

March  
2024



## Isle of Man Substance Use Survey 2022

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## Contributorship

Rebecca Bates planned and conducted the analyses of the survey data and drafted the report and infographic. Nadia Butler advised on data analyses and reviewed the report. Charley Wilson quality assured the analyses and supported drafting the report. Zara Quigg reviewed the final report. Charlotte Nicol and Madeleine Sayle (and colleagues) planned and implemented the survey and commissioned data analyses and report production. All authors contributed to and edited the report and agreed the final text.

## Acknowledgements

We are very grateful to all Isle of Man residents who kindly participated in the survey, and Dr Henrietta Ewart (Director of Public Health) and Dan Davies (Chief Executive Officer for Department of Home Affairs) for supporting the development and implementation of the survey. Front cover image by James Qualtrough IIII on Unsplash.

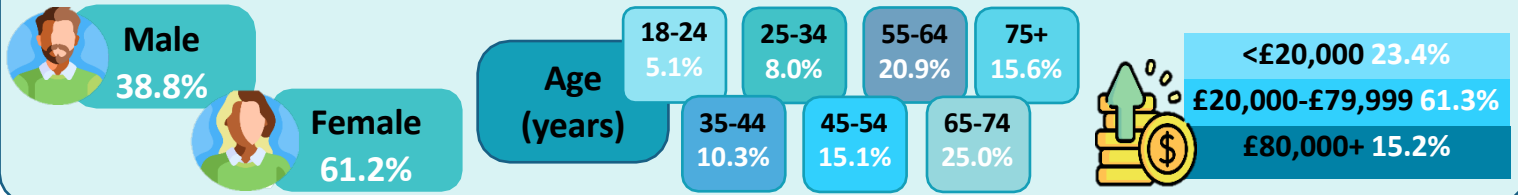
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# Isle of Man Substance Use Survey 2022

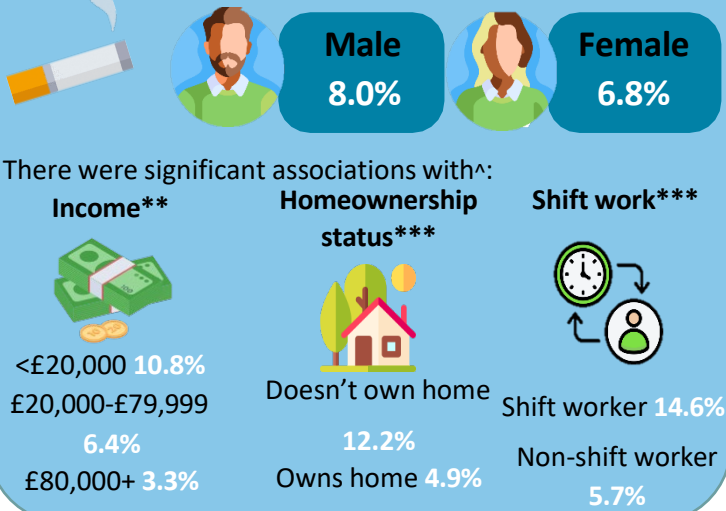
The survey aimed to examine individuals' alcohol and drug use, as well as attitudes towards use, criminality, and punishment relating to the use of cannabis in the Isle of Man. The questionnaire included a range of questions on a series of key health issues including smoking, alcohol, diet and nutrition, exercise, weight, general health and wellbeing. In addition, the questionnaire collected information on basic demographics of participants.

## Demographics of survey participants (N=1774)

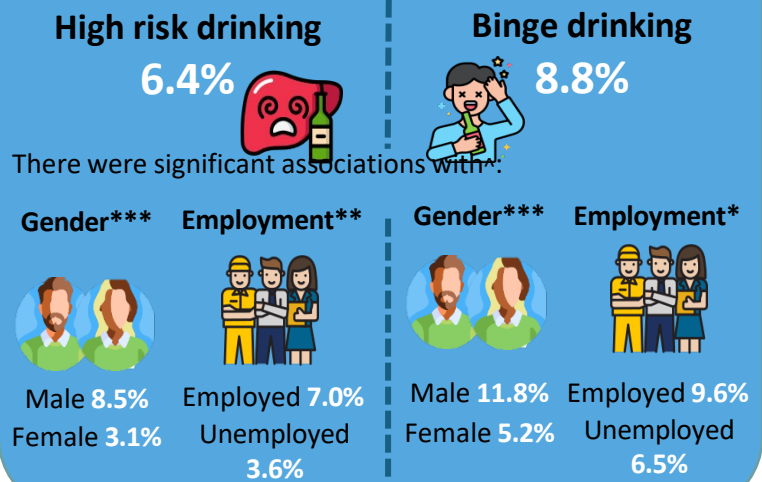


## Substance use

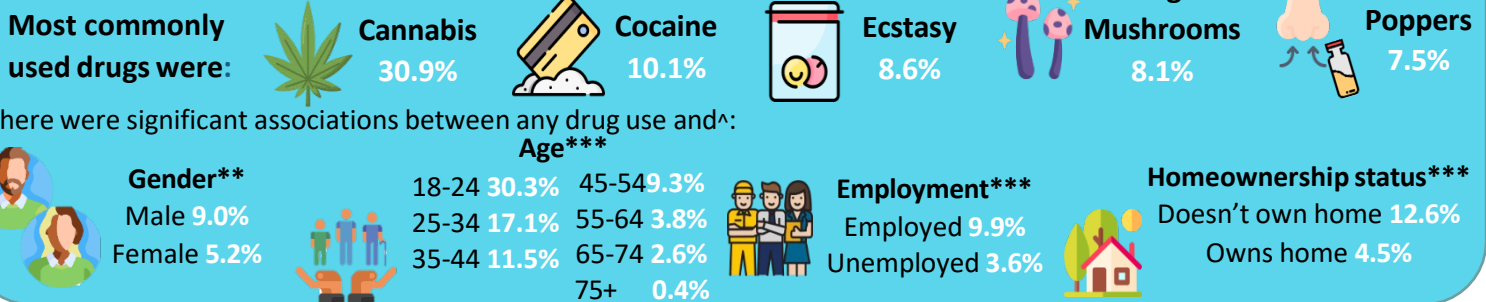
### Daily tobacco smoking 7.4%



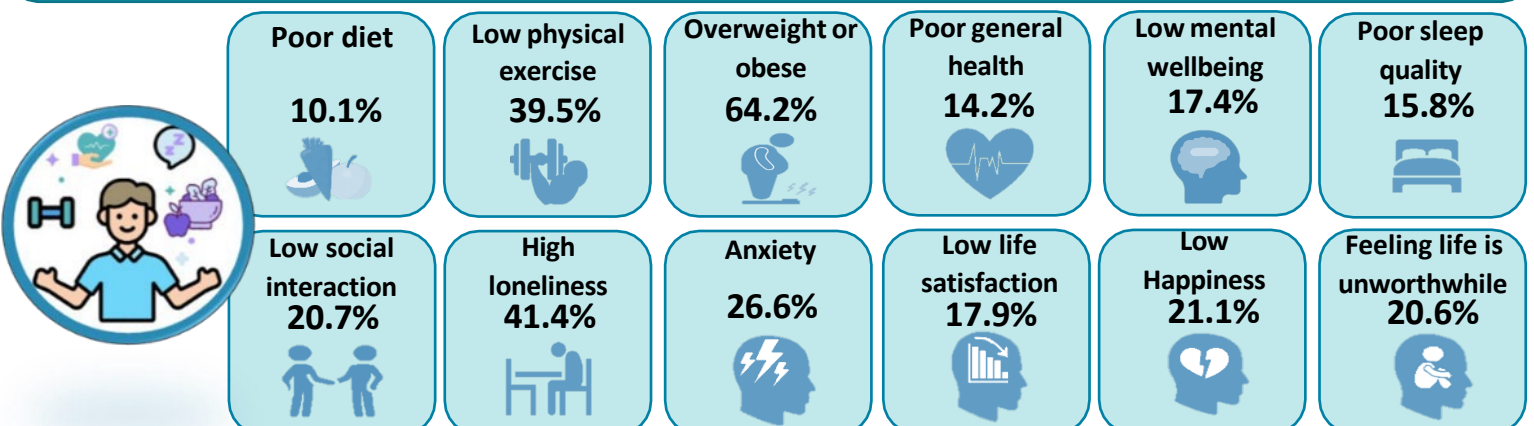
### Alcohol consumption



### Drug use 9.5% had used any drug in the past 12 months.
















## Key health indicators



All figures represent weighted data unless stated otherwise with <sup>^</sup> indicates sample level data. \* indicates a significant association; \*\*=p<0.05; \*\*\*=p<0.01; \*\*\*\*=p<0.001.

## Health indicators by substance use

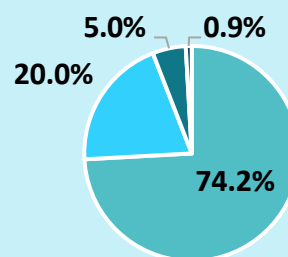
Health indicators 	Daily tobacco smokers 		Binge drinkers 		Any drug use (past 12 months) 	
	Yes	No	Yes	No	Yes	No
Poor diet 	25.4%	8.8%	16.1%	9.4%	17.1%	9.4%
Low physical activity 	56.4%	37.8%	36.1%	38.3%	34.5%	39.4%
Overweight or obese 	62.8%	64.8%	72.5%	63.6%	50.5%	66.0%
Poor general health 	23.3%	12.0%	10.5%	11.8%	13.0%	12.6%
Low mental wellbeing 	26.1%	16.7%	19.5%	16.5%	26.6%	16.3%
High loneliness 	45.1%	41.3%	40.2%	41.0%	47.9%	40.8%
Low life satisfaction 	30.7%	16.7%	19.0%	17.1%	26.8%	16.5%
Low happiness 	32.5%	20.1%	17.2%	20.6%	27.3%	19.9%
Feeling life is unwhorthwhile 	34.8%	19.5%	25.6%	19.5%	30.0%	19.6%

## Clustering of substance use

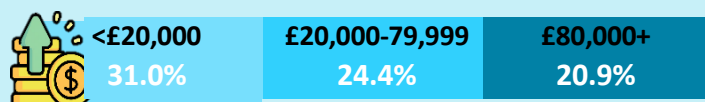
**25.8%** of adults used at least one substance.



Multiple substance use










Using at least one substance was highest amongst the lowest income group and decreased as income group increased.



■ No substances      ■ One substance  
■ Two substances      ■ Three substances

## Clustering of substance use and health indicators<sup>^</sup>

Health indicators 	No substances	One substance	Two substances	Three substances	Significance
Poor diet 	6.8%	14.8%	25.5%	11.1%	***
Poor general health 	11.6%	17.1%	17.3%	33.3%	*
Low mental wellbeing 	13.6%	23.9%	20.4%	33.3%	***
Low life satisfaction 	14.3%	23.0%	26.9%	33.3%	***
Low happiness 	17.0%	24.5%	26.9%	11.1%	*
Feeling life is unwhorthwhile 	16.4%	28.5%	33.3%	33.3%	***

## Executive summary

The Isle of Man Health and Lifestyle Survey 2022 aimed to examine survey respondents' alcohol and drug use, as well as participants attitudes towards use, criminality, and punishment relating to the use of cannabis in the Isle of Man. The questionnaire was conducted online, with a paper-based version available on request. Sampling was an invited representative sample (n=7,000) of the Isle of Man population. In total, 1877 responses were received which equates to 2.7% of the Island's adult population. The questionnaire included a range of questions on a series of key health issues including smoking, alcohol, diet and nutrition, exercise, weight, general health, and wellbeing. In addition, the questionnaire collected information on basic demographics of participants, and a number of questions related to drug use, criminality, and punishment relating to the use of cannabis in the Isle of Man. It used a number of validated instruments for identifying and measuring health-related issues. The Public Health Institute (PHI), Liverpool John Moores University were commissioned to analyse the data from the survey and produce a report presenting the findings.<sup>1</sup>

### Smoking

10.8% of adults were current tobacco smokers, 7.4% of adults smoked tobacco daily. A slightly higher proportion of males (8.0%) than females (6.8%) reported smoking tobacco on a daily basis. The prevalence of daily smoking was lowest amongst the oldest age groups and was similar amongst other age groups (75+ years, 1.0%). In sample (unweighted) analyses, daily tobacco smoking was significantly associated with age ( $p<0.01$ ) but not gender. Daily tobacco smoking was also significantly associated with income level (<£20,000, 10.8%; £20,000-£79,999, 6.4%; £80,000+, 3.3%;  $p<0.01$ ); home ownership status (does not own home, 12.2%; owns home, 4.9%;  $p<0.001$ ); and shift working (shift worker, 14.6%; non-shift worker, 5.7%;  $p<0.001$ ).

