

Introduction & Background

1

Implementation

2

Evaluation & Outcomes

3

References

4



Introduction & Background

WHAT IS SBIRT?



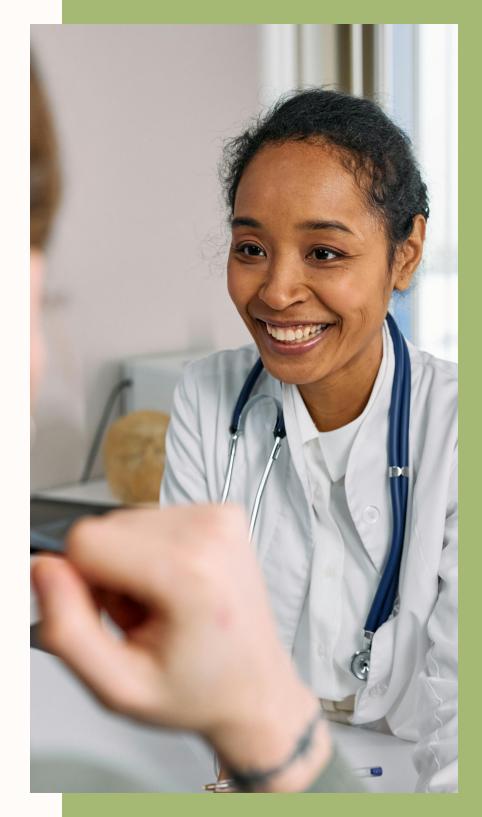
SBIRT (Screening, Brief Intervention and Referral to Treatment) is an established public health approach to the delivery of early identification and treatment services for persons with or at risk of developing substance use disorders. SBIRT encompasses the following activities:

- UNIVERSAL SCREENINGS to quickly assess the severity of risk and identify appropriate level of intervention
- **BRIEF INTERVENTIONS** that focus on increasing insight, awareness, and motivation to change regarding the identified risk
- **ASSERTIVE REFERRALS** to specialty treatment for those with greater risk

There is **established evidence for the effectiveness of SBIRT** with adults particularly for reducing alcohol and tobacco use and support for SBIRT's effectiveness with illicit drugs is growing¹⁻⁴. The use of SBIRT has expanded beyond substance use to include other risk factors such as mental health symptoms and firearm safety.

I felt supported and not judged. It was a very welcoming environment."

Participant



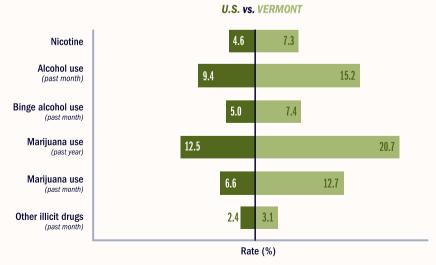
Importance for Youth & Young Adults

WHY FOCUS ON YOUTH AND YOUNG ADULTS?

Research has established that the age at first substance use is associated with lifetime incidence of developing a substance use disorder ^{5,6}.

More recently, greater emphasis has been placed on utilizing SBIRT with adolescents. Adolescents are at highest risk of experiencing substance use-related health consequences^{7,8}. It is recommended adolescents be screened for substance use whenever they present for outpatient pediatric care⁹. The American Academy of Pediatrics (AAP) argues that low cost, minimal potential for harm, and emerging evidence of the benefit SBIRT may have among adolescent alcohol users supports the practice of routine screening.¹⁰

FIGURE 1
12-17 YEAR OLD SUBSTANCE USE RATES 2017-2018:

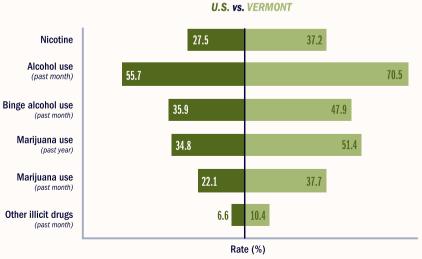


WHY FOCUS ON YOUTH AND YOUNG ADULTS?

Another population of concern for developing substance use disorders includes young adults, ages 18 to 24. Data from the National Survey on Drug Use and Health (NSDUH) found that young adults ages 18 to 25 have higher rates of binge drinking and heavy drinking compared to those 26 and older (34.9% vs. 25.1% and 9.0% vs. 6.2% respectively)¹¹. Data from 2015 to 2018 showed an increase of 16% in young adults ages 18 to 25 with a marijuana use disorder¹¹.

It's also important to note that for both adolescents and young adults, rates of substance use across the majority of indicators in the years prior to Vermont Youth SBIRT (Y-SBIRT) have been higher in Vermont compared to national averages (see Figures 1 & 2).

