



Youth Vaping in Calgary

REPORT

Prepared by Youth Central's Mayor's Youth Council's
Current Issues Committee | May 2024

Survey Purpose

- Understand youth vape use in Calgary
- Understand what factors influence youth to engage in or avoid vape use, and
- understand youth perceptions on vaping.

Survey Questions

1. How old are you?
2. How do you identify?
3. Where do you live?
4. Are you currently enrolled in junior or senior high school?
5. How many people do you know who vape?
6. If you know people who vape, on a scale of 1-5, with 1 being extremely negative and 5 being extremely positive, how do you feel about those people vaping?
7. Do you use any of the following substances? (select all that apply)
8. What do you think is the biggest risk of vaping?
9. Have you ever vaped?

At this point in the survey, respondents were given different questions based on their answers to question 9. For those who selected that they vaped before, the questions were as follows;

10. How old were you when you first used a vape, even one time?
11. Why did you start vaping? (select all that apply)
12. How often do you vape?
13. What are the reasons that you continue to use vapes? (select all that apply)
14. Did you notice any changes in your relationships when you started vaping? (select all that apply)
15. Did you notice any changes in your mental health when you started vaping? (select all that apply)
16. Do you consider yourself dependent on vaping? (please select the answer that best describes your relationship with vaping)
17. Are you considering quitting vaping?
18. If you were trying to quit vaping, what resources would you consider? (select all that apply)

For those who selected that they had never vaped before, the questions were as follows;

10. Would you consider vaping?
11. If you'd consider it or might consider it, how likely are you to start vaping?
12. On a scale of 1-5, what are your feelings to vaping overall, 1 being extremely negative and 5 being extremely positive?
13. Please complete the following sentence. I think vape use is...

Methodology

The study was conducted through an online survey on SurveyMonkey and consisted of a total of 22 questions.

Since the research study was aimed at youth in Calgary, participants were limited to youth 12 - 18 or still attending high school; therefore, our participants ranged from age 12 - 21. Participants were recruited through a convenience sample. The survey was shared on Youth Central’s social media, with youth that participate in Youth Central programming, and with both junior and senior public and private schools across Calgary, Alberta.

At the beginning of the survey, participants were given a brief description of the study, the requirements of participants and informed that all data would remain anonymous. At the end of the survey, participants had the option to enter their email for the chance to receive a gift card. Participants were informed that this information would not be linked to their responses. All participants were informed that they could skip questions if they did not feel comfortable answering.

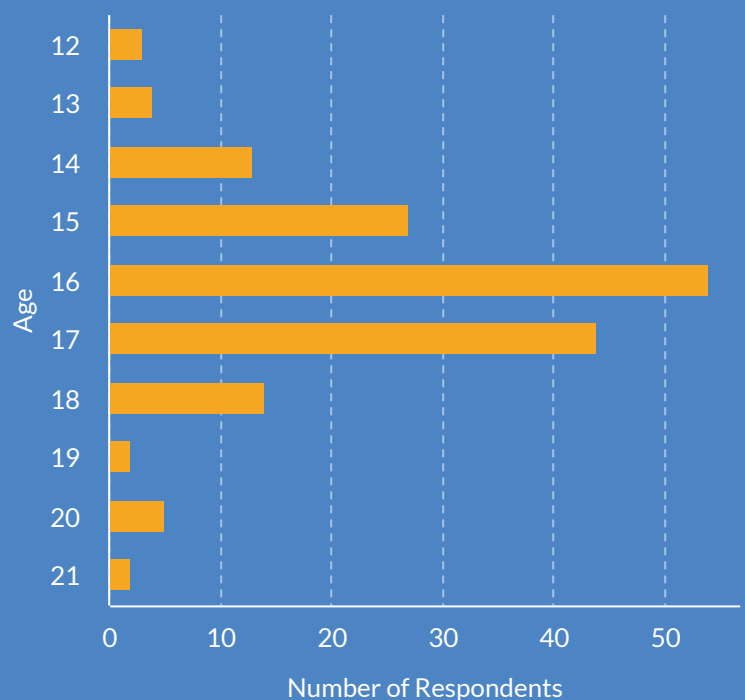
The survey was released mid January and closed in late February, and the sample size was **168 respondents**.

Demographics

Question #1 How old are you?

Question 1 revealed that the majority of survey respondents were 15-17 years old with a combined percentage of 74.40% of respondents being within that range.

As the survey was sent out to an age range of 12-21, with a focus on sending it out to high school students, this percentage is an accurate representation of the main demographic that we surveyed.



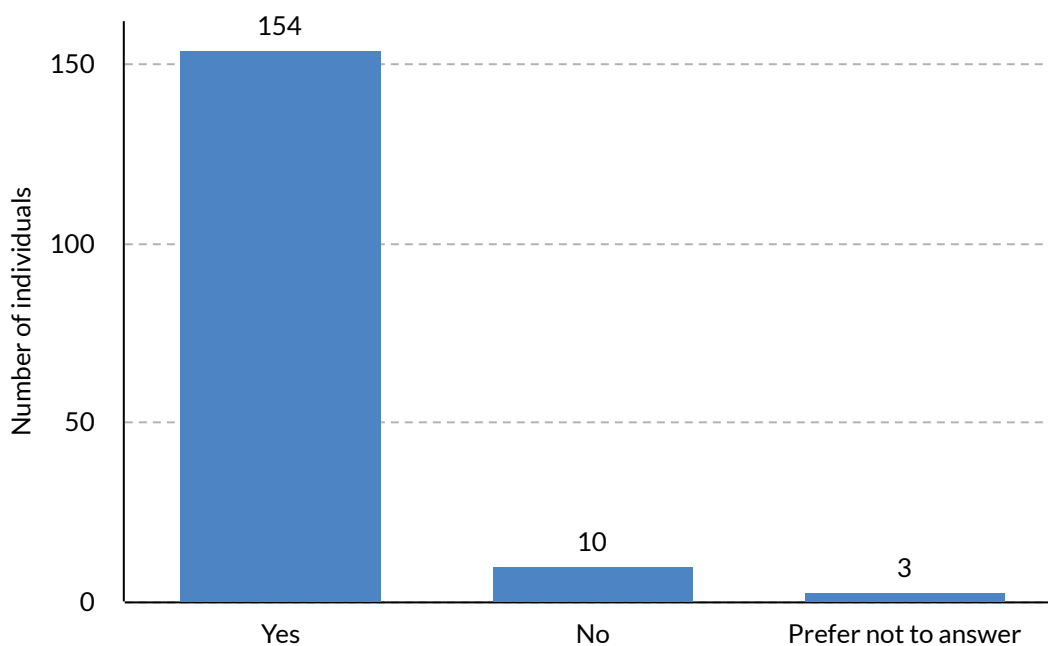
Question #2 How do you identify?

We asked the gender of the respondents, the results were female (57.49%), male (37.72%), non-binary (1.8%), prefer not to answer (2.4%), and prefer to self describe (0.60%).

Question #3 Where do you live?

The majority of respondents (89.29%) live in Calgary, Alberta, which is accurate with the targeted population that were asked to complete the survey.

Question #4 Are you currently enrolled in junior or senior high school?

