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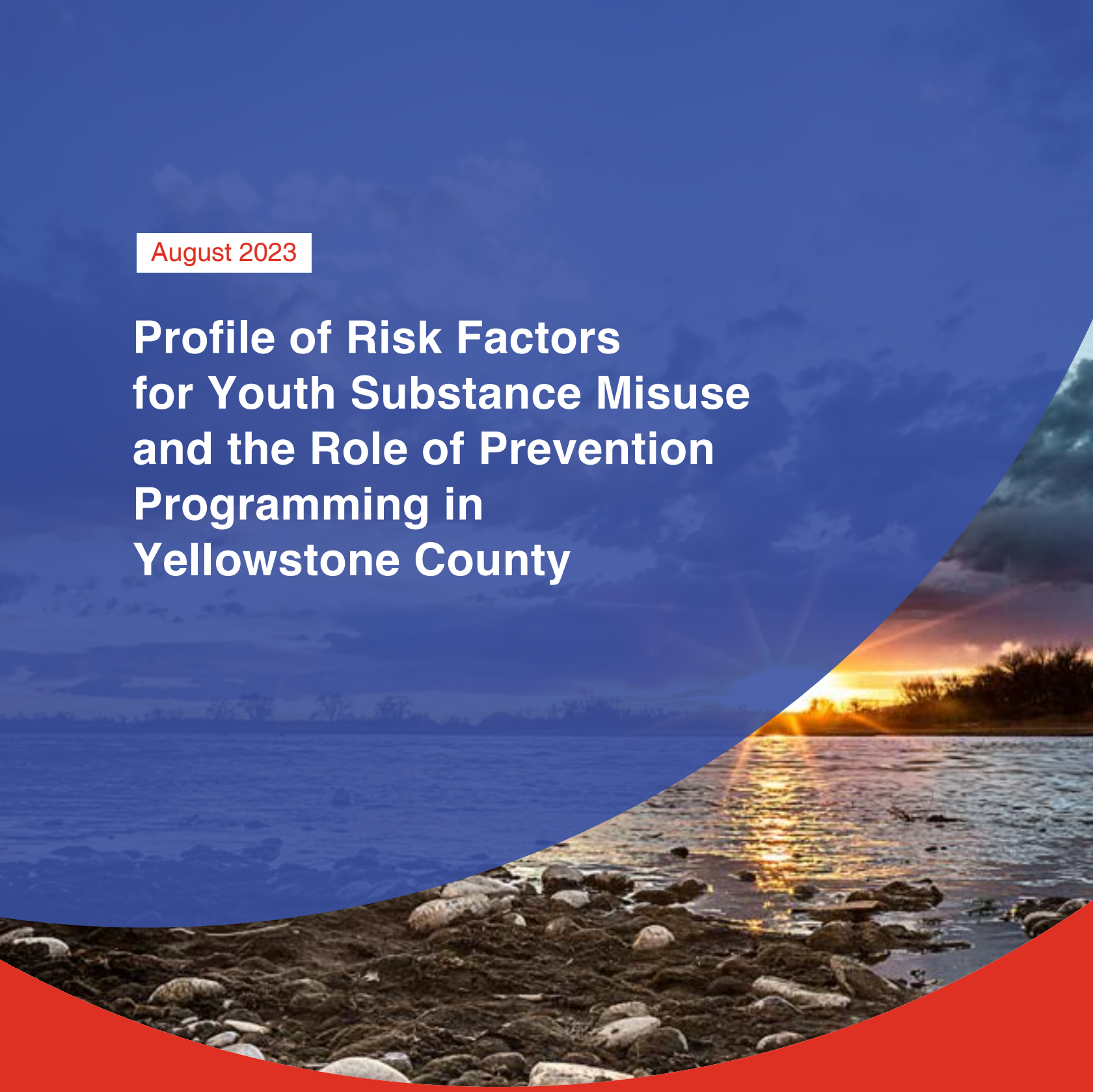
Profile of Risk Factors for Youth Substance Misuse and the Role of Prevention Programming in Yellowstone County



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EXECUTIVE SUMMARY

The Substance Abuse CONNECT (SAC) Coalition in Yellowstone County, Montana have spearheaded health promotion and substance use prevention efforts for the residents of Yellowstone County. This report focuses on characteristics of Yellowstone County utilizing publicly available secondary data sources to present promotive and risk factors in the County, as well as primary data on prevention programs, their impact and engagement. There is a specific focus on youth and young adults who would be the target of future interventions and programs to better prevent adverse outcomes in adulthood. The assessment supports activities undertaken by SAC members through the Drug Free Communities and STOP grant programs.

Prevention programming in Yellowstone County is undertaken with an environmental approach, in concert with federal guidelines from the Centers for Disease Control (CDC) and Substance Abuse and Mental Health Services Administration (SAMHSA). Community-wide change is being pursued through multi-faceted programming that includes education, evidence-based programs, and the utilization of best practices. Activities are aimed at increasing protective factors across the community.

SAC focuses on activities that aim to address and mitigate against underage drinking, adult binge drinking, youth substance use/abuse and initiation, mental health de-stigmatization, and suicide prevention education and 988 promotion. This assessment is intended to summarize the population characteristics in Yellowstone County and highlight the ways in which prevention activities undertaken by SAC have been able to advance protective factors throughout the community, while also providing direct programming to engage the most at-risk populations.

KEY FINDINGS

01 The rate of foster care placements for youth under 18 (per 1,000) in Yellowstone County is 5.8 times the national rate and 1.6 times the Montana rate.

02 One in a hundred youth are referred to Youth Court Services in Yellowstone County, roughly the same rate as Montana.

03 Only 25% of high school students in Yellowstone County received treatment after a suicide attempt, compared to 77% of high schoolers nationally.

04 Approximately 1,499 youth ages 18 and below and 1,156 young adults 19 to 25 do not have health insurance coverage.

05 It is estimated that over 800 youth under 18 years of age who are eligible for SNAP may not be accessing nutritional assistance.

INTRODUCTION

JG Research & Evaluation (JG) has been asked by prevention program leadership within Substance Abuse Connect (SAC) to complete a report on patterns of risk factors and prevention program impact in Yellowstone County. The report will be utilized to meet grant reporting requirements for the Drug Free Communities and STOP grant.

This summary is meant to provide an overview of Yellowstone County's population and factors that may affect behavioral health of the county through publicly available secondary data sources and primary data from SAC when available. This report looks at the demographics of all county residents, but youth and/or youth adults and their behaviors and attitudes are primarily the focus of this prevention needs assessment that inform possible risk factors to later behavioral health issues.

The report is comprised of the following sections:

1. **POPULATION CHARACTERISTICS**
2. **RISK, PROMOTIVE, AND PREVENTATIVE FACTORS, BEHAVIORS, AND ATTITUDES**
3. **ADVERSE OUTCOMES**
4. **PREVENTION PROGRAMMING EFFORTS**
5. **RECOMMENDATIONS**

While this report provides a comprehensive overview of Yellowstone County utilizing available secondary sources, there are limitations to the existing data sources, as survey samples may not be reflective of the entire county population. Comparisons between Yellowstone County and Montana do not examine statistical significance. Detailed information on data sources and their limitations can be found in Appendix A.

PROMOTION AND PREVENTION

There is a major need for behavioral health promotion and prevention programs targeted towards youth to avoid adverse outcomes later in life. Current research suggests that 1 in every 4 or 5 youth meet the criteria for a mental disorder in the United States. Left unchecked, these youth may face challenges across all facets of their lives.

Prevention may be categorized in three major levels: **primary, secondary, and tertiary** (defined below). Figure 1 is an adaptation of a population prevention pyramid that shows those three major levels of prevention. Almost all of SAC's

prevention efforts focus on primary prevention and environmental factors. By focusing further upstream, primary prevention efforts can cut the cost of treatment that could be needed later if prevention efforts were not available.

Throughout this report, we examine different **promotive, protective, and risk factors** engaged by Yellowstone County youth (defined below). Research around behavioral health promotion and prevention also suggests cost-effectiveness in preventing or reducing behavioral health-related morbidity at the community and individual level.2,3 In Section 4, we approximate the dollars saved for conducting behavioral health promotion and prevention programs directed towards youth to reduce the cost burden of behavioral health challenges in adulthood.

