|  |  |
| --- | --- |
| Learning activities using data from: **Youth19 Rangatahi Smart Survey, Initial Findings: Substance Use** August 2020 |  |

For this collection of activities we have selected Youth19 data about:

1. Vaping / e-cigarette use (and comparisons with tobacco use)
2. Alcohol use and binge drinking
3. Marijuana use
4. Alcohol and marijuana use comparisons
5. Trends in binge drinking and marijuana use 2000-2019

|  |
| --- |
| **All data is summarised from:**Fleming, T., Ball, J., Peiris-John, R., Crengle, S., Bavin, L., Tiatia-Seath, J., Archer, D., & Clark, T. (2020). *Youth19 Rangatahi Smart Survey, Initial Findings: Substance Use.* Youth19 Research Group, The University of Auckland and Victoria University of Wellington, New Zealand.Source the full report at <https://www.youth19.ac.nz/publications/2020/8/12/youth19-rangatahi-smart-survey-initial-findings-substance-use> |

**Notes:**

* We haven’t designed these activities for use by students in any specific year level although all of this material may have relevance for students completing **AS90975** which this year will draw on **vaping, alcohol or marijuana**, and the **alcohol data** is obviously relevant for student completing **AS91265** this year with the focus on alcohol misuse.
* Data about other drug use (P, synthetics huffing – all grouped together) is presented on page 6 of the report but as these numbers are very small they have not been included here.
* The complete report contains a breakdown of data by school decile and neighbourhood deprivation, as well as data by ethnicity. As some of these data report some disturbing trends we have not (yet) included it with these materials, as this, along with the Youth19 mental health data, will need to be used carefully and in appropriate learning contexts.
* The data included here simplifies that provided in the report to help make it accessible for learners at school. The total size of the sample has been left in to give students an idea of how many students responded to the survey items.
* The data presented in the Word tables can be trimmed to include only relevant data and then cut and pasted into an Excel spreadsheet if students or teachers wish to convert the tables into graphs.
* Teachers are encouraged to add further questions to those provided to help students make connections with previous learning.
* As this was a school-based survey, we have referred to young people here as students (as in students responding to the survey) which may not be representative of all young people, especially for age groups old enough to not be attending school.
* We await the full prevalence reports (assuming these will be published as in previous years) to extend the array of data provided for interpretation by students.
* Updates to the NZHEA Alcohol and drug education resource will incorporate these and other newly reported data.

**A. Vaping** **/ e-cigarette use**

**Vaping and e-cigarette use by sex**

|  |  |  |
| --- | --- | --- |
|  | **Vape / use e-cigarettes weekly or more often**  | **Vape / use e-cigarettes monthly or more often**  |
| Sex  | n | N | % | n | N | % |
| **Male**  | 232 | 3,193 | 9.1 | 370 | 3,193 | 13.4 |
| **Female** | 191 | 3,953 | 6.6 | 353 | 3,953 | 11.5 |
| **Total**  | **423** | **7,154** | **7.8**  | **723** | **7,146** | **12.4** |

n=number of students saying they had vaped / used e-cigarettes

N=total sample size of all students in the survey

Questions

1. Overall, who vapes/uses e-cigarettes more often – males or females?
2. Why do you think this is the case?
3. Among students who vape, why do you think some students vape weekly or more often, while other vape less frequently?
4. Do any of these results surprise you? If so what? If not, why not?
5. What actions do you think will help reduce and eliminate vaping among young people who do it as a lifestyle habit (and not as an aid to smoking cessation)?

