FEBRUARY 28, 2023

YOUTH SUBSTANCE USE PREVENTION IN GLOUCESTER, MA

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TABLE OF CONTENTS

Introduction 2

Methods 2

Substance Use Landscape in Gloucester 4

Risk and Protective Factors 6

Risk Factors 7

Protective Factors 11

Intervention 13

Safe, welcoming, fun environment for youth at community center 14

Behavioral Health Education 14

Parenting Style Education 15

Conclusion 16

INTRODUCTION

This report presents key findings and recommendations from a research project led by the Metropolitan Area Planning Council (MAPC) in partnership with the Gloucester Health Department (GHD). The research supports the State Opioid Response-Prevention in Early Childhood (SOR-PEC) grant, with the goal of better understanding and addressing substance use prevention in 9-11 year olds in Gloucester, MA. The work was guided by the following two research questions:

1. What are the risk and protective factors for substance use prevention in 9-11 year olds in Gloucester, MA?
2. Incorporating the risk and protective factors, what are possible interventions to reduce the risk of substance use?

Using a mixed-methods research approach, MAPC produced this report to highlight the research findings that address the overall goals and questions of the research. The results can hopefully be used to better understand the landscape of substance use and design programming to address it.

METHODS

Development of the focus group questions was an iterative and collaborative process between MAPC, content experts, and the Gloucester Health Department (GHD). MAPC developed a set of draft questions aimed at understanding risk and protective factors for youth substance use, and identifying possible programmatic interventions. These draft questions were shared with prevention experts from Healthy Chelsea, a coalition focused on youth substance use in the City of Chelsea, who helped prioritize a second draft of the question set. Additionally, the experts provided guidance on phrasing questions in a trauma-informed manner to ensure a safe and positive experience for participants. The process resulted in a final set of 6 questions for the focus groups, as well as a collaborative activity to generate ideas for an intervention. See appendix for full focus group guide.

The target focus group participants were youth (ages 14-18), caregivers, parents or guardians of a youth aged 9-18 attending school in Gloucester, and social workers working with youth in Gloucester. MAPC developed a flyer (in English and Spanish) for GHD to distribute to potential participants that provided more details about the focus groups. See appendix for a focus group flyer.

MAPC conducted a total of four focus groups, two with youth, one with caregivers, and one with social workers. Additionally, one key informant interview was conducted with a caregiver. There were 18 total participants from the focus groups and key informant interviews. There was a mental health clinician on-site for all focus groups.

Detailed focus group information is as follows:

- 11 people participated across the two youth focus groups, conducted in-person at Gloucester High School in November and December of 2022
- One Zoom focus group was conducted in October 2022 with three social workers
- One focus group was conducted in November 2022 with three caregivers
- One key informant interview was conducted in December 2022 with one caregiver

A post-focus group survey was developed to provide an opportunity for caregivers and youth to share any thoughts they might not have had the opportunity to share, or did not feel comfortable sharing, during the focus group. MAPC also used the post-focus group survey to gather demographic information about race/ethnicity and gender, which can be seen on Table 1. Post focus group surveys were voluntary. See appendix for post focus group survey.

Table 1. Demographics of Participants

	Youth (n=11)	Caregiver (n=4)	Social Worker (n=3)	Total (n=18)
Gender				
Male (#, %)	2 (18%)	0	0	2 (11%)
Female (#, %)	9 (82%)	4 (100%)	3 (100%)	16 (89%)
Race/Ethnicity				
Non-Hispanic White (#, %)	11 (100%)	3 (75%)	3 (100%)	17 (94%)
Prefer not to say (#, %)	-	1 (25%)	-	1 (6%)

Focus groups were recorded and transcribed for qualitative analysis. Following each focus group, MAPC staff reconvened to share initial thoughts and reactions to the focus group. Through this process, key themes started to emerge and became the basis for code book development that was used for analysis. Two MAPC staff used the code book to independently code the first half of one focus group transcription to assess the initial codes drafted in the code book, identify potential additions or removals, and confirm consistent code definitions and interpretations. After this process, the two MAPC staff reconvened to compare similarities and differences among the analysis. Final edits produced a second iteration of the codebook, which was used for the remaining qualitative analysis. MAPC used the qualitative software, Dedoose, for analysis.