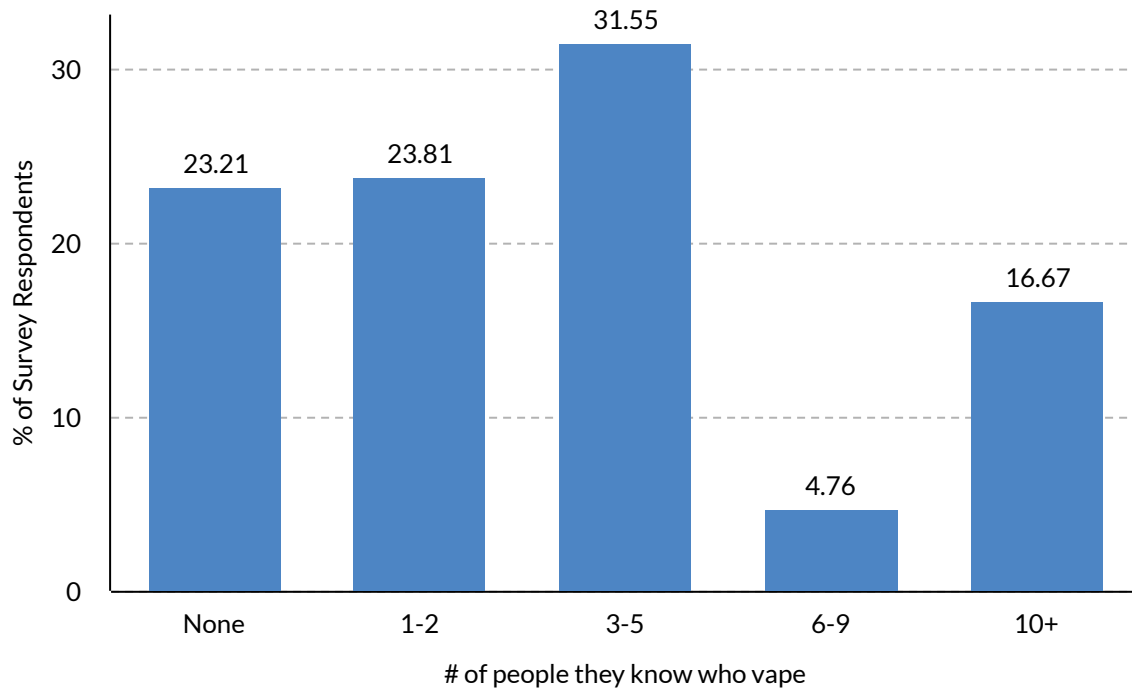


We confirmed that the majority of our respondents were enrolled in either junior or senior high school, again solidifying that the population that was surveyed was accurately defined.



Question #5

How many people do you know who vape?



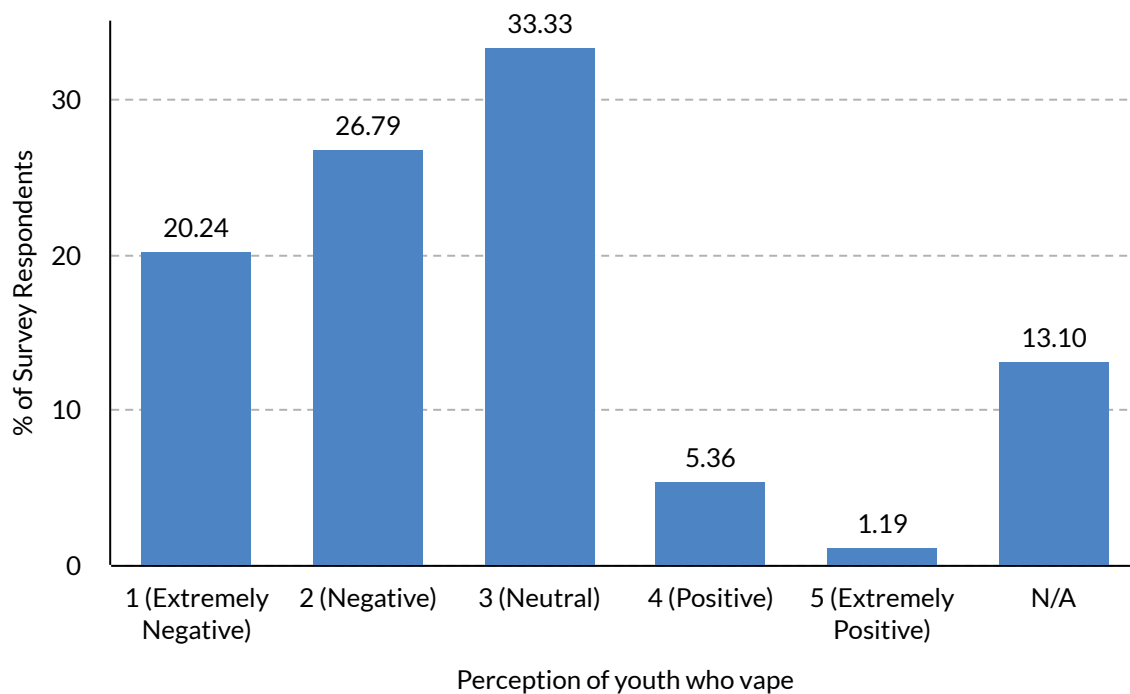
The responses to this question revealed that the majority of our sample was in proximity to someone who vaped, with 76.79% knowing at least 1 person who vaped; where as 23.21% of people knew no one who vaped. This suggests that vaping is very prevalent and most youth are exposed to others that vape.

This data supports existing research, such as articles written by the UGA College of Public Health and official statistics released by the Government of Canada, that identify increased popularity of vaping with youth.



Question #6

If you know people who vape, on a scale of 1-5, with 1 being extremely negative and 5 being extremely positive, how do you feel about those people vaping?



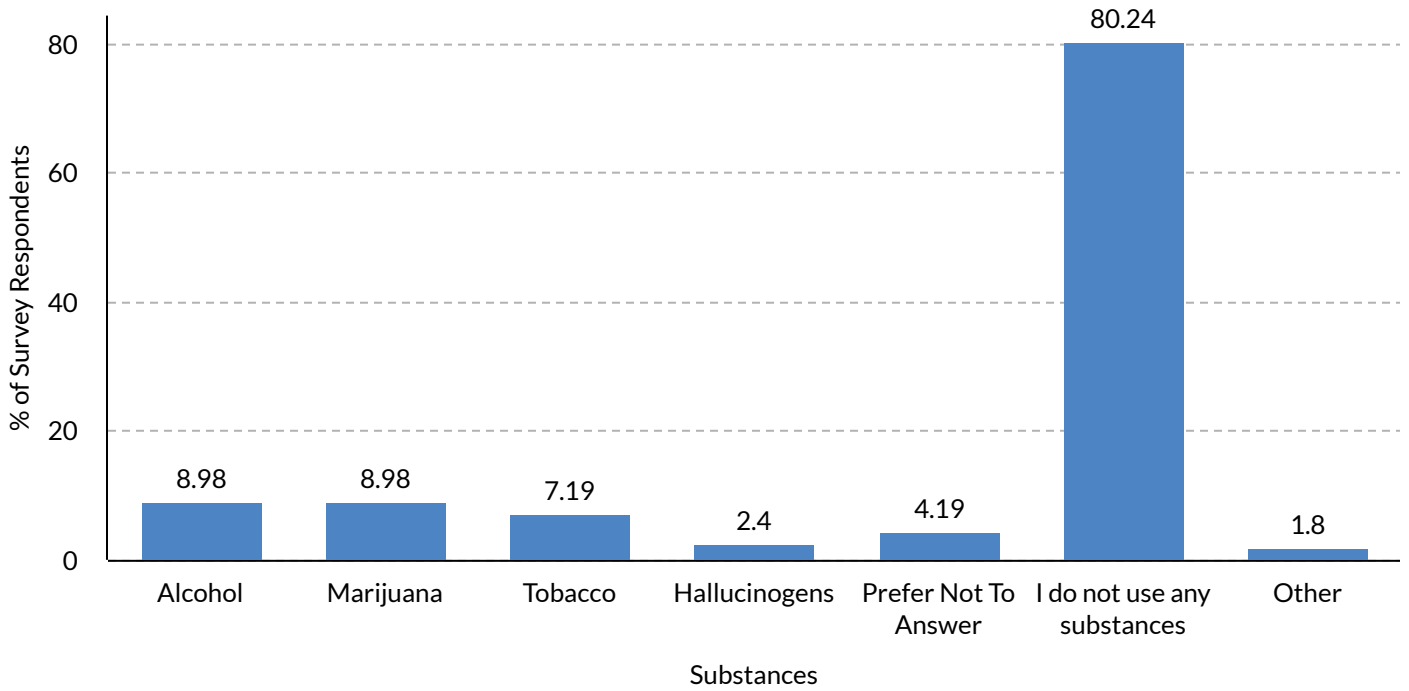
This question aimed to identify youth perceptions on vaping. 20.24% of respondents said they felt extremely negative about those people vaping while 1.19% said they felt extremely positive about those people vaping. The majority of respondents instead said they felt neutral towards those people vaping at 33.33%, but the general consensus was a negative feeling towards the vaping of those people with 47.03% of people saying that they felt either extremely negative or just negative to people vaping. 13.10% of respondents selected N/A and decided to skip this question.