FIGURE 2 18-25 YEAR OLD SUBSTANCE USE RATES 2017-2018:



C4BHI & Spectrum **Partnership**

FALL 2018

VERMONT YOUTH SBIRT INITIATIVE

In 2018, our center, the Center for Behavioral Health Integration, LLC (C4BHI), in collaboration with Spectrum Youth and Family Services, received a multi-year, \$5 million dollar grant from SAMHSA to implement Youth SBIRT (Y-SBIRT) across Vermont with a focus on serving youth and young adults in both traditional as well as non-traditional SBIRT settings.







GRANT IMPLEMENTATION

The grant operated from fall 2018 through fall 2024. For the first 5 years, the grant served over 24,300 Vermonters. The last year of the grant focused on ensuring sites were able to sustain SBIRT in their settings. The following report details implementation efforts, lessons learned, and outcomes achieved.

Served over 24,300 Vermonters



Y-SBIRT has allowed our health education team to discuss health behaviors more clearly and directly with students while maintaining positive regard and connection. We have seen students more easily discuss challenges with substances and mental health and receive more effective support through this program."

Y-SBIRT Provider

Implementation

HOW WERE PROGRAMS IDENTIFIED?

Sites were identified based on:

- Their **INTEREST AND READINESS** to implement SBIRT services with youth
- Whether they were LOCATED IN GEOGRAPHICAL AREAS in need of increased access to behavioral health services
- Whether they included **UNIQUE SETTINGS** in which SBIRT might have significant impact such as college campuses

Sites often hired or identified a Y-SBIRT interventionist(s) who helped to ensure screenings occurred as well as delivered interventions.

Y-SBIRT INTERVENTIONISTS

Y-SBIRT interventionists received training and coaching in SBIRT on topics such as what SBIRT is, use of specific screening tools, and interventions including motivational interviewing and behavioral activation for depression, and how to make assertive referrals to treatment. The Y-SBIRT grant team provided biweekly, then monthly, ongoing support to each site for a sustained period of time.

It was helpful to realize how much I'm doing and what I'm doing. New school stuff was stressing me out so I started up again....I reduced my use after my conversation with [SBIRT interventionist] because I wanted to be a new person."

Participant



Screening

Screening for SBIRT typically involves universal screening comprised of a brief set of items given to an entire group or population.

Example: a school might screen all students at the beginning of the year to determine if they have any behavioral health risk. If an individual is positive for initial risk on the universal screen, they will be asked additional secondary screening questions.

Secondary screening helps to determine the overall level of risk, which guides the recommended level of intervention. Often, universal and secondary screening are done sequentially at the same time as is the case in Y-SBIRT.

SCREENING TOOLS



The majority of screening tools used in Y-SBIRT are valid and reliable measures of substance use, depression, and anxiety. **Table 1** provides a summary of the screening tools

used. Sites had the ability to add additional questions to tailor the screening to address their priorities for wellness.

Screenings were administered through HIPAA compliant, web-based screening platforms; either TickitHealth or REDCap. Web-based platforms allowed for:

- **SCREENING WITH BRANCHING LOGIC** so participants only received questions applicable to them based on their responses
- PROVISION OF A SUMMARY REPORT staff could utilize in their interventions
- IMMEDIATE ALERTS should participants indicate thoughts of self-harm

TABLE 1
SCREENING TOOLS

	11-17 YEAR OLDS			
	UNIVERSAL	SECONDARY		
NICOTINE	Screening to Brief Intervention (S2BI)	CRAFFT		
ALCOHOL	S2BI	CRAFFT		
MARIJUANA	S2BI	CRAFFT or Cannabis Intervention Screener (CIS) depending on site		
OTHER DRUGS*	S2BI	CRAFFT		
DEPRESSION	Patient Health Questionnaire (PHQ)-2 + item 9	PHQ-9 items 3-8		
ANXIETY	Generalized Anxiety Disorder (GAD)-2	GAD-7 items 3-7		
	18-24 YEAR OLDS			
	UNIVERSAL	SECONDARY		
NICOTINE	Single Frequency Item	N/A		
ALCOHOL	U.S. Alcohol Use Disorders Identification Test (U.S. AUDIT, items 1-3)	U.S. AUDIT (items 4-10)		
MARIJUANA	Single Frequency Item	CIS		
OTHER DRUGS	3 Frequency Items	Drug Abuse Screening Test (DAST-10, items 2-10)		
DEPRESSION	PHQ-2 + item 9	PHQ-9 items 3-8		
ANXIETY	GAD-2	GAD-7 items 3-7		

^{*}Includes use of other illicit drugs and prescription drug misuse. References are provided for each tool and for further information for how the screening process was implemented, please contact Dr. Win Turner at win@c4bhi.com.