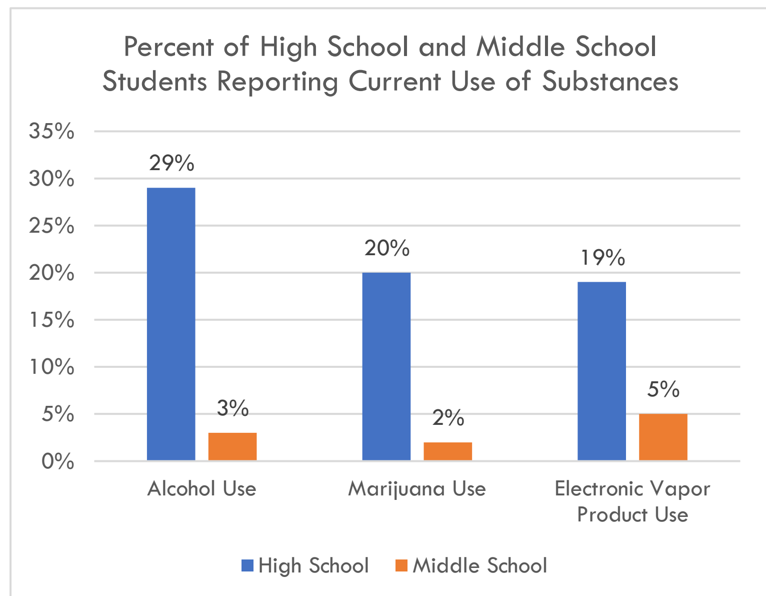
MAPC staff also analyzed the Gloucester Youth Risk Behavior Survey (YRBS) from 2022. GHD and the Gloucester Public Schools conduct the YRBS every other year with students in grades 6-12. In 2022, 600 high school students and 565 middle school students responded to the YRBS. Results from the YRBS complemented the focus groups by providing an additional source of

information about students' experiences and perceptions of substance use and factors that influence substance use.

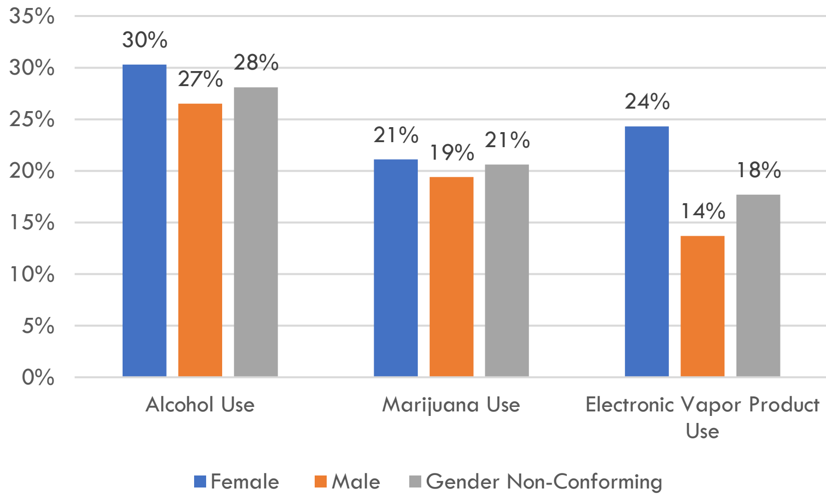
SUBSTANCE USE LANDSCAPE IN GLOUCESTER

The GHD sought to learn more about substance use among youth in Gloucester, as well as the risk and protective factors that lead to use. The YRBS and focus groups provided data on the most commonly used substances, populations who may be at higher risk for use, and how youth access substances, which is described in more detail below.

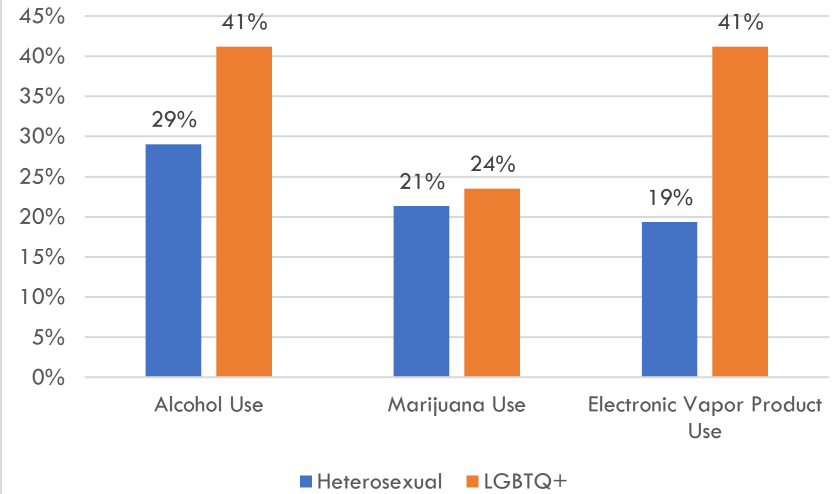
As reported in the YRBS, the most commonly used substances among Gloucester students are alcohol, marijuana, and electronic vaping products. In 2022, 29% of high school students reported current use (defined as using within the past 30 days) of alcohol, 20% reported current use of marijuana, and 19% reported current use of electronic vapor product. A smaller percentage of middle school students reported current use of these three substances; however, it is noteworthy that more students use electronic vapor products than alcohol and marijuana.



