversely affects the health of an individual or when the use and misuse of a substance impose social and personal costs. |
| Substance Dependence | An adaptive state that develops from repeated drug administration, and which results in withdrawal upon cessation of drug use and misuse. |
| 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 alcohol and other drugs. 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. A condition in which there is uncontrolled use of a substance despite harmful consequences. SUDs occur when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home. |
| Telehealth | The use of electronic information and telecommunications technologies to support and promote long-distance clinical health care, patient and professional health-related education, public health, and health administration. Technologies include videoconferencing, the internet, store-and-forward imaging, streaming media, and terrestrial and wireless communications. |
| TCS | Texas College Survey of Substance Use. A biennial collection of self-reported data related to alcohol and drug use, mental health status, risk behaviors, and perceived attitudes and beliefs among college students in Texas. |
| TSS | Texas School Survey. Collection of self-reported tobacco, alcohol, and substance use data among students in grades 7 through 12 in Texas public schools. The survey is sponsored by the Texas Health and Human |

Services Commission and administered by the Public Policy Research Institute.

YRBS

Youth Risk Behavior Surveillance Survey. An American biennial survey of adolescent health risk and health protective behaviors such as smoking, drinking, drug use, diet, and physical activity conducted by the Centers for Disease Control and Prevention. It surveys students in grades 9-12.