Brief Intervention & Referral to Treatment

NO RISK

Affirmation of making positive healthy choices.

LOW RISK

Individuals who scored low risk for substance use, depression and/or anxiety received Brief Interventions utilizing Motivational Interviewing (also referred to as the Brief Negotiated Interview or BNI) or Behavioral Activation. Bls can be as short as several minutes up to 30 minutes and focus on increasing insight and awareness regarding the areas of risk and motivation toward behavioral change. Ultimately, the goal of a BI or BA is for individuals to identify a plan or set of steps they can commit to enacting to increase positive behavior change and decrease their risk.

MODERATE TO SEVERE RISK

Individuals who scored in the moderate to severe risk range received a BI focused on eliciting a commitment to accept a referral to collocated brief treatment or to longer term treatment from a specialty provider in the community. Motivational Interviewing is utilized as a primary approach to increase an individual's readiness and willingness to seek treatment services. Longer term treatment often utilized Cognitive Behavior Therapy and sought to address not only substance use but co-occurring mental health needs as well.

NO RISK

LOW RISK

SEVERE RISK

Implementation Across Settings

MEDICAL CENTERS



















MIDDLE AND HIGH SCHOOLS









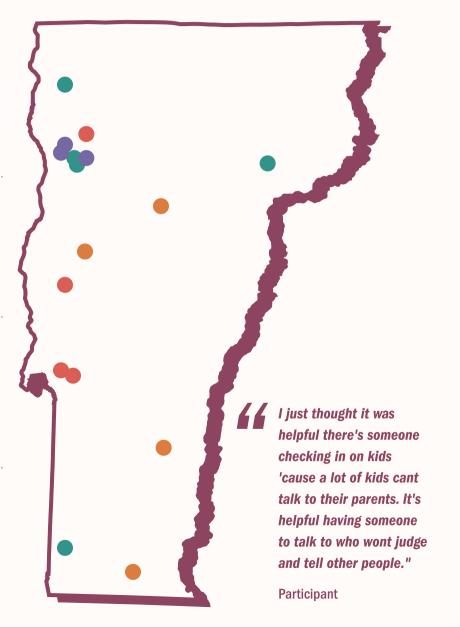
COLLEGES AND UNIVERSITIES











Implementation Settings



MEDICAL CENTERS

SETTINGS INCLUDED: Pediatric practices, emergency departments, urgent care.

For both youth and young adults, medical centers often implemented Y-SBIRT in the same way.



Screening often occurred via a link on a tablet that was handed to the patient upon check in. For some pediatric practice settings, screening also occurred in advance via a link emailed to the patient prior to their wellness visit.



SBIRT interventionists reviewed the screening results and met with the patient at some point during their medical visit. The type of intervention was determined by the highest level of identified risk.



COMMUNITY ORGANIZATIONS

ORGANIZATIONS INCLUDED: Spectrum Youth and Family Services (Spectrum), The Family Room, Upward Bound

Spectrum has a number of programs ranging from mentoring support to to outpatient treatment to shelter services. Spectrum implemented Y-SBIRT by having all youth and young adults seeking services engage in a Centralized Intake process which included the SBIRT screening measures. Intake workers administered the Y-SBIRT screening and based on the level of risk, engaged the individual in the appropriate intervention.

For the *Family Room*, a parent-child center, staff identified young parents utilizing their services and engaged them in face-to-face screening using the

Y-SBIRT screening measures. Based on the results, the Family Room staff provided targeted interventions.

Upward Bound is a high school support program focused on students who are the first in their families to apply for a college degree. To implement Y-SBIRT within Upward Bound, a Y-SBIRT wellness coordinator met and screened students during their summer orientation program and offered follow-up for any students at risk.



Implementation Settings



MIDDLE & HIGH SCHOOLS

IMPLEMENTATION LED BY: Guidance Staff.

Within middle and high school settings, the school's guidance staff often spearheaded the implementation of Y-SBIRT. This included identifying the permissions needed, screening questions to be asked, key roles and workflow. For permissions, the school sent a letter to the parents or guardians of each student explaining what Y-SBIRT was, why they were doing it and when it would occur. Parents were asked to contact the school only if they did not wish for their teen to participate in screening.

Screening often occurred by classroom and/or grade.

Example: all ninth grade students were screened on a specific date in their homeroom classes.