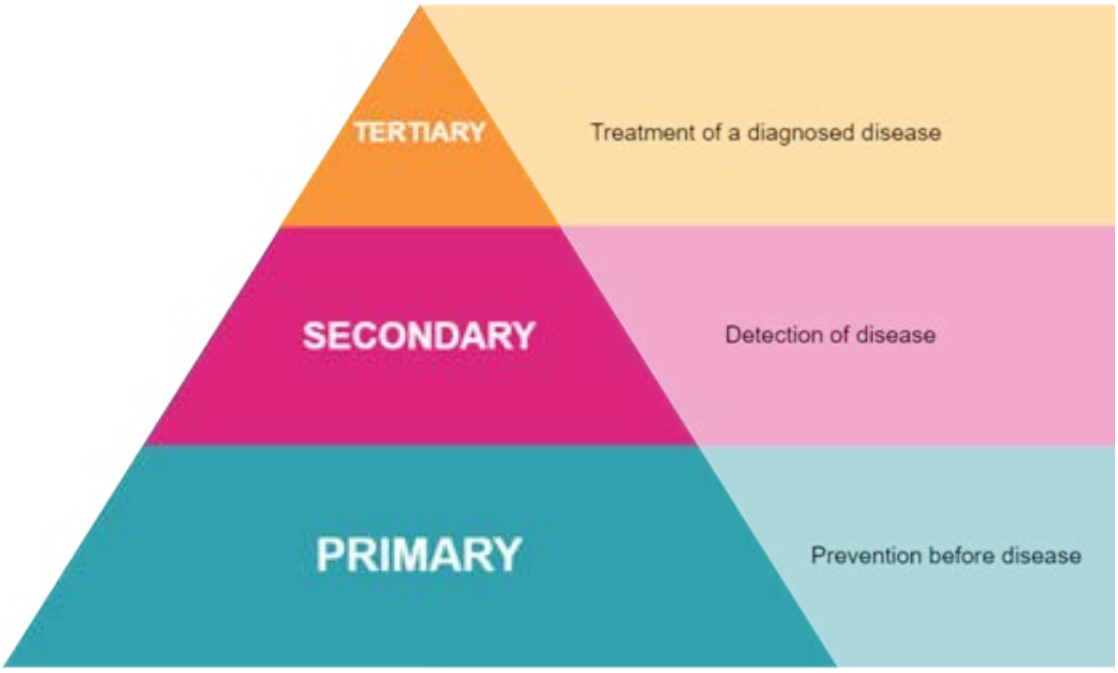

Figure 1. Population prevention pyramid

LIST OF KEY DEFINITIONS

- **Primary prevention** takes an approach that prevents the occurrence or manifestation of disease. This may include actions that improve health by changing the impact of social and economic determinants of health, promoting healthy behaviors through education or programs.

- **Secondary prevention** works to detect disease to improve changes of positive health outcomes. This may include screening for early detection of disease due to high risk factors or preventing adverse manifestations of disease.

- **Tertiary prevention** is the treatment of a diagnosable disease to decrease the severity of symptoms or reduce the effects of disease on an individual.

- **Promotive factors** are beneficial to all individuals, meaning they predict positive outcomes similarly for those at both high and low levels of risk, whereas protective factors are more important for mitigating or reducing the effects of risk on adaptive outcomes at primarily higher levels of risk (Wright et al., 2013). Promotive factors, also described as assets or resources, are generally associated with desirable outcomes at nearly all levels of risk, while protective factors play a special role when adversity is high (Sameroff, 1998).

- **Protective factors** include individual characteristics and behaviors and environmental characteristics and conditions. The more promotive and/or protective factors present, the better health outcomes one can expect. Protective factors are different from promotive factors that moderate outcomes for everyone, including those not at risk.

- **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. Some risk and protective factors are fixed, and they do not change over time whereas other factors are considered variable and may change over time. Variable risk factors include constructs such as income level, peer group, adverse childhood experiences (ACEs), and employment status. For example, individual level risk factors include a person's genetic predisposition to addiction or exposure to alcohol prenatally, and individual-level protective factors might include positive self-image, self-control, or social competence.

SUBSTANCE USE IN MONTANA

Prevalence of substance use is a major challenge across the state. Montana ranks higher than the United States when it comes to the prevalence of substance use. It is estimated that 10.3% (95% CI: 7.3-14.6%) of youth ages 12 to 17 have a substance use disorder in the past year compared to 8.6% (95% CI: 7.8-9.4%) of youth ages 12 to 17 in the United States while 34.5% (95% CI: 27.3-42.4%) of young adults ages 18 to 25 in Montana are experiencing substance use disorders compared to 25.6% (95% CI: 24.4-26.8%) of young adults in the United States.[1] Figure 2 presents estimates of substance use and substance use disorder of Montanans ages 12+ from 2021 NSDUH.

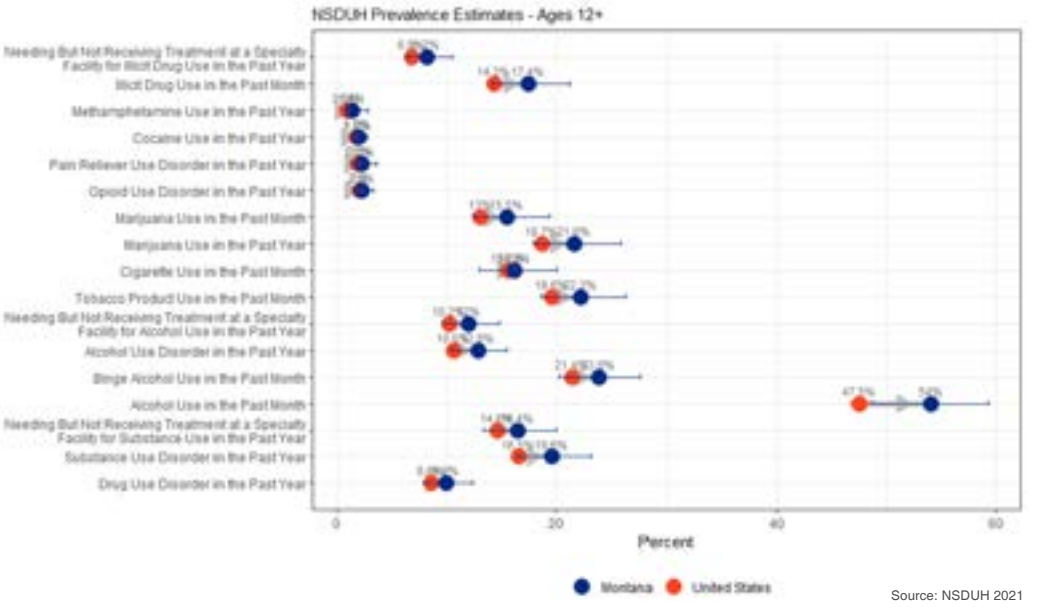

Figure 2. Prevalence estimates of substance use and substance use disorders in Montana from 2021 NSDUH

SECTION 1: POPULATION CHARACTERISTICS

Yellowstone County is the most populated county in Montana with 163,593 residents, making up 15% of Montana's population. Approximately 23% of residents in the county are youth under 18 years of age and 8% are between the ages of 18 to 24.

Figure 3. Map of Yellowstone County, Montana

DEMOGRAPHICS

Table 1. Demographic characteristics of Yellowstone County and Montana

		YELLOWSTONE		MONTANA	
Category		**Count**	**Percent**	**Count**	**Percent**
Age group	Under 18	38,563	23.6	232,815	21.6
	18 to 24	13,032	8.0	98,701	9.2
	25 to 44	43,728	26.7	270,932	25.1
	45 to 64	40,530	24.8	273,076	25.3
	65 and up	27,740	17.0	202,454	18.8
Gender	Male	61,258	49.0	425,570	50.4
	Female	63,772	51.0	419,593	49.6
Race	White	144,413	88.3	938,223	87.0
	Black or African American	1,410	0.9	6,236	0.6
	American Indian or Alaska Native	6,856	4.2	65,452	6.1
	Asian	1,205	0.7	8,972	0.8
	Native Hawaiian or Pacific Islander	54	0.0	581	0.1

		YELLOWSTONE		MONTANA	
Category		**Count**	**Percent**	**Count**	**Percent**
Age group	Some other race	2,127	1.3	10,155	0.9
	Two or more races	7,528	4.6	48,359	4.5
Ethnicity	Hispanic or Latino	9,892	6.0	43,877	4.1
	Not Hispanic or Latino	153,701	94.0	1,034,101	95.9
Education	High school graduate or higher (ages 25+)	106,416	95.0	704,302	94.4
	Bachelor's degree or higher (ages 25+)	37,713	33.7	251,226	33.7

Note: Data are from the 2021 ACS 5-year estimates.

NATIVE AMERICAN POPULATION

Montana is one of the states with the highest proportion of Native American populations. It is well understood that Native Americans face major disparities in their physical and behavioral health outcomes. Native American youth have the highest rate of suicide across all racial or ethnic groups in the United States.[4] Table 2 provides a breakdown of youth and young adults by race in Yellowstone County. Native American youth make up 6.3% of Yellowstone County people under 18 years and 5.7% of people 18 to 24 years.

Table 2. Youth (under 18) and young adults (18 to 24 years) by race in Yellowstone County

	UNDER 18		18 TO 24	
Race/Ethnicity	**Count**	**Percent**	**Count**	**Percent**
American Indian and Alaska Native alone	2,435	6.3	744	5.7
Asian alone	251	0.7	78	0.6
Black or African American alone	574	1.5	207	1.6
Native Hawaiian and Other Pacific Islander alone	20	0.1	3	0.0
Some Other Race alone	453	1.2	104	0.8
Two or More alone	3,212	8.3	1,114	8.5
White alone	31,618	82.0	10,782	82.7
Hispanic or Latino	4,138	10.7	1,206	9.3
White alone, Not Hispanic or Latino	29,432	76.3	10,078	77.3

Note: Data are from the 2021 ACS 5-year estimates.

UNHOUSED POPULATION

According to a point-in-time analysis of unhoused people by the United States Department of Housing and Urban Development (HUD), of the 1,585 unhoused individuals in Montana, 16.2% are youth under 18 years of age and 6.4% are people are ages 18 to 24, and of the 1,233 households that are unhoused, 11.2% are in households with at least one adult and one child.[5] This estimate, however, does not include individuals or households who may be in "doubled-up housing," which would be living at someone else's house.

