

What is PACE Vermont?

The Policy and Communication Evaluation (PACE) Vermont Study is a research and evaluation partnership between the Vermont Department of Health and the University of Vermont Center on Behavior and Health. Using online surveys administered three times annually, the goal of the PACE Vermont Study is to understand the impact of state-level policies and communication campaigns on substance use beliefs and behaviors in young Vermonters.

Participants were recruited using posters, emails, and online ads and could earn online gift cards for completing surveys. For more information on the PACE Vermont study visit pacevt.org.

The initial three waves of online surveys were conducted between March and October 2019, with Wave 1 being open between 3/26/2019 and 6/25/2019. Approximately 1,500 young Vermonters participated in PACE.¹

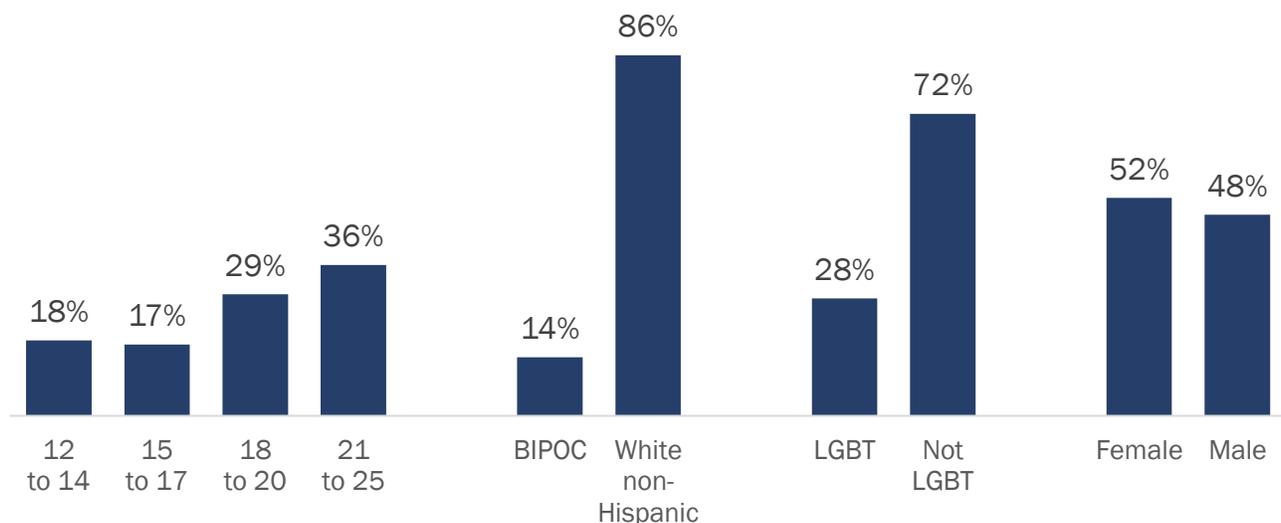
- 480 Youth (ages 12-17) and 1,037 young adults (ages 18-25).
- Nearly 70% of respondents (74% of youth and 69% of young adults) completed all three waves.
- Data were weighted by age, sex, and county of residence to better represent the population of Vermont.

Survey respondents were mostly young adults (65%), white non-Hispanic (86%), and did not identify as LGBT (72%). Slightly more females (52%) responded to the survey than males (48%), but respondents were more evenly split on sex than other demographic characteristics.

KEY POINTS

- **Some respondents aware of campaigns changed behavior as a result of being exposed to messaging.**
- **Awareness of communication campaigns among PACE participants was highest for campaigns running during Wave 1 of PACE.**

Overall Demographics of PACE Vermont Survey Respondents



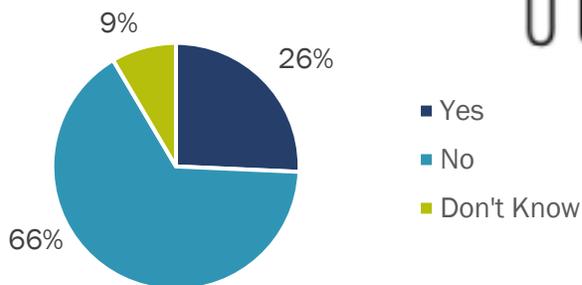
PACE VT – Communications Campaigns

During Wave 1 (3/26/2019 – 6/5/2019) PACE asked youth and young adults whether they had seen or heard information about several active state-level campaigns addressing the risks of substance misuse. Respondents were also asked to select the single peer crowd which they most fit in or identified with from a pre-defined list of 11 groups. Peer crowds are groups of individuals with similar characteristics or interests.ⁱⁱ Although this brief describes campaign recognition within all 11 peer crowds, campaigns are typically designed to reach a limited number of peer crowds while others have no specific peer crowd. Additionally, while the PACE study was an opportunity to evaluate campaign awareness and behavior change, PACE was not designed to reach the same audiences as the campaigns being reviewed, and therefore the PACE respondents may not have been part of the audiences the campaigns were designed to reach.