Possible reasoning for the negative view of vaping from respondents is the potential negative health effects (as seen in question 8 as the biggest risk) or the social stigma and stereotyping associated with vaping. This could also be explained by potential biases as most respondents surveyed were not vape users themselves (question 9) and instead provided insights and opinions from a secondhand source.



Question #7

Do you use any of the following substances?
(select all that apply)

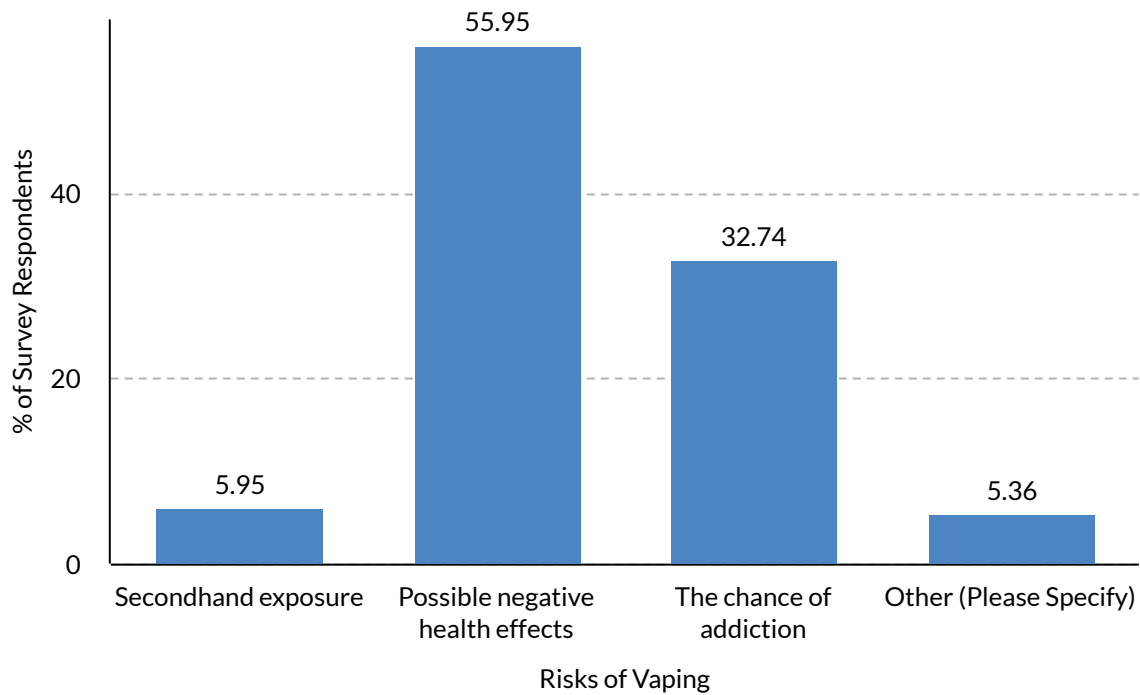


This question aimed to identify if youth are also using other substances. Understanding an individual's concurrent use of substances may identify patterns of addiction. Although 80.24% of respondents did not use any other substances, among those who did, 8.98% used alcohol and 8.98% used marijuana.



Question #8

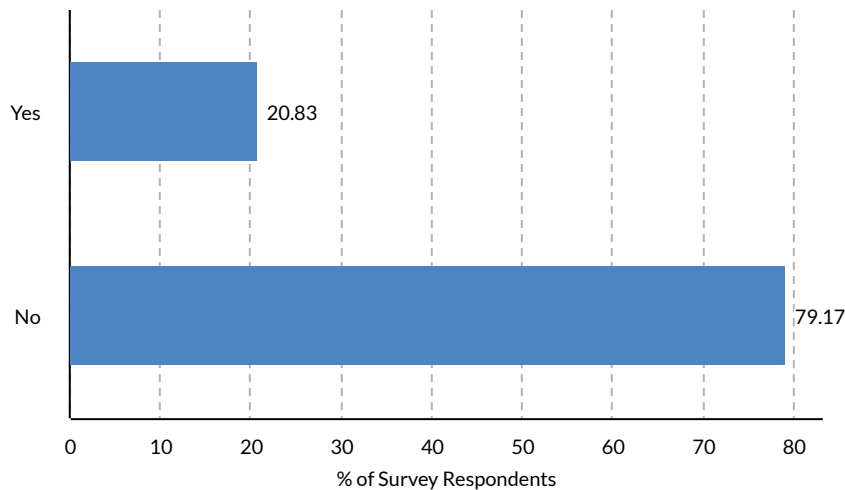
What do you think the biggest risk of vaping is?



The question was intended to explore youth perceptions on the risks associated with vaping. According to the data, the majority (55.95% of respondents), view negative health effects as the primary risk of vaping. This finding highlights growing concerns regarding the potential long-term health implications linked to vaping, including but not limited to, respiratory issues and cardiovascular problems. Furthermore, a substantial portion of respondents, 32.74%, identify addiction as the most significant risk. This suggests that youth recognize the addictive nature of nicotine present in many vaping products.



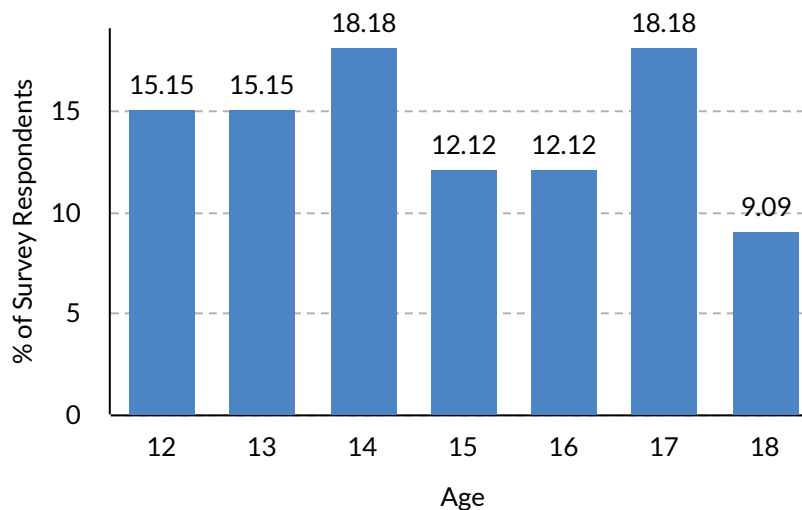
Question #9 Have you ever vaped?



The majority (79.19%) of respondents have not vaped. Conversely 20.83% of respondents have vaped. This data reveals that the majority of our sample does not vape; therefore, the data collected may be based on a second-hand perspective rather than direct experience. However, these findings are similar to existing findings from Canadian Health's 2021-22 Canadian Student Tobacco, Alcohol, and Drugs Survey that found 29% of students grades 7 - 12 had tried vaping.