There are also 4,670 youth enrolled in public school in grades PK through 12 who were unhoused during the 2020-2021 school year across Montana. Figure 4 shows the percentage of unhoused youth enrolled in public school by the type of primary nighttime residence, which includes doubled-up housing. Almost 75% of unhoused youth in public schools are in a doubled-up nighttime residence and 10.7% are unsheltered (i.e. living in cars, parks, campgrounds, temporary trailer, or abandoned building). In addition, 484 of the 4,670 youth (10.4%) are unaccompanied minors.[6]

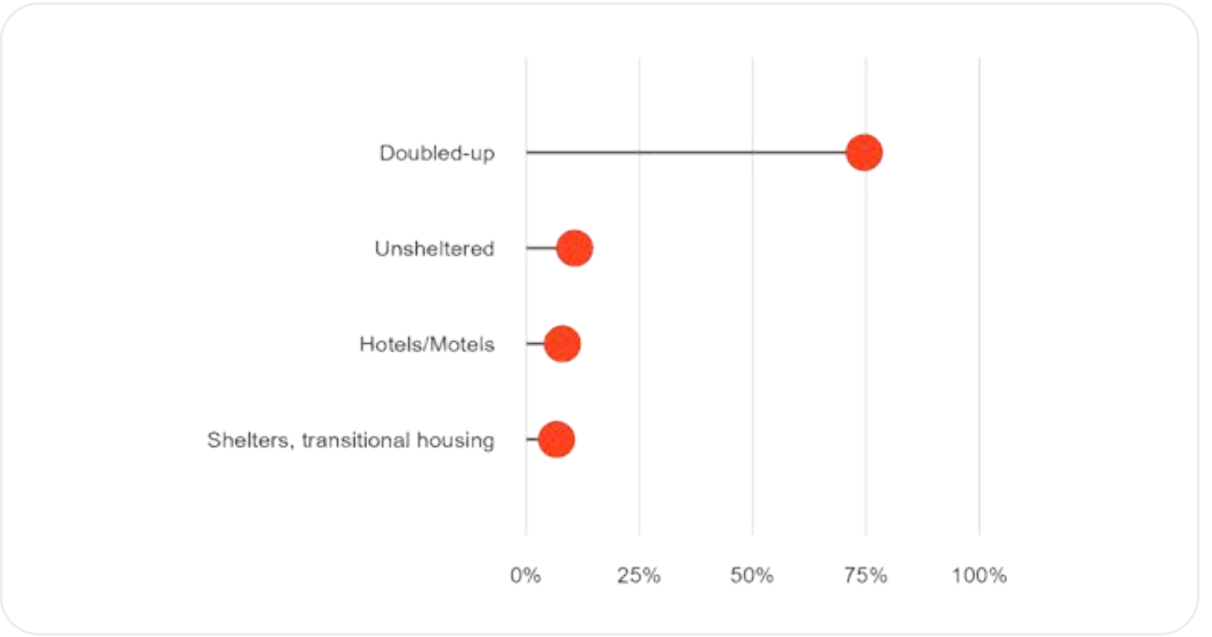

Figure 4. Proportion of unhoused youth in public school by nighttime residence

POVERTY

Poverty is a well-known and high prevalent risk factor for multiple adverse outcomes. The United States poverty rate is 11.6% while Montana has a poverty rate of 12.5%. Yellowstone County has 11.3% of all residents and 14.3% of youth under 18 years who are under the poverty line.7 Table 3 provides a breakdown of people under the poverty line by age group. Youth under the age of 18 have the highest proportion under the poverty line by age group in Yellowstone County as well as in Montana.

Table 3. Population under the poverty line by age group

	YELLOWSTONE		MONTANA	
Age group	**Count**	**Percent**	**Count**	**Percent**
Under 18	5,333	13.8	34,405	14.8
18 to 24	2,212	17.0	23,472	23.8
25 to 44	4,732	10.8	31,443	11.6
45 to 64	3,209	7.9	24,848	9.1
65 and up	2,029	7.3	17,344	8.6

Note: Data are from the 2021 ACS 5-year estimates. Proportions are calculated by taking the number of people under the poverty line by age group divided by the total number of people in the age group multiplied by 100.

HEALTH CARE COVERAGE

Approximately 48.9% of youth in Yellowstone County are medically insured through Medicaid or Healthy Montana Kids (CHIP), which is 3.7% lower than the state (Table 4). However, 3.7% of youth 18 years of age and younger are not insured and 9.0% of young adults 19 to 25 years of age are uninsured (Table 5). Young adults are the age group who are uninsured at the highest proportion across all age groups in Yellowstone County.

Table 1. Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF) recipients by birth to age 18 in 2022

Table 4. Youth up to age 18 enrolled in Medicaid or Healthy Montana Kids (CHIP)

	MEDICAID		YELLOWSTONE		MONTANA	
Location	**Count**	**Percent**	**Count**	**Percent**	**Count**	**Percent**
Yellowstone County	16,862	41.5	3,049	7.5	19,911	48.9
Montana	108,099	43.8	21,823	8.8	129,922	52.6

Note: Data are from Montana DPHHS, Human & Community Services Division. Percentages are calculated from the total number of children ages 0 to 18 enrolled in Medicaid, Healthy Montana Kids (CHIP), and total enrolled divided by the total number of youth ages 0 to 18 multiplied by 100.

Table 5. Healthcare insurance coverage by age groups

	INSURED		UNINSURED	
Age group	**Count**	**Percent**	**Count**	**Percent**
18 and below	38,915	96.3	1,499	3.7
19 to 25	11,655	91.0	1,156	9.0
26 to 64	74,217	91.2	7,121	8.8
65 and up	27,066	99.9	14	0.1

Note: Data are from the 2021 ACS 5-year estimates.

Medicaid expansion in Montana was approved in 2015 and started in 2016.8 Figure 5 presents youth enrollment of Medicaid (green line), Healthy Montana Kids (red line), and total (blue line) from 2013 to 2022, showing an increase from 2015 to 2018. There was a decrease in enrollment up to 2020, but numbers have been increasing again as of 2022.

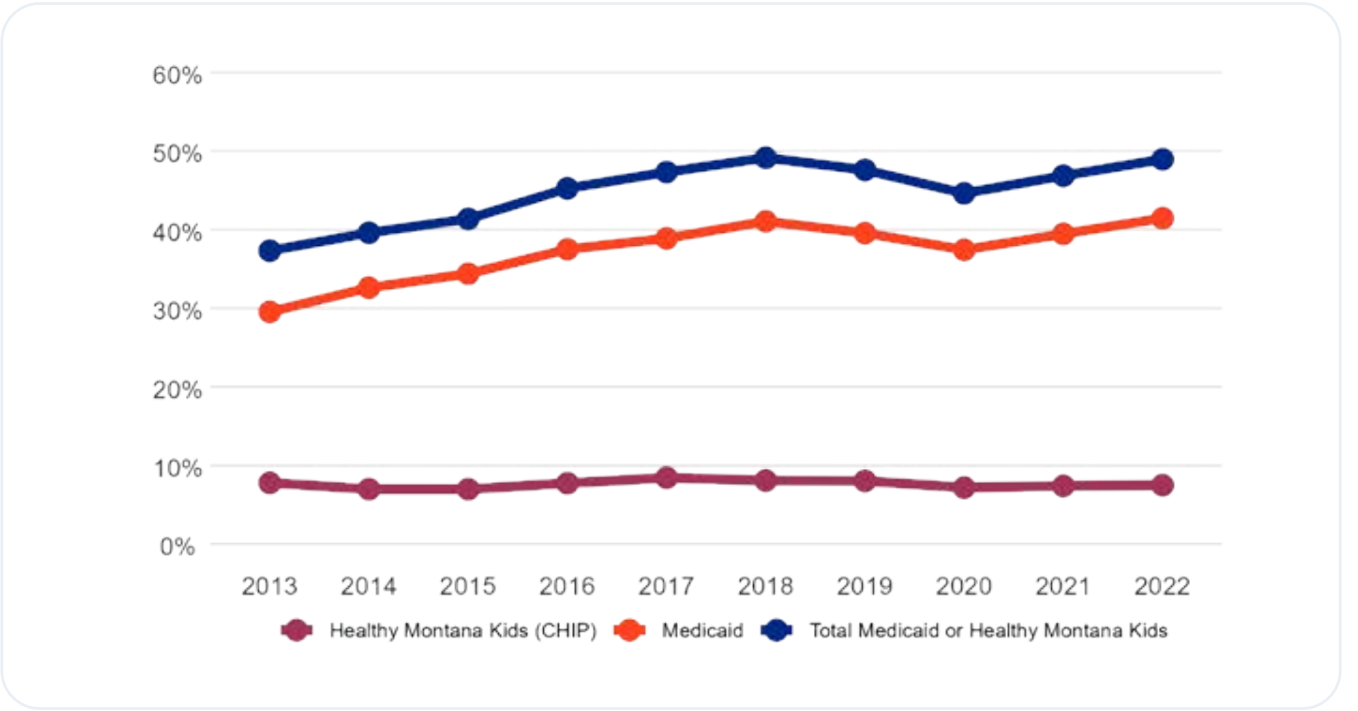

Figure 5. Yellowstone County youth enrolled in Medicaid or CHIP from 2013 to 2022 (figure generated from Kids Count Montana)

PUBLIC ASSISTANCE

The Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF) programs are public assistance programs that allow recipients to below a certain household income to receive additional cash assistance for food or other necessities. In Yellowstone County, 13.8% of youth ages 0 to 18 are recipients of SNAP and 1.3% are recipients of TANF (Table 6).