Outlast

Outlast is a campaign reaching Vermont youth 12-17 at increased risk of alcohol and marijuana use. It focuses on living with originality, beyond using substances to have fun. The campaign launched in 2018, with two phases of messaging that ran in late 2018 and through the first quarter of 2019.

A quarter of youth who took the PACE Survey were aware of the Outlast Campaign.

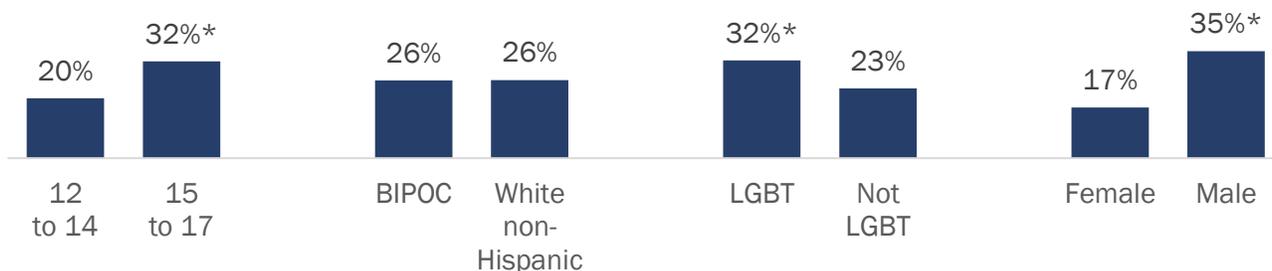


OUTLAST

Campaign awareness

The Outlast campaign was recognized by 112 – or 23% – of the 480 youth who participated in the PACE Survey. Awareness was significantly higher among 15-to-17 year olds than 12-to-14 year olds. Additionally, LGBT and male respondents were significantly more aware of Outlast than respondents who did not identify as LGBT and females, respectively.

Percentage of Individuals Aware of Outlast VT by Demographics

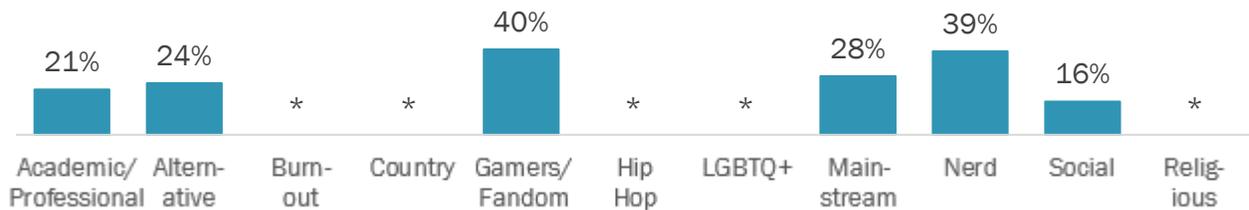


*Indicates a statistically significant difference ($p < .05$).

Did awareness differ across peer crowds?

Vermont youth (12-17) who identified as part of the gamers/fandom (40%) and nerd (39%) peer crowds were most aware of Outlast Vermont. Awareness was lowest among the social peer crowd (16%).

Percentage of Individuals Aware of Outlast Within Each Peer Crowd



*Suppressed due to <6 observations.

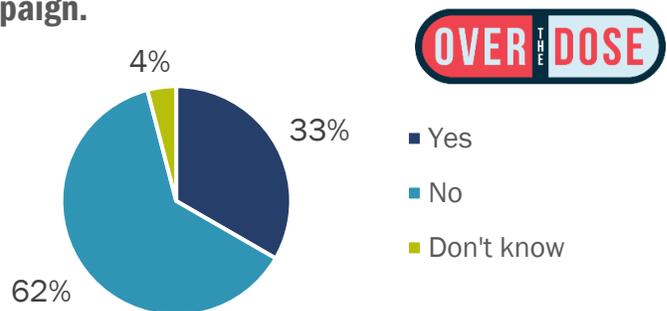
Was campaign recognition associated with changes in behavior?