- Students received an email with a link to the screening and completed the screening during their identified class.
- The guidance staff then reviewed completed screenings, identified those with acute risk who needed to be seen immediately due to thoughts of self-harm and those who were at risk for mental health and/or substance use.
- The guidance staff met with all identified students in order of greatest risk to lowest risk.



I like that it made me reflect on my own drinking."

Participant



COLLEGES & UNIVERSITIES

PARTICIPATING INSTITUTIONS: Champlain College, Middlebury College, Castleton College/Vermont State University, St. Michael's College

Four colleges and universities in Vermont implemented Y-SBIRT through their health and wellness programs. Central to their implementation, each entity hired a dedicated Y-SBIRT coordinator. For screening, the Y-SBIRT coordinators utilized a range of methods to invite students to complete the screening including:

- Tabling at campus events with OR codes
- Sending emails to students with a link to complete the screening to specific classes and also freshman orientation
- Working with athletic departments to screen students on teams

- Displaying posters across campus explaining screening with QR code
- Embedding screening into student health and counseling centers as a part of initial appointments

Whenever a screening was completed, a Y-SBIRT risk report was generated which identified areas of strength as well as areas positive for risk. If the screening was completed at a time when the Y-SBIRT coordinator was present, the Y-SBIRT coordinator reviewed the Y-SBIRT risk report with the student, engaging them in an immediate brief intervention. If the screening was done by the student via a link or QR code, upon completion of screening, students received an email that included their Y-SBIRT risk report, along with a calendar link for the Y-SBIRT coordinator and a note offering to meet and discuss the Y-SBIRT risk report findings.

Implementation Settings

This allowed for the student to immediately, conveniently and discretely schedule an appointment with the Y-SBIRT coordinator. In addition, the Y-SBIRT coordinator reached out to students who were positive for risk to invite them to meet with them. Students were offered nominal incentives (\$5 to \$10 value) for attending a meeting with the Y-SBIRT coordinator to discuss their results.



College students who screened positive for moderate to severe substance use risk were offered the opportunity to engage in services with DynamiCare Health (DCH) as part of the grant. DCH is a cross-platform mobile app designed to automate several features of a standard contingency management (CM)-based substance use intervention, increasing access to evidence-based substance use treatment. Participants had the DCH app installed on their smartphone and were provided a reloadable debit card through which they would receive financial incentives for submitting biomarker tests demonstrating abstinence from the targeted substance(s), as well as for attending virtual meetings with a recovery coach and completing scheduled activities, and completing self-directed app-based modules on recovery.

Note: all but one of the colleges and universities involved sustained the Y-SBIRT approach on their campus, adding a permanent Y-SBIRT/wellness coordinator position; integrating the digital screening tool into their campus electronic health records; creating a wellness curriculum; and/or including screens and linking to interventions in the campus counseling and health centers.



We wanted to pursue Y-SBIRT because we believed students with mental health and substance use challenges were falling through the cracks.

Y-SBIRT Provider

Impact of COVID-19

THE SHIFT TO VIRTUAL Y-SBIRT SERVICES

In March of 2020, Vermont, like the rest of the world, was in a state of emergency and forced shut-down due to COVID. Sites saw decreases in the sheer volume of individuals served. Many individuals stayed home when they started to experience behavioral health symptoms and only sought services when their symptoms were significantly worse, putting greater strain on already burdened systems. Medical and social service organizations were often in an "all hands on deck" mode. Y-SBIRT providers were often asked to help screen for COVID vs. provide SBIRT services. Navigating the use of PPE and securing confidential space added additional stressors. Sites struggled to meet basic medical and acute mental health and substance use needs. Consequently, several medical sites opted to "pause" Y-SBIRT services to focus solely on providing medical care and support for basic needs.

Programs that elected to continue Y-SBIRT shifted to providing these services via telemedicine. Challenges of telemedicine included being able to reach individuals and navigating the virtual technology while trying to engage individuals in a meaningful, reflective conversation about their behavioral health. Providers felt it was harder to connect and build rapport with youth and young adults. Despite these challenges, COVID forced a change in how universal screenings were conducted.

It essentially increased the use of virtual platforms and ultimately facilitated a de-coupling of SBIRT from traditional clinical settings, whom were often too overwhelmed. Providers strongly felt these changes helped to provide continued access to behavioral health services during the pandemic. Providers described participants experiencing relief at times in being able to "vent" or talk with someone about what they were experiencing, as well as obtain some case management support.

CHALLENGES & ADAPTATIONS DURING COVID-19

CHALLENGES

Service volume dropped as individuals delayed care, worsening system strain.