Table 6. Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF) recipients ages birth to 18 in 2022

	SNAP		TANF	
Location	Count	Percent	Count	Percent
Yellowstone County	5,609	13.8%	509	1.3
Montana	36,016	14.6%	3,466	1.4

Note: Data are from Montana DPHHS, Human & Community Services Division. Percentages are calculated from the total number of SNAP recipients ages 0 to 18 divided by the total number of youth ages 0 to 18 multiplied by 100.

In Yellowstone County, while 30.3% of youth under 18 years of age were estimated to be eligible for SNAP in 2018 to 2020, 84.5% of those eligible accessed those benefits.9 While this rate is higher than Montana's rate (78.8%), that means over 800 youth under 18 years of age who are eligible for SNAP may not be accessing nutritional assistance.

SECTION 2:
RISK, PROMOTIVE, AND PROTECTIVE FACTORS

Certain factors in the form of behaviors or attitudes may be attributed to higher risk or promotion and prevention of behavioral health issues for youth over time. In addition, risk and protective factors have a tendency to be correlated and have cumulative effects (i.e. the more risk factors someone has, the less protective factors they have).[2] Therefore, it is important to look at the presence of multiple factors, which may strengthen the probability of youth developing mental health or substance use disorders in adulthood. Table 7 provides a summary of risk and protective factors for youth by individual, family, and community-levels. Understanding what factors youth in Yellowstone County may be experiencing can ultimately help shape future promotion and prevention strategies.

Table 7. Summary of risk and protect factors by individual, family, and community levels

Domaint	Risk Factors	Protective Factors
Individual	• Emotional dysregulation • Poor self-esteem • Depression or anxiety • Insecure attachment • Poor social and problem solving skills • Conduct disorder • Favorable attitudes toward drugs • Rebelliousness • Early substance use • Antisocial behavior	• Positive physical development • Academic achievement or intellectual development • High self-esteem • Emotional self-regulation • Positive coping skills and problem-solving skills • Engagement and connections in two or more of the following contexts: school, with peers, in athletics, employment, religion, culture
Family	• Negative family environment • Child abuse/maltreatment/neglect • Parent with mental health or substance use disorders • Poor attachment with parents • Family dysfunction	• Family structure, limits, rules, monitoring, and predictability • Supportive relationships amongst family members • Clear expectations for behavior and values
School, Neighborhood, and Community	• Peer rejection or loss of close relationships • Poor academic achievement • Poverty • Community/school violence or traumatic events • Low commitment to school • Aggression towards peers • Associating with peers who use substances or peers with antisocial characteristics • Societal/community norms favor alcohol and substance use	• Presence of mentors and support for development of skills and interests • Opportunities for engagement within school and community • Positive community norms • Clear expectations for behavior • Physical and psychological safety

Note: Data are from Montana DPHHS, Human & Community Services Division. Percentages are calculated from the total number of SNAP recipients ages 0 to 18 divided by the total number of youth ages 0 to 18 multiplied by 100.

INDIVIDUAL LEVEL FACTORS

SUBSTANCE USE

Early substance use is a strong indicator of future substance use and mental health issues in adulthood. As mentioned in the Introduction, Montana ranks much higher than nationally when it comes to early engagement of substance use. When looking at the high school (grades 9-12) population in Yellowstone County, respondents of the 2021 YRBS state that 33.5% currently drink alcohol (past 30-day use) and 20.9% of those who drink engage in binge drinking, which are higher than the state averages and much higher than the national averages. Table 8 presents self-reported substance use trends high school students in Yellowstone County, Montana, and the United States.

Table 8. Self-reported proportion of substance use of high school students from 2021 YRBS

Substance	Risk Factors	Yellowstone	Montana	United States
Tobacco	Tried Smoking a Cigarette	26.7	27.8	17.8
	Smoked a Cigarette Before 13 Years Old	10.3	9.6	6.3
	Currently smoke cigarettes	6.4	7.0	3.8
	Used An Electronic Vapor Product	48.5	48.3	36.2
	Currently Use an Electronic Vapor Product	30.7	25.5	18.0
	Currently Use a Smokeless Tobacco Product	4.8	5.2	2.5
	Tried to quit using all tobacco products	59.0	59.5	54.2
Alcohol	Had First Alcoholic Drink Before 13 Years Old	19.9	18.2	15.0
	Currently Drink Alcohol	33.5	31.4	22.7
	Currently Binge Drink	20.9	16.4	10.5
Marijuana	Ever Used Marijuana	34.8	37	27.8
	Tried marijuana before age 13	7.3	7.3	4.9
	Currently Use Marijuana	17.9	19.7	15.8
Opioids	Abused Prescription Pain Medicine	11.7	12.0	12.2
	Ever Used Heroin	1.9	1.5	1.3
Stimulants	Ever Used Cocaine	4.2	4.0	2.5
	Ever Used Methamphetamines	1.3	1.9	1.8
Other	Ever Used Inhalants	9.4	8.6	8.1
	Ever Used Hallucinogenic Drugs	6.3	6.3	6.5
	Ever Used Ecstasy	3.6	4.2	2.9
	Ever injected any illegal drug	1.2	1.4	1.4

Note: Data are from the 2021 Youth Risk Behavior Survey for Yellowstone County, Montana, and United States respondents in grades 9 to 12. Factors in which the percentage of students in Yellowstone County is greater than the percentage of students by over a percent are highlighted in red. Differences between Montana and the United States that are significant (t-test; p-value > 0.5) in which Montana is more likely to respond affirmatively are highlighted in blue while differences in which the United States is more likely to respond affirmatively are highlighted in yellow.

MENTAL HEALTH

Mental health plays an important role in a young person's development into adulthood. Almost a third of Yellowstone County high school students report having poor mental health most of the time or always and almost a quarter seriously considered suicide (Table 9). A quarter (25.7%) of students who stated they attempted suicide stated that they were treated by a doctor or nurse, which is much lower than national respondents of which 77.6% of students stated they received treatment after their attempt.

Table 9. Self-reported proportion of mental health of high school students from 2021 YRBS

Risk Factors	Yellowstone	Montana	United States
Felt sad or hopeless for 2+ weeks in a row	41.0	41.4	42.3
Seriously considered attempting suicide	22.8	21.7	22.2
Made a plan about how they would attempt suicide	19.4	18	17.6
Actually attempted suicide in the past 12 months	15.6	10.2	10.2
Suicide attempt was treated by a doctor or nurse (among those who attempted suicide)	25.7	31.7	77.6
Had poor mental health most of the time or always	32.1	31.5	29.3

Note: Data are from the 2021 Youth Risk Behavior Survey for Yellowstone County, Montana, and United States respondents in grades 9 to 12. Factors in which the percentage of students in Yellowstone County is greater than the percentage of students by over a percent are highlighted in red. Differences between Montana and the United States that are significant (t-test; p-value > 0.5) in which Montana is more likely to respond affirmatively are highlighted in blue while differences in which the United States is more likely to respond affirmatively are highlighted in yellow.

SEXUAL BEHAVIORS

Risky sexual behaviors, such as failure to use protective methods (i.e. condoms, birth control), may increase the risk of teen pregnancy and sexually transmitted infection (STI) rates. Based on current research, both teenage pregnancy and birth are significant contributors to high school dropout rates among girls. One in two teen mothers only receive their high school diploma by the age of 22, while those who did not give birth as teenagers graduate at 90%. Teen fathers have 25-30% lower probability of graduating high school than teenage boys who are not fathers. In addition, there are impacts to the children of teen births, who are more likely to experience low academic commitment and dropout of high school, have more behavioral health and chronic health problems, experience higher rates of foster care placements, be involved in the justice system during adolescence, give birth as a teenager, and face unemployment challenges as a young adult.[10]

Yellowstone County high schoolers engage in sexual intercourse and are sexually active at rates higher than the national rate. When asked about ever having sexual intercourse, 41.2% of Yellowstone County high schoolers responded affirmatively, compared to 30% nationally and 28.4% of respondents in Yellowstone County stated they were currently sexually active compared to 20.7% of high schoolers nationally. While Montana high school students were statistically less likely than students nationally to not use any method to prevent pregnancy during their last sexual intercourse (7.9% vs. 13.9%), 10.7% of Yellowstone County high school respondents did not use any method of protection. In addition, Yellowstone County high school respondents responded at a higher proportion compared to Montana and the United states to having sexual intercourse before the age of 13 (see Table 10).

Table 10. Self-reported proportion of sexual behaviors of high school students from 2021 YRBS

Risk Factors	Yellowstone	Montana	United States
Ever had sexual intercourse	41.2	41.5	30
Had sexual intercourse before age 13	4.1	2.8	3.2
Currently sexually active	28.4	30.1	20.7
Did not use any method to prevent pregnancy during last sexual intercourse	10.7	7.9	13.7
Drink alcohol or used drugs before last sexual intercourse	18.5	17.8	20.6

Note: Data are from the 2021 Youth Risk Behavior Survey for Yellowstone County, Montana, and United States respondents in grades 9 to 12. Factors in which the percentage of students in Yellowstone County is greater than the percentage of Montana students by over a percent are highlighted in red. Differences between Montana and the United States that are significant (t-test; p-value > 0.5) in which Montana is more likely to respond affirmatively are highlighted in blue while differences in which the United States is more likely to respond affirmatively are highlighted in yellow.