- 57.4% of smokers were planning to stop smoking.

### Alcohol

- 56.5% of adults consumed alcohol in the past week.
- 13.2% of adults drank above the recommended weekly limit for alcohol.

Using the AUDIT-C tool, 65.6% of adults were classified as lower risk, 28.0% as increasing risk, 6.0% as higher risk, and 0.4% as possible dependence. A higher prevalence of males (9.2%) classified as high-risk drinkers compared to females (3.6%). The prevalence of high-risk drinking was lowest in those aged 75+years (2.8%) and was highest amongst those aged 35-44 years (9.3%). In sample (unweighted) analyses, high risk drinking was significantly associated with gender ( $p<0.001$ ) but not age, employment status (employed 7.0%, unemployed, 3.6%;  $p<0.01$ ); and carer responsibility (carer 3.3%, not a carer 6.1%;  $p<0.05$ ).

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<sup>1</sup> All figures given in the report are sample data weighted by age and gender to align with the population of the Isle of Man, unless otherwise stated.

8.8% of adults were classified as binge drinkers (i.e., consuming six (females)/eight (males) or more standard alcoholic drinks on one occasion, at least once a week), with binge drinking higher amongst males (12.1%) compared to females (5.5%). The lowest prevalence of binge drinking was amongst those aged 75+ (5.0%), whilst highest was amongst those aged 35-44 years (10.6%). In sample (unweighted) analyses, binge drinking was significantly associated with gender ( $p<0.001$ ) but not age. Binge drinking was also significantly associated with employment status (employed, 9.6%; unemployed, 6.5%;  $p<0.05$ ); place of birth (IoM, 9.9%; other, 7.0%;  $p<0.05$ ); and carer responsibility (carer, 4.7%; not a carer 9.4%,  $p<0.01$ ).

## Drug taking

9.5% of adults had taken any drugs in the past 12 months. A higher proportion of males (12.0%) than females (7.1%) reported taking drugs in the past 12 months (Table A10). The lowest prevalence of drug taking was amongst those aged 75+ years (0.5%), whilst prevalence was highest amongst those aged 18-24 years (28.8%). In sample (unweighted) analyses, any drug taking was significantly associated with gender ( $p<0.01$ ) and age ( $p<0.001$ ). Any drug taking was also significantly associated with employment status (employed, 9.9%; unemployed, 3.6%;  $p<0.001$ ); place of birth (IoM, 9.3%; other, 5.1%;  $p<0.01$ ); and housing status (owns home, 4.5%; does not own home 12.6%,  $p<0.001$ ).

3.7% of adults had only used a class A drug (this included Cocaine, Crack, Ecstasy, LSD, Magic mushrooms, Heroin and Methadone) in the past 12 months.

4.9% of adults had only used cannabis in the past 12 months. A higher proportion of males (5.7%) than females (4.1%) reported only using cannabis in the past 12 months. The lowest prevalence of cannabis use was amongst those aged 75+ years (0.0%), whilst the highest was amongst those aged 18-24 years (14.4%). In sample (unweighted) analyses, cannabis use was significantly associated with age ( $p<0.001$ ) but not gender. It was also significantly associated with employment status (employed, 5.3%; unemployed, 2.2%;  $p<0.01$ ); and housing status (does not own home, 6.5%; owns home, 2.7%;  $p<0.001$ ).

## Associations between substance use, health harming behaviours and health indicators

### Poor diet

10.1% of adults reported eating less than two pieces of fruit and/or vegetables a day. The proportion of adults reporting a poor diet varied by substance use activity; a quarter (25.4%) of those who smoked daily also had a poor diet, whilst 22.4% of adults who took a Class A drug in the past 12 months had a poor diet. In sample (unweighted) analyses, having a poor diet was significantly associated with daily tobacco smoking (21.8%, non-smokers 7.6%,

smokers,  $p < 0.001$ ; 14.3% high risk drinker, 8.1% non-high risk drinkers,  $p < 0.05$ ; 15.7% binge drinking, 8.0% non-binge drinkers,  $p < 0.01$ ; 17.4% drug taking in the past 12 months, 7.9% no drug use in the past 12 months  $p < 0.001$ ; 16.4% cannabis use in the past 12 months, 8.3% no cannabis use in the past 12 months,  $p < 0.05$ ; and 22.2% Class A drug use in the past 12 months, 8.3% no class A drug use in the last 12 months;  $p < 0.01$ .

### *Low physical activity*

39.5% of adults reported taking part in less than 2.5 hours of physical activity in the past week. The proportion of adults reporting low physical activity varied by substance use with over half (56.4%) of those who smoked daily also reporting low physical activity. In sample (unweighted) analyses, low physical exercise was significantly associated with daily tobacco smoking (55.7%; 39.3% non-smokers;  $p < 0.001$ ).

### *Overweight or obese*

64.2% of adults had a BMI of 25 or more. The proportion of adults classified as overweight or obese varied by substance use activity. Three quarters (72.9%) of those who are high risk drinkers were classified as being overweight or obese, similarly 72.5% of adults who were binge drinkers were also overweight or obese. Participants who reported any type of smoking or drug taking were less likely to report being overweight or obese. In sample (unweighted) analyses, being overweight or obese was only significantly associated with high-risk drinking (77.3%, non-high-risk drinkers 64.1%;  $p < 0.05$ ), binge drinking (75.6%, non-binge drinkers 64.1%;  $p < 0.05$ ) and using Class A drugs only in the past 12 months (44.0%; and not only using Class A drugs 65.7%;  $p < 0.05$ ).

### *Poor general health*

14.2% of adults reported poor general health. The proportion of adults reporting poor general health varied by substance use activity. Approximately a quarter (23.3%) of those who were daily tobacco smokers also had poor general health, whilst 14.7% of adults who used cannabis in the past 12 months also reported poor general health. In sample (unweighted) analyses, poor general health was significantly associated with daily tobacco smoking (25.0%; non-daily tobacco smokers 13.3%;  $p < 0.001$ ).

### *Low mental wellbeing*

17.4% of adults reported low mental wellbeing. The proportion of adults reporting low mental wellbeing varied by substance use activity. Three in ten (30.6%) adults who used cannabis in the past 12 months also reported low mental wellbeing, similarly 28.6% of adults who use e-cigarettes daily also had low mental wellbeing. In sample (unweighted) analyses, low mental wellbeing was significantly associated with daily tobacco smoking (23.6%; non-daily tobacco smoking 15.8%;  $p < 0.05$ ); daily e-cigarette smoking (26.4%; non-daily e-cigarette smoking 16.1%;  $p < 0.05$ ); any drug taking in the past 12 months (27.5%; non-drug takers in the past 12 months 15.1%;  $p < 0.01$ ); and cannabis use in the past 12 months (29.8%; and not only using cannabis 15.4%;  $p < 0.01$ ).



### *Sleep quality*

15.8% of adults reported having bad/very bad sleep quality. The proportion of adults reporting poor sleep varied by substance use activity. One in five (21.9%) of those who smoked tobacco daily also reported poor sleep, whilst 17.4% of binge drinkers had poor sleep. In sample (unweighted) analyses, poor sleep was not significantly associated with any substance use activities.

### *Low social interaction*

20.7% of adults reported low social interaction. The proportion of adults reporting low social interaction varied by substance misuse activity. Nearly a quarter (23.7%) of those who smoked tobacco daily reported low social interaction. In sample (unweighted) analyses, low social interaction was not significantly associated with any substance use activity.

### *High loneliness*

41.4% of adults reported feeling lonely occasionally, sometimes, often/always. The proportion of adults reporting high loneliness varied by substance misuse activity. In sample (unweighted) analyses, high loneliness was significantly associated with drug taking in the past 12 months (49.5%; no drug taking in the past 12 months 39.5%;  $p < 0.05$ ).

### *Anxiety*

26.6% of adults were highly anxious. The proportion of adults reporting being highly anxious varied by substance use activity. Approximately three in ten (28.9%) adults who smoked tobacco daily also reported anxiety, whilst similar numbers (28.6%) of adults who took drugs in the past 12 months reported being highly anxious. In sample (unweighted) analyses, anxiety was not significantly associated with any substance use activities.

### *Low life satisfaction*

17.9% of adults report having low life satisfaction. The proportion of adults reporting low life satisfaction varied by substance misuse activity. Three in ten (30.7%) adults who smoked tobacco daily also reported low life satisfaction, whilst 26.8% of individuals who took drugs in the past 12 months had low life satisfaction. In sample (unweighted) analyses, low life satisfaction was significantly associated with daily smoking (28.8%; non-daily smoking 16.7%;  $p < 0.01$ ); drug taking in the past 12 months (27.6%; no drug taking in the past 12 months 16.4%;  $p < 0.01$ ); cannabis use only in the past 12 months (27.6%; non-cannabis user in the past 12 months 16.7%;  $p < 0.05$ ); and Class A drugs only in the past 12 months (32.4%; non-class A drug user in the past 12 months, 16.8%;  $p < 0.05$ ).

### *Low happiness*

21.1% of adults reported having low happiness. The proportion of adults reporting low happiness varied by substance misuse activity. Almost three in ten (32.5%) adults who smoked tobacco daily also reported low happiness, whilst 27.3% of individuals who took drugs in the past 12 months reported low happiness. In sample (unweighted) analyses, low happiness was significantly associated with daily smoking (28.2%; non-daily smoking 19.4%;

$p < 0.05$ ); and drug taking in the past 12 months (27.2%; no drug taking in the past 12 months 19.0%;  $p < 0.05$ ).

### *Feeling life is unworthwhile*

20.6% of adults felt the things they do in life are unworthwhile. The proportion of adults feeling life is unworthwhile varied by substance misuse activity. Over a third (34.8%) of those who smoked tobacco daily also reported feeling life is unworthwhile, whilst 30.0% of individuals who took drugs in the past 12 months reported feeling life is unworthwhile. In sample (unweighted) analyses, feeling life is unworthwhile was significantly associated with daily smoking (33.0%; non-daily smoking 18.9%;  $p < 0.001$ ); daily e-cigarette smoking (37.5%; non-daily e-cigarette smoking, 19.0%;  $p < 0.001$ ); drug taking in the past 12 months (29.8%; no drug taking in the past 12 months 19.0%;  $p < 0.01$ ); and Class A drug use in the past 12 months (35.3%; non-class A drug user in the past 12 months, 19.4%;  $p < 0.05$ ).

### **Clustering of substance use**

25.8% of adults had at least one substance (i.e., daily tobacco smoking, binge drinking, drugs taken within the last 12 months). The most prevalent substance used was tobacco smoking (11.2% of adults), followed by any drugs (9.5% of adults), and binge drinking (8.8% of adults). Three quarters (74.2%) of adults did not use any substances, 20.0% used one substance, 5.0% used two, and 0.9% used three substances.

A higher proportion of males (30.4%) than females (21.1%) had used at least one substance. The proportion of adults who had used at least one substance was highest amongst aged 18-24 years. The proportion of adults who had used at least one substance was highest amongst the lowest income group and decreased as income group increased (<£20,000, 31.0%; £20,000-79,999, 24.4%; £80,000+, 20.9%).

### **Clustering of substance misuse and health outcomes**

#### *Poor diet*

In sample (unweighted) analyses there was a significant association between number of substances used and poor diet. Prevalence of having a poor diet was lowest amongst those who used zero substances and highest amongst those who misused two substances (none, 6.8%; one, 14.8%; two, 25.5%; and three, 11.1%;  $p < 0.001$ ).

#### *Poor general health*

In sample (unweighted) analyses there was a significant association between number of substances used and poor general health. There was a graded relationship between the number of substances used and poor general health, with the prevalence of poor general health increasing as the number of substances used increased (none, 11.6%; one, 17.1%; two, 17.3%; and three, 33.3%;  $p < 0.05$ ).

#### *Low mental wellbeing*

In sample (unweighted) analyses there was a significant association between number of substances misused and low mental wellbeing. There was a graded relationship between the number of substances used and low mental wellbeing, with the prevalence of low mental

wellbeing generally increasing as the number of substances used increased (none, 13.6%; one, 23.9%; two, 20.4%; and three, 33.3%;  $p < 0.001$ ).