- Y-SBIRT providers were redirected to COVID screening.
- PPE needs and confidentiality issues added stress.
- Some sites paused Y-SBIRT to focus on critical medical care.
- Telemedicine made it harder to connect and build rapport, especially with youth.

ADAPTATIONS

- Shifted Y-SBIRT to telemedicine, keeping services accessible.
- COVID sped up virtual platform use, freeing SBIRT from overloaded clinical settings.
- Providers offered participants a space to share experiences and receive support, ensuring ongoing behavioral health access.

In Year Two, we screened entirely remotely via email invitation. This year, we stepped into a hybrid model that offered screenings at live events and via universal screening by email. This kind of surround sound YSBIRT screening was particularly important on the heels of a very isolating time for students."

Y-SBIRT Provider

Evaluation & Outcomes

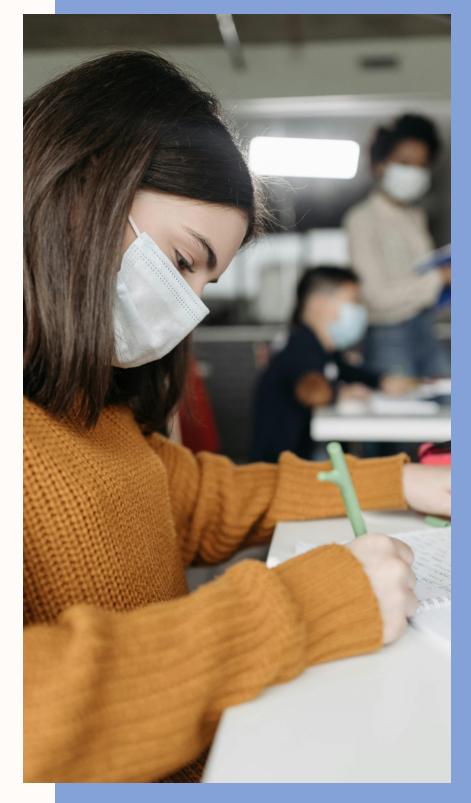
FIGURE 3
NUMBER OF SCREENINGS BY AGE GROUP DURING 5-YEAR GRANT IMPLEMENTATION



During the life of the grant, 24,348 individuals were screened. While the focus of the grant was on youth and young adults, because several sites included Emergency Departments, a number of individuals screened were older*.

CONTEXTUALIZING THE DATA

When reviewing the data presented in the remainder of the report, it is important to remember that Vermont Youth SBIRT is a service initiative and as such, it is not a formal research study. Consequently, the only measure of substance use across both timepoints is youth self-report. To help promote open and honest responding among participants, sites engaged in the following steps: 1) if applicable, discussing with and encouraging parents to allow their teen to complete the screening independently and in a confidential manner; 2) participants were repeatedly told, including at the beginning of the screening, that their responses were private between the youth and the provider; and 3) participants completed the screening via a HIPAA compliant, web-based screening platform, an administration method known to facilitate honest responding when screening in these types of settings and for these types of sensitive topics.



^{*}It is important to note that their data is not included here, again due to the focus of the report, but if you have questions about lessons learned for those 25 years of age and older, please contact the project director, Dr. Win Turner at win@c4bhi.com.

Screening Outcomes

DEMOGRAPHICS

Figures 4 & 5 show the demographics of both age groups – youth and young adults. With regards to *gender identity, for both youth and young adults,* approximately 4.4% to 5.1% identified as gender diverse and a little over 10% identified as being people from racial and ethnic minority groups (Figure 6).

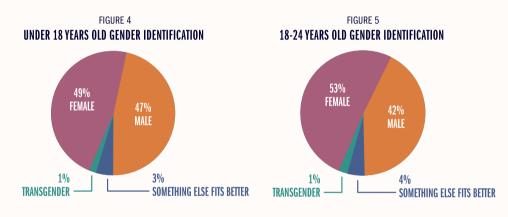
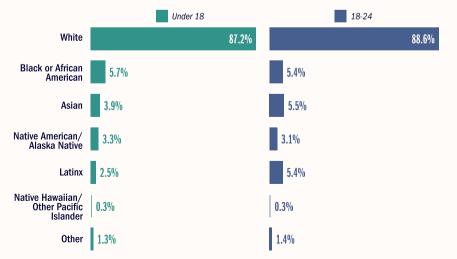