**Vaping and e-cigarette use by age**

|  |  |  |
| --- | --- | --- |
|  | **Vape / use e-cigarettes weekly or more often**  | **Vape / use e-cigarettes monthly or more often**  |
| Age  | n | N | % | n | N | % |
| **13** and under | 26 | 1,269 | 2.2 | 53 | 1,269 | 4.7 |
| **14** | 61 | 1,620 | 4.3 | 130 | 1,620 | 8.0 |
| **15** | 102 | 1,551 | 8.9 | 171 | 1,551 | 13.7 |
| **16** | 111 | 1,378 | 9.5 | 189 | 1,378 | 15.9 |
| **17** and over | 123 | 1,328 | 12.4 | 180 | 1,328 | 17.6 |
| **Total**  | **423** | **7,154** | **7.8**  | **723** | **7,146** | **12.4** |

n=number of students saying they had vaped / used e-cigarettes

N=total sample size of all students in the survey

Questions

1. Overall, which age group vapes/uses e-cigarettes more?
2. Why do you think this is the case?
3. Among students who vape, why do you think there are more students who vape less frequently than vape weekly across the age groups?
4. Do any of these results surprise you? If so what? If not, why not?
5. What actions do you think will help prevent younger students taking up vaping in the first place?
6. What actions will help reduce and eliminate vaping among young people who do it as a lifestyle habit (and not as an aid to smoking cessation) – not only but especially older students?

**Vaping and e-cigarette use by urban/rural location**

|  |  |  |
| --- | --- | --- |
|  | **Vape / use e-cigarettes weekly or more often**  | **Vape / use e-cigarettes monthly or more often**  |
| Location  | n | N | % | n | N | % |
| **Urban**  | 252 | 4,875 | 7.0 | 428 | 4,875 | 11.4 |
| **Small towns** | 47 | 509 | 11.9 | 77 | 509 | 17.1 |
| **Rural**  | 63 | 1,050 | 7.7 | 117 | 1,050 | 12.0 |
| **Total**  | **423** | **7,154** | **7.8**  | **723** | **7,146** | **12.4** |

n=number of students saying they had vaped / used e-cigarettes

N=total sample size of all students in the survey

Urban (population of 10,000 or more), Small towns (population between 1,000 and 9,999 people), Rural (population fewer than 1,000)

Questions

1. Overall, do urban, small town, or rural students vape/use e-cigarettes more?
2. Why do you think this is the case?
3. Do any of these results surprise you? If so what? If not, why not?
4. The Youth19 Rangatahi Smart Survey (Youth19) summary states (based on other data in the survey) regular vaping is more common in wealthier communities. Why do you think this is the case?

**Comparing vaping with tobacco smoking**

|  |  |  |
| --- | --- | --- |
|  | **Smoke cigarettes weekly or more often** | **Vape / use e-cigarettes weekly or more often** |
| Sex  | **n** | **N** | **%** | **n** | **N** | **%** |
| **Male**  | 81 | 3,194 | 2.9 | 232 | 3,193 | 9.1 |
| **Female** | 110 | 3,960 | 2.3 | 191 | 3,953 | 6.6 |
| Age  | **n** | **N** | **%** | **n** | **N** | **%** |
| **13** and under | 10 | 1,267 | 0.6 | 26 | 1,269 | 2.2 |
| **14** | 26 | 1,614 | 1.7 | 61 | 1,620 | 4.3 |
| **15** | 54 | 1,554 | 3.1 | 102 | 1,551 | 8.9 |
| **16** | 42 | 1,388 | 3.4 | 111 | 1,378 | 9.5 |
| **17** and over | 59 | 1,331 | 3.7 | 123 | 1,328 | 12.4 |
| Location  | **n** | **N** | **%** | **n** | **N** | **%** |
| **Urban**  | 111 | 4,876 | 2.2 | 252 | 4,875 | 7.0 |
| **Small towns** | 29 | 515 | 5.0 | 47 | 509 | 11.9 |
| **Rural**  | 33 | 33 | 2.2 | 63 | 1,050 | 7.7 |
| **Total**  | **191** | **7,154** | **2.6** | **423** | **7,154** | **7.8** |

Questions

1. The Youth19 Rangatahi Smart Survey (Youth19) summary states that there were very large declines in cigarette smoking for New Zealand secondary school students from 2001–2019. Why do you think this has been the case?
2. The Youth19 Rangatahi Smart Survey (Youth19) summary also states that most students do not smoke, vape, although vaping has emerged as a ‘new issue’. Why do you think vaping has emerged as a new issue in recent times?
3. Are there any categories (sex, age, or location) where more students smoke tobacco than vape?