#### *Low life satisfaction*

In sample (unweighted) analyses there was a significant association between number of substances used and low life satisfaction. There was a graded relationship between the number of substances used and low life satisfaction, with the prevalence of low life satisfaction increasing as the number of substances used increased (none, 14.3%; one, 23.0%; two, 26.9%; and three, 33.3%;  $p < 0.001$ ).

#### *Low happiness*

In sample (unweighted) analyses there was a significant association between number of substances used and low happiness. Prevalence of low happiness highest among those who misused two substances (none, 17.0%; one, 24.5%; two, 26.9%; and three, 11.1%;  $p < 0.05$ ).

#### *Feeling life is unworthwhile*

In sample (unweighted) analyses there was a significant association between numbers of substances used and feeling life is unworthwhile. There was a graded relationship between the number of substances used and feeling life is unworthwhile, with the prevalence of feeling life is unworthwhile increasing as the number of substances used increased (none, 16.4%; one, 28.5%; two, 33.3%; and three, 33.3%;  $p < 0.001$ ).

# 1. Introduction

The role of Public Health Isle of Man is to protect and improve the health and wellbeing of residents and to reduce health inequalities. The Health Intelligence division contributes to this role by gathering and analysing data to assess the health and health needs of the population.

The Health and Lifestyle Survey is a valuable tool providing a regular overview of the health and wellbeing of the local population. Survey results provide key information that enables the Public Health Directorate to set goals, develop policies, and implement programs based on robust evidence. Moreover, it will allow monitoring of results.

This is the sixth survey compiled by the directorate. Previous surveys include:

- 2016 - General health and lifestyle with an interest in drug and alcohol consumption.
- 2017 - Health and lifestyle with a particular interest in gambling.
- 2018 - DHSC staff wellbeing in the workplace.
- 2019 - The health and wellbeing of the Island's adult population.
- 2021 - General health and wellbeing with a particular interest in Covid-19.
- 2022 - General health and wellbeing and the impact of substance misuse.

The results of this survey will contribute to the Isle of Man Public Health Outcomes Framework (PHOF), which combines and compares population-level indicators. Where applicable, the results may also be incorporated into other Public Health and Isle of Man government projects.

All respondents had to be 18 or older to participate in the survey.

## 2. Methods

### Questionnaire design

The questionnaire recorded basic demographic information on participants, including gender, age, income level, sexuality, employment status, qualification level, home ownership, place of birth, and carer status. In addition, individuals were asked a number of questions specifically related to participants' attitudes towards the use, criminality, and punishment relating to the use of cannabis in the Isle of Man.

A range of questions on a series of key health issues were also included and covered:

- Smoking
- Diet and nutrition
- Exercise
- Weight
- General health
- Wellbeing

The questionnaire included a number of validated instruments for identifying and measuring health-related issues including:

#### *The Alcohol Use Disorder Identification Test Consumption (AUDIT C)*

The Alcohol Use Disorder Identification Test Consumption (AUDIT C) consists of the consumption questions from the full AUDIT developed by the World Health Organisation to identify harmful and hazardous alcohol consumption patterns [1]. It consists of three questions measuring the frequency and quantity of alcohol consumption. Answers for each question<sup>2</sup> are scored and summed to provide an overall score that indicates an individual's risk of harm from alcohol use. Drinking risk is categorised as:

Low risk	Scores 1 to 4
Increasing risk	Scores 5 to 7
High risk	Scores 8 to 10
Possible dependence	Scores 11 to 12

#### *EQ-5D*

The EQ-5D is a measure of health status developed by the EuroQol Group which provides a measure of current general health [2]. The EQ VAS measure was used in the current report to determine the prevalence of poor general health. The EQ VAS is a measure of respondents' self-rated health on a vertical visual scale, where the end points are labelled 'the best health you can imagine' and the 'worst health you can imagine'. Scores are dichotomised to indicate poor general health as >1 standard deviation (19.4) below the mean (77.6) for the sample thus poor general health was operationalised as scores ≤58.

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<sup>2</sup> Standard response options on the AUDIT C include a "never" answer on two of the questions, however, this response option was not included in the current survey. Thus, Audit C data relates to only those who have consumed alcohol.

### *The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)*

The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) is used as a measurement of mental wellbeing in adults [3]. WEMWBS consists of 14 questions about an individual's mental wellbeing over the last two weeks. Responses are scored (none of the time=1, rarely=2, some of the time=3, all of the time=5) and summed to provide an overall WEMWBS score, ranging from 14 to 70. WEMWBS scores were grouped into three categories of low, moderate, and high mental wellbeing, where low/high represent scores of at least one standard deviation below/above the mean score for the sample (mean 50.7, SD, 9.6):

Low mental wellbeing: Scores of 41 or lower  
Moderate mental wellbeing: Scores of 42 to 60  
High mental wellbeing: Scores of 61 or above

### Sample design and response rate

The survey launched on 24th March 2022, and recipients had until 10th April 2022 to complete it. A further letter was issued on 31st March 2022 to remind recipients to complete the survey. It was decided that 7,000 addresses would be chosen from the database as had been done for previous lifestyle surveys. A 25% response rate was assumed based on previous experience.

The Cabinet Office maintains a property database of all known addresses on the island, which was shared with the Public Health Directorate. No information about the occupiers of a particular address was disclosed since the property database does not include the names of occupants. As part of the cleaning process, the Public Health Directorate removed non-residential addresses and nursing and residential homes from the list.

Addresses were divided into 3-digit postcode areas based on census data regarding population numbers within those areas.

Random sampling was used to select addresses within these postcode areas. In the invitation letter, another level of randomisation was added by asking the person whose birthday is next to answer the questionnaire.

### *Response Rate*

Type of Response	Number returned
Online	1796
Paper	81
Total Response	1877

In total, 1877 responses were received which equates to 2.7% of the adult population.

### Data analyses

Copies of paper surveys were entered into the online survey system. All data was then downloaded in Excel spreadsheet format and transferred to the Public Health Institute (via a secure SharePoint). Data was then transferred to the Statistical Package for Social Science (SPSS) v2 for data cleaning, recoding, and analyses. Analyses presented in this report were

undertaken using frequencies and cross-tabulations to examine findings by sociodemographic and other factors.

### Data weighting

The characteristics of the participants who completed the survey (section 2.6) did not correspond to the characteristics of the Isle of Man population. To account for these differences, it was necessary to weight the sample by age and gender to better align it with the Isle of Man population.<sup>3</sup> The weights were based on results from the Isle of Man Census 2021. The demographic information used from this Census is listed below. All figures given in the report are based on weighted data, unless otherwise stated. Full data tables, including weighted and unweighted data, are available in the Data Annex.

#### Isle of Man Census information 2021

Resident population: 84069

Number of residents over the age of 18: 68884

Age (years) and gender breakdown:

	18-24	25-34	35-44	45-54	55-64	65-74	75+	Total
Male	3159	4528	4965	6159	6244	4986	3777	33818
Female	2927	4577	5231	6287	6238	5068	4738	35066
Total	6086	9105	10196	12446	12482	10054	8515	68884

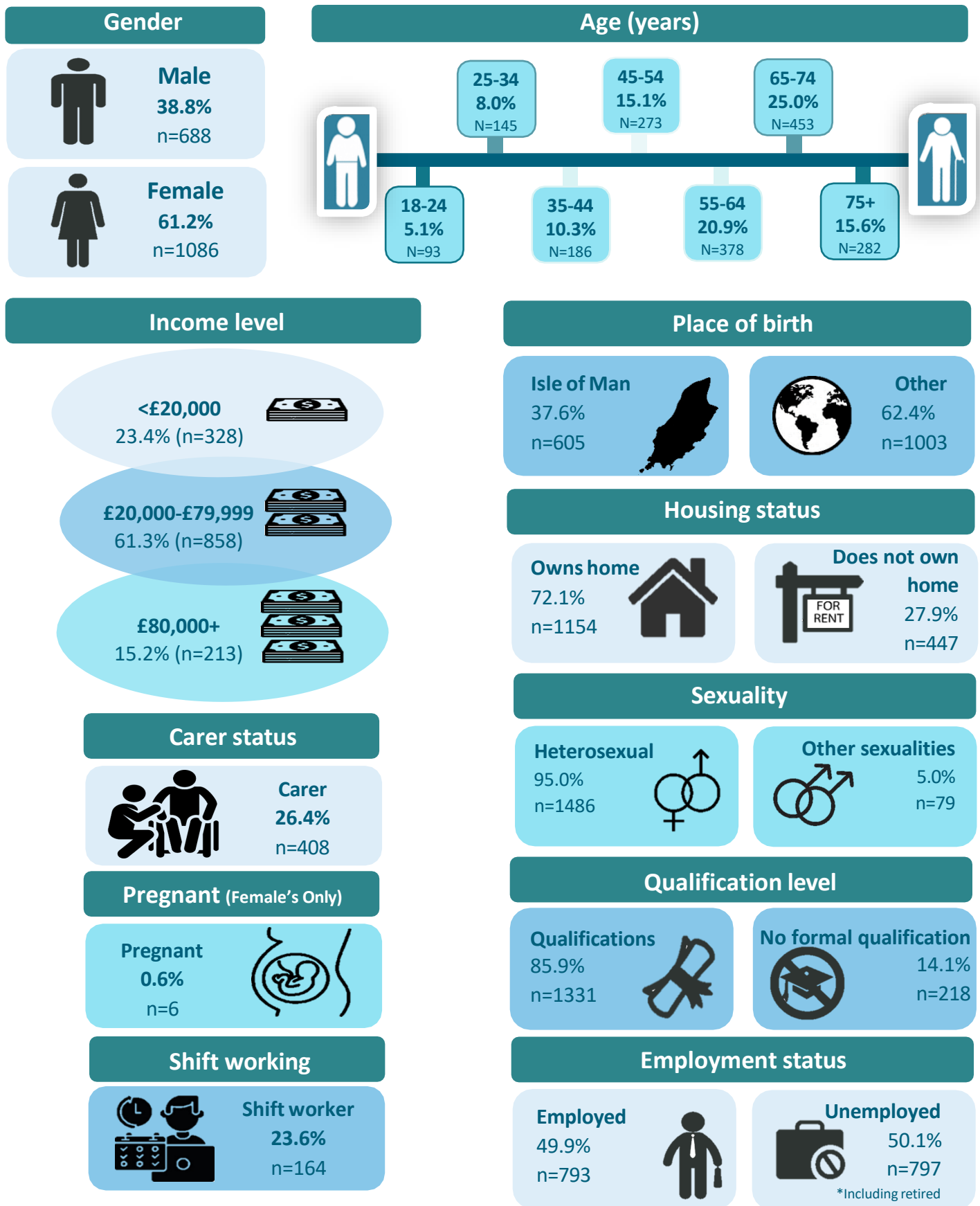
### Reporting conventions

The following caveats and conventions should be considered when interpreting the findings in this report:

- The data is based on valid responses, with non-responses excluded from the reported figure, therefore bases may vary between analyses.
- Data should be interpreted with caution due to the small base sizes involved for some of the outcome measures. Sample base sizes can be found in the annex.
- Rows may not sum to 100% due to rounding.
- All figures presented in the main body of the report are weighted data, unless otherwise stated.
- Where significant differences are reported in bivariate analyses, these are based on unweighted data. Full data tables of weighted and unweighted data are presented in the Annex accompanying this report.
- Findings represent an association only and do not imply causation in any direction.

<sup>3</sup> The population may have differed from the sample on more than these two characteristics.

## Sociodemographics of survey respondent's summary<sup>4</sup>



<sup>4</sup> Unweighted data.



### 3. Findings

Key findings from survey questions are presented in this section, with full data tables included in the Data Annex. All data are adjusted to match the Isle of Man population demographics of adults (on age and sex), unless otherwise stated.