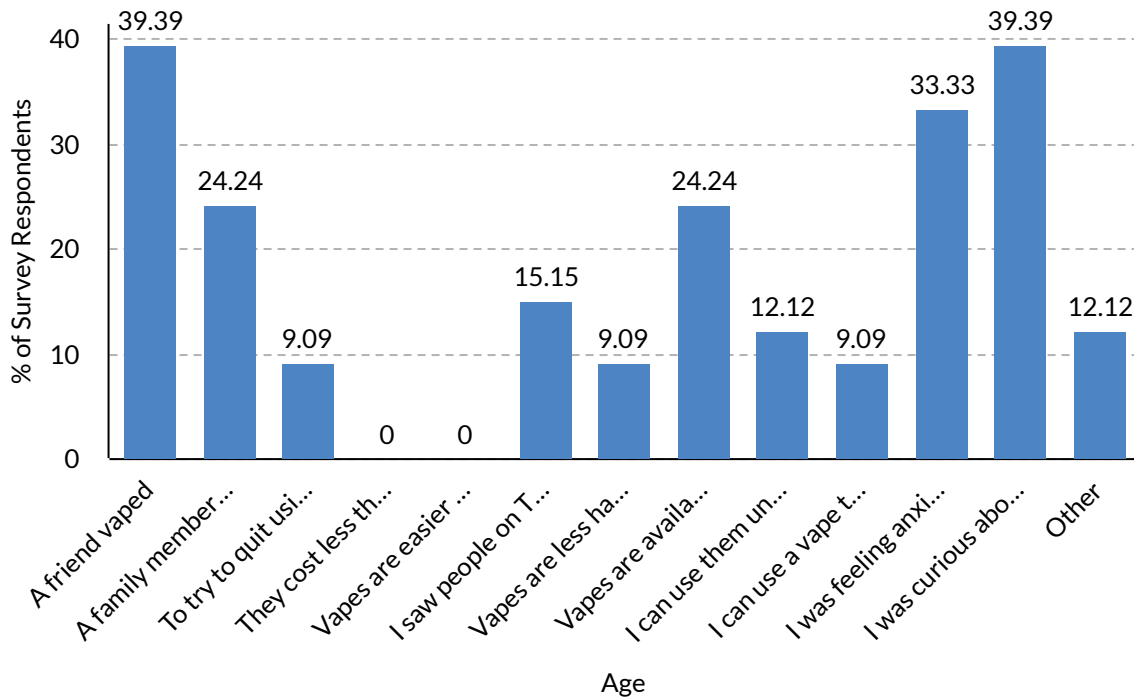
Question #10 How old were you when you first used a vape, even one time?



The data indicates that a large proportion of respondents began vaping during their teenage years, with 15.15% reporting their first vape use at the age of 12 and an equal percentage at age 13. Furthermore, 18.18% of respondents tried vaping at the age of 14, while another 18.18% at the age of 17. These findings highlight a trend of vaping initiation occurring at relatively young ages, potentially exposing individuals to the risks associated with vaping during critical stages of development. Factors contributing to this trend could include peer influence, accessibility of vaping products, advertising targeting youth, and a lack of awareness about the potential harms of vaping.



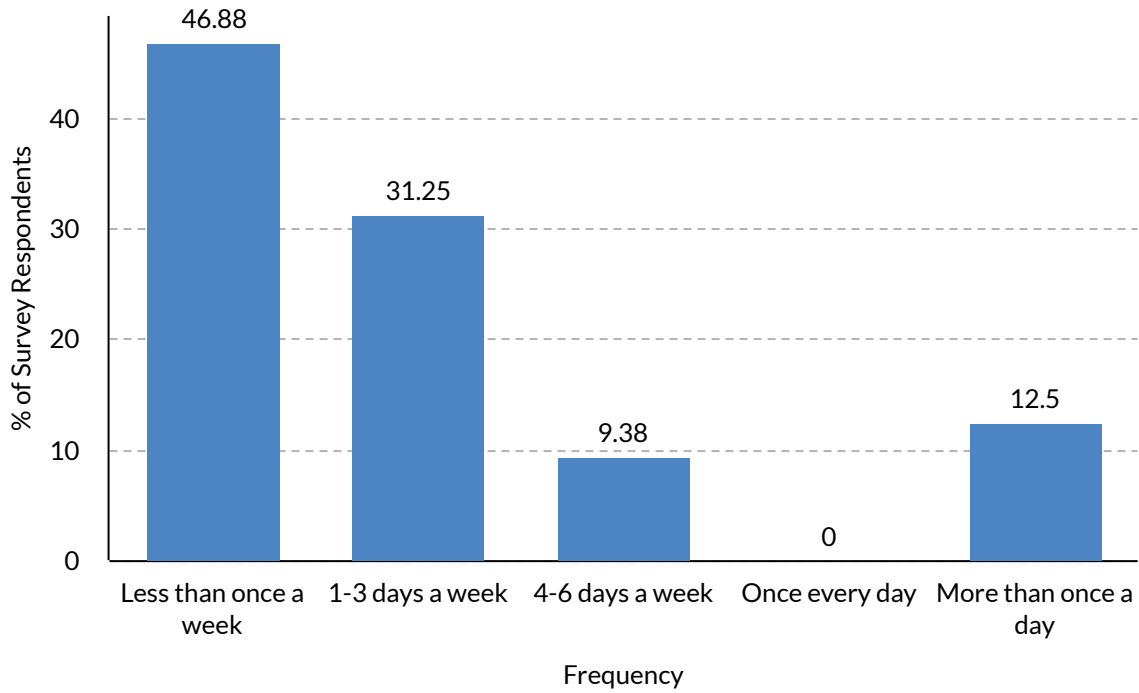
Question #11 Why did you first start vaping? (Select all that apply)



The data reveals that the most common reasons for starting vaping were peer influence (a friend vaped) and curiosity, with both accounting for 39.39% of respondents each. This indicates that social factors, such as friends vaping or curiosity about the experience, play significant roles in driving vaping initiation among individuals. Additionally, a proportion of respondents, comprising 33.33%, reported using vaping as a coping mechanism for anxiety. This suggests that some individuals turn to vaping as a means of self-medication or relief, possibly due to perceptions of vaping as a calming activity.



Question #12 How often do you vape?

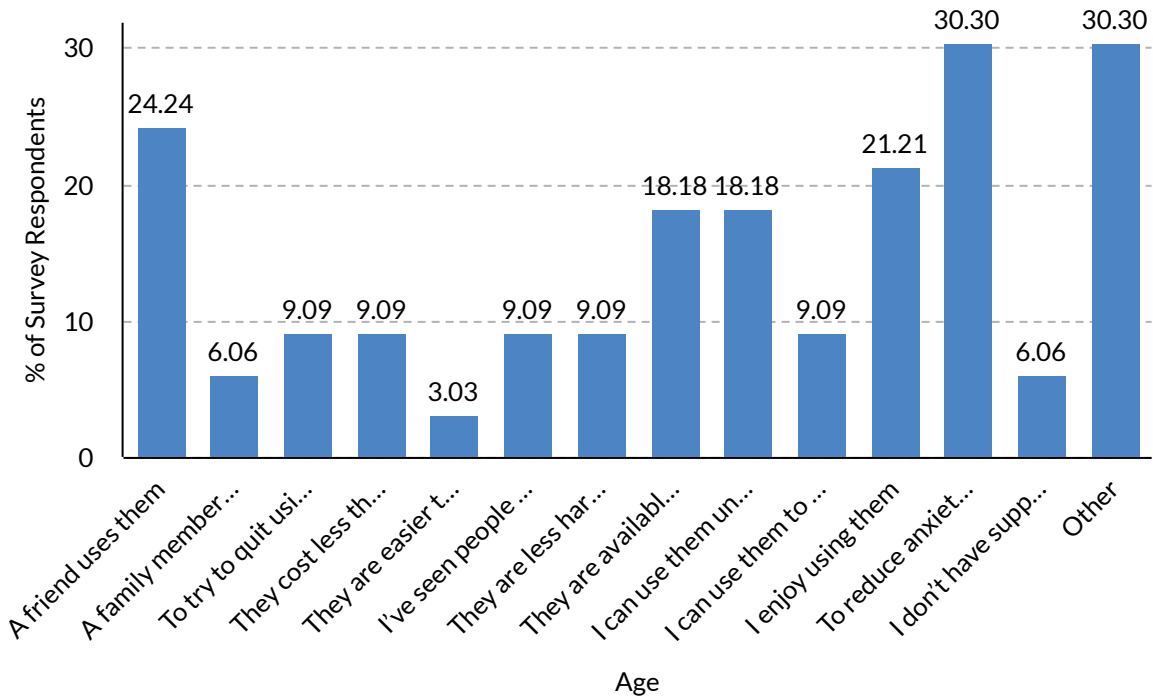


The data indicates that 46.88% of respondents vape less than once a week. Another substantial portion, accounting for 31.25% of respondents, vape 1 to 3 days a week. Additionally, 12.5% of respondents reported vaping more than once a day. These findings suggest various ranges of vaping habits among individuals, with the majority engaging in occasional or infrequent vaping.