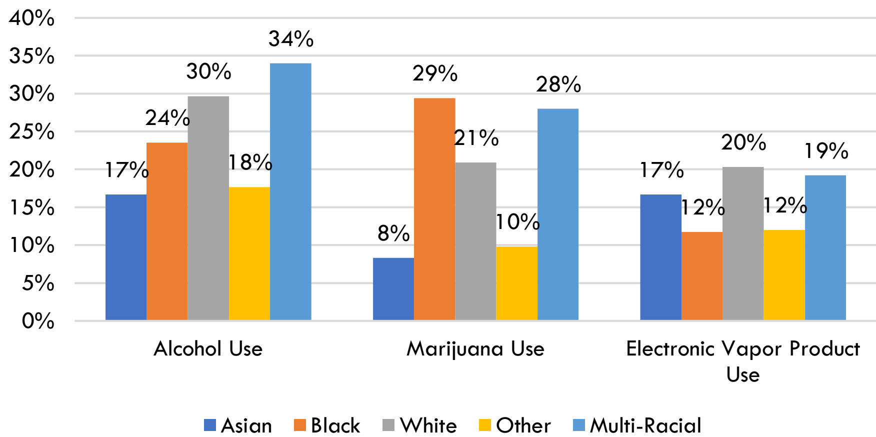
In terms demographics of high schoolers who are using, more individuals who identify as female reported current use of alcohol, marijuana, and electronic vaping products than male and gender non-conforming individuals. In addition, a much higher percentage of LGBTQ+ students reported current alcohol use than heterosexual students (41% LGBTQ+ vs. 29% heterosexual students) and electronic vaping products use (41% LGBTQ+ vs. 19% heterosexual students). In terms of ethnicity, a higher percentage of non-Hispanic or Latino identifying students reported current use of alcohol, marijuana, and electronic vaping products. Students identifying as multi-racial or white had higher percentages of current reported alcohol and electronic vapor use while students identifying as multi-racial or Black had higher percentages of current reported marijuana use. Finally, use of all three substances progressively increased from 9th to 12th grade, with a marked increase of alcohol use between 11th grade (28%) to 12th grade (51%).



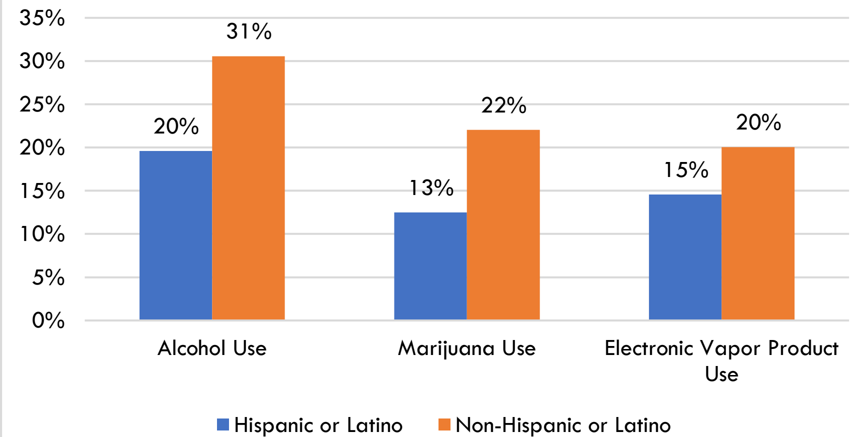
Percent of High School Students Reporting Current Use of Substances by Gender Identity
35%
30%
25%
20%
15%
10%
5%
0%
30%
27%
28%
21%
19%
21%
24%
14%
18%
Alcohol Use
Marijuana Use
Electronic Vapor Product Use
Female
Male
Gender Non-Conforming



Percent of High School Students Reporting Current Use of Substances by Sexual Orientation
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
29%
41%
21%
24%
19%
41%
Alcohol Use
Marijuana Use
Electronic Vapor Product Use
Heterosexual
LGBTQ+

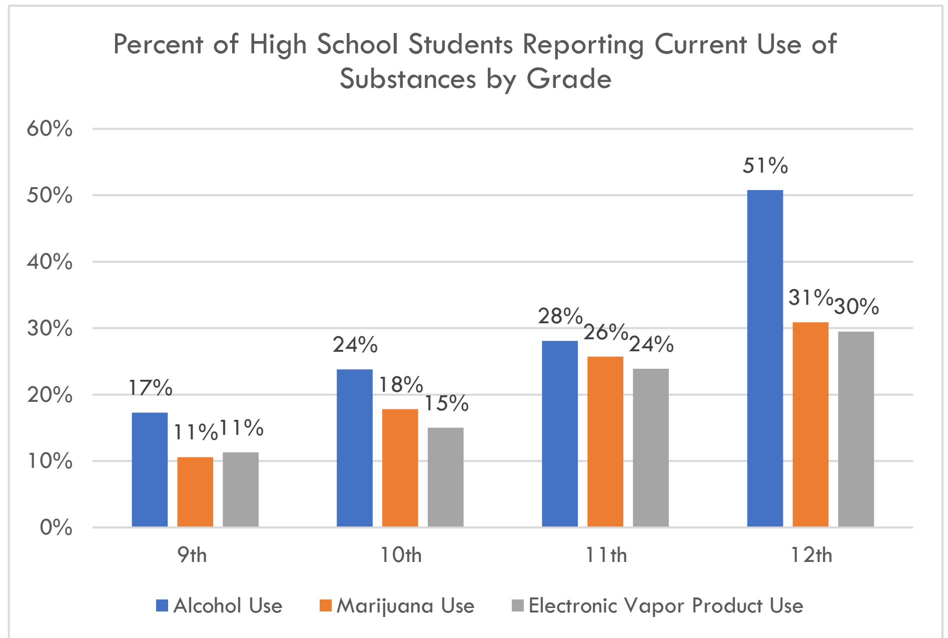


Percent of High School Students Reporting Current Use of Substances by Race
40%
35%
30%
25%
20%
15%
10%
5%
0%
17%
24%
30%
18%
34%
8%
29%
21%
10%
28%
17%
12%
20%
12%
19%
Alcohol Use
Marijuana Use
Electronic Vapor Product Use
Asian
Black
White
Other
Multi-Racial