#### 3.1 Smoking

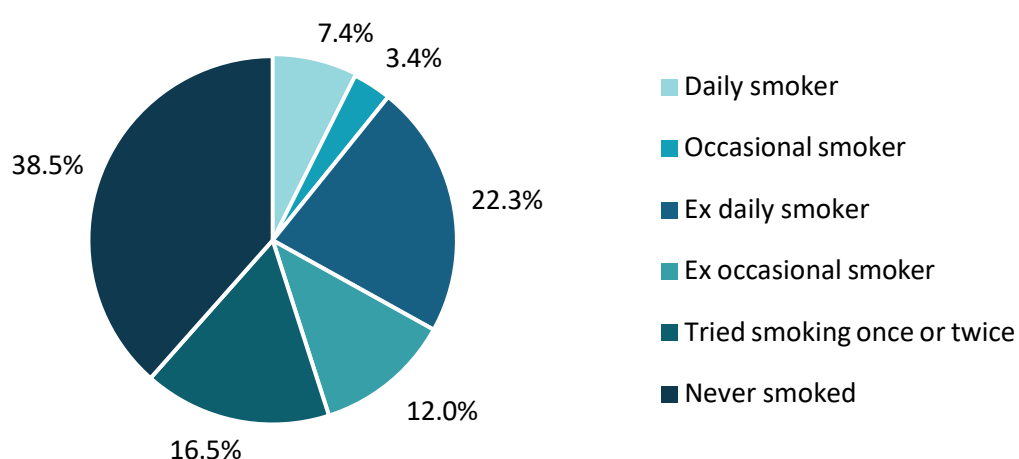
##### Tobacco smoking



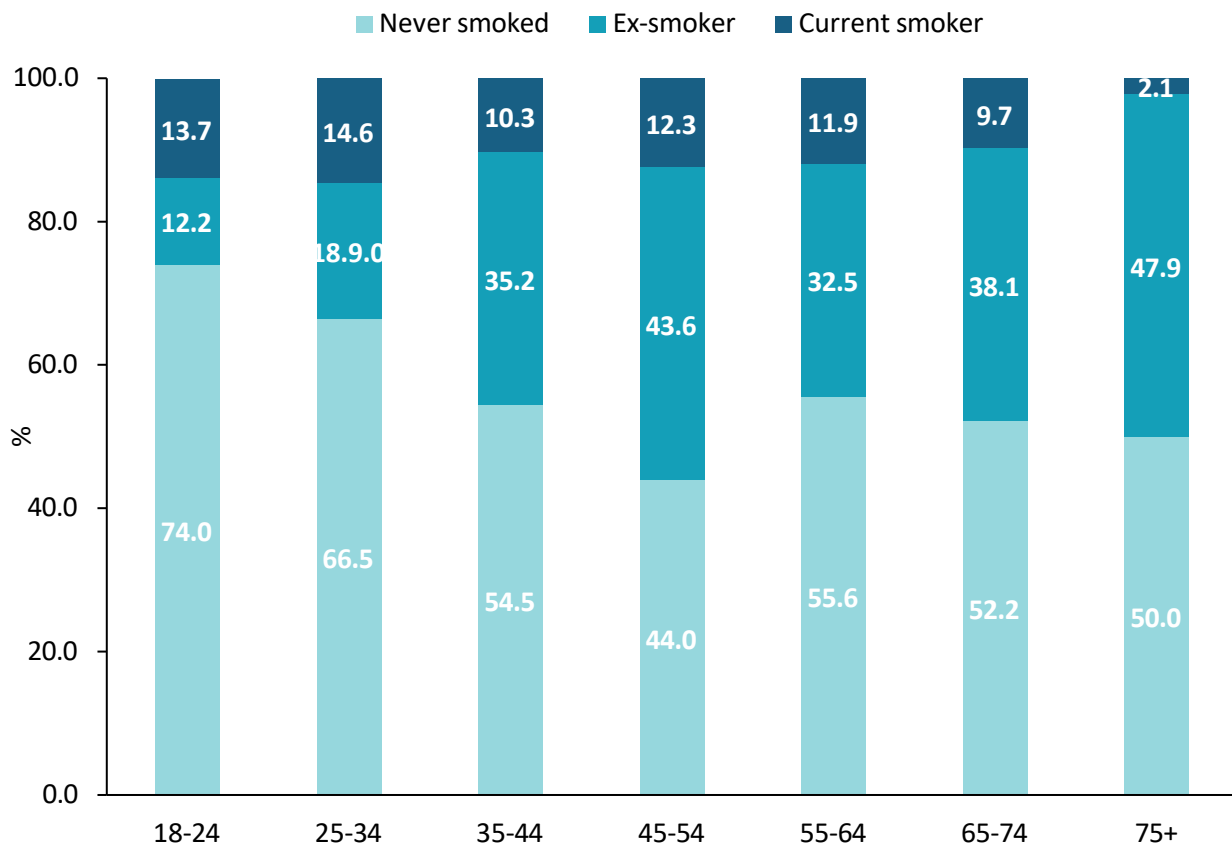
**10.8% of adults were current tobacco smokers.**

- Approximately over half (55.0%) adults had never smoked tobacco or only tried smoking once or twice, 34.2% of adults were ex-smokers, and 10.8% were current smokers (including daily (see Box 1) and occasional smokers; Figure 1; Table A1).
- The overall prevalence of current smoking was slightly higher amongst males (11.4%) to females (10.3%; Table A1). The prevalence of ex-smokers was slightly higher amongst males (36.3%) than females (32.2%; Table A1).
- The prevalence of current smoking was highest amongst 25–34-year-olds and ex-smoking was highest amongst the oldest age group (Figure 2; Table A1).
- The prevalence of current smoking was highest amongst the lowest income group and decreased as income level increased (<£20,000, 15.5%; £20,000-79,999, 10.6%; £80,000+, 5.6%; Table A1). The prevalence of ex-smokers also increased as income level increased (<£20,000, 48.8%; £20,000-79,999, 52.5%; £80,000+, 54.4%; Table A1)

**Figure 1: Smoking status**



**Figure 2: Tobacco smoking status by age group (years)**



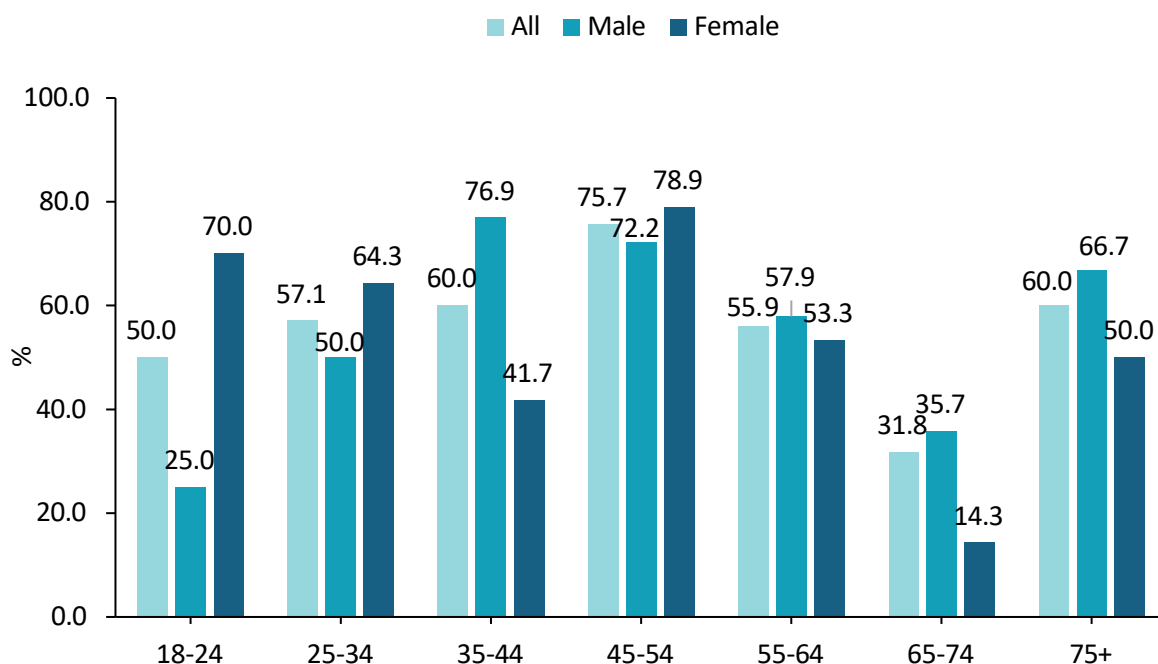
### Intentions to stop tobacco smoking.



**57.4% of smokers were planning to stop smoking tobacco.**

- Almost four in ten (37.5%) smokers planned to stop smoking sometime in the future, 19.9% planned to stop soon, whilst 14.0% were unsure if they were going to stop smoking, and 28.5% had no plans to quit.
- Slightly fewer males (55.6%) than females (58.8%) were planning to stop smoking soon or sometime in the future. The highest proportion of smokers who planned to stop smoking was amongst those aged 45-54 years (75.7%), whilst the lowest proportion was amongst those aged 65-74 years (31.8%; Figure 3).
- Slightly more occasional smokers (61.5%) than daily smokers (55.7%) were planning to stop smoking.

**Figure 3: Proportion of smokers planning to stop tobacco smoking by age group (years) and gender.**



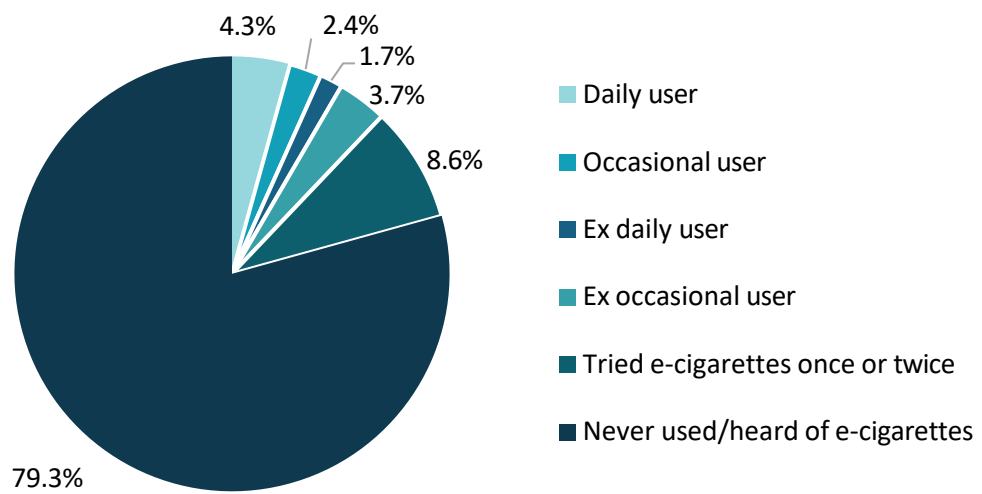
## Electronic cigarettes



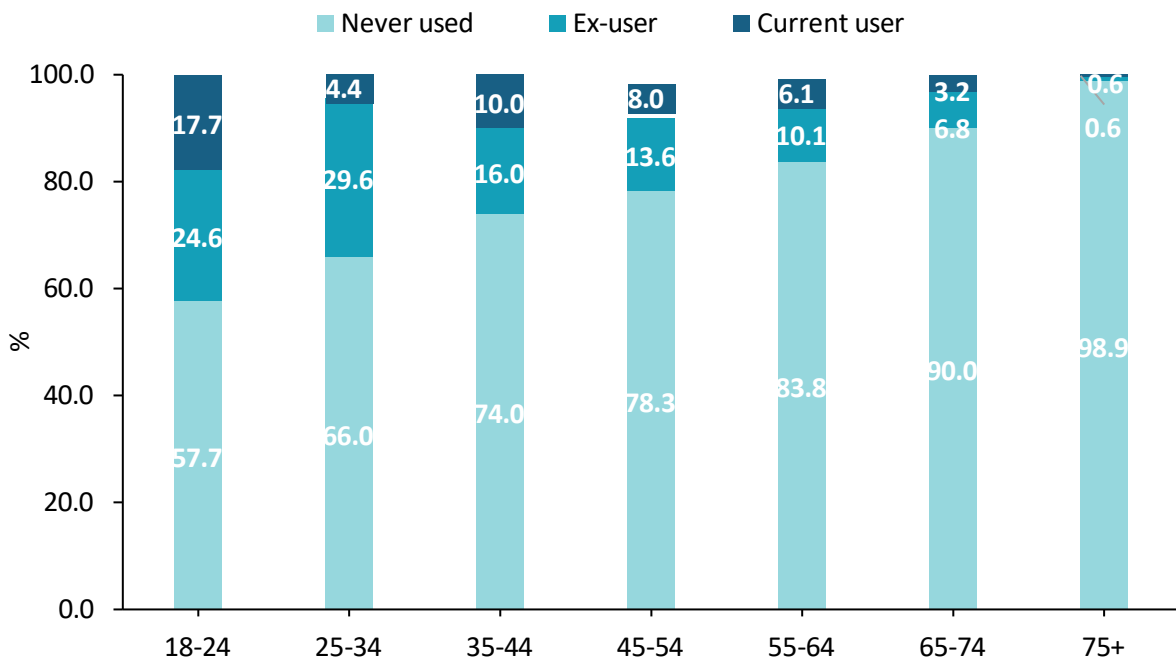
### 6.7% of adults were current e-cigarette users.