Question #13

What are the reasons that you continue to use vapes? (Select all that apply)

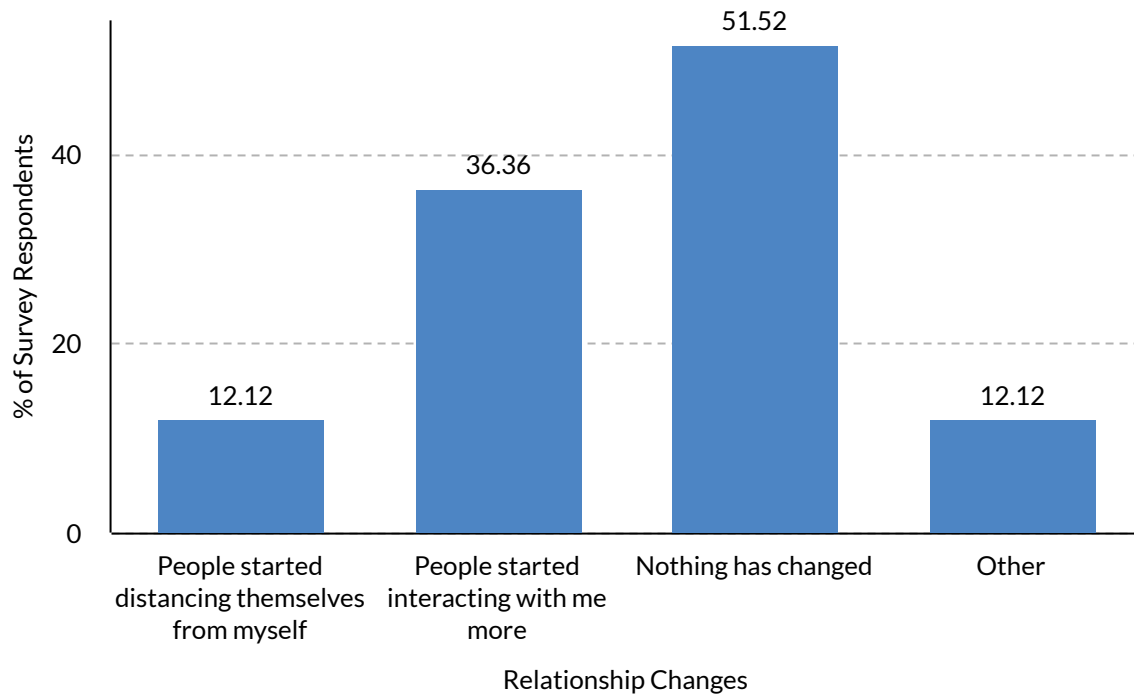


The data reveals that various factors contribute to the continuation of vaping. A significant portion, comprising 30.30% of respondents, continue to vape as a means to reduce anxiety, suggesting that vaping serves as a coping mechanism for managing mental health. Furthermore, 24.24% of respondents report continuing to vape because a friend also uses vaping products, suggesting social influences play a role in perpetuating vaping behaviour among peer groups. 21.21% of respondents indicated enjoyment as a reason for continuing to vape, which suggests that they derive pleasure or satisfaction from the act of vaping itself.



Question #14

Did you notice any changes in your relationships when you started vaping?
(Select all that apply)

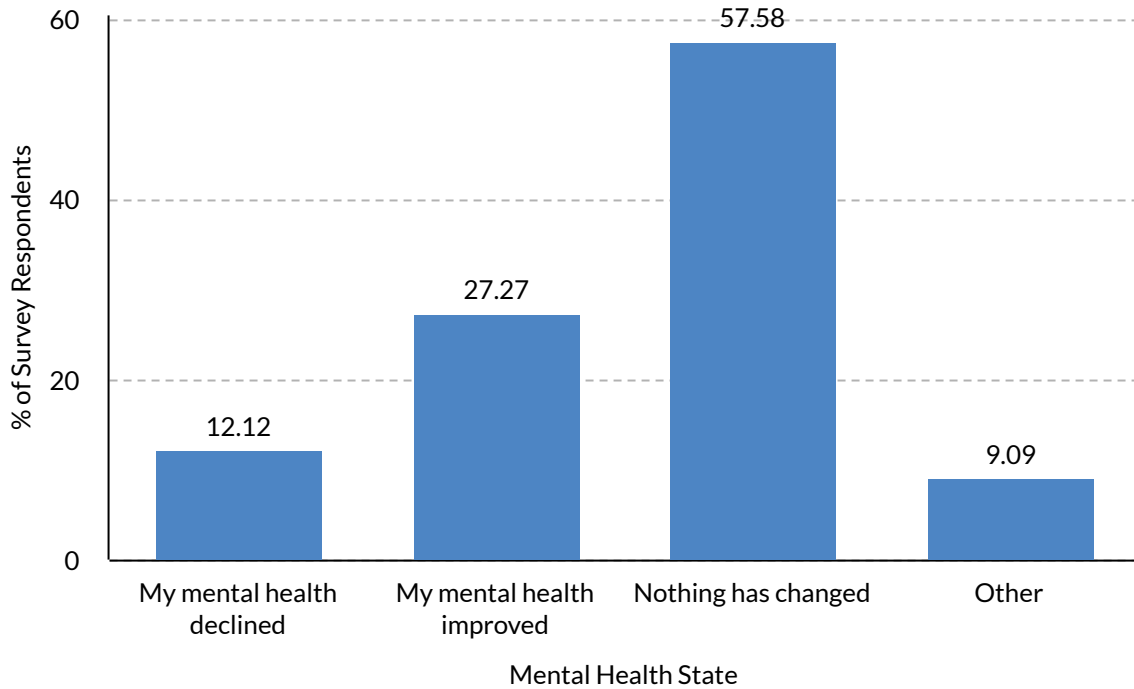


The data indicates that for most respondents, comprising 51.52%, stated that vaping did not lead to noticeable changes in their relationships. However, a significant proportion, accounting for 36.36% of respondents, reported that people started interacting with them more after they began vaping. This suggests that vaping may have facilitated increased social interactions or bonding with peers who also vape. Conversely, a smaller but notable portion, comprising 12.12% of respondents, reported that people started distancing themselves from them after they started vaping. This finding may indicate potential negative social consequences, or stigma associated with vaping among certain social circles.