**B. Alcohol use and binge drinking**

**Alcohol use and binge drinking by sex**

|  |  |  |
| --- | --- | --- |
|  | **Drink alcohol at least once a week**  | **Binge drinking at least once in past 4 weeks**  |
| Sex  | n | N | n | n | N | % |
| **Male**  | 268 | 3,166 | 10.2 | 620 | 3,135 | 22.9 |
| **Female** | 226 | 3,948 | 8.1 | 694 | 3,918 | 20.8 |
| **Total**  | **494** | **7,114** | **9.1** | **1,314** | **7,035** | **21.8** |

n=number of students saying they have used alcohol

N=total sample size of all students in the survey

*Note that overall, not many students are drinking regularly (at least once a week), but on the occasions students do drink, quite a few binge drink – which explains why the binge drinking data (%) is higher than the drink alcohol data (of any amount at least once a week).*

Questions

1. Overall, who drinks alcohol more often – males or females?
2. Overall, who engages in binge drinking more often – males or females?
3. Why do you think this is the case?
4. Although rates of binge drinking have dropped over the years, there is still a persistent problem with it among some students. Why do you think it is the case that when about 1/5 of young people drink (even if they don’t drink that often), they binge drink?
5. Do any of these results surprise you? If so what? If not, why not?
6. What actions do you think will help reduce binge drinking among young people, and thinking about possible differences between the drinking habits of males and females?

**Alcohol use and binge drinking by age**

|  |  |  |
| --- | --- | --- |
|  | **Drink alcohol at least once a week**  | **Binge drinking at least once in past 4 weeks**  |
| Age  | n | N | % | n | N | % |
| **13** and under | 20 | 1,254 | 2.0 | 42 | 1,244 | 4.1 |
| **14** | 46 | 1,612 | 3.4 | 134 | 1,597 | 7.7 |
| **15** | 108 | 1,548 | 8.3 | 287 | 1,530 | 19.4 |
| **16** | 145 | 1,376 | 11.7 | 365 | 1,364 | 29.3 |
| **17** and over | 175 | 1,324 | 17.7 | 486 | 1,318 | 42.1 |
| **Total**  | **494** | **7,114** | **9.1** | **1,314** | **7,035** | **21.8** |

n=number of students saying they have used alcohol

N=total sample size of all students in the survey

*Note that overall, not many students are drinking regularly (at least once a week), but on the occasions students do drink, quite a few binge drink – which explains why the binge drinking data (%) is higher than the drink alcohol data (of any amount at least once a week).*

Questions

1. Overall, which age group drinks alcohol more often?
2. Why do you think this is the case?
3. Overall, which age group engages in binge drinking alcohol more often?
4. Why do you think this is the case?
5. Do any of these results surprise you? If so what? If not, why not?
6. What actions do you think will help prevent younger students’ binge drinking in the first place?
7. What actions do you think will help reduce binge drinking among older students?

**Alcohol use and binge drinking by urban/rural location**

|  |  |  |
| --- | --- | --- |
|  | **Drink alcohol at least once a week**  | **Binge drinking at least once in past 4 weeks**  |
| Location  | n | N | % | n | N | % |
| **Urban**  | 261 | 4,859 | 8.2 | 720 | 4,831 | 19.2 |
| **Small towns** | 53 | 509 | 10.5 | 142 | 497 | 26.1 |
| **Rural**  | 109 | 1,047 | 10.6 | 252 | 1,035 | 25.8 |
| **Total**  | **494** | **7,114** | **9.1** | **1,314** | **7,035** | **21.8** |

n=number of students saying they have used alcohol

N=total sample size of all students in the survey

Urban (population of 10,000 or more), Small towns (population between 1,000 and 9,999 people), Rural (population fewer than 1,000)