- The majority (79.3%) of adults had either never used or never heard of e-cigarettes, or only tried e-cigarettes once or twice (Figure 4; Table A2). 14.0% of adults were ex-users, and 6.7% were current e-cigarette users (including daily [see Box 2] and occasional users; Figure 4; Table A2).
- The overall prevalence of current e-cigarette use was slightly higher for males (7.0%) than females (6.4%; Table A2). The prevalence of ex-users was higher amongst males (17.2%) than females (10.9%; Table A2).
- The prevalence of current e-cigarette use was highest amongst those aged 18-24 years (17.7%), and the prevalence of current and ex use generally decreased as age group increased (Figure 5; Table A2).
- The prevalence of current e-cigarette use was highest amongst the lowest income group and decreased as income level increased (<£20,000, 8.3%; £20,000-79,999, 6.2%; £80,000+, 5.6%; Table A2). The prevalence of ex-users increased as income level increased (<£20,000, 10.3%; £20,000-79,999, 14.7%; £80,000+, 15.5%; Table A2).
- Over a third (36.3%) of e-cigarette users were also current tobacco smokers, whilst 61.8% of current e-cigarette users were ex-tobacco smokers, and 2.0% had never smoked tobacco.

**Figure 4: E-cigarette use**



**Figure 5: E-cigarette use by age group (years)**



## Box 1: Health in focus – Daily tobacco smoking



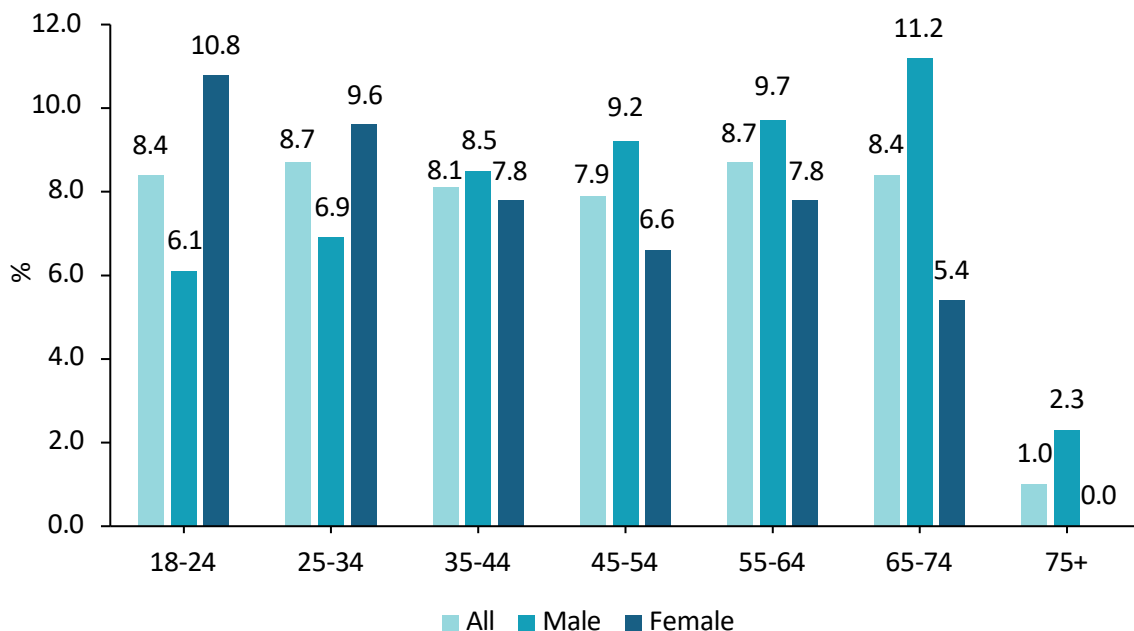
### Daily tobacco smoking

Current smoking of tobacco on a daily basis

7.4% of all adults

- A slightly higher proportion of males (8.0%) than females (6.8%) reported smoking tobacco on a daily basis. The prevalence of daily smoking was lowest amongst the oldest age groups and was similar amongst other age groups (75+ years, 1.0%; Figure 6; Table A3).
- In sample (unweighted) analyses, daily tobacco smoking was significantly associated with age ( $p < 0.01$ ; Table A3) but not gender. Daily tobacco smoking was also significantly associated with income level (<£20,000, 10.8%; £20,000-£79,999, 6.4%; £80,000+, 3.3%;  $p < 0.01$ ); home ownership status (does not own home, 12.2%; owns home, 4.9%;  $p < 0.001$ ); and shift working (shift worker, 14.6%; non-shift worker, 5.7%;  $p < 0.001$ ; Table A3).

Figure 6: Prevalence of daily tobacco smoking by age group (years) and gender



## Box 2: Health in focus – Daily e-cigarette use



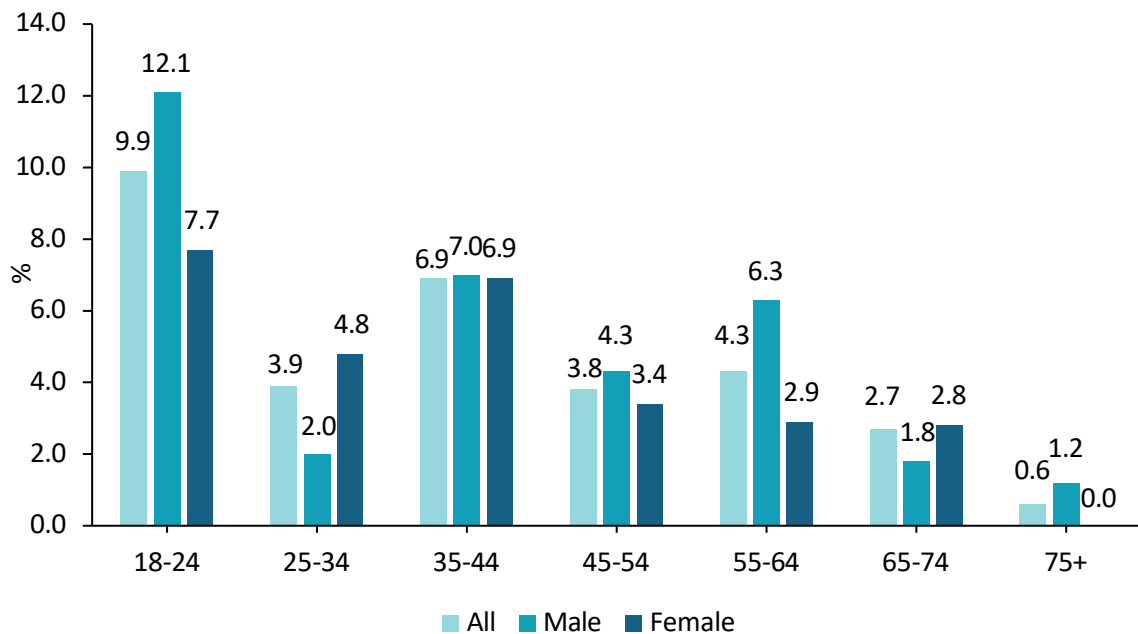
### Daily E-cigarette use

Current use of e-cigarettes on a daily basis

4.3% of all adults

- A slightly higher proportion of males (4.8%) than females (3.9%) reported using e-cigarettes on a daily basis. The prevalence of daily e-cigarette use was highest in the youngest age group (18-24 years, 9.9%) and lowest amongst the oldest age group (75+ years, 0.6%; Figure 7; Table A4).
- In sample (unweighted) analyses, daily e-cigarette use was significantly associated with age ( $p < 0.01$ ; Table A4) but not gender. Daily e-cigarette smoking was significantly associated with employment status (employed 4.9%; unemployed 2.3%;  $p < 0.01$ ); place of birth (IoM, 4.9%; other, 2.9%;  $p < 0.05$ ); and home ownership status (does not own home, 6.9%; owns home, 2.4%;  $p < 0.001$ ; Table A4).

Figure 7: Prevalence of daily e-cigarette use by age group (years) and gender.



## 3.2 Alcohol

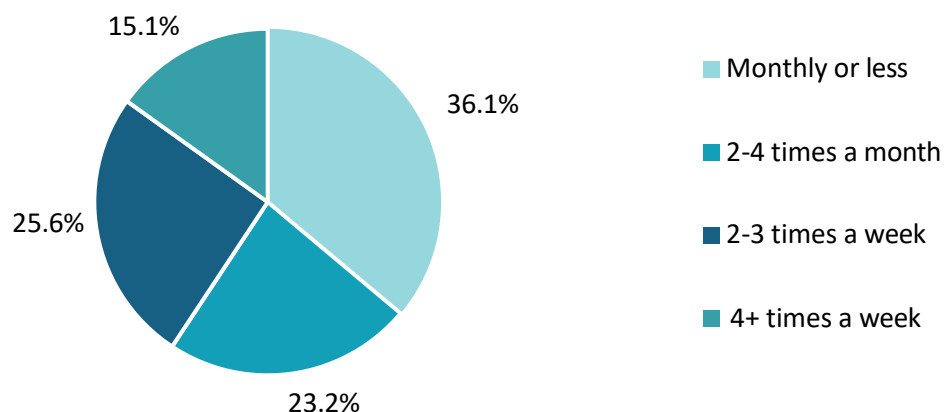
### Frequency of alcohol consumption



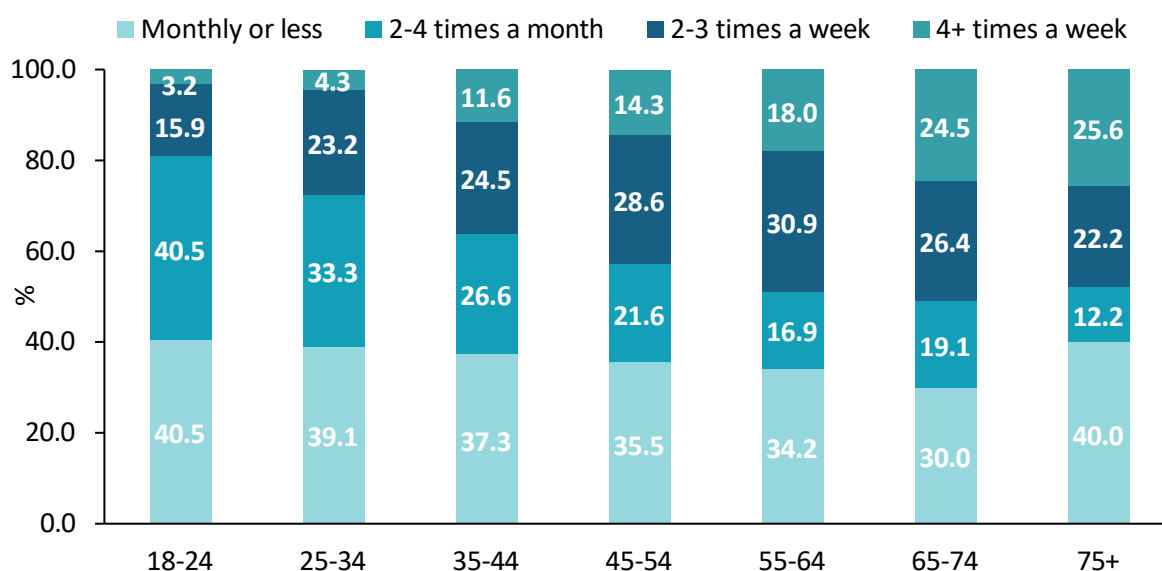
**56.5% of adults consumed alcohol in the past week.**

- 40.7% of respondents drink alcohol on two or more occasions per week (Figure 8).
- The overall prevalence of drinking at least twice a week was higher amongst males (46.0%) than females (35.5%; Table A5).
- Consuming alcohol at least twice weekly was lowest amongst those aged 18-24 years (19.1%) and generally increased as age group increased (Figure 9; Table A5).
- The prevalence of alcohol consumption on at least two occasions a week increased as income level increased (<£20,000, 35.2%; £20,000-79,999, 40.2%; £80,000+, 51.0%; Table A5).