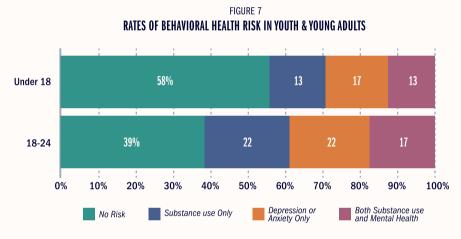
FIGURE 6 YOUTH & YOUNG ADULT RACIAL AND ETHNIC IDENTIFICATION

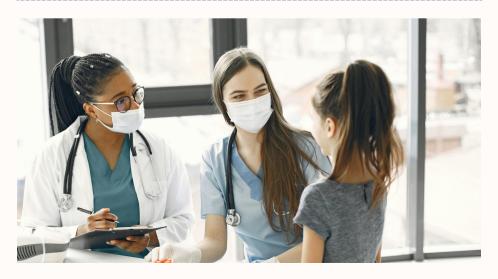


^{*1.3%} of youth & 1.9% of young adults endorsed "do not know" or "refused" when asked their race.

OVERALL BEHAVIORAL HEALTH RISK

Figure 7 shows the overall rates of behavioral health risk which includes screening positive for substance use risk, depression risk, and/or anxiety risk. Young adults had higher rates of any risk compared to youth (61% vs. 42% respectively).

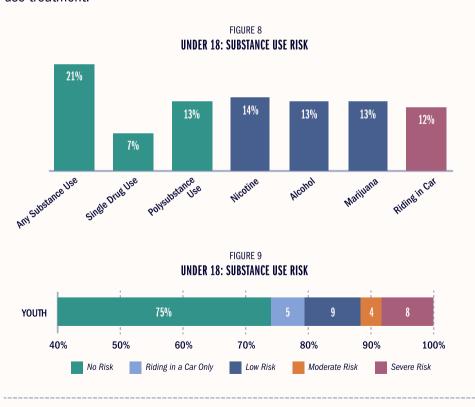




Screening Outcomes

SUBSTANCE USE RISK IN YOUTH (UNDER 18)

Risk prevalence for substance use appears differently for youth under 18 compared to 18 to 24-year-olds. Given developmental vulnerabilities, *ANY* substance use for 12 to 17 year olds is considered risk whereas for young adults, depending on age, use of nicotine, alcohol and marijuana is legal. Once legal, risk becomes more about the degree to which individuals are using a given substance and its related impacts. While *1 of every 5 youth under 18 reported using a substance in the past year, 1 of every 10 youth were positive for moderate to severe substance use risk,* suggesting a need for substance use treatment.



SUBSTANCE USE RISK IN YOUNG ADULTS (18-24)



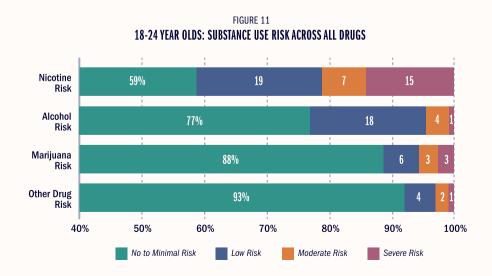


reported using multiple substances

1 OUT OF EVERY 9
were positive for moderate to severe substance use risk.

FIGURE 10 18-24 YEAR OLDS: SUBSTANCE USE RISK 62% 27 18-24 40% 60% 70% 80% 50% 90% 100% No Risk Low Risk Moderate Risk Severe Risk

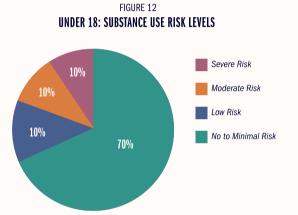
Nicotine was the most frequently used substance followed by alcohol, marijuana and other drugs.



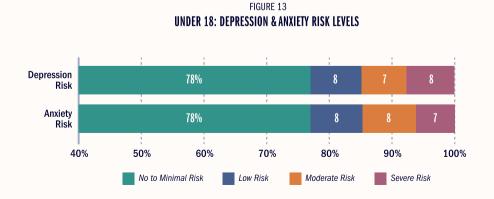
Screening Outcomes

MENTAL HEALTH RISK IN YOUTH (UNDER 18)

For youth under 18, 29.6% or nearly **1** of every **3** youth were positive for some level of mental health risk – either depression, anxiety or both.

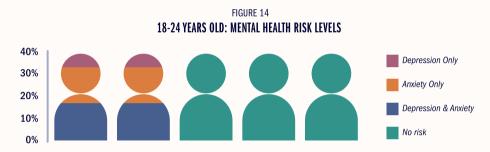


Rates of risk prevalence for depression and anxiety risk were relatively similar as shown in Figure 13. Scores that fall in the moderate to severe risk range indicate a need for mental health treatment.