With the Outlast campaign newly launched, PACE Vermont questions only focused on campaign awareness, therefore behavior change data are not available for this campaign.

Over the Dose

Over the Dose is designed to reach young adults who identify as being part of the “partier” peer crowd, and therefore, might be at a higher risk of misusing prescription opioids. The campaign addresses the risks of opioid misuse, including mixing with alcohol. From the campaign launch in November 2017 to the time the PACE survey data was collected through October 2019, there were three phases of Over the Dose messaging that ran for approximately 8 weeks each.

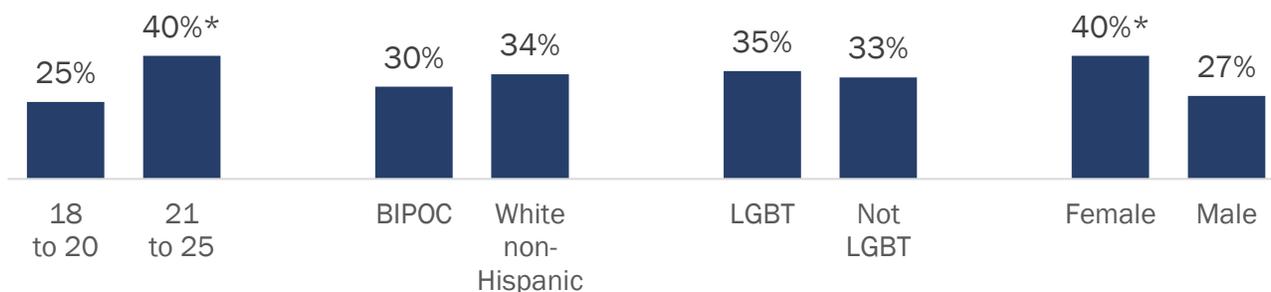
One-third of young adults who took the PACE Survey were aware of the Over The Dose campaign.



Campaign awareness

The Over the Dose campaign was recognized by 383 – or one-third – of the 1,037 young adults who participated in the PACE Vermont Study. Awareness was significantly higher among older (21-25) respondents compared to those who were younger (18-20) and for females compared to males.

Percentage of Individuals Aware of Over the Dose by Demographics

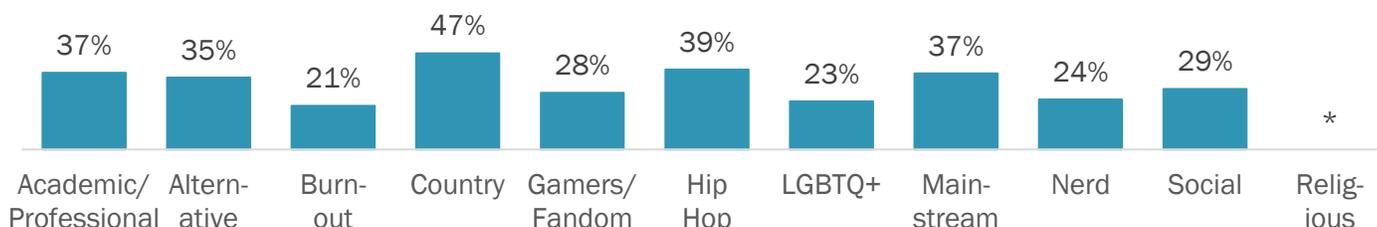


*Indicates a statistically significant difference ($p < .05$).

Did awareness differ across peer crowds?

Over the Dose is designed to primarily reach the “partier” peer crowd, a group that was not included in the list of 11 predefined crowds from which respondents could choose to self-identify. Nearly half (47%) of young adults who identified as being part of the country peer crowd were aware of Over the Dose. This peer crowd was the most aware of the campaign, followed by those who identified with the hip hop peer crowd (39%). Awareness was lowest among the burnout peer crowd (21%). It is difficult to determine which peer crowd(s) “partiers” most closely resemble, however, given that awareness of Over the Dose was highest among the country and hip-hop crowds, it is possible that there is some overlap in behaviors between these crowds and “partiers.” However, this assumes that the campaign reached the intended peer crowd, which might not be true.

Percentage of Individuals Aware of Over the Dose within Each Peer Crowd



*Suppressed due to <6 observations.

Was campaign recognition associated with changes in behavior?

Over the Dose seeks to educate higher risk young adults on the risks of prescription opioid misuse, including mixing with alcohol.