Question #15

Did you notice any changes in your mental health when you started vaping? (Select all that apply)

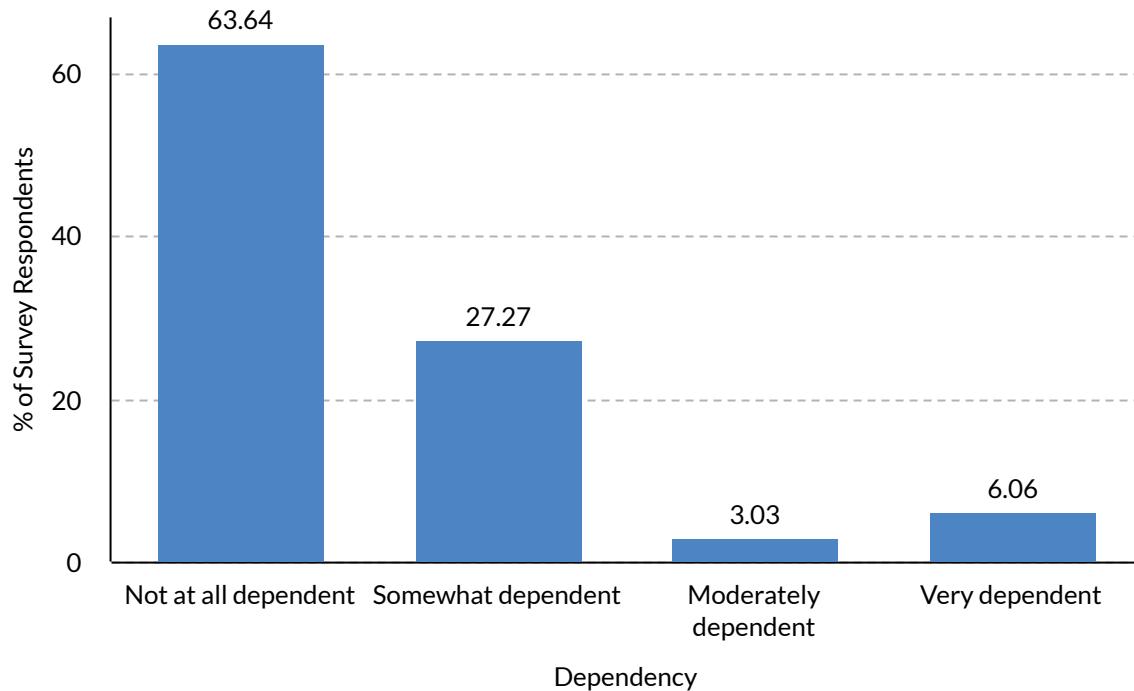


The data indicates that more than half (57.58%) of the individuals who vape had no change in their mental health, however, 27.27% of respondents had a positive change in their mental health after beginning to vape. Conversely 12.12% of respondents had their mental health decline, inferring that the majority of those using vapes have a neutral or positive relationship with vaping in relation to their mental health.



Question #16

Do you consider yourself dependent on vaping? (Please select the answer that best describes your relationship with vaping)

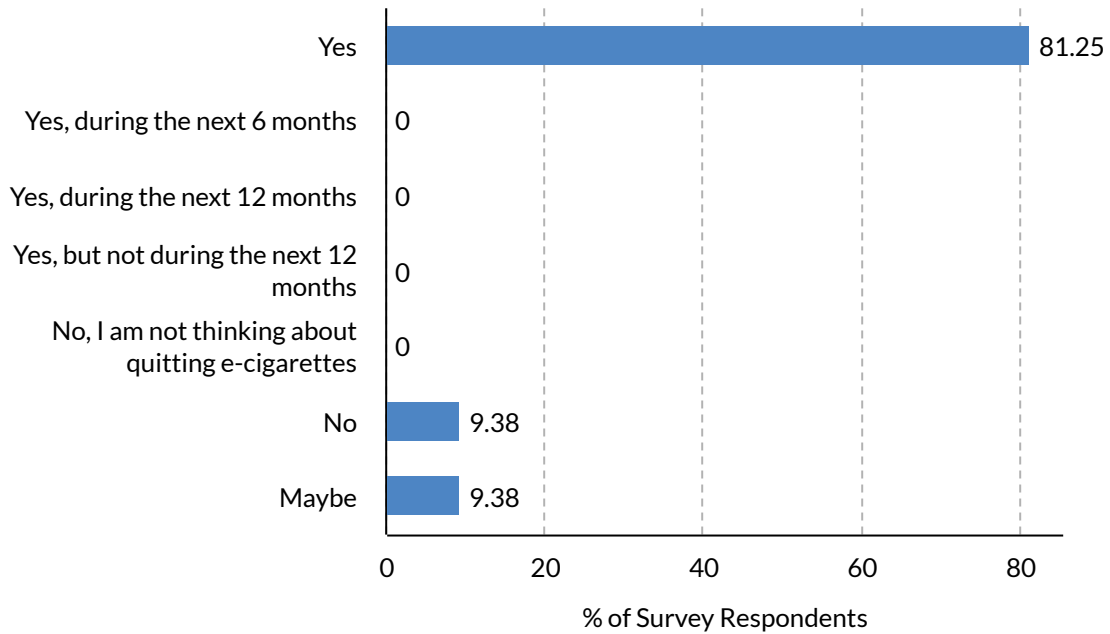


This question gives insight into youth's perceptions of their own relationship and dependency with vaping. The majority of respondents who vaped (63.64%) believed themselves to be 'Not at all dependent' on vaping, whereas 27.27% believed that they were "Somewhat dependent" and 6.06% believed they were 'Very dependent'. It is important to mention that this question may not accurately reflect those that are actually dependent as some may not be able to self identify their behaviour. However, the self-reported data indicates that the majority of youth that vape do not consider themselves dependent on vaping.



Question #17

Are you considering quitting vaping?

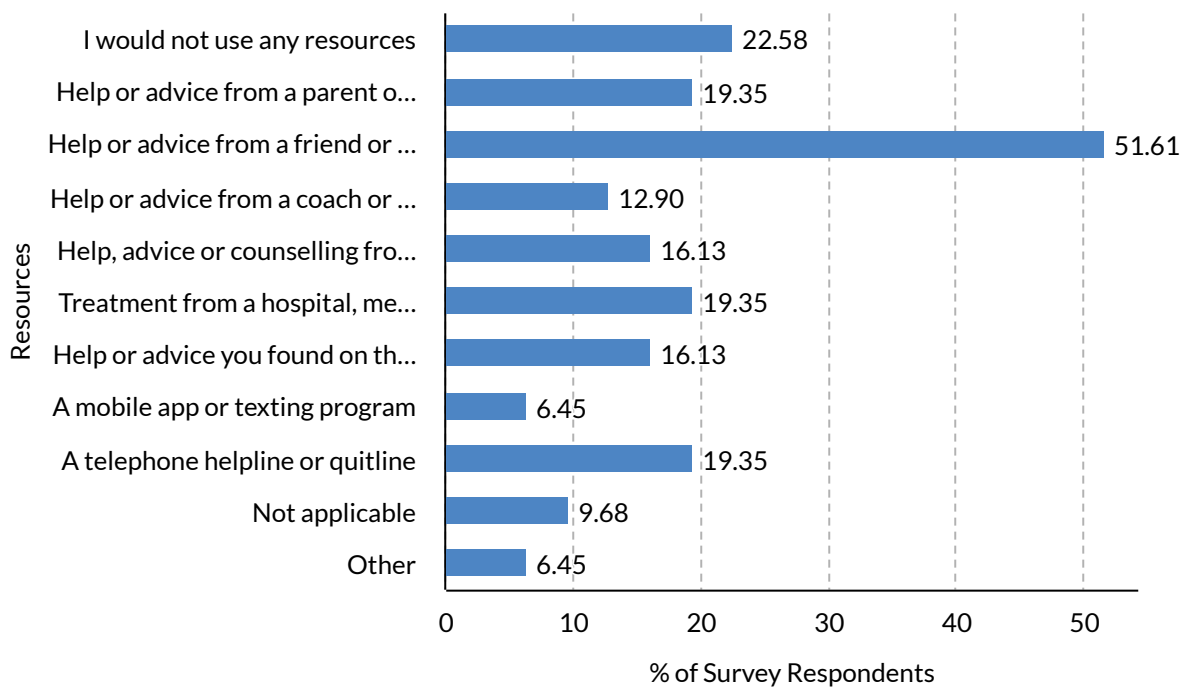


The study revealed that 81.25% of youth that vape are considering quitting vaping, indicating that offering assistance to youth could potentially help them stop vaping.