**Figure 8: Frequency of alcohol consumption**



**Figure 9: Frequency of alcohol consumption by age group (years)**



## Quantity of alcohol consumption



**13.2% of adults drank above the recommended weekly limit for alcohol.**

- Men and women are recommended to drink no more than 14 units of alcohol a week.<sup>5</sup> Almost one fifth (13.2%) of adults drank above the recommended weekly limit, whilst 43.3% drank within this limit, and 43.5% of adults drank no alcohol in the previous week.
- A higher proportion of males (18.3%) than females (8.3%) drank above the recommended weekly limit in the past week (Table A6). A higher proportion of females (47.0%) than males (39.9%) drank no alcohol in the past week (Table A6).
- Prevalence of drinking above the recommended weekly limit was highest amongst adults aged 55-64 years (17.3%) and lowest amongst those aged 18-24 years (9.0%; Figure 10; Table A6).
- The prevalence of drinking above the recommended weekly limit was highest amongst those with the highest income level and decreased as income level decreased (£80,000+, 18.6%; £20,000-79,999, 13.9%; <£20,000, 11.3%; Table A6).

## Alcohol consumption in the past week

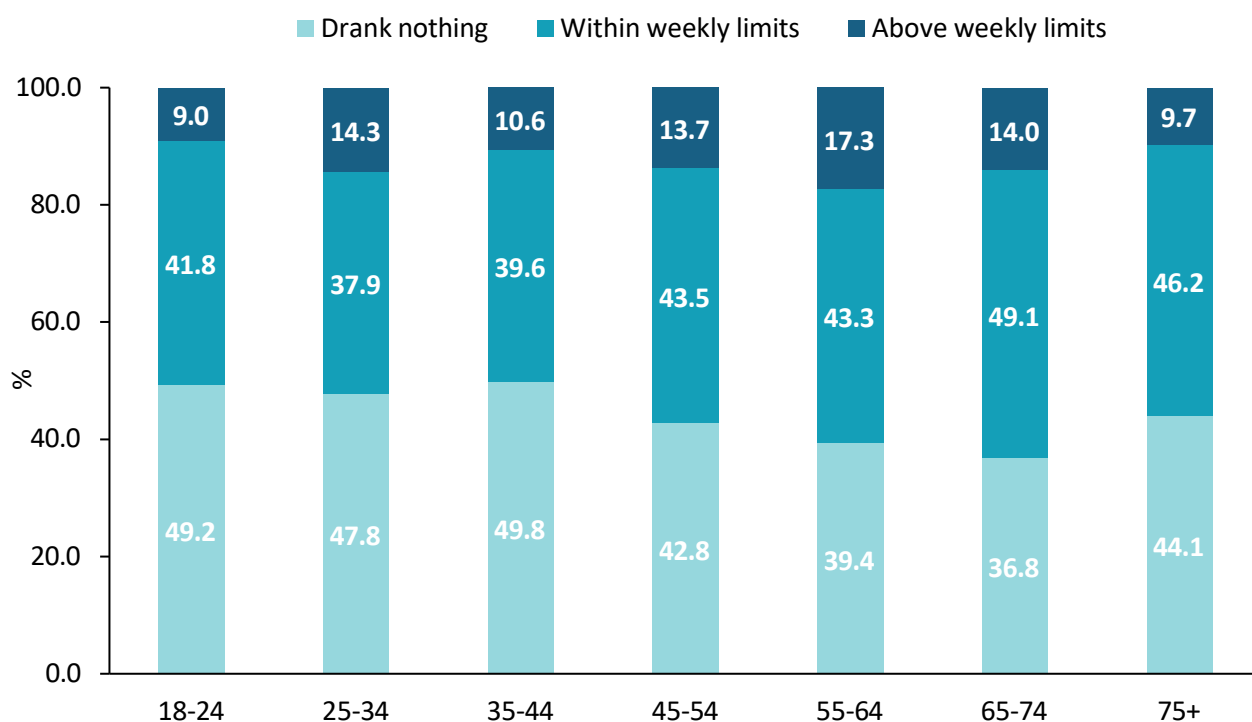
- Four in ten (43.5%) adults hadn't drunk in the past week, 5.8% of adults drank on every day in the past week, 2.3% on 6 days, 3.6% on 5 days, 5.0% on 4 days, 8.7% on 3 days, 11.5% on 2 days, and 19.5% on one day.
- Of those who reported consuming alcohol in the past week the most common type of alcohol consumed was wine (57.3%), followed by normal strength beer (55.9%), spirits (44.5%), strong strength beer (8.5%), fortified wine (5.1%) and alcopops (2.3%).<sup>6</sup>
- Most (84.4%) reported that their past weeks alcohol consumption was fairly typical of what they would usually drink in a week.
- Of adults who consumed alcohol, the average number of units consumed in the past week was 10.5 units. The mean number of units consumed in the past week was higher amongst males than females (Males, 12.5 units; Females, 8.3 units).

<sup>5</sup> See <https://www.nhs.uk/live-well/alcohol-support/calculating-alcohol-units/>

<sup>6</sup> Participants could select as many that applied.



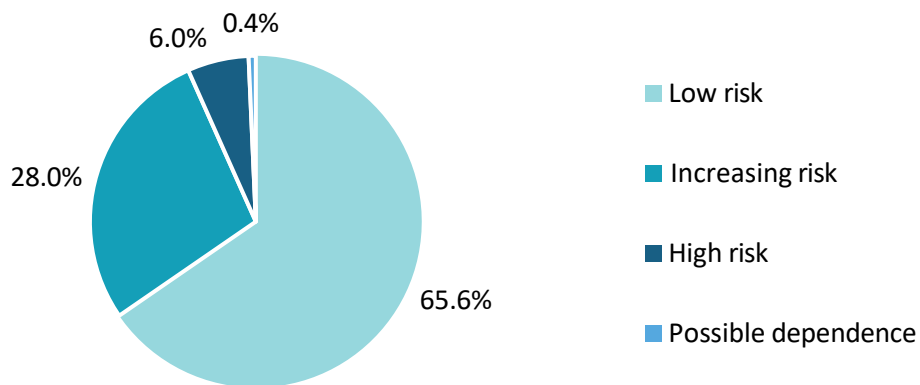
**Figure 10: Past week alcohol consumption by age group (years)**



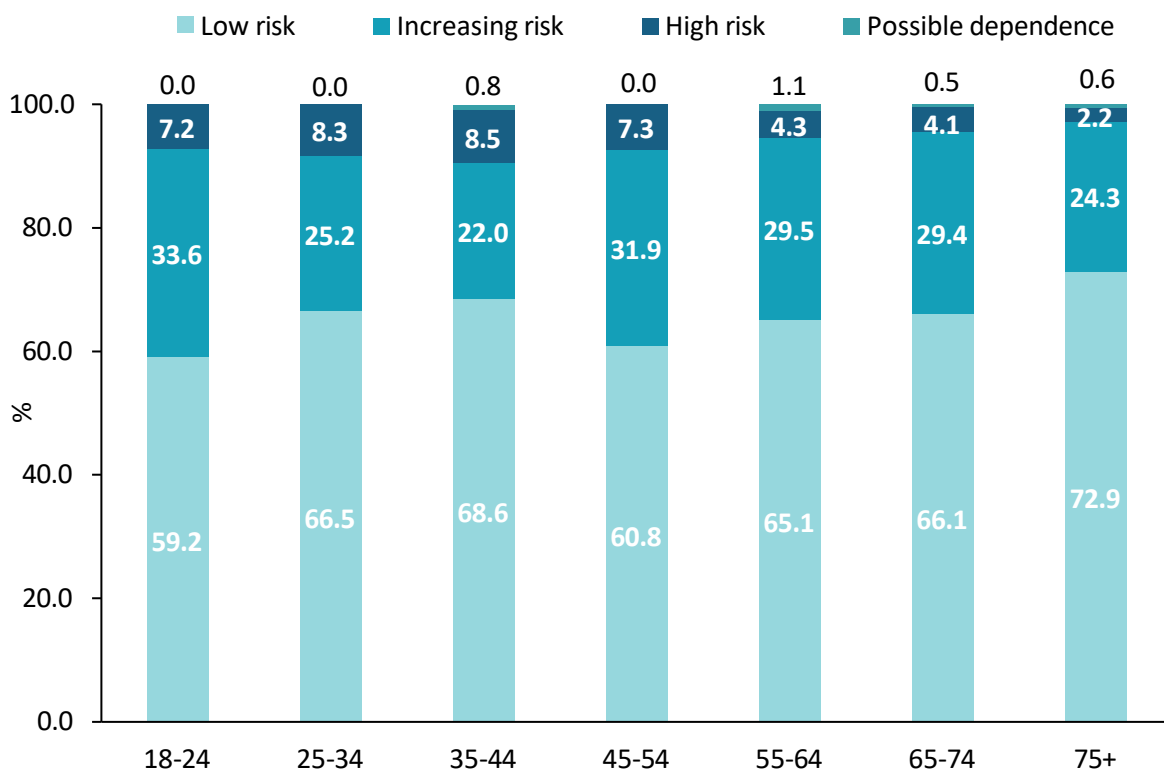
### AUDIT-C drinking risk

- Of those who drink alcohol,<sup>2</sup> two thirds (65.6%) of adults were classified as low risk drinkers and 28.0% were categorised as increasing risk (Figure 11; Table A5). 6.4% were classified as high risk or possible dependence (Figure 11; Table A7; Box 3).
- A higher proportion of females (73.0%) than males (58.0%) were categorised as low risk drinkers (Table A7). A higher proportion of males (32.7%) than females (23.4%) were categorised as increasing risk drinkers (Table A7). More males (9.2%) than females (3.6%) were high risk drinkers or possibly dependent, and equal proportions of males and females were categorised as possibly dependent drinkers (Table A7).
- The proportion of adults classified as increasing, high risk drinkers or possibly dependent was lowest amongst those aged 75+ years (Figure 12; Table A7).
- High risk drinking/possibly dependent was highest amongst those in the highest income bracket <£80,000 (10.0%) (Table A7).
- Over one third (37.9%) of adults never binge drink, 29.6% binge drink less than monthly, 12.9% monthly, 16.6% weekly and 2.9% daily or almost daily (see Box 4).

**Figure 11: AUDIT-C drinking risk**



**Figure 12: AUDIT-C drinking risk by age group (years)**



**Problems associated with alcohol usage.**

- Almost one in fifty (1.7%; 0.1%, in the past year; 1.6%, ever) adults had been admitted to hospital due to their alcohol consumption.
- Approximately three in one hundred (2.9%; 0.3%, past year; 2.6%, ever) adults had been arrested due to their alcohol consumption.
- One in twenty (5.0%) adults indicated that they thought their alcohol use impacted upon their friends or family.
- Over one fifth (22.2%) of adults indicated that they had been affected by someone in their family’s use of alcohol.

### Box 3: Health in focus – High risk drinking



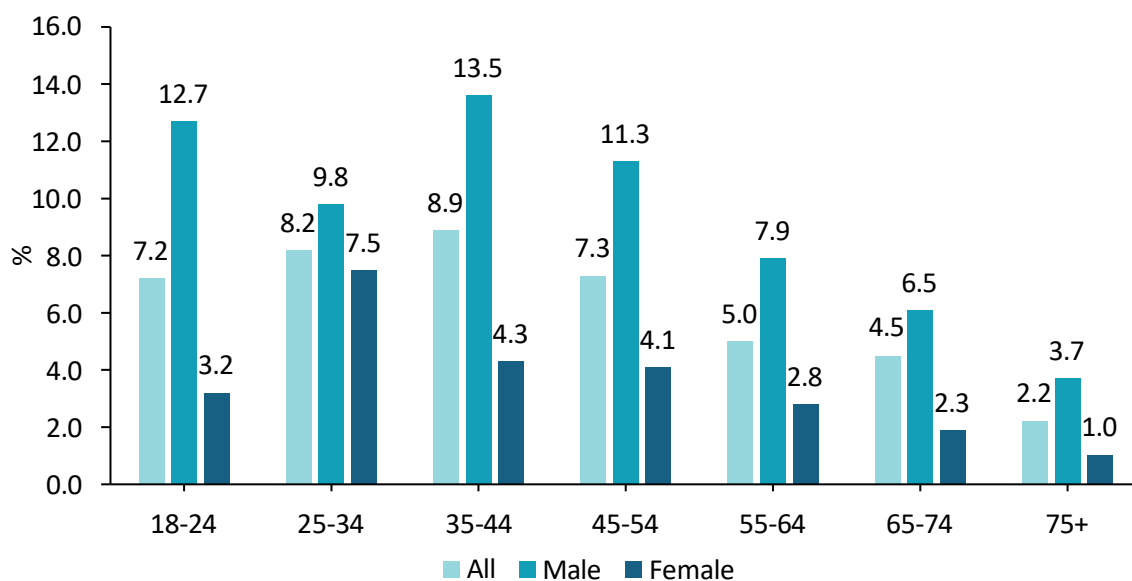
#### High risk drinking

Individuals with a score of 8 or more on the Alcohol Use Disorder Identification Test-Consumption (AUDIT-C).