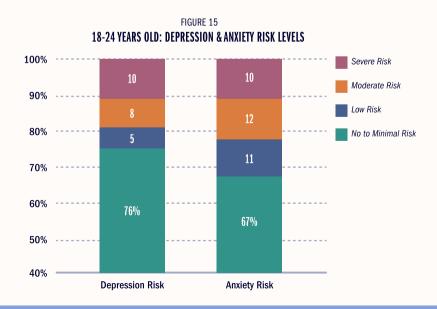


MENTAL HEALTH RISK IN YOUNG ADULTS (18-24)

The presence of mental health risk was higher for those 18 to 24, with 39.2% or 2 of every 5 young adults scoring positive for some level of risk including depression, anxiety or both.



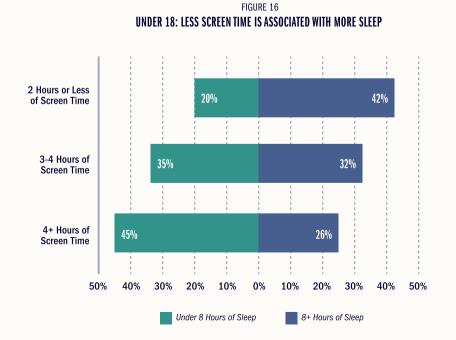
Young adults had higher rates of anxiety compared to depression as shown in Figure 15. 32.6% of young adults had anxiety risk while 23.6% had depression risk. Importantly, 1 in 5 had scores in the moderate to severe risk range, indicating a need for treatment.



Effects of Sleep & Screen Time

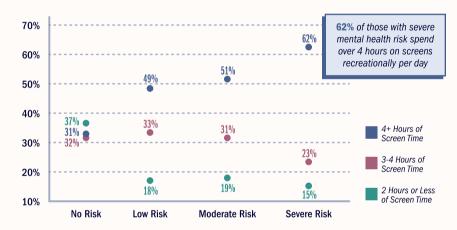
In 2023, the Surgeon General issued an Advisory calling attention to the growing concerns about the effects of social media on youth mental health. As part of Vermont Y-SBIRT's universal screening, youth and young adults are asked about the amount of sleep they receive per day as well as the amount of screen time they engage in outside of school or work. As shown here, our data indicate that among youth under 18, there was an association between screen time and sleep and screen time and mental health risk.

Youth who reported spending more time on screens recreationally were significantly more likely to report getting less than the recommended amount of sleep each night.



Youth with a greater severity of depression and/or anxiety risk, were significantly more likely to report increased screen time recreationally.

FIGURE 17
UNDER 18: MENTAL HEALTH RISK & SCREEN TIME



Screening for these health indicators provides opportunities to increase youth's awareness of how screen usage may be impacting their wellbeing and engage youth in considering healthy alternatives.

Note: For young adults 18 to 24, while there was no relationship between sleep and screen time, increased screen time was associated with those who presented with the most severe level of mental health risk.

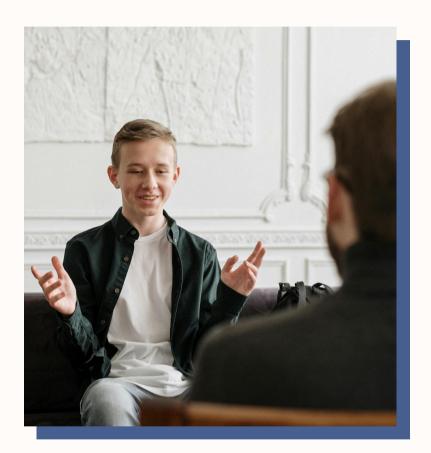
Intervention Delivery

In general, intervention delivery rates were relatively strong with two-thirds to three-quarters of participants positive for risk receiving an intervention. The one exception was for youth under 18 who were positive for substance use risk. Although lower, 1 of every 2 youth positive for substance use risk received an intervention. Percentages of youth under 18 who were already in treatment at the time of screening were less than half for substance use compared to mental health. For young adults, the disparity was even greater with percentages 10 times smaller for substance use risk compared to depression and 7 times smaller compared to anxiety. These data further highlight the critical importance of screening to facilitate identification and engagement into care.