Percent of High School Students Reporting Current Use of Substances by Hispanic/Latino Ethnicity
35%
30%
25%
20%
15%
10%
5%
0%
20%
31%
13%
22%
15%
20%
Alcohol Use
Marijuana Use
Electronic Vapor Product Use
Hispanic or Latino
Non-Hispanic or Latino

The YRBS findings were substantiated in the focus groups, with students referencing peer alcohol, marijuana, and electronic vapor product use. When asked about how students access these substances, students noted three main sources: from caregivers, older peers or siblings, or online. As one student said, "I know friends that take without asking. Their parents don't even notice either, which is really shocking." A couple of participants also said that some parents allow their kids to use their substances because there's a "perception that it's better for them to drink if at home because [parents] know they're here." Many participants, including youth, also said that students access substances from older peers or siblings or online. As one high-schooler noted "people order stuff online… it's very easy." A social worker said that youth she works with have alcohol delivered to their home in a discreet package, so their family does not know what it is.



Participants had varying responses in terms of *where* their peers use substances. They mentioned several places, including the following:

- Vaping in middle school or high school bathrooms
- At home
- Other towns, such as Salem and Boston
- Burnham's Field in Gloucester
- At high school football games

Using substances at home was the most commonly reported location, although it is important to note that not all focus group participants were asked or responded to this question.

RISK AND PROTECTIVE FACTORS

This project aimed to identify risk and protective factors for youth substance use in the City of Gloucester. The Substance Abuse and Mental Health Services Administration (SAMHSA) provides useful definitions for these terms:

- **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. [1]
- **Protective factors** are characteristics associated with a lower likelihood of negative outcomes or that reduce a risk factor's impact. Protective factors may be seen as positive countering events.[1]

As referenced in the definitions, risk and protective factors exist across many contexts and levels. On the family level, an example of a risk factor is a caregiver who models unhealthy substance use while a protective factor is caregiver disapproval of substances.[1] On the community level, a risk factor is norms that are favorable towards substances while a protective factor is policies that limit the availability of alcohol.[1] The MAPC team and GHD decided to focus on the **individual, family, peer, and community levels** for this project.

Risk factors are correlated with experiencing more risk factors and fewer protective factors, and the opposite is true of protective factors. As described by SAMHSA, "people with some risk factors have a greater chance of experiencing even more risk factors, and they are less likely to have protective factors."[1] In addition, experiencing risk and protective factors at a young age influences development of health conditions later in life. For example, young people with multiple risk factors are at increased risk for developing a substance use disorder later in life while young people with multiple protective factors are at a reduced risk.[1] Finally, risk and protective factors influence and interact with each other across levels. As noted by SAMHSA, "effective parenting has been shown to mediate the effects of multiple risk factors, including poverty, divorce, parental bereavement, and parental mental illness."[1] Together, these facts underscore the importance of intervening early to enhance protective factors and minimize risk factors that young people experience to prevent negative health outcomes later in life.

The following section describes risk and protective factors for youth substance use in the City of Gloucester. We report on the "top" risk and protective factors, or the factors that arose most frequently in the focus groups, and then also include "noteworthy" risk and protective factors, or those that were discussed less often but still merit attention. It is important to note that these are the risk and protective factors as described by the focus group participants, which was largely comprised of females who identify as white, and cannot be generalized beyond this population.

Risk Factors

Top Risk Factors

Mental Health

Mental health challenges emerged as a top contributing factor to youth substance use. Many youth and every caregiver in the focus groups discussed youth suffering from anxiety, depression,

[1] https://www.samhsa.gov/sites/default/files/20190718-samhsa-risk-protective-factors.pdf

stress, past traumas, among other mental health challenges, and the degree to which these struggles impact their day to day lives. YRBS data corroborates these findings; 37% of high school students and 33% of middle school students reported experiencing depression and 16% of high school students and 22% of middle school students reported considering attempting suicide.

Despite the prevalence of these mental health challenges, youth in the focus groups cited a lack of support for mental health issues, as well as insufficient education around coping mechanisms and warning signs of mental health issues, thus elevating substances as a possible coping mechanism. While YRBS shows that about 71% of high school students and 67% of middle school students have a coping strategy to relieve stress, there is still substantial room for improvement. In particular, social workers highlighted the role that schools should play in social and emotional coping skills, yet the schools are understaffed and under resourced to be able to effectively support students.