Question #18

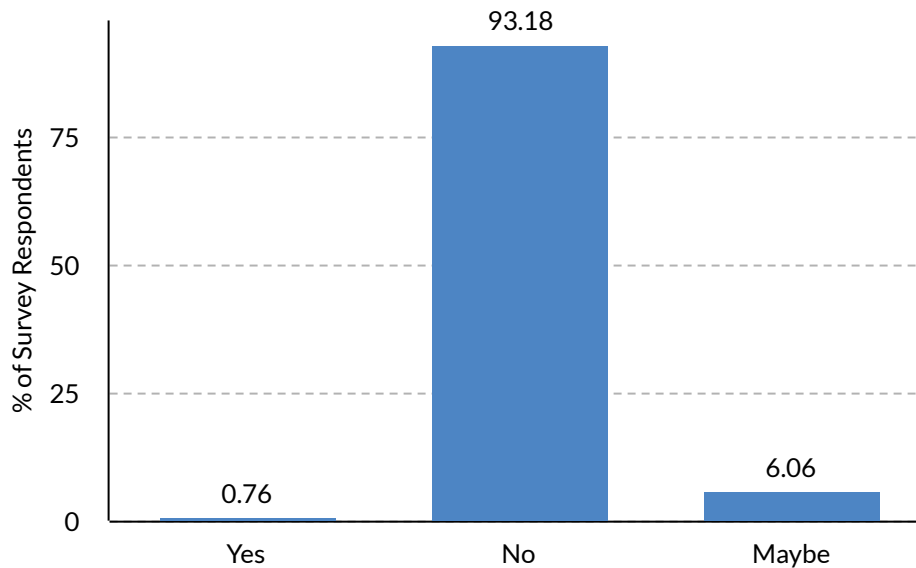
If you were trying to quit vaping, what resources would you consider (select all that apply)?



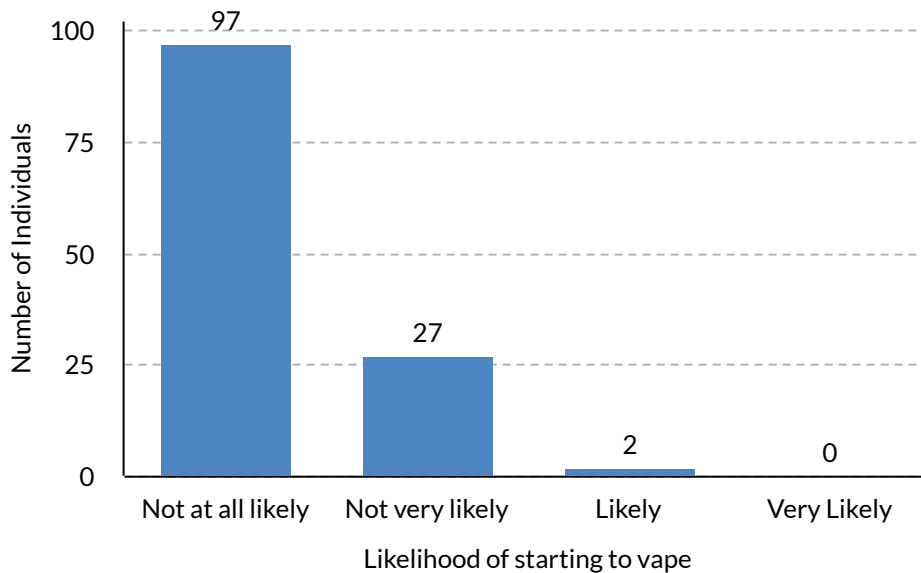
The study revealed that 51.61% of youth that vape would consider help from a friend or peer if they were trying to quit vaping. As the most popular answer, this suggests that programs should be youth led.



Question #19 Would you consider vaping?



Question #20 If you'd consider it or might consider it, how likely are you to start vaping?



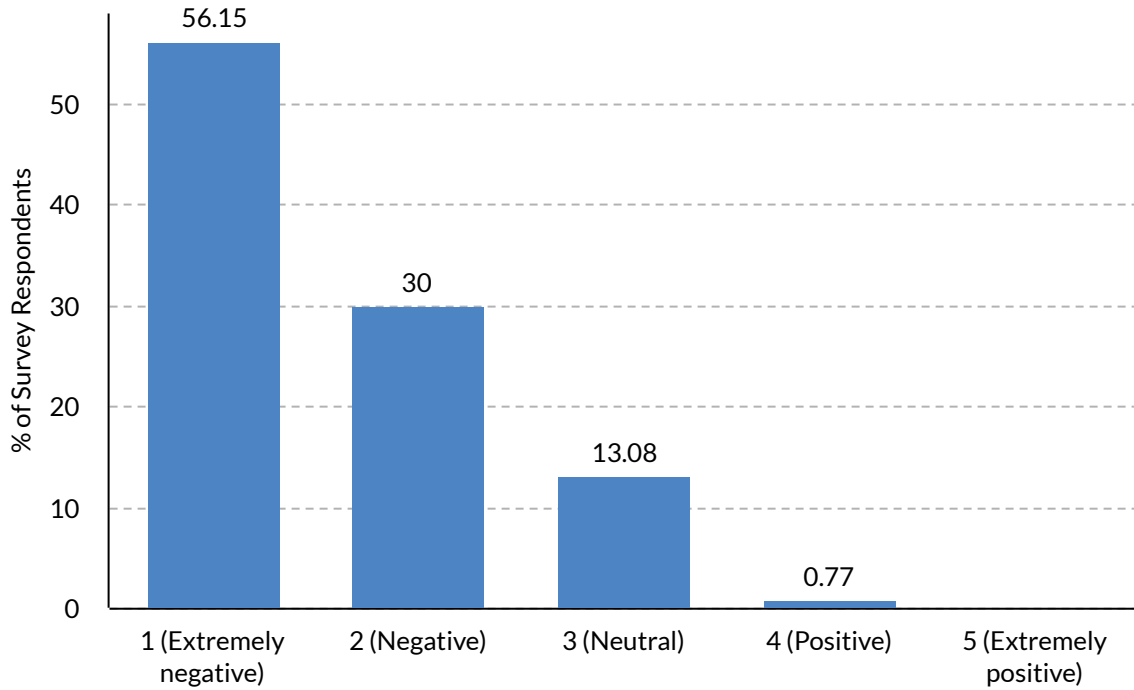
Question 19 and 20 provide insight into the likelihood of those who don't vape, starting to vape in the future. In combination, these questions reveal that the majority of youth who aren't currently vaping do not believe they will start in the future.

It is important to note that those who said they would not consider vaping in question 19 were able to answer question 20 which may impact this question's validity.



Question #21

On a scale of 1-5, what are your feelings towards vaping overall, 1 being extremely negative and 5 being extremely positive?

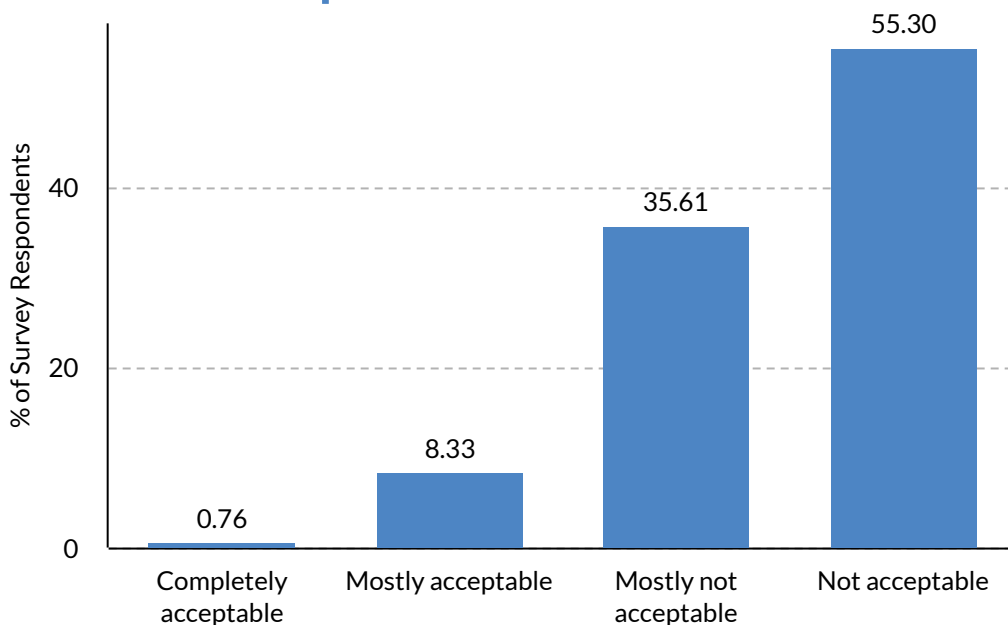


56.15% of respondents had extremely negative opinions on vape use, while 30% felt vaping was negative. 13.08% of people were neutral and 0.77% felt positively about vaping.