Of the 383 Young Adults who were aware of the campaign, nearly 15% indicated that they took action because of what they learned from the messaging.



Of the 383 respondents who were aware of Over the Dose, five percent decided not to take a prescription opioid in a dose higher than prescribed, while 9% chose not to mix a prescription opioid with alcohol – both potentially lifesaving decisions. Finally, 6% took another action as a result of seeing Over the Dose content. Although these rates are low, this is likely due to the fact that young adult respondents are unlikely to misuse prescription opioids (3%) and tend to believe that they are highly addictive.

Actions taken by respondents who were aware of Over the Dose:



Decided not to mix a prescription opioid with alcohol	9%
Other	6%
Decided not to take prescription opioids in a dose higher than prescribed	5%

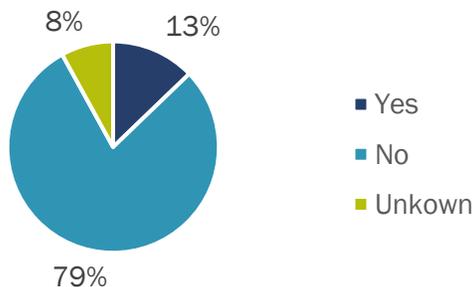
*Respondents could select multiple responses. Therefore, percentages will not add to the total who took any action.

Do Your Part

Do Your Part is intended to reach Vermont adults (18+) and focuses on the safe storage and disposal of prescription medications. The campaign launched in 2018 but also ran from April 15, 2019 through April 27, 2019 to promote the annual Drug Enforcement Administration (DEA) drug takeback day.

Campaign awareness

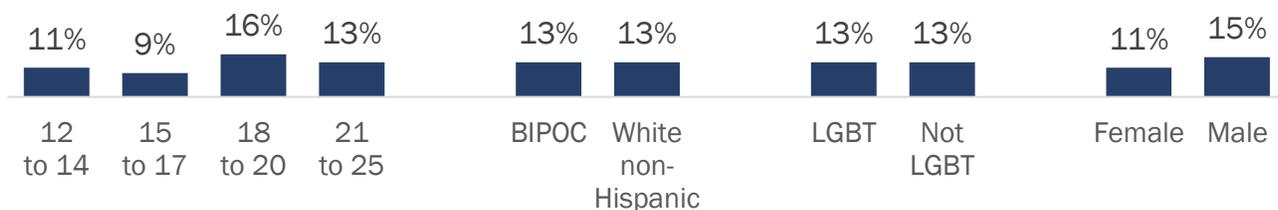
Most of the young adults and youth who took the PACE Survey were not aware of the Do Your Part Campaign.



PACE VT – Communications Campaigns

The Do Your Part campaign was recognized by 185 – or 13% - of the 1,517 youth and young adults who participated in the PACE Survey. Do Your Part was not focused on youth or young adults, and media implementation was skewed toward older adults which could explain the low level of awareness compared to other campaigns. Awareness did not significantly differ across a variety of demographic groups.

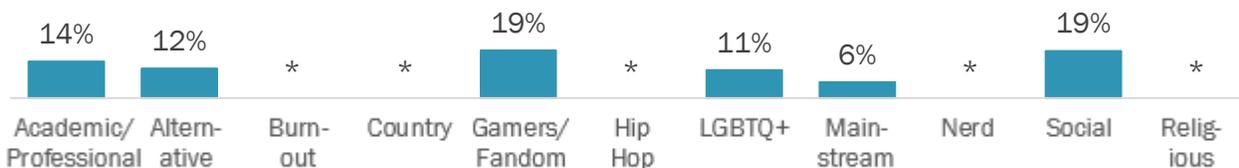
Percentage of Individuals Aware of Do Your Part by Demographics



Did awareness differ across peer crowds?

Awareness of Do Your Part was low among all peer crowds, likely because younger Vermonters were not the primary intended audience for this campaign, and it was not designed to reach any specific peer crowds. Individuals in the gamer/fandom peer crowd had the highest awareness out of all groups (19%), while awareness was lowest among those in the mainstream peer crowd (6%).

Percentage of Individuals Aware of Do Your Part within Each Peer Crowd



*Suppressed due to <6 observations.

Was campaign recognition associated with changes in behavior?

Do Your Part primarily educates the public about the safe storage and disposal of prescription medications. Messaging addresses the potential misuse or harms of accidental ingestion by kids and pets if not stored safely, and harms to the environment if not disposed of properly.