One youth suggested that mental health education should begin from an earlier age because "kids do have mental health problems and I feel like a lot of the time it's glossed over because people don't like the reality that kids in elementary school have the same issues that maybe a kid in high school has, they just don't know what it is. When you're in high school, it's easier to realize, 'Oh, I'm really anxious, maybe I have anxiety. Oh, I'm really depressed all the time, maybe I'm depressed', whereas when you're in middle school and elementary school you don't really understand any of that." Another youth added that "people are not always taught well enough how to handle their emotions" so they turn to substance use to fix their problems.

Pressure to Succeed

Another source of stress that both youth and caregivers discussed was a general pressure to succeed, including high school, social life, college, and other decisions about their future. In the YRBS, 60% of high school students and 49% of middle school students reported worrying fairly or very often about school. This sense of pressure presented challenges for mental health. Youth discussed the stress they feel in trying to balance their school, job, social, and financial responsibilities, all while also looking forward towards the future. One youth expanded, saying "Also time management and balance through family and friends, school, sports, all of that and making sure you're staying close to everyone. And with missing out on certain things, I think just trying to have time for everything is really hard." A caregiver echoed this sentiment discussing their child, saying that in high school "there's going to be college talks soon, grades, fitting in, school work, social life, relationships, different kinds of things [my child is] navigating now, finding himself. And it's a lot to balance and stuff..."

Beyond the wide array of daily responsibilities, youth are also beginning to look forwards and feel the weight of their decisions in how they potentially impact their futures. One youth explained the perceived gravity of the moment, saying, "You can change everything and you can switch your major or switch your school, but it is difficult and even having people tell me that, still the thought of you're still probably gonna end up doing this and you have to study what you like and

that's gonna be your job for the rest of your life, it's really stressful and trying to balance everyday life on top of that, I feel like some people don't understand. It's a very stressful time."

Lack of Stability at Home

Home life was frequently noted as a stressor for students, starting in elementary school through high school. This finding is also reflected in the YRBS data, which found 22% of high schoolers and 20% of middle schoolers worry fairly or very often about family issues. For some, it was an acute life event that caused stress. A couple of students shared that their parents got divorced when they were between the ages of 9-11, which "really put [them] through a tough time." A social worker also shared that being placed in foster care or under the care of a grandparent or other relative caused duress among young students. Finally, one student noted that the death of a close relative was a difficult time for them.

Other participants described generally stressful environments at home. As one student said,

> "My sister was in maybe freshman year, yeah, and when I was in fifth grade, and she had a lot of struggles with mental health, and would get in a lot of arguments with my parents too. So it was kind of like sometimes I was the only one she would talk to, so I had to take care of her, but I was the younger one. And then it kind of of just made me feel like I had to be perfect so that my parents won't have to deal with me too."

Multiple students echoed that strife between their parents and siblings, often related to their siblings' poor mental health or substance use, caused stress in their own lives. Finally, many participants noted that parental substance use influences youth to use substances as well. Several youth participants shared that their parents had drinking problems, with one person noting their parent had gone to rehab. In YRBS, 11% of high schoolers reported that they perceive someone in their household "drinks too much alcohol", 20% reported someone uses electronic vapor products, and 21% reported someone smokes cigarettes, with similar trends for the middle schoolers. Many of the stressors noted by participants—such as divorce, substance use at home, mental illness— are considered Adverse Childhood Events (ACEs). These traumatic events are linked with chronic health problems in adulthood, including substance use.[2]

Peer Group

Both youth and caregivers mentioned peer pressure as a social stressor. The pressure manifests itself both in everyday decisions, such as how to dress and what to do in school, as well as the pressure to start using substances. One youth explained the chain of events as "a domino effect sometimes. One person says, 'Hey look I'm drinking.' That triggers a bunch of other kids because they want to do it too. They want to be cool people that are doing it. Kids start talking about it. All these other kids get curious about it. It's a long chain." This quote illustrates the impact that

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[2] https://www.cdc.gov/vitalsigns/aces/pdf/vs-1105-aces-H.pdf

peer substance use has on youth, especially if it is from an older peer or driven by a "fear of missing out" on social experiences.

Notably, in the YRBS, most high schoolers reported that their close friends feel it would be "wrong or very wrong" to smoke cigarettes, drink 1-2 drinks of alcohol nearly every day, drink 5 or more drinks of alcohol twice a week, or use prescription drugs that are not prescribed to them. However, only 52% of students reported their friends would feel it would be "wrong or very wrong" for them to use electronic vapor products and 43% reported the same for smoking marijuana once or twice a week; these data highlight perceived norms about specific substances, which may increase or decrease likelihood that a youth will use them.

Another stressor mentioned by youth and caregivers, albeit less frequently, was bullying, including "mean" and "judgmental" comments from peers in person, and bullying via social media. In the focus groups, high schoolers noted that bullying was more prevalent in middle school, which is reflected in the YRBS. About 25% of middle schoolers reported being bullied in school and 19% reported being bullied while not at school or electronically; these percentages drop to 8-9% for each of the types of bullying for the high schooler students. Another facet of social life that youth highlighted as contributing to stress, and sometimes resulting in a bullying situation, was evolving friendships and social circles. A couple youth participants cited losing friendships throughout their childhoods as people grew apart.