OTHER FACTORS

Table 11 provides a summary of other factors around antisocial behavior, injury and violence, academic achievement, and others as reported in 2021 YRBS for high school students. In the United States, 3.1% of high schoolers stated that they carried a weapon on school property, however, 9.1% of Montana high school students and 8.5% of Yellowstone County high school students stated they carried a weapon on school property. These percentages are similar when asked if they carried a gun.

Table 11. Other self-reported proportion of behaviors of high school students from 2021 YRBS

Category	Risk Factors	Yellowstone	Montana	United States
Injuries and Violence	Carried a weapon on school property	8.5	9.1	3.1
	Carried a gun	8.7	8.9	3.5
	Were in a physical fight	20.4	19.7	18.3
	Driven a car when you had been drinking	9.1	7.5	4.6
	Experienced forced sexual intercourse	11.1	11.0	8.5
	Experienced forced sexual violence	13.3	13.5	11.0
Academic performance	Earned mostly A's or B's in school	77.5	73.6	
	Received help from a resource teacher, speech therapist, or other special education teacher	17.5	14.8	

Note: Data are from the 2021 Youth Risk Behavior Survey for Yellowstone County, Montana, and United States respondents in grades 9 to 12. Factors in which the percentage of students in Yellowstone County is greater than the percentage of Montana students by over a percent are highlighted in red. Differences between Montana and the United States that are significant (t-test; p-value > 0.5) in which Montana is more likely to respond affirmatively are highlighted in blue while differences in which the United States is more likely to respond affirmatively are highlighted in yellow.

FAMILY LEVEL FACTORS

Family[b] environments and relationships play a major role in the later development of youth. Families that provide meaningful engagement and influence over their children's formative years can positively impact mental and behavioral health, academic performance, and health in adulthood. Therefore, positive family engagement and environments are shown to be strong protective factors against severe behavioral health issues in adulthood.

[b]*Family may include biological, adoptive, and foster parents, other adult caregivers, extended family, legal guardians, and adult siblings.*

MALTREATMENT AND ABUSE

Maltreatment and abuse of youth by their primary caregivers is a well-established risk factor for behavioral issues. Studies have shown significant correlation between maltreatment and abuse to depression, substance use, and violence in children.11,12 In 2015, Yellowstone County removed 1.26% of children from their homes due to neglect and abuse.[13]

In Yellowstone County, 6.4% of high schoolers stated that they slept away from parents or guardians because they were kicked out, ran away, or were abandoned, which is 2.1% greater than the responses of all Montana high schoolers based on the 2021 YRBS results (Table 12). In addition, 4.8% of Yellowstone County high schoolers stated that they usually do not sleep at their parent's or guardian's home, which is almost double the national rate.

Table 12. Self-reported proportion of family risk factors of high school students from 2021 YRBS

Risk Factors	Yellowstone	Montana	United States
Did not usually sleep in their parent's or guardian's home	4.8	3.3	2.7
Slept away from parents or guardians because they were kicked out, ran away, or were abandoned	6.4	4.3	

Note: Data are from the 2021 Youth Risk Behavior Survey for Yellowstone County, Montana, and United States respondents in grades 9 to 12. Factors in which the percentage of students in Yellowstone County is greater than the percentage of Montana students by over a percent are highlighted in red.

FOSTER CARE

Research has shown that one year after youth are transitioned out of foster care as "young adults," they are less likely to achieve a high school diploma or alternative credential, more likely to experience job and financial insecurity, more likely to experience homelessness at some point, and experience some degree of mental health or substance use disorders.14 Youth who are in foster care or aging out of foster care are a population of high-risk youth who may be in need of more resources.

As of 2021, Montana ranks 14th in highest rates of foster care placements for youth up to age 17, with a rate of 18.2 youth in foster care placements per 1,000 as opposed to the national rate, which is 5 youth in foster care per 1,000 youth. Yellowstone County has a rate that is 1.6 times higher than Montana's rate and 5.8 times higher than the national rate of foster care placements (see Table 13). Approximately 3% of Yellowstone County's youth under 18 years of age are in foster care.

Table 13. Foster care placements of youth ages 0 to 17 in 2022

Location	Count	Rate per 1,000
Yellowstone County (2022)	1,121	29.0
Montana (2022)	4,259	18.2
United States (2021)	376,926	5

Note: Montana data are from the Montana DPPHS, Child and Family Services Division 2022. National data are from the Adoption and Foster Care Analysis and Reporting System (AFCARS) 2021. Children are ages 0 to 17. Rates are calculated by the number of children in foster care divided by the total population of children ages 0 to 17 in Montana multiplied by 1,000.

While a youth in foster care may be at risk of various adverse outcomes in adulthood, research suggests that youth in foster care who have a nonparental mentor after 14 years of age and before 18 were less likely than their non-mentored counterparts to experience suicidal ideation, contract a sexually transmitted infection, act violently to others, and participate in higher education.[15] Despite the fact that Yellowstone County has a high rate of youth in foster care, there is major opportunity for this population of youth to engage in positive nonparental relationships, which can be protective against adverse outcomes in the future.

COMMUNITY LEVEL FACTORS

The community around youth, such as their school and neighborhoods, also impact the development of behavioral health issues in adulthood. In Section 1: Population Characteristics, we also discuss factors such as community-level poverty, health care coverage, and public assistance recipients, which als

In Yellowstone County, 23.7% of high school students were offered, sold, or given an illegal drug on school property in the last year, compared to 22.3% of all Montana high school students and 13.9% of high school students nationally. In addition, 7.8% of Yellowstone County high school students did not go to school because of safety concerns, compared to 6.6% of all Montana high school students (see Table 14).[16]

Table 14. Self-reported proportion of community risk factors of high school students from 2021 YRBS

Risk Factors	Yellowstone	Montana	United States
Were offered, sold, or given an illegal drug on school property in past 12 months	23.7%	22.3%	13.9%
Been threatened or injured with a weapon on school property	6.4%	6.0%	6.6%
Did not go to school because of safety concerns	7.8%	6.6%	8.6%

Note: Data are from the 2021 Youth Risk Behavior Survey for Yellowstone County, Montana, and United States respondents in grades 9 to 12. Factors in which the percentage of students in Yellowstone County is greater than the percentage of Montana students by over a percent are highlighted in red. Differences between Montana and the United States that are significant (t-test; p-value > 0.5) in which Montana is more likely to respond affirmatively are highlighted in blue while differences in which the United States is more likely to respond affirmatively are highlighted in yellow.

CRIME

Violent crime has an impact on the health of individuals and communities, even among those who are not directly affected by it. In 2022, Yellowstone County experienced 1,349 reported instances of violent crime, including aggravated assault, rape, murder and manslaughter, and robbery and 672 drug seizures. Yellowstone County accounted 27.8% of all violent crime and 22.0% of all drug seizures in Montana in 2022.[17]

SECTION 3: ADVERSE OUTCOMES

Emotional and behavioral problems in youth that are untreated predict school failure, long-term unemployment, unplanned pregnancy, and involvement in justice.[2,18] In this section, we discuss some of these outcomes in Yellowstone County compared to Montana or the United States to better understand where Yellowstone County youth are when experiencing negative outcomes.

ACADEMIC PERFORMANCE

In Yellowstone County, approximately 4.1% of high school students will dropout, which is similar to the proportion of high school dropouts in Montana and the United States (Table 15). These differences, however, present a major disparity amongst racial groups. Data from the Montana Office of Public Instruction from 2011 to 2020 show that Native American students grades 7 through 12 have an average dropout rate of 6.1% compared to white students (1.9%) in Montana, as shown in Figure 6.[19]

Table 15. Proportion of high school dropouts in 2021-2022

Location	Proportion
Yellowstone County (2021-2022)	4.1
Montana (2021-2022)	4.0
United States (2021)	5.2

Note: Data for Montana are from the Montana Office of Public Instruction, 2021-2022. United States estimate is from NCES.20 A dropout event is a student in high school (grades 9-12) who leaves school between the beginning of one year and the beginning of the next without earning a high school diploma or high school equivalency (i.e. GED, HiSET).