Of the 185 PACE participants who were aware of the campaign, nearly one-third (32%) indicated that they took action because of what they learned from the messaging.



More than 1 in 10 respondents who were aware of Do Your Part chose to store prescription medications more securely (11%). Additionally, nearly 2 in 10 disposed of unused medications at a local pharmacy kiosk or other location (18%). Other actions, including mailing unused medications, were less common (6%).

Actions taken by respondents aware of Do Your Part:



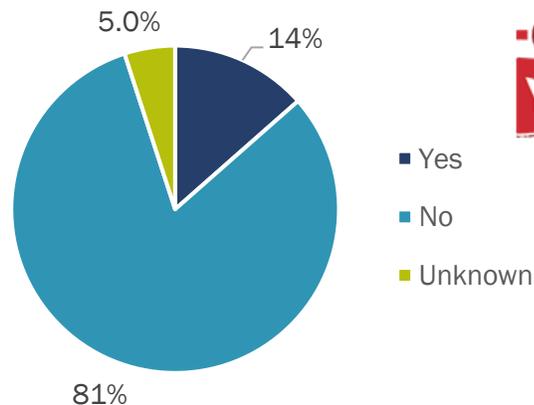
Disposed of unused medications at a local pharmacy kiosk or other location	18%
Chose to store medications more securely	11%
Other (including mailing unused medication)	6%

*Respondents could select multiple responses. Therefore, percentages will not add to the total who took any action.

Check Yourself

Check Yourself is intended to reach young adults ages 21-25 engaging in higher risk drinking behaviors. The campaign started in 2015, with messaging focusing on the social consequences and health effects of binge drinking, however, it did not run during the PACE survey. All PACE respondents between the ages of 18 and 25 were asked whether they were aware of the Check Yourself campaign.

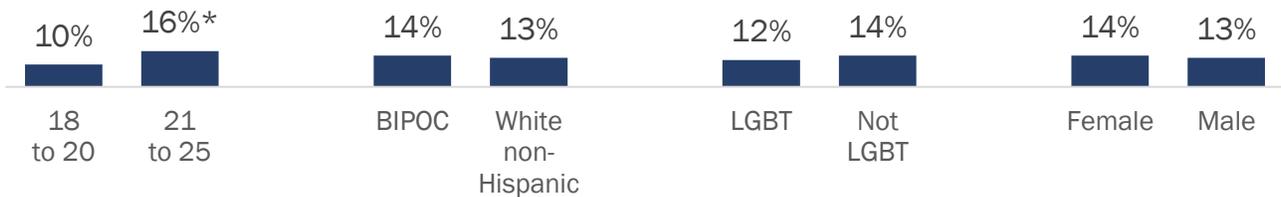
Most Young Adults who took the PACE Survey were not aware of the Check Yourself Campaign.



Campaign awareness

The Check Yourself campaign was recognized by 149 – or 14% – of the 1,037 young adults who participated in the PACE Vermont Study. This was lower than awareness of other campaigns, likely because Check Yourself did not run during Wave 1 of PACE. Awareness was significantly higher among older (21-25) respondents compared to those who were younger (18-20). This is expected, as the campaign was intended to reach young adults of drinking age. Differences were not statistically significant across the other demographic groups.

Percentage of Individuals Aware of Check Yourself by Demographics

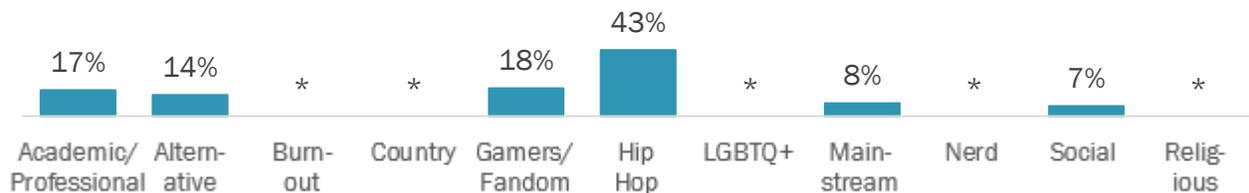


*Indicates a statistically significant difference ($p < .05$).

Did awareness differ across peer crowds?

Awareness of the Check Yourself campaign was highest among young adults who identified as being part of the hip-hop peer crowd (43%). The next highest group was gamers/fandom with only 18% aware. Respondents in the social peer crowd were the least likely to be aware of Check Yourself (7%).

Percentage of Individuals Aware of Check Yourself within Each Peer Crowd



*Suppressed due to <6 observations.