*Note that overall, not many students are drinking regularly (at least once a week), but on the occasions students do drink, quite a few binge drink – which explains why the binge drinking data (%) is higher than the drink alcohol data (of any amount at least once a week).*

Questions

1. Overall, do urban, small town, or rural students drink alcohol more often?
2. Why do you think this is the case?
3. Overall, do urban, small town, or rural students binge drink alcohol more often?
4. Why do you think this is the case?
5. Do any of these results surprise you? If so what? If not, why not?

**C. Marijuana use**

**Marijuana use by sex**

|  |  |  |
| --- | --- | --- |
|  | **Ever used marijuana**  | **Marijuana use weekly or more often**  |
| Sex  | n | N | n | n | N | % |
| **Male**  | 675 | 3,107 | 25.7 | 150 | 3,099 | 5.1 |
| **Female** | 750 | 3,889 | 21.1 | 129 | 3,882 | 3.1 |
| **Total**  | **1,425** | **6,996** | **23.4** | **279** | **6,981** | **4.1** |

n=number of students saying they have used marijuana

N=total sample size of all students in the survey

Questions

1. Overall, who has ‘ever used marijuana’ the most – males or females?
2. Overall, who uses marijuana more often – males or females?
3. Why do you think this is the case?
4. Do any of these results surprise you? If so what? If not, why not?
5. What actions do you think will help reduce marijuana among young people, and thinking about possible differences between the marijuana habits of males and females?
6. The Youth19 Rangatahi Smart Survey (Youth19) summary states that weekly marijuana use has been relatively stable over time, and is now more prevalent than weekly cigarette smoking. Why do you think marijuana use hasn’t changed much but tobacco smoking has decreased?

**Marijuana use by age**

|  |  |  |
| --- | --- | --- |
|  | **Ever used marijuana**  | **Marijuana use weekly or more often**  |
| Age  | n | N | % | n | N | % |
| **13** and under | 84 | 1,239 | 6.0 | 20 | 1,237 | 1.3 |
| **14** | 174 | 1,580 | 11.3 | 35 | 1,578 | 2.5 |
| **15** | 336 | 1,522 | 24.1 | 83 | 1,518 | 6.4 |
| **16** | 389 | 1,355 | 31.2 | 71 | 1,353 | 5.2 |
| **17** and over | 442 | 1,300 | 38.8 | 70 | 1,295 | 4.6 |
| **Total**  | **1,425** | **6,996** | **23.4** | **279** | **6,981** | **4.1** |

n=number of students saying they have used marijuana

N=total sample size of all students in the survey

Questions

1. Overall, which age group who has ‘ever used marijuana’ the most?
2. Why do you think this is the case?
3. Overall, which age who uses marijuana more often?
4. Why do you think this is the case?
5. Do any of these results surprise you? If so what? If not, why not?
6. What actions do you think will help prevent younger students’ using marijuana in the first place?
7. What actions do you think will help marijuana use among older students?

**Marijuana use by urban/rural location**

|  |  |  |
| --- | --- | --- |
|  | **Ever used marijuana**  | **Marijuana use weekly or more often**  |
| Location  | n | N | % | n | N | % |
| **Urban**  | 781 | 4,777 | 20.7 | 138 | 4,769 | 3.5 |
| **Small towns** | 145 | 497 | 26.5 | 32 | 494 | 6.2 |
| **Rural**  | 274 | 1.037 | 28.2 | 61 | 1,033 | 4.5 |
| **Total**  | **1,425** | **6,996** | **23.4** | **279** | **6,981** | **4.1** |

n=number of students saying they have used marijuana

N=total sample size of all students in the survey

Urban (population of 10,000 or more), Small towns (population between 1,000 and 9,999 people), Rural (population fewer than 1,000)

Questions

1. Overall, have urban, small town, or rural students ever tried marijuana?
2. Why do you think this is the case?
3. Overall, do urban, small town, or rural students use marijuana weekly or more often?
4. Why do you think this is the case?
5. Do any of these results surprise you? If so what? If not, why not?