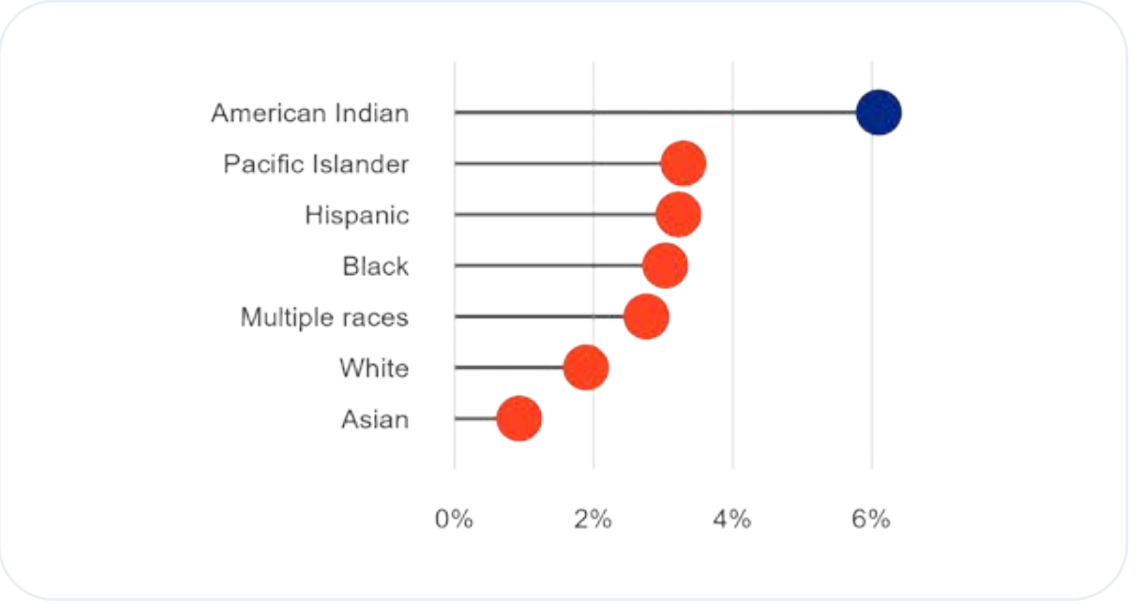

Figure 6. Average proportion of high school dropouts by race in Montana from 2011-2020

TEEN PREGNANCY AND BIRTHS

Table 16 shows the teen birth rate per 1,000 girls between 15 and 19 years of age. Yellowstone County has an estimated teen birth rate of 16.2 per 1,000 in 2020, which is both higher than Montana and the United States.

Table 16. Estimated teen birth rate ages 15 to 19

Location	Teen births per 1,000
Yellowstone County (2020)	16.2
Montana (2021)	13.6
United States (2022)	13.5

Note: Birth rate provided by number of births per 1,000 females aged 15 to 19 years. Data are from the CDC's National Center for Health Statistics.21,22 The most recent rate is provided for each geographic location.

JUVENILE JUSTICE

Youth involved with the juvenile justice system are a high-risk population that face substantial issues later in life, including re-offending and incarceration, and severe mental health disorders.[23] Youth with mental health disorders are overrepresented in the juvenile justice system, as approximately 70% of those juveniles have a diagnosable mental health disorder and almost 30% are experiencing more severe mental health disorders. Many of these youth have experienced several risk factors that have contributed to their involvement in the justice system.

According to the Montana Judicial Branch, approximately 20% of youth are formally referred to juvenile courts annually.[24] Yellowstone County juveniles represent 13.9% of Montana's juvenile population. In Yellowstone County, 1 out of 100 youth up to 21 years of age are referred to juvenile facilities and experienced roughly 26 offenses per 1,000 youth in 2022. These numbers are comparable to Montana (see Table 17 and Table 18).

Table 17. Number and rate of juveniles referred to Montana Youth Court in 2022

Location	Number of Youth Referred	Referrals per 100 Youth
Yellowstone County (2022)	463	1.00
Montana (2022)	3,342	1.15

Note: Data are from the Montana Judicial Branch, Youth Court Services from the year 2022. The number of youth referred to Montana Youth Court reflects unduplicated individuals through age 21.

Table 18. Number and rate of juvenile offenses in 2022

Location	Number of Offenses	Offenses per 1,000 Youth
Montana	6703	23.02
Yellowstone County	1086	23.45

Note: Data are from the Montana Judicial Branch, Youth Court Services from the year 2022. Juveniles are up to 21 years of age and a juvenile can commit multiple offenses. The location reflects where the offenses occurred, not necessarily the residence of the offender.

UNEMPLOYMENT

There are long-term consequences of unemployment during young adulthood that affect behavioral health outcomes later in life. Unemployment is a predictor of psychological distress and research shows that early unemployment at ages 18 to 21 is significantly connected with poorer mental health (measured by nervous systems, depressive symptoms, and sleeping problems) through adulthood.[25,26]

As of July 2023, Montana's unemployment rate is 2.7% compared to the national rate of 3.5%.[27] When looking at employment by age group, 53.4% of youth ages 16 to 19 and 19% of young adults ages 20 to 24 are not in the labor force (Table 19).

Table 19. Employment by age group in Yellowstone County

	IN LABOR FORCE		NOT IN LABOR FORCE	
Age group	**Count**	**Percent**	**Count**	**Percent**
16 to 19	3,706	46.6	4,244	53.4
20 to 24	7,668	81.0	1,799	19.0
25 to 34	19,533	86.8	2,973	13.2
35 to 64	49,469	80.1	12,283	19.9
65 and up	5,309	19.1	22,431	80.9

Note: Data are from the 2021 ACS 5-year estimates. Percentages are calculated by the number of civilians in or not in the labor force divided by the total number of people in that age group. Excluded from the employed are people whose only activity consisted of work around the house or unpaid volunteer work for religious, charitable, and similar organizations; also excluded are all institutionalized people and people on active duty in the United States Armed Forces.

SECTION 4:
PROMOTION AND PREVENTION PROGRAMMING

It is well documented that promotion and prevention efforts are effective intervention strategies to mitigate the adverse outcomes of poor behavioral health during childhood and adolescence. In addition, there are significant cost-savings in promotion and prevention programs. In this section, we look at the potential cost-savings of youth prevention programs as well as some prevention programming efforts undertaken by Substance Abuse CONNECT that have impacted the Yellowstone County community.

PREVENTION PROGRAMS REACH AND IMPACT

As mentioned earlier, SAC has an extensive history of providing primary prevention-based programming. Table 20 presents a selection of five education initiatives and school-based programs, although a comprehensive list of over 30 prevention programming efforts by SAC can be found in Appendix B.

For the three virtual education efforts listed, there were over 1.2 million engagements with content across those unique efforts.

Table 20. Select prevention programs summary

Program	Timeline	Topics	Target population(s)	Reach and impact
When the Game Slows Down	2020 to present	• Opioid use	• Youth athletes • Caregivers/parents • Coaches • Medical providers	• 403,655 impressions* • 42,707 engagements+ reaching half youth and half adults
Ongoing social media campaigns	2020 to present	• Substance use • Mental health • Positive norms	• Youth • Caregivers/parents	• 812,148 impressions • 56,670 engagements (18 months)
Virtual Ask a Therapist	2021 to present	• Mental health	• Youth • Caregivers/parents	• 3 events • 227 attendees • 4,000 engagements with Facebook content post-events
Readiness for Legal Recreational Marijuana	2021 to 2022	• Marijuana	• Businesses • Local government • Schools • Nonprofits • Recovery Community	• 4 events • 150+ participants • Additional sessions planned across the state
PAX Good Behavior Game	2018 to present	• Positive Behaviors	• Elementary teachers • Students • Caregivers/parents	• Implementation in all county elementary schools • 6 PAX Tools trainings for caregivers (n=78) • 11,000+ students impacted • Available to other groups and organizations • PAX Safe Return to School kits distributed to every child K-5 • 70% increase in Parenting Montana website engagement post-implementation

Note: Only youth-targeted education initiatives and school-based programs are included in this table due to availability of reach and impact measures. A full comprehensive list of prevention programming efforts by SAC can be found in Appendix B.

**Impressions are the number of times the resource was shown to a particular person or social media account.*

+Engagements are the number of times the resource was clicked on, viewed, commented, liked, etc.

Currently, SAC's prevention efforts are paid with through federal and state dollars, as shown in Table 21. As of September 2023, there are three sources of funding that SAC's prevention programs receive for a total of $175,000, with roughly 69% of those funds available for funding activities. No local grants fund these primary prevention efforts.

Table 21. Funding sources for SAC prevention programming efforts

Funding Source	Level	Amount	Constraints
Block Grant	State	$5,000	$5,000 for activities
Drug Free Communities Grant	Federal	$125,000	$70,000 for activities
STOP grant	Federal	$50,000	$40,000 for activities
TOTAL		**$180,000**	**$115,000 for activities**

Note: The following list provides grants that are currently active as of September 2023.

COST-SAVINGS ANALYSIS OF PREVENTION PROGRAMS

The youth population is defined as all individuals under 18 in Yellowstone County and is estimated to be 38,563. The Montana YRBS estimates the following for alcohol, marijuana, and consumption of tobacco, which is displayed in Column 1 of Table 22 below. When applied to the youth population of Yellowstone County, the total number of youths engaging in these behaviors is in Column 2. These estimates do not account for if any of these behaviors are co-occurring.

Table 22. Estimated youth using substances in Yellowstone County

Substance Use Estimates	Yellowstone County Youth Estimates
33.4% of youth drank alcohol (past 30 days)	12,880 youth estimated to have drank alcohol in past 30 days
17.5% of youth binge drank alcohol (past 30 days)	6,748 youth estimated to have binge drank alcohol in past 30 days
21.1% of youth currently used marijuana (past 30 days)	8,163 youth estimated to have used marijuana in past 30 days
31.7% of youth currently smoked cigarettes or electronic vaping products (past 30 days)	12,224 youth estimated to have smoked tobacco products in past 30 days

Note: Estimates are from the 2021 YRBS of Yellowstone County high school respondents. Estimates do not account for co-occurring behaviors.