TABLE 2
INTERVENTION DELIVERY RATES*

	UNDER 18			
	SUBSTANCE USE RISK	DEPRESSION RISK	ANXIETY RISK	
POSITIVE FOR RISK	1664	1390		
INTERVENTION RECEIVED	805 (48.4%)	986 (70.9%)	1428 (74.5%)	
ALREADY IN TREATMENT	158 (9.5%)	259 (18.6%)	262 (18.4%)	
	18-24 YEARS OLD			
	SUBSTANCE USE RISK	DEPRESSION RISK	ANXIETY RISK	
POSITIVE FOR RISK	2944	1601	2368	
	2011	2002	2000	
INTERVENTION RECEIVED	1992 (67.7%)	1145 (71.5%)	1068 (67.9%)	

^{*}Interventions received include those who were already in treatment as 1) risk was still present and 2) the BI offered an opportunity to explore on how treatment was progressing and if additional resources might be indicated.



Y-SBIRT has allowed our health education team to discuss health behaviors more clearly and directly with students while maintaining positive regard and connection."

Y-SBIRT Provider

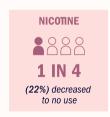
Change in Outcomes Overtime

INTERVENTION FOLLOW-UP & RE-ADMINISTRATION

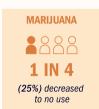
To determine whether SBIRT was having an impact on youth and young adult risk, we conducted a 6-month follow-up assessment with 15% of youth who were screened AND who received an intervention for substance use. We interviewed 94 youth under 18 and 320 young adults 18 to 24. The grant focus was on substance use and required grantees to conduct follow up with 10% of participants who received interventions for substance use specifically. The 6-month follow-up consisted of readministering the screening measures listed in Table 1, allowing comparisons to risk profile changes at intake, as well as a satisfaction survey regarding the SBIRT services they received.

For youth and young adults who received at least a BI for substance use, there were significant decreases in the following:

UNDER 18:

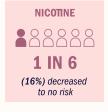




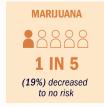




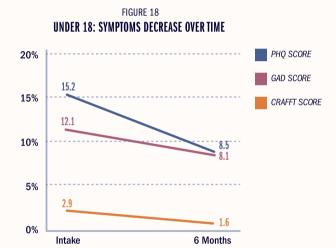
18-24 YEARS OLD:

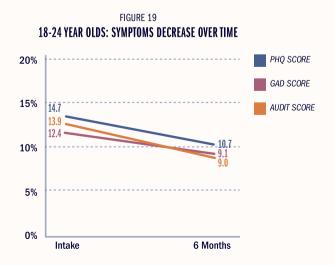






AUDIT SCORES Mean AUDIT scores decreased from 13.9 to 9.0 Both youth and young adults who received at least a BI for depression and/ or anxiety reported significant decreases in their symptoms as shown in Figures 18 & 19. Depression was measured using the PHQ-9 and anxiety using the GAD-7.

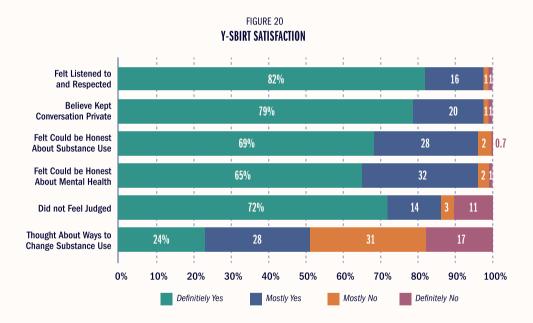




Satisfaction

PARTICIPANT SATISFACTION

Participants reported high levels of satisfaction with SBIRT services. Highest rated areas included feeling listened to and respected, having confidence the conversation was kept private, feeling they were not judged, and feeling they could be honest about their substance use and mental health (see Figure 20).

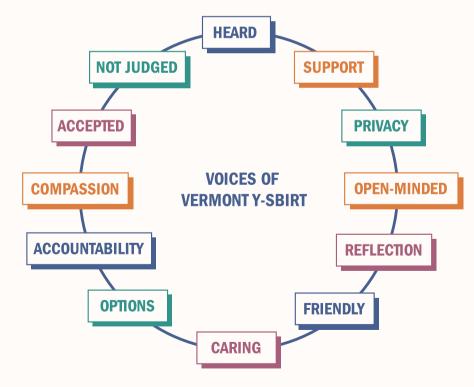


Just having the conversation was helpful. It made me reflect and think about my mental health and alcohol use."

Participant

ADAPTING TO THE CHALLENGES

Despite the challenges COVID presented, the majority of participating SBIRT programs serving youth and young adults persevered to continue to provide SBIRT care within their settings. Sites became creative in implementing the SBIRT process from screening to intervention delivery, increasing access in an unanticipated way. Services were consistently delivered in a way in which participants felt respected, heard and accepted. Youth and young adults ultimately experienced benefits including decreases in risky substance use as well as mental health symptoms.



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