It is important to note that while peer pressure emerged as a clear risk factor for substance use, focus group participants communicated that peer groups can also serve as a protective factor; friend groups generally influence the activities and behaviors of youth, whether that results in healthy or unhealthy decisions. This finding underscores the significance of establishing a community and friend group early on in a child's development and social life.

Culture of Use in Gloucester

Caregivers and youth perceived Gloucester as fostering a culture around drinking. As one caregiver said, "I feel like we as a community really condone alcohol, it's a part of everything we do; it's even probably the focal point of our biggest celebration of the year." Both caregivers and students referenced this celebration, Fiesta Day, as an event where there is frequent public intoxication. Caregivers also described Gloucester as an "alcohol saturated community" without many other forms of entertainment. "Once you hit 21 what else are you going to do in Gloucester but go to the bars?" one caregiver asked. Although students were not going to bars, having adults in their life model this behavior may normalize alcohol use and be a risk factor for their own use.

In addition, caregivers noted that there are not many recreational activities for young teens. One caregiver said that her kid used to go to a Friendly's on Friday nights but it closed. Gloucester also used to have a Teen Center at the YMCA, but that closed too. Apart from the bowling alley, this caregiver did not feel as if her teenager had a safe place to congregate. Availability of

drugs, community norms favorable toward drug use, and inadequate youth services and opportunities for pro-social involvement are all risk factors for youth substance use.[3]

Noteworthy Risk Factors

- **Social Media:** There seemed to be a consensus among youth, caregivers and social workers that excessive exposure to smartphones and social media was a stressor for youth and negatively impacted mental health, for a variety of reasons. Social media serves as a mental escape for youth, facilitating its use as an unhealthy coping mechanism to "turn off your brain." Yet, social media can result in more exposure to the very stressors they are trying to escape, such as peers and school. Additionally, access to a smartphone prematurely begins exposure to substances and other related topics.
  - Caregiver: "I think the difference from our time and their time is that we got to go home and be in a safe bubble. And they come home and they have a device in their hand that keeps them connected to the negativity. There's no break. Whereas before, I would maybe have a hard day at school with a peer. And I'd come home and I'd be in my safe space with my mom. And I could deconstruct it. Now parents are combating that constant connection to that negativity."
  - Youth: "At some point I got a phone and then... A smartphone and then my mental health just deteriorated and I closed myself off of my friends and stuff."

- **COVID-19:** A couple caregivers mentioned that COVID-19 has contributed to a general disconnect from school and community, and in some cases adding to social anxiety.
  - Social worker: "During COVID, youth didn't find community. We have a vacuum and kids are scrambling. They feel awkward—would rather go home and sit because that's what they've been doing for two years. They would rather talk to people online."
  - Caregiver: "And I think the pandemic has altered how my children interact with the world. I have teenagers who don't wanna leave the house, like a teenager that doesn't wanna leave the house a lot and it's a lot related to fear of being sick."

Protective Factors

Top Protective Factors

Recreational Outlet

Students, caregivers, and social workers universally lauded participation in recreational activities as a key protective factor. Participants noted a range of activities that had been a positive influence on youth's lives: sports teams, school run club, bowling league, D&D club, dance classes, theater, fine arts programs, and more. While all quite different, these activities provide a structured way for students to socialize. As one parent said, reflecting on their elementary school aged child, "My daughter just likes the social aspect of bowling. It's a team. It's just the

[3] https://youth.gov/youth-topics/risk-and-protective-factors#_ftn

encouragement. It's something she wanted to learn so she's with her peers, and they encourage each other… It's a big social thing for her, which is really fun." High schoolers echoed this sentiment that recreational sports created social connection. One student said this was particularly beneficial after being isolated during the COVID pandemic, "Volleyball just helps me get out more 'cause I've isolated myself so much these past couple of years. So I've gotten out more because of it."

Participants noted other benefits of participating in an activity. One student shared that it's "rewarding when you make own personal goals and just feel productive" while a social worker said that activities "keeps [kids] busy and focused. With the older kids, if you get in trouble, you can't play [sports] so keeps them focused." Having a sense of purpose and opportunities to engage in prosocial behavior were viewed as the main advantages of participating in a recreational activity.

Sense of Community

Related to recreational activities, having a sense of community brought youth joy and provided a social support system. While this could come from sports or another structured activity, it could also come from other places. One student, for example, described how having the same friend group from childhood to adolescence "was important in ensuring that you have a good support system in high school." Caregivers and social workers gave examples of how places could foster a sense of community; many of them discussed YOUnity and the former Teen Center as the YMCA as safe, welcoming, and positive spaces for adolescents to go and make connections.

Parenting Style

Parenting style emerged as a key protective factor in modeling healthy behaviors and teaching youth about substance use. Focus group participants spoke to a wide spectrum of parenting strictness, ranging from easy going (in which caregivers may purchase substances for their children), to very strict (to which youth may respond by rebelling and using more substances). One youth described the differences between both their parents: "I know my dad cares about me and that's why he's saying this stuff, but it feels almost like I have to hide it from him, whereas my mom is like, 'I want you to be honest with me, and I want us to have a transparent relationship. And I know you probably will do this stuff at some point, so I'd rather have you tell me and we know and if anything happens, I am already aware of the situation,' whereas I feel like my dad would ground me." In this case, which was fairly prevalent among youth, they are more willing to share with the parent who will not react solely in a punitive manner.