Miller and Hendrie (2008) estimate that the cost of school-based prevention programs is $220 per individual, and that for each $1 invested, $18 is saved. Therefore, the total cost savings **per individual** in Yellowstone County for school-based prevention is $3,960 under these assumptions. These authors also estimate the percentage reduction in substance use as a result of school-based activities, which are included in Column 1 of Table 23 below. These estimates are multiplied by the Yellowstone County total youth population for each of these categories in Column 2, and then multiplied by the total cost savings **per individual of $3,960** to get the total potential cost savings of having school-based prevention.

Table 23. Cost-savings estimates based on youth substance use estimates for Yellowstone County

Estimated % Decrease in Substance Use	Estimated # of Yellowstone County Youth with Decreased Substance Use	Total Cost Savings
8 percent fewer youth ages 13 to 15 would not have engaged in binge drinking	539 Less youth binge drinking	$2,134,440 in total savings
11.5 percent fewer youth would not have used marijuana	938 less youth using marijuana	$3,714,480 in total savings
10.7 percent fewer youth would have smoked	1307 less youth smoking	$5,175,720 in total savings

Note: Estimates of percent decrease in substance use (Column 1) are based on research studies of school-based prevention programs as summarized by SAMHSA's cost-benefit analysis on prevention programs.3 The total number of youth for each substance use factor does not assume polysubstance use, which may impact the estimates of total savings.

The total cost savings from the table assume that the only substance students are using is the one associated with that row, which is likely not true. There are likely many students that use multiple substances, meaning that school-based prevention programs may cause differing changes in their substance use behaviors than estimated above, which would impact the estimates of total savings. Data are not available on co-occurring substance use however, so total savings are substance specific. As with the adult estimates, these results should be considered preliminary and are expected to have a large margin of error due to the assumptions that needed to be made. If additional data are available, it may be possible to conduct a more detailed analysis.

SECTION 5:
PROMOTION AND PREVENTION PROGRAMMING

Based on a full analysis of both secondary data and prevention programming done by SAC, we provide 3 recommendations based on the assessment of youth and young adult characteristics in Yellowstone County.

RECOMMENDATION 1: INCREASE TARGETED ENGAGEMENT WITH HIGH-RISK YOUTH AND YOUNG ADULTS

There are fewer resources available for high-risk populations, like youth engaged with the juvenile justice system, foster care system, Native American youth, and unhoused and unaccompanied youth. SAC's prevention programs for youth do include these populations, but a more targeted approach would be more effective in future efforts.

JUVENILE POPULATION

Justice-involved youth with substance use problems or disorders are at the highest likelihood of reoffending, but evidence has shown that youth offenders who are provided adequate and consistent treatment are less likely to reoffend.[28] However, a recent study from a 2020 national survey of community supervision agencies and behavioral health providers for juvenile justice found that overall, only one third of these agencies provide substance use prevention programs to youth.[29]

One in a hundred youth up to age 21 in Yellowstone County are referred to Montana's Youth Court Services. SAC's pilot project to reduce relapse and re-arrest has been highly successful in adult clients with substance use problems who are transitioning out of probation and parole. Expansion and adaptation of this program to target both juvenile offenders and young adults may be a potential area of prevention that can provide youth and young adults an opportunity to reduce their chances of reoffending.

YOUTH AND YOUNG ADULTS INVOLVED IN FOSTER CARE

In addition, Yellowstone County also has a rate of foster care placements per 1,000 youth under 18 that is 5.8 times higher than the national rate and 1.6 times Montana's rate (Table 13). There are approximately 1,121 youth in Yellowstone County who are currently in the foster care system that may need more targeted support in preventing more adverse outcomes when they age out of foster care. Roughly 20% of youth who age out of foster care into young adulthood are immediately unhoused. Therefore, both youths currently in the foster care system and those who recently aged out as young adults are a population in need of targeted resources.

NATIVE AMERICAN YOUTH

We recommend that culturally competent campaigns and resources be developed and existing ones be expanded upon and supported specifically for the Native American population. Increasing trust and relationships with organizations like Billings Urban Indian Health and Wellness Center who provide services and resources to the Native American population so Native American youth can receive culturally competent behavioral health resources and services, which can strengthen the impact towards this underserved population.

NATIVE AMERICAN YOUTH

Youth who are experiencing homelessness both with their families or those unaccompanied by an adult are at high risk of adverse outcomes. We recommend partnering with organizations like **Tumbleweed Runaway Program,** who specialize in resources for unhoused youth, to increase engagement with this population who may need more targeted prevention programs.

RECOMMENDATION 2: PROVIDE RESOURCES AND SERVICES FOR YOUTH WHO HAVE EXPERIENCED A BEHAVIORAL HEALTH CRISIS

As shown in Section 2, a quarter of high school students who reported attempting suicide stated they received treatment from a medical professional after, which is approximately half the rate in which high schoolers nationally received treatment after an attempt. This may be compounded by the fact that Montana does not have many behavioral health treatment facilities for youth. Currently, Billings Clinic offers one third of their 44 inpatient psychiatric beds for youth. While Billings Clinic is located in Yellowstone County, these beds are not specific to patients who reside in the county. In addition, 988 was only recently implemented in the state, there is a huge need for services for those who may need additional services after a behavioral health crisis event, such as attempted suicide.

Research has shown that adults who had attempted suicide before the age of 25 were more likely to experience persistent and severe mental health problems, such as substance use disorders, depression, and additional suicide attempts, as well as physical health problems such as elevated inflammation and metabolic syndromes.30 Therefore, youth who have attempted suicide are in great need of long-term follow-up and supportive care to reduce adverse outcomes and more severe behavioral health issues in their adulthood and additional resources and programs should target these youth.

RECOMMENDATION 3: PROVIDE COMMUNITY LEVEL RESOURCES THAT COULD TARGET UNDERUTILIZATION OF ELIGIBLE SOCIAL SERVICE PROGRAMS AND HEALTH INSURANCE

An estimated 800 youth under 18 years of age who are eligible for SNAP may not be accessing nutritional assistance and approximately 1,499 youth ages 18 and below and 1,156 young adults 19 to 25 do not have health insurance coverage, as shown in Section 1.

SNAP, the nation's anti-hunger program, has been shown to improve health outcomes and lower health care costs for recipients.[31] Children without health insurance are 4 times more likely to delay seeking medical care than those with health insurance.[32] Recent research has demonstrated that providing health insurance to children who were previously uninsured resulted in better health, greater access of health services, greater use of preventative health services, better quality of care, increased parental satisfaction, and reduced financial burden for families.[33]

We recommend that additional education and resources be developed to help families understand the positive outcomes associated with utilizing social service programs and health insurance and identify if they would qualify for social service programs as well as health insurance through the state.

RECOMMENDATION 4: INCREASE PREVENTION FUNDING TO BUILD CAPACITY FOR PREVENTION PROGRAMMING IN YELLOWSTONE COUNTY AND EXPAND ON PREVIOUSLY FUNDED EFFORTS.

Prevention programming efforts in Yellowstone County have shown success. While there is much more that needs to be done, efforts are limited by lack of adequate funding. The ability to increase capacity and build on what has been done previously, would ensure that the dollars and efforts already spent are not lost or wasted.

The need for more prevention programming has been acknowledged over and over again in Yellowstone County. While the need and support are evident, funding has been and continues to be the primary limiting factor as to why this has not happened.

APPENDIX

A. SECONDARY DATA SOURCES OVERVIEW

Data Source	Measure(s)	Date Range	Limitations
5-year American Community Survey, US Census Bureau	Population level estimates	2021	• Possibilities of error based on sampling size
National Survey of Drug Use and Health	Prevalence estimates of substance use and mental health indicators	2021	• Data are based on self-reported responses, which may contribute to underreported or overreported estimates based on the perception of the topic • Selective non-response, small sample size, sampling frame, and under-reporting may contribute to underestimates34
Youth Risk Behavior Survey	Behaviors, attitudes, and perceptions of Montana high school (grades 9 to 12) students	2021	• Data are based on self-reported responses, which may contribute to underreported or overreported behaviors based on the perception of the topic
US Department of Housing and Urban Development	Point in time estimate of unhoused Montanans	2022	• Does not include people who may be in doubled-up housing (i.e. couch surfing) • Only captures a point in time estimate
National Center for Homeless Education (NCHE)	Counts of unhoused youth, including doubled-up living	2020-2022	• Must consider COVID-19 impacts on counts • Only included public school enrollees
Montana Board of Crime Control	Counts of violent crime and drug seizures	2022	• Only provides crime that have been reported and may underestimate crimes that went unreported • Drug seizures do not provide detail on how much was seized, only an instance and what type of drug

B. YELLOWSTONE PREVENTION PROGRAMMING EFFORTS

TABLE B. YELLOWSTONE COUNTY PREVENTION PROGRAMMING EFFORTS

Effort	Program	Target population(s)	Description and Goals	Program Impact / Cost	Timeline
Education Initiatives	When the Game Slows Down	Youth athletes Caregivers/parents Coaches Medical providers	Video campaign to raise awareness about increased opioid addiction and risks associated with athletes who experience physical injuries and their psychological impacts. Provides information on risk factors to look for to protect athletes from addiction in the case of sports injury.	403,655 impressions 42,707 engagements reaching half youth and half adults **Cost $15,000**	2020 to present
Education Initiatives	Ongoing social media campaign	Youth Caregivers/parents	SAC and their prevention partners have spearheaded a rigorous social media campaign. These campaigns target youth, parents and caregivers based on interests and demographic characteristics highlighting protective factors and healthy alternatives to alcohol and drug use while using a positive social norm framework.	812,148 impressions 56,670 engagements (18 months) **Cost $37,500**	2020 to present
Education Initiatives	Virtual Ask a Therapist	Youth Caregivers/parents	Partnerships with Suicide Prevention Coalition, RiverStone Health, Billings School District #2, and Mental Health Center. Facebook Live question and answer event with therapists.	5 events 427 attendees 6,862 engagements with Facebook content post-events **Cost- $5,000**	2021 to present
Education Initiatives	Readiness for Legal Recreational Marijuana	Businesses Local government Schools Nonprofits Recovery Community	Demographically customized 2-hour training events to prepare for recreational marijuana legalization. There was a Town Hall meeting associated with this that was recorded for the Community Television Station.	6 events 475+ participants including elected officials. Additional sessions planned across the state. **Cost- $7,500**	2021 and 2022