Was campaign recognition associated with differences in behavior?

Check Yourself acknowledges that young adults of legal age might choose to drink. However, it emphasizes the importance of drinking responsibly and employing strategies to prevent alcohol-related harms.

Of the 149 young adults who were aware of the campaign, nearly two-thirds (62%) indicated that they took action as a result of seeing the messaging.



Pacing – both the respondent pacing themselves (32%) or reminding friends to pace themselves (23%) – was common among actions taken, along with eating high protein foods before drinking (24%) and skipping a last round (12%). However, the most common action respondents took was to drink water between drinks (43%). Of note, younger (18-20) respondents were significantly less likely to drink water between drinks than older (21-25) respondents (14% vs 58%).

Actions taken by respondents aware of Check Yourself:



Drank water between drinks	43%
Paced themselves to not drink too much too quickly	32%
Ate high protein foods before drinking	24%
Reminded friends to pace themselves	23%
Skipped having "one last round"	12%

*Respondents could select multiple responses. Therefore, percentages will not add to the total who took any action.

Key Takeaways

Campaign awareness is dependent on a number of factors, including when the campaign ran and for whom it was tailored. Over the Dose had the highest level of awareness of the four campaigns, at least in part because it ran prior to and during Wave 1 of PACE and was designed for higher risk young adults. Similarly, Outlast, the campaign with the second-highest level of awareness, ran during Wave 1 and was designed for higher risk youth. Do Your Part ran prior to and at the end of Wave 1, but media implementation skewed toward older adults, rather than a focus specifically on the young adult population, possibly affecting awareness. Respondents were also not as likely to be aware of Check Yourself as other campaigns which could be a result of the campaign running prior to, but not during, Wave 1.

While some respondents were aware of campaigns and changed their behavior based upon knowledge learned directly from the campaigns, behavior change is a valuable metric of campaign success only if the person is at risk of participating in that behavior to begin with. For example, the percentage of young adults misusing prescription opioids is low, so it is unsurprising to see that the percentage who chose not to misuse opioids *because* they saw ads from Over the Dose is in the single digits. Conversely, nearly two-thirds of young adults who saw the Check Yourself campaign employed strategies that they had learned in the ads. Given that alcohol is the most commonly used substance among young adults, PACE participants likely had more opportunity to employ the strategies described in the campaign.ⁱⁱⁱ

PACE VT – Communications Campaigns

By creating tailored, relevant messaging and having clear goals (prevention, harm reduction, etc.), campaigns may be more likely to effect behavior change among their identified audiences. This data brief highlights the potential to leverage these factors with public health messaging campaign audiences to encourage healthy behaviors and decrease substance use in Vermont.

Note: PACE Vermont is a convenience sample of Vermont youth and young adults. Although the data have been weighted by age, sex, and county of residence using 2017 Vermont population estimates, the results presented above are not generalizable to the population overall. Additionally, due to small numbers and other variables, including overlapping behaviors among peer crowds, results by peer crowds should be interpreted with caution.

All data included in this brief were collected by the University of Vermont. The Vermont Department of Health would like to acknowledge the University of Vermont and Dr. Andrea Villanti for their leadership of the PACE Vermont Study.

The PACE Vermont Study was funded by the Vermont Department of Health, the University of Vermont Cancer Center, and the University of Vermont Larner College of Medicine.

For more information: <https://www.healthvermont.gov/alcohol-drugs>

For data related questions: Jeff Trites, Jeffrey.Trites@Vermont.gov

For questions related to media campaigns: Megan Trutor, Megan.Trutor@vermont.gov

ⁱ Villanti A, Vallencourt C, West J, Peasley-Miklus C, LePine S, McCluskey C, Klemperer E, Priest J, Logan A, Patton B, Erickson N, Hicks J, Horton K, Livingston S, Roemhildt M, Singer E, Trutor M, Williams R. Recruiting and Retaining Youth and Young Adults in the Policy and Communication Evaluation (PACE) Vermont Study: Randomized Controlled Trial of Participant Compensation. *J Med Internet Res* 2020;22(7):e18446. <https://www.jmir.org/2020/7/e18446>

ⁱⁱ Moran M.B., Walker M.W., Alexander T.N. Why peer crowds matter: Incorporating youth subcultures and values in health education campaigns. *Am J Public Health*. 2017;107:389–395. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5296684/#bib8>

ⁱⁱⁱ <https://www.samhsa.gov/data/report/2018-2019-nsduh-state-prevalence-estimates>