6.4% of all adults

- A higher prevalence of males (9.2%) was classified as a high-risk drinker compared with females (3.6%; Table A8). The prevalence of high-risk drinking was lowest in those aged 75+ years (2.8%) and was highest amongst those aged 35-44 years (9.3%) (Figure 13; Table A8).
- In sample (unweighted) analyses, high risk drinking was significantly associated with gender ( $p < 0.001$ ) but not age, employment status (employed 7.0%; unemployed, 3.6%;  $p < 0.01$ ); and carer responsibility (carer 3.3%, not a carer 6.1%;  $p < 0.05$ ; Table A8).

Figure 13: Prevalence of high risk drinking by age group (years) and gender.



## Box 4: Health in focus – Binge drinking



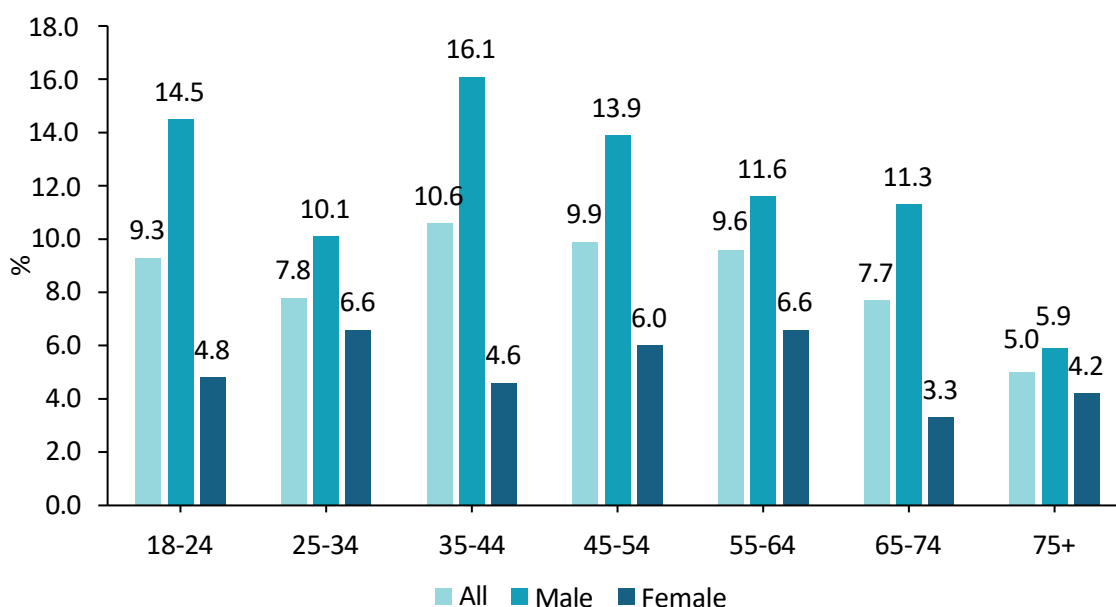
### Binge drinking

Consuming six (females)/eight (males) or more standard alcoholic drinks on one occasion, at least once a week.

8.8% of all adults

- A higher proportion of males (12.1%) than females (5.5%) reported binge drinking (Table A8). The lowest prevalence of binge drinking was amongst those aged 75+ years (5.0%), whilst those highest was amongst those aged 35-44 years (10.6%; Figure 14; Table A8).
- In sample (unweighted) analyses, binge drinking was significantly associated with gender ( $p < 0.001$ ) but not age (Table A8). Binge drinking was also significantly associated with employment status (employed, 9.6%; unemployed, 6.5%;  $p < 0.05$ ); place of birth (IoM, 9.9%; other, 7.0%;  $p < 0.05$ ); and carer responsibility (carer, 4.7%; not a carer 9.4%,  $p < 0.01$ ; Table A8).

Figure 14: Prevalence of binge drinking by age group (years) and gender.



### 3.3 Drug use

The survey looked at the consumption of illicit drugs and drugs not prescribed by a doctor or healthcare professional.

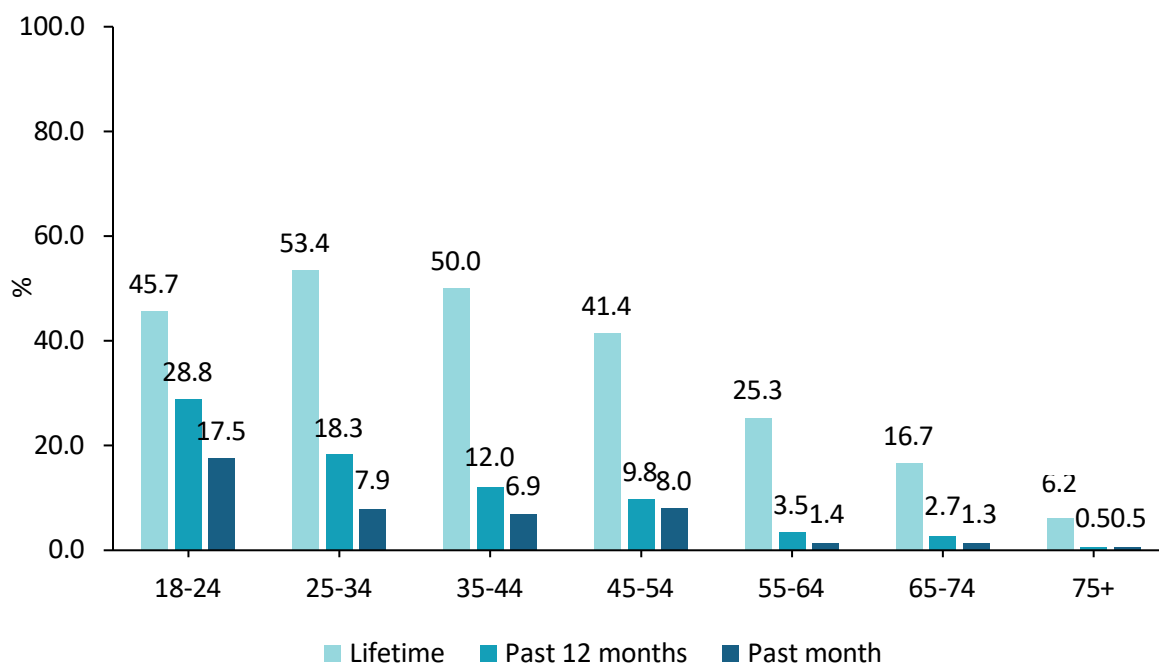
#### Frequency of drug usage



**9.5% of adults had taken drugs in the past 12 months.**

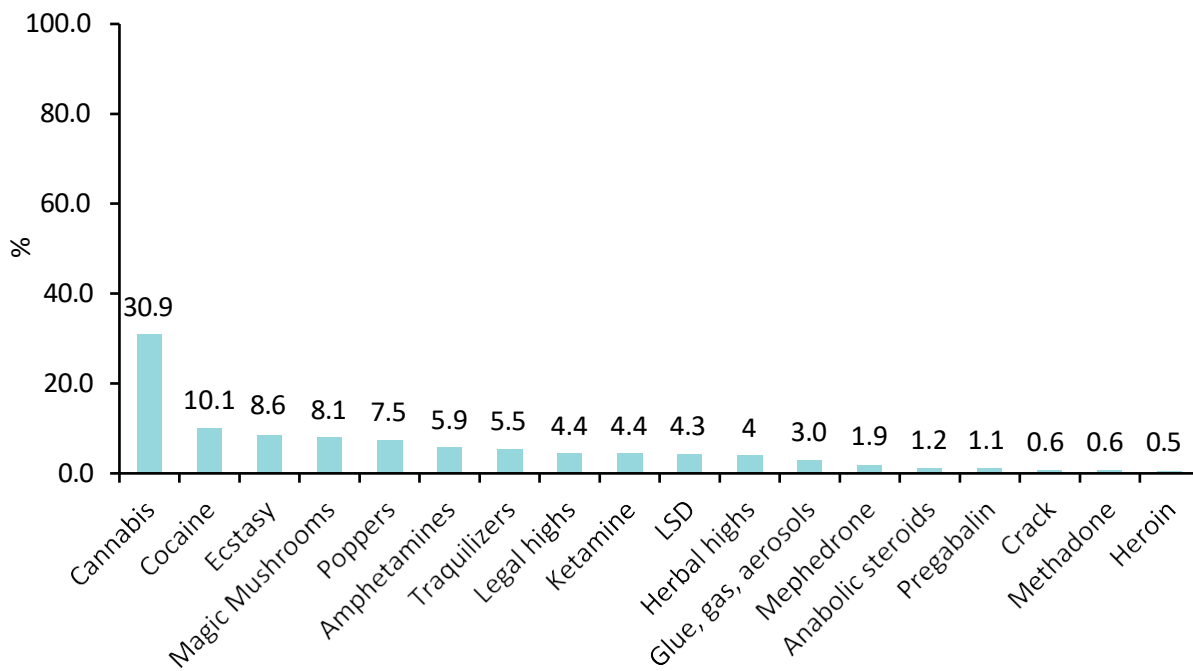
- One third (33.8%) of adults had ever used any type of drug. Approximately one in ten (9.5%) had used drugs in the past 12 months (box 5), while 5.5% had used drugs in the past month.
- A higher proportion of males than females had ever used drugs (males, 37.2%; females, 30.6%), had used drugs in the past 12 months (males, 12.0%; females, 7.1%), and had used drugs in the past month (males, 7.7%; females, 3.3%; Table A9).
- In general, lifetime drug usage, past 12 months usage, and past month usage tended to decrease as age group increased (Figure 15; Table A9).

**Figure 15: Drug use by age group (years)**



- The most commonly used drug was cannabis, which 30.9% of adults said they had ever used. The next most commonly used drugs were cocaine (10.1%), ecstasy (8.6%), magic mushrooms (8.1%), and poppers (7.5%; Figure 16).

**Figure 16: Lifetime drug usage by type of drug**



### Drug accessibility

- Of those who had used drugs, 55.2% reported that they got the drugs from somebody known to them. 10.4% of people got their drugs from a dealer either known to them or not.
- Of those who had used drugs, a third (32.8%) said that the last time they used drugs, they had bought or were given them at someone else's home, while 17.0% indicated that the last time they took drugs they got them at a bar, pub, club, party, or rave.
- Of those who had used drugs, over half (52.5%) used them at their own or somebody else's home. 21.0% used their drugs in a bar, pub, club, party, or rave.

### Problems associated with drug use.

- Almost one in a hundred (1.1%; 0.1% in the past year; 1.0% ever, 1.0%) had been admitted to hospital due to their drug use.
- Approximately one in twenty-five (3.9%; 0.5%, past year; 3.4%, ever) had ever been arrested due to drugs offences.
- Two in fifty (4.3%) indicated that they thought their drug use impacted their friends or family.
- Over one in fifteen (6.4%) of adults indicated that they had been affected by someone in their family's use of drugs.