The ideal approach that emerged from all three participant types was to lead by example in terms of substance use, engage in open communication with children, and foster trusting relationships. In the focus groups, one youth described a conversation they had with their caregiver: "When I was a freshman last year, my mom sat me down and had a talk with me, and she obviously did that type of stuff, but she just told me the cons about it and how people around me are probably gonna do it, and not to really feel forced to do anything and to do what you

want, and obviously know what's good and bad, and I just took her advice and listened to it." The communication referenced by this youth exemplifies a trusting relationship in which youth feel safe to share with their caregivers, ultimately reducing unsafe behaviors. Even a social worker advised, "Don't scare children; just inform them in a fun way. Have parents lead by example." Currently, only 42.5% of high schoolers report talking with their parents/guardians sometimes or often about making decisions about substance use according to the YRBS.

Noteworthy Protective Factors

- **Creative Outlets:** Youth highlighted individual activities that allowed them to destress and have a creative outlet, such as art classes, writing, drawing, and photography.
    - Youth: "I think that doing those activities can be mindless and they get you out of your head sometimes and just like not like a bad distraction, just something else to focus on."

- **Resource Centers at School:** Some focus group participants reported a shift in how disciplinary issues were handled in school, evolving away from shame and moving more towards engaging youth in conversation and providing support. Some schools have also created innovative resource centers for youth where they can come for support.
    - Caregiver: "When a kid was caught vaping or whatever, they go to the counselors, they reach out to the parents, let's have a discussion about it. It's talked about. It's not really shamed, which is a good thing. So it's just, why are you doing this? How can we help you not do this anymore, work past this? So it definitely... Seems like it's an opportunity for communication, which is... It's a healthier setting I think"

- **Therapy:** A couple youth participants organically raised the topic of therapy, noting the benefits of having that outlet to process stressful and sometimes traumatic life events and experiences.

- **Safe Neighborhood:** A couple youth and caregivers mentioned the important role that a safe neighborhood plays in a child's experience and sense of community because it allows youth to play outside and develop friendships.
    - Caregiver: "But we actually live in…a public housing community, but it is kind of enclosed. So, there's not a main thorough way that cuts through. So, my kids kind of grew up free range. They just ran the neighborhood with their friends as long as they stayed within yelling distance."

INTERVENTIONS

A primary goal of this research was to recommend interventions that would help prevent substance use among 9-11 year olds in Gloucester. As described in the Methods section, a portion of the focus group focused on asking participants what they think an effective and well-attended intervention would be. Based on their ideas (as well as the risk and protective factors enumerated

above), MAPC generated three possible interventions that cover a variety of audiences, settings, activities, and purposes.

Safe, welcoming, fun environment for youth at community center

Many focus group participants highlighted the role of community in keeping youth occupied and happy, and simultaneously lamented the lack of opportunities for youth to engage in affordable, community-building activities. YOUnity, a drop-in center for youth ages 16-25, was highlighted as a model that provides a safe space for youth to find community, and a few social workers and caregivers suggested creating a "baby YOUnity" that would cater to late elementary and early middle school aged youth.

This program could be multi-faceted, aiming to accomplish multiple goals. The first goal would be to "foster a sense of belonging," as one social worker said. A common risk factor for substance use was when youth did not feel a sense of community. Thus, a space in which youth are welcomed, can foster friendships and community, and have activities to occupy their time would satisfy this need. One caregiver framed this well, explaining that "I think organized and unorganized peer time, I think, having an opportunity for kids to be in a situation where they are interacting with their peers and have that sort of mentorship where somebody can help instill coping strategies. And, help sort of, I guess maybe it's positive youth development that I'm thinking of. And then just opportunities to be successful because it's building a sense of esteem and belief in themselves and their ability."

As described by that participant, a key component of this intervention would be having both structured and unstructured time for youth, as these both can serve similar and slightly different purposes. Structured time allows for youth to get involved in recreational activities, as well as learn explicit skills in workshops or other sorts of direct programming. Unstructured time would also be important for this program as it allows youth to form connections with peers and organically build community.

A community center, oftentimes specifically the YMCA, was raised as an option for an intervention setting because it is a neutral setting (as compared to a high school) and already has the necessary infrastructure to host youth. A key characteristic of this program is that it should be accessible to anyone regardless of financial abilities; caregivers described refraining from including their children in various recreational activities if they could not afford it.

Behavioral Health Education

Students and parents thought behavioral health education, or education about substance use and mental health, may prevent or encourage healthier substance use. On the substance use side, participants hoped this education would provide youth with factually accurate information about different types of substances and their effects. One student noted that this education should "not [try] to scare kids," alluding to substance use education's historic use of scare tactics. Relating to mental health, participants wanted youth to learn and talk about mental health at an early age

to destigmatize the subject. They hoped that youth could learn and develop healthy coping strategies as part of this education.