School-based and Clinical Programming	PAX Good Behavior Game	teachers Students Caregivers/parents	Evidence-based prevention intervention specifically for classrooms. Helps to improve children's self-regulation. https://www.paxis.org/school-based-programming/ See table below for cost estimate and savings	in all 28 county elementary schools **Cost of implementation - $249 per teacher kit** **Training for 30 teachers - $2,545** **Spent thus far in implementation -$65,000** 6 PAX Tools trainings for caregivers (n=78) 11,000+ students impacted Available to other groups and organizations **Cost –** **$3,200** PAX Safe Return to School kits distributed to every child K-5 in Yellowstone County. 70% increase in Parenting Montana website engagement post-implementation **Cost** **$15,000**	Present

Note: This contains only a subset of prevention programs. Additional prevention programs are listed below. While this report only focuses on prevention programming, SAC also has treatment and diversion programs for the community.

Site Estimate for Enter number of First Graders of School District #2 - 1,180

102	Fewer young people will need any form of special education services
66	More boys will likely graduate from high school
79	More boys will likely enter university
105	More girls will likely graduate from high school
82	More girls will likely enter university
11	Fewer young people will commit and be convicted of serious violent crimes
113	Fewer young people will likely develop serious drug addictions
78	Fewer young people will likely become regular smokers
42	Fewer young people will likely develop serious alcohol addictions
57	Fewer young women will likely contemplate suicide
78	Fewer young men will likely attempt suicide
$15,363,600	Predicted financial net savings to students, families, schools, communities, state/federal governments
$23.67	Estimated Cost of PAX GBG Materials Per Child for Lifetime Protection
$22.00	Estimated Cost of External Training & Technical Supports Per Teacher Prorated per Child's Lifetime
$26.80	Estimated Cost of Internal Supports for Implementation and Maintenance by Teachers Prorated per Child's Lifetime

ADDITIONAL PROGRAMS LIST:

- Popcorn QR Code
    - Target: Youth, Parents, Stakeholders, Community Members
    - Watch a 15 sec video, answer 3-4 questions, customized popcorn bags with QR code to access resources, get a coupon for free bag of popcorn
    - **Cost - $2,200**
- Under the Big Top
    - Target: Community members and Youth
    - Substance use and mental health education game created about positive norm messaging. Ability to survey and access participants knowledge on prevention issues.
    - Enables opportunities for engagement and distribution of prevention materials
    - **Cost - $3,500**

ADDITIONAL PROGRAMS LIST:

- Mental health and substance abuse prevention media on school electronic devices
    - Target: Youth in school
    - Prevention and mental health messaging that has been vetted through focus groups.
    - **Cost - $400**
- Floor stickers on middle and high school floors in the county
    - Target: Youth in middle school and high school
    - Positive messaging around non-substance use
    - **Cost - $2,576**
- Weekly focus groups
    - Target: Youth and caregivers
    - SAC conducts weekly focus groups testing during the school months and refining prevention messaging with youth and caregivers
    - **Cost - $5,400**
- Prevention playing cards
    - Target: Community members
    - Developed decks of cards that have prevention messaging on them – conversation starters
    - **Cost -$3,750.00**
- Curated resource list
    - Target: Community members
    - SAC-maintained and other organizations resources list. Includes prevention resources, parenting tools, and other behavioral health resources curated in one place
    - https://www.substanceabuseconnect.com/resources/
    - **Cost - $1,200**
- Campaigns:
    - Target: Community members
    - Campaign topics include:
        - Underage drinking
        - Positive Community Norming
        - Enhanced Positive Community Norming
        - Marijuana education
        - Marijuana safe storage
        - Adult binge drinking education
        - Mental health de-stigmatization
        - 988 crisis line / 211 / Suicide Prevention
        - Sticker Shock (for retailers to prevent underage drinking)
        - Taking Care of Business: Supporting Yellowstone County Workforce (opioid use prevention education)
        - **Cost - $62,500**

- Alcohol Tool Kit
    - Tool kit that has caution tape, scanner for ID, ID guidebook, to identify responsible service
    - For use at community events and beer gardens
    - **Cost - $1,850**
- Alcohol Vendor Packets
    - **Cost - $2,200**
- Superintendent Goes Back to School / educational speakers monthly / encumber other schools
    - Dr. Lisa Strohman (Digital Citizen's Academy)
    - Ben Cort (marijuana legalization consequences, policy)
    - Laura Stack (Johnny's Ambassadors)
    - Darla Tyler McSherry (Ask In Ernest)
    - **Cost - $18,000**
- Evidence-based program that teaches and reinforces alcohol and drug refusal skills
    - Target: Middle school and high school students
    - Ongoing process
    - **Cost – Program dependent -Approximately $25,000**
- Alternative alcohol-free space at community events for youth and families
    - Target: Youth and families
    - Working towards possible alcohol-free zones at the Metra Park
    - Ongoing
    - **Cost - $5,000**
- Evidence-based program for school administrators, teachers and staff that focuses on transition years
    - Transition years -grade school to middle school – middle school to high school -are high risk times for all students
    - Ongoing
    - **Cost – Program dependent - $15,000**
- Alternative activities: Opportunities for pro social behaviors for youth
    - Reinforcing positive behaviors, building a culture that doesn't include substance use as a means to have fun, delaying initiation and onset of use. All are protective factors against substance use and addiction
    - **Cost – dependent on number of activities funding will allow for and scope of activity. Approximately $8,000 per fiscal year**
- Youth Coalition development
    - Progress towards initiation and development of a youth coalition in Yellowstone County
    - **Cost - $3,000**

- School folders
    - Custom folders that include messaging from school district personnel, resources in the community, links for more prevention information, 988 magnets, Parenting MT Magnets (age appropriate), education on substance use/misuse, mental health awareness / suicide prevention / counseling / technology & social media / parenting strategies, Holding Onto Life Toolkit (Middle and high school) / A Parents Guide To Mental Health (grade school). These will hopefully be distributed throughout all of the school in Yellowstone County
    - These folders are an opportunity for school personnel to get information out and engage with parents.
    - It will provide sought out information by parents and guardians regarding prevention and mental health
    - This is an opportunity to give every student and their parents or caregiver a folder of educational materials and resources that addresses the topics listed above. This is a innovative approach that has been endorsed by SAHMSA and is an unique opportunit that engages with an entire population and demographic. This endeavor will lay the foundation to build on further programming and partnerships.
    - **Cost - $46,250**
    - **Cost - Holding Onto Life Toolkit - $6,840**
    - **Cost - Parent's Guide To Mental Health - $50,000**

- Coaster Distribution throughout Yellowstone County
    - Informational dual-sided coasters are being offered to all establishments that serve alcohol in Yellowstone County. These coasters have 4 designs, two that inform on adult binge drinking and the effects of youth using alcohol, the other two, educate on 988 and reaching out for help. They contain a QR code that leads them to the SAC website where they can access more information and/or resources. There are posters that mimic the coaster designs that will also be dispersed to these establishments to be put up in bathrooms, hallways, etc.
    - **Cost – $9,450**

- Hidden In Plain Sight Backpacks
    - A tool used to train staff and parents on youth substance use trends in Yellowstone County; in the backpack are examples of products that can easily be missed by an untrained eye. The goal of this training is to learn what products look, signs of substance, and how to start a conversation with youth
    - **Cost - $3,100**

- Providing Parenting Montana Materials and Information
    - Tools to help youth manage stress and develop routines in an ever-changing environment, easy-to-use tools to support a child's success from birth through the teen years and information and tools for children at every age to address a variety of challenges
    - **Cost – To date thus far $6,400**

- Cannabis Safe Storage Campaign
    - Colored copies of the one-page pamphlet will be supplied to all participating dispensaries and will be restocked as needed. This vital information will also be shared with coalition partners across South Central Montana, including Tobacco Prevention organizations. Once approved, these partners plan to feature the pamphlet on their respective websites and in monthly newsletters. Copies will also be distributed at various community events, such as local Farmers Markets and Public Health Departments throughout the region. The material will also be made available online on pertinent websites.
    - **Cost - $1,200**

- Alcohol Sticker Shock Campaign
    - The community partner sticker shock/support initiative allows for coalitions and youth coalitions to proactively engage the business community, with emphasis on alcohol sales locations. This opportunity creates conversation and engagement with the audience and provides a positive support message to adults to not provide alcohol to youth.
    - Most youth report getting their alcohol from other adults or from their own homes. This method is one that is done nationally to remind not only clerks, but other adults, that kids and alcohol don't mix.
    - **Cost - $1,100**

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