**D. Alcohol and marijuana use comparisons - 2019**

**Alcohol and marijuana use by sex**

|  |  |  |
| --- | --- | --- |
|  | **Drink alcohol at least once a week**  | **Binge drinking at least once in past 4 weeks**  |
| Sex  | n | N | n | n | N | % |
| **Male**  | 268 | 3,166 | 10.2 | 620 | 3,135 | 22.9 |
| **Female** | 226 | 3,948 | 8.1 | 694 | 3,918 | 20.8 |
| **Total**  | **494** | **7,114** | **9.1** | **1,314** | **7,035** | **21.8** |

|  |  |  |
| --- | --- | --- |
|  | **Ever used marijuana**  | **Marijuana use weekly or more often**  |
| Sex  | n | N | n | n | N | % |
| **Male**  | 675 | 3,107 | 25.7 | 150 | 3,099 | 5.1 |
| **Female** | 750 | 3,889 | 21.1 | 129 | 3,882 | 3.1 |
| **Total**  | **1,425** | **6,996** | **23.4** | **279** | **6,981** | **4.1** |

n=number of students saying they have used alcohol or marijuana

N=total sample size of all students in the survey

Questions

1. Compare the alcohol and marijuana use by sex. What is more common for each of males and females - binge drinking or heavy use of marijuana?
2. Why do you think this is the case?
3. Are the patterns of use the same across males and females (ie. are the highest and lowest rates for each substance the same in every category)?
4. Have you got any ideas that might explain the patterns in these data?

**Alcohol and marijuana use by age**

|  |  |  |
| --- | --- | --- |
|  | **Drink alcohol at least once a week**  | **Binge drinking at least once in past 4 weeks**  |
| Age  | n | N | % | n | N | % |
| **13** and under | 20 | 1,254 | 2.0 | 42 | 1,244 | 4.1 |
| **14** | 46 | 1,612 | 3.4 | 134 | 1,597 | 7.7 |
| **15** | 108 | 1,548 | 8.3 | 287 | 1,530 | 19.4 |
| **16** | 145 | 1,376 | 11.7 | 365 | 1,364 | 29.3 |
| **17** and over | 175 | 1,324 | 17.7 | 486 | 1,318 | 42.1 |
| **Total**  | **494** | **7,114** | **9.1** | **1,314** | **7,035** | **21.8** |

|  |  |  |
| --- | --- | --- |
|  | **Ever used marijuana**  | **Marijuana use weekly or more often**  |
| Age  | n | N | % | n | N | % |
| **13** and under | 84 | 1,239 | 6.0 | 20 | 1,237 | 1.3 |
| **14** | 174 | 1,580 | 11.3 | 35 | 1,578 | 2.5 |
| **15** | 336 | 1,522 | 24.1 | 83 | 1,518 | 6.4 |
| **16** | 389 | 1,355 | 31.2 | 71 | 1,353 | 5.2 |
| **17** and over | 442 | 1,300 | 38.8 | 70 | 1,295 | 4.6 |
| **Total**  | **1,425** | **6,996** | **23.4** | **279** | **6,981** | **4.1** |

n=number of students saying they have used alcohol or marijuana

N=total sample size of all students in the survey

Questions

1. Compare the alcohol and marijuana use by age group. What is more common - binge drinking or heavy use of marijuana?
2. Why do you think this is the case?
3. Are the patterns of use the same across the different locations (ie. are the highest and lowest rates for each substance the same in every category)?
4. What does this suggest about substance availability and the social habits of students of different ages … or have you got other ideas about the patterns in these data?