Participants suggested a few potential options for who may deliver the education. In terms of substance use education, many youth thought that students would be more receptive to information if a peer was delivering it. As one high-schooler said, "I think for kids it should be taught by teens 'cause they're around the same age, but also I think kids look up to teens and will take it more seriously than from an adult." Another student echoed this sentiment, "I said [the education should be] taught by teens because I feel it's more meaningful to hear it come from someone who's kind of around your age." Other participants, including students and caregivers, suggested having someone with lived experience speak to a class. In terms of mental health education, participants largely brought up teachers or mental health clinicians as educators.

Notably, the participants did not provide many details about what a substance use or mental health curriculum would look like. It is important to note that there are many available evidence-based substance use education programs (see Appendix). These programs differ in terms of where they are delivered, by whom, and if they are universal or selective interventions. However, they are alike in that they use a curriculum over a series of time to reinforce knowledge and influence behavior; one-off speaker series are unlikely to affect long-lasting change. Deliverers of behavioral health education should also consider consulting with a mental health clinician to ensure that the content is trauma-informed and –responsive.

Parenting Style Education

Many participants, most of whom were students, independently raised the idea of creating programming for caregivers to influence their parenting style around substances. This type of programming would serve two purposes: 1) educating caregivers about how to communicate with youth about substance use and 2) educating caregivers about how to model healthy behavior at home. In terms of the first purpose, students thought the programming should cover how to talk to youth about using substances, identify warning signs for youth substance use, and respond if their child is using.

Students hoped that such programming would de-emphasize punitive approaches towards substance use and instead encourage open communication between caregivers and children. In addition, a couple of students suggested that such programming cover how caregivers can appropriately monitor children's social media use as a way of regulating youth mental health, a risk factor for substance use.

Other participants discussed how programming should teach caregivers how to enhance protective factors at home. For example, education could teach parents about needing to model healthy behavior around their own substance use or "leading by example," as one student put it. In addition, one caregiver suggested programming for the whole family to improve stability at home. She recommended creating structured opportunities to "[get] the family together, make the family bond, have the kids talk with the parents honestly, and then do something to celebrate as a

family working together." This type of programming could foster more transparent communication between caregivers and youth.

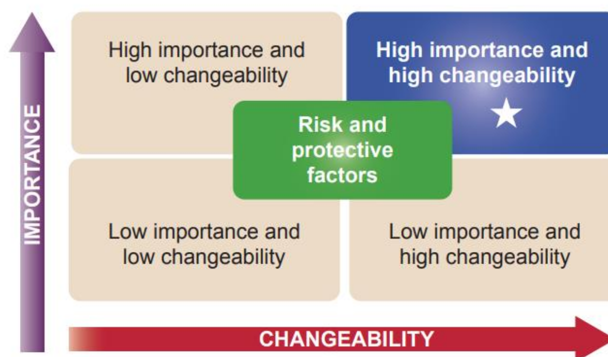
There was no consensus about where the intervention should take place, although participants raised the possibility of a community center or school hosting it. In addition, there was no consensus about who would provide the programming, but participants suggested having other caregivers, a mental health clinician, or even teens deliver this education.

CONCLUSION

Gloucester youth experience a range of risk and protective factors across the individual, family, peer, and community levels, as reflected in the YRBS and focus group data. Notably, each young person will experience these risk and protective factors differently, if at all. Individual experience of these risk and protective factors will create unique conditions that lead to an increased or decreased likelihood of substance use later in life. Interventions that aim to *enhance protective factors* while *minimizing risk factors* will be the most successful in preventing youth substance use.

One intervention, however, cannot address all risk and protective factors. Prioritizing risk and protective factors based on **importance** and **changeability** can narrow on which factors to focus. The SAMHSA Strategic Prevention Guide recommends using the following questions to assess importance and changeability[4]:

- **Importance:**
    - How much does this factor contribute to our priority problem?
    - Is this factor relevant, given the developmental stage of our focus population?
    - Is this factor associated with other harmful behavioral health problems?



- **Changeability**
    - Do we have the resources and readiness to address this factor?
    - Does a suitable program or practice exist to address this factor?
    - Can we produce outcomes within a reasonable timeframe?

[4] https://www.samhsa.gov/sites/default/files/20190620-samhsa-strategic-prevention-framework-guide.pdf

Choosing a risk or protective factor with high importance and high changeability will likely yield the most impact.

A major limitation of this research is the overrepresentation of participants who identified as white and female. Before taking further steps to develop programming, it is critical to connect with more diverse populations to hear about their experiences. Structural forces—such as laws, norms, and practices that promote structural racism, homophobia, transphobia, and other forms of bias—influence how identity affects individual life experiences and thus what risk and protective factors people may encounter. Hearing a diverse set of perspectives will help GHD prioritize risk and protective factors that not only decrease likelihood of youth substance use, but also lead to more equitable outcomes.

This report presents three potential intervention ideas that arose directly from community members. Evidence-based and -informed interventions (see Appendix) can provide additional content for the curriculum of these possible interventions. Regardless of which intervention is chosen, it is important to incorporate the ideas of youth during the program development process. Their collaboration will lead to a more robust intervention that is reflective of and responsive to youth's priorities and, ultimately, help ensure the intervention has the intended outcome of reducing substance use in Gloucester.