Question #22

Please complete the following sentence. I think that vape use is...





Survey Limitations

While the survey provided valuable insights into various aspects of vaping behavior and perceptions, several limitations should be acknowledged to improve the effectiveness of future surveys.

The survey's sample size and demographics could be diversified to ensure greater representation and generalized findings across various population groups. A larger sample size may better represent the general population of youth.

Since our sample only included 20.83% of respondents that vape, a large amount of the data is drawn from second-hand perspectives on vape use rather than vape users themselves. Future research should include a larger sample of youth that do vape to better understand that population.

The survey's closed-ended format may have constrained respondents' ability to fully articulate their experiences and perspectives on vaping, limiting the depth of insights gathered. To address these limitations and improve future surveys, the survey could have open-ended questions in which participants directly type their answers into a text box, although increasing the length of the survey may affect the participation rate.

Recommendations

Our survey's motivation and purpose is to better understand youth vaping behaviours, what factors influence them to engage in or avoid vape use, and youth perceptions on vaping. When analyzing the findings from this survey, the most interesting finding that we discovered was that 33% of youth started to vape as a coping mechanism for anxiety. This suggests that mental health issues may lead to increased vape use in youth. These findings are similar to existing studies examining cigarette usage and addiction as well. Vaping among youth is a relatively new phenomenon, so references to cigarette use and campaigns aimed at decreasing their use were taken into consideration when looking at possible solutions to this issue. If this issue is not addressed in a timely manner, the negative consequences of it will have devastating effects on youth.

This leads to our recommendations:

1. Increased peer based supports for youth

The survey findings, specifically data from question #18, informs our recommendation to implement community support programs in which youth can speak with like-minded peers, who have similar experiences and struggles as them. This recommendation is based on our findings from Question #18 which revealed that 51.61% of youth that vape said they would consider help from a friend or peer if they were trying to quit vaping. This suggests that peer support would be more effective than receiving help from an adult, such as a parent, counsellor, or coach.

As a sub-committee on the Mayor's Youth Council, we suggest an increase in centres and opportunities for youth to help their fellow youth. Numerous articles (such as the one referenced from youth.gov) reiterate the value of youth integration into programs that are meant to positively affect and impact other youths' development. By creating opportunities for youth to help other youth, they are able to connect with and influence the person using the vape or struggling with their mental health on a level that otherwise would not be possible.

Recommendations

2. Increased awareness and mental health support for youth

We recommend increasing awareness and providing mental health support as a proactive strategy to minimize youth vaping. This recommendation is supported by our findings that 33% of youth that vape started vaping as a coping mechanism for anxiety, stress, or depression (Question 11) and 30% of youth that vape continue vaping as a coping mechanism for anxiety, stress or depression (Question 13). Therefore, we recommend targeting the root of the problem and considering ways in which we can better support youth mental health as a preventative measure to protect against vape use.

Although mental health supports are often available to youth, we recommend an increased amount of funding support for these supports, as well as to increase the awareness of their existence. Within Calgary there are existing initiatives, such as *Change Can't Wait*, that offer funding to improve mental health resources. We support these initiatives and recommend increased accessibility to funding and resources to help teach youth healthy coping strategies to deal with their anxiety and stress and avoid other coping mechanisms, such as vape or substance use.

3. Early education about vaping and its consequences to decrease curiosity

Finally, it was found in the results that many individuals began vaping because of their curiosity about the action. To combat this, educational campaigns including facts such as the potential harmful chemicals in vapes, and the negative effects of vaping on an individual should be integrated into the education system. Our study revealed that 48% of youth that vape tried vaping by the age of 14. Therefore, we suggest that these presentations should be introduced to students in middle school, allowing for a clear understanding of the action to be taken into account for the coming years.

Conclusion

After a thorough analysis of the vaping survey, we found a relationship between mental health and vaping. With a sample of 168 responses, accurate reasonings were made possible. A significant portion of youth who vape reported using vapes as a coping mechanism for anxiety, stress, and depression in their lives.

A contrast in opinions emerged between those who vape and those who do not (80% non-vape users and 20% those who use vapes), with a majority expressing negative feelings towards vaping, possibly influenced by concerns about health risks and the social stigma associated with it. Regardless of the limitations of the survey, including sample size and closed-end format, the findings provide valuable insights into vaping attitudes and correlations among youth.

Recommendations provided in this survey emphasize the importance of critical measures to address the underlying factors driving vape use, including mental health challenges, peer influence, and societal pressures.

By addressing the complex connection between mental health and vaping, we can work towards safeguarding the health and well-being of future generations.

References

References

City of Calgary. (2020). Change can't wait! – second round of funding for Mental Health and Addiction. <https://newsroom.calgary.ca/change-cant-wait--second-round-of-funding-for-mental-health-and-addiction/>

Explainer: More teens are vaping. This is why that's a concern. (2023, April 12). UGA College of Public Health. Retrieved April 9 2024, from, <https://publichealth.uga.edu/explainer-more-teens-are-vaping/>

N.A. (2023). Summary of results for the Canadian Student Tobacco, Alcohol and Drugs Survey 2021-22. *The Government of Canada*. Retrieved from, <https://www.canada.ca/en/health-canada/services/canadian-student-tobacco-alcohol-drugs-survey/2021-2022-summary.html>

N.A. (2024). Vaping in Canada: What We Know. *The Government of Canada*. Retrieved from, <https://www.canada.ca/en/health-canada/services/smoking-tobacco/surveys-statistics-research/vaping-what-we-know.html>

Surgeon General's Advisory on E-cigarette Use Among Youth | Smoking & Tobacco Use | CDC. (n.d.). Centers for Disease Control and Prevention. Retrieved April 16, 2024, from, https://www.cdc.gov/tobacco/basic_information/e-cigarettes/surgeon-general-advisory/index.html

Tan, A. (2022, September 2). *Which teens are more likely to vape? Research shows surprising patterns in race and sexuality | Penn Today.* Penn Today. Retrieved April 1 2024, from, <https://penntoday.upenn.edu/news/which-teens-are-more-likely-vape-research-shows-surprising-patterns-race-and-sexuality>

U.S. E-cigarette Sales Climbed during 2020-2022 | CDC Online Newsroom | CDC. (2023, June 22). Centers for Disease Control and Prevention. Retrieved April 16, 2024, from, <https://www.cdc.gov/media/releases/2023/p0622-ecigarettes-sales.html>

Previl, S. (2023, September 11). *Almost half of Canada's young adults have tried vaping: StatCan - National | Globalnews.ca.* Global News. Retrieved April 20, 2024, from, <https://globalnews.ca/news/9952391/canada-vaping-youth-young-adults/>

Youth Topics - Involving Youth in Positive Youth Development. (n.d.). Youth.gov. Retrieved April 22, 2024, from, <https://youth.gov/youth-topics/involving-youth-positive-youth-development>

What Does Vaping Do to Your Lungs? (n.d.). Johns Hopkins Medicine. Retrieved April 23, 2024, from <https://www.hopkinsmedicine.org/health/wellness-and-prevention/what-does-vaping-do-to-your-lungs>