**Alcohol and marijuana use by urban/rural location**

|  |  |  |
| --- | --- | --- |
|  | **Drink alcohol at least once a week**  | **Binge drinking at least once in past 4 weeks**  |
| Location  | n | N | % | n | N | % |
| **Urban**  | 261 | 4,859 | 8.2 | 720 | 4,831 | 19.2 |
| **Small towns** | 53 | 509 | 10.5 | 142 | 497 | 26.1 |
| **Rural**  | 109 | 1,047 | 10.6 | 252 | 1,035 | 25.8 |
| **Total**  | **494** | **7,114** | **9.1** | **1,314** | **7,035** | **21.8** |

|  |  |  |
| --- | --- | --- |
|  | **Ever used marijuana**  | **Marijuana use weekly or more often**  |
| Location  | n | N | % | n | N | % |
| **Urban**  | 781 | 4,777 | 20.7 | 138 | 4,769 | 3.5 |
| **Small towns** | 145 | 497 | 26.5 | 32 | 494 | 6.2 |
| **Rural**  | 274 | 1,037 | 28.2 | 61 | 1,033 | 4.5 |
| **Total**  | **1,425** | **6,996** | **23.4** | **279** | **6,981** | **4.1** |

n=number of students saying they have used alcohol or marijuana

N=total sample size of all students in the survey

Urban (population of 10,000 or more), Small towns (population between 1,000 and 9,999 people), Rural (population fewer than 1,000)

Questions

1. Compare the alcohol and marijuana use by location. What is more common - binge drinking or heavy use of marijuana?
2. Why do you think this is the case?
3. Are the patterns of use the same across the different locations (ie. are the highest and lowest rates for each substance the same in every category)?
4. What does this suggest about substance availability, social habits of students in these regions … or have you got other ideas about the patterns in these data?

**E. Trends in alcohol and marijuana use 2000-2019**

**Binge drinking at least once in past 4 weeks – males and females**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2001****N = 8,720** | **2007****N = 8,301** | **2012****N = 8,179** | **2019** **N=6,850** |
|  | n | % | n | % | n | % | n | % |
| Male  | 1,241 | 34.4 | 1,566 | 37.8 | 845 | 25.7 | 579 | 22.8 |
| Female  | 1,304 | 31.9 | 1,263 | 34.7 | 995 | 24.9 | 642 | 20.7 |
| **TOTAL**  | **2,545** | **34.4** | **2,829** | **36.2** | **1,840** | **25.3** | **1,221** | **21.8** |

**Marijuana use weekly or more often**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2001****N = 8,720** | **2007****N = 8,301** | **2012****N = 8,179** | **2019** **N=6,850** |
|  | n | % | n | % | n | % | n | % |
| Male  | 297 | 7.8 | 249 | 5.9 | 166 | 5.0 | 141 | 5.1 |
| Female  | 261 | 5.2 | 125 | 3.5 | 93 | 2.1 | 105 | 3.1 |
| **TOTAL**  | **558** | **6.5** | **374** | **4.7** | **259** | **3.6** | **249** | **4.1** |

Questions

1. What do you notice about the overall (and male and female) trends in binge drinking across the years from 2001-2019? Why do you think this has happened?
2. Are these differences for regular marijuana use across 2001-2019 as large as they are for alcohol? Why do you think this is the case?
3. The Youth19 Rangatahi Smart Survey (Youth19) summary states (based on other data in the survey) that the pattern of binge drinking is common across all socioeconomic groups whereas regular vaping is more common in wealthier communities, and tobacco smoking and marijuana use is more common in poorer communities. Why do you think this is the case?
4. In past years of the survey, students in school from around the country were included. The Youth19 survey was conducted in the Auckland, Waikato, and Tai Tokerau (Northland) education regions. These three regions contain 47% of the total New Zealand youth population and are the most ethnically diverse areas of the country. Do you think this could mean that the data in the 2019 survey may not apply to all regions (for example, the South Island)? Why or why not?