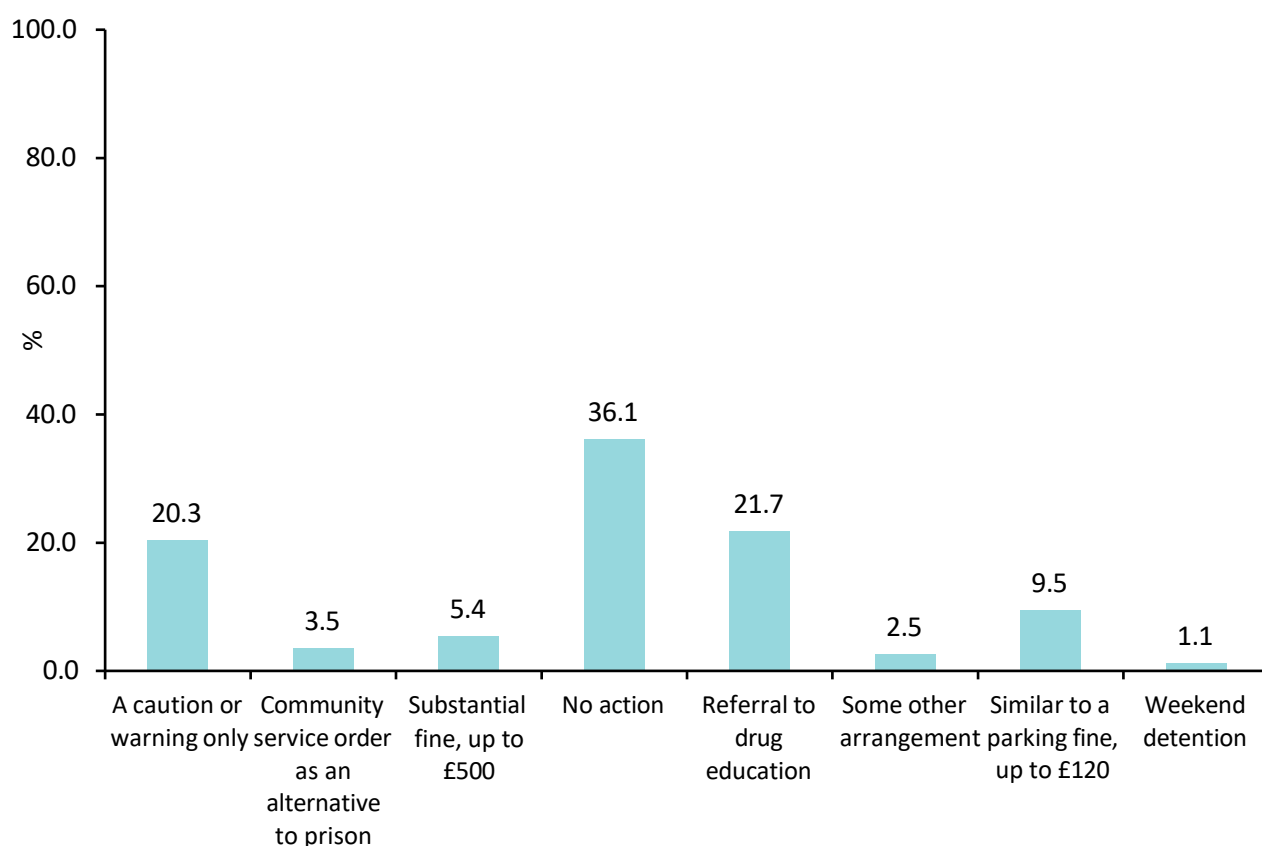
### Attitudes towards cannabis laws

- A quarter (25.8%) of respondents thought the law should stay as it is, so that possession of cannabis remains a criminal offence. Over a third (35.2%) felt an

experimental trial of decriminalisation should take place for a limited time period, to allow its effectiveness to be evaluated. One in ten (7.4%) adults had other views predominately related to legalisation for medical use only.

- Six in ten adults (62.2%) thought that possession of small quantities of cannabis for personal use should not be a criminal offence, whilst 18.3% felt it should be a criminal offence, and 19.4% were not sure or didn't know.
- A third (36.1%) of adults thought no action should be taken if a person is found with small quantities of cannabis for personal use, 21.7% thought they should be referred to drug education, and 20.3% thought the person should receive a caution or warning only (Figure 17).

**Figure 17: Single action that best describes what should happen to anyone found in possession of small quantities of cannabis for personal use.**



## Box 5: Health in focus – Drug use



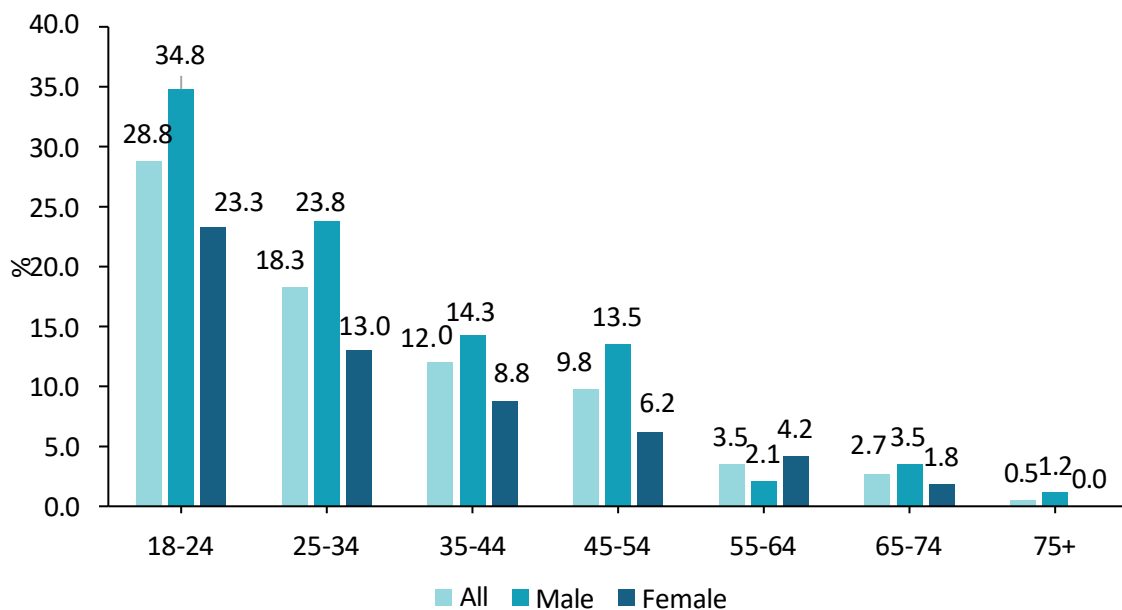
### Drug taking

Any drug use in the past 12 months.

9.5% of all adults

- A higher proportion of males (12.0%) than females (7.1%) reported taking drugs in the past 12 months (Table A10). The lowest prevalence of drug taking was amongst those aged 75+ years (0.5%), whilst prevalence was highest amongst those aged 18-24 years (28.8%; Figure 18; Table A10).
- In sample (unweighted) analyses, any drug taking was significantly associated with gender ( $p < 0.01$ ) and age ( $p < 0.001$ ; Table A10). Any drug taking was also significantly associated with employment status (employed, 9.9%; unemployed, 3.6%;  $p < 0.001$ ); place of birth (IoM, 9.3%; other, 5.1%;  $p < 0.01$ ); and housing status (owns home, 4.5%; does not own home 12.6%,  $p < 0.001$ ; Table A10).

Figure 18: Prevalence of drug taking by age group (years) and gender.





**Box 6: Health in focus – Cannabis only:**



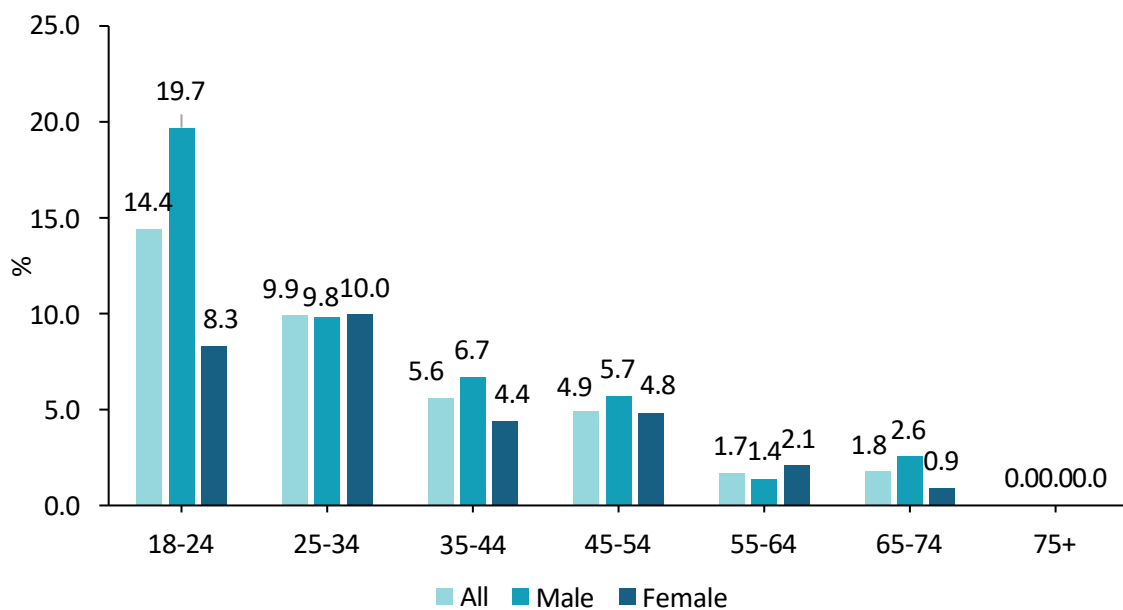
**Cannabis use**

*Past 12 months cannabis use only.*

**4.9% of all adults**

- A higher proportion of males (5.7%) than females (4.1%) reported only using cannabis in the past 12 months (Table A10). The lowest prevalence of cannabis use was amongst those aged 75+ years (0.0%), whilst the highest was amongst those aged 18-24 years (14.4%; Figure 19; Table A10).
- In sample (unweighted) analyses, cannabis use was significantly associated with age ( $p < 0.001$ ) but not gender. It was also significantly associated with employment status (employed, 5.3%; unemployed, 2.2%;  $p < 0.01$ ); and housing status (does not own home, 6.5%; owns home, 2.7%;  $p < 0.001$ ; Table A10).

**Figure 19: Prevalence of cannabis use by age group (years) and gender**



## Box 7: Health in focus – Class A drugs only



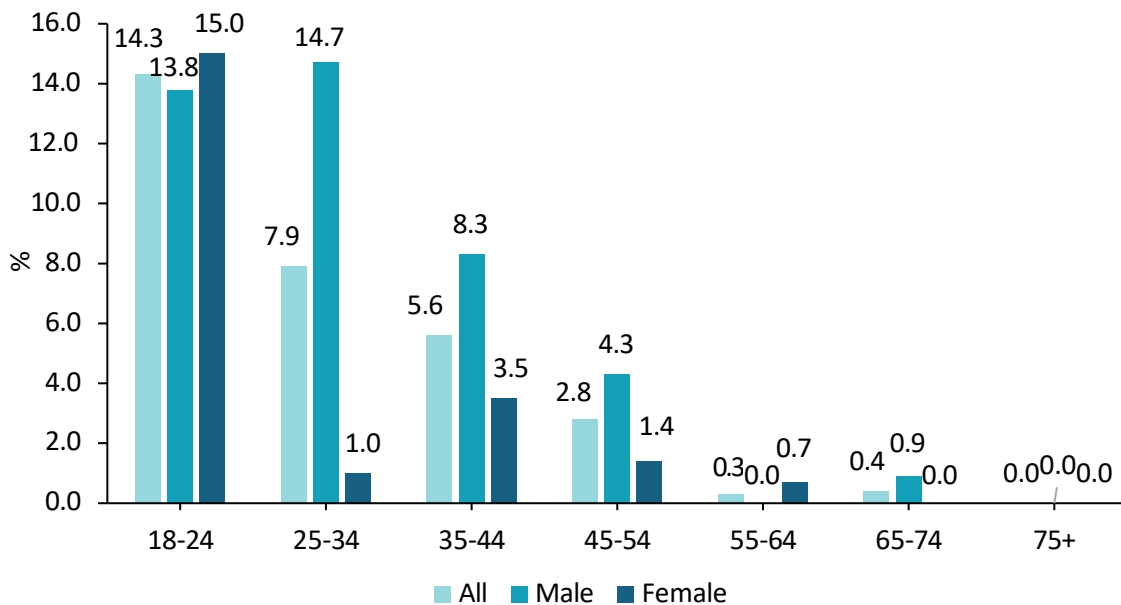
### Class A drugs

Past 12 months Class A drugs used only (this included Cocaine, Crack, Ecstasy, LSD, Magic mushrooms, Heroin, and Methadone).

**3.7% of all adults**

- A higher proportion of males (5.3%) than females (2.2%) reported only using Class A drugs in the past 12 months (Table A10). The lowest prevalence of Class A drug use was amongst those aged 75+ years (0.0%), and highest amongst those aged 18-24 years (14.3%; Figure 20; Table A10).
- In sample (unweighted) analyses Class A drug use was significantly associated with gender ( $p < 0.01$ ) and age ( $p < 0.001$ ). It was also significantly associated with employment status (employed, 3.4%; unemployed, 0.9%;  $p < 0.01$ ); place of birth (IoM, 3.8%; other, 1.1%;  $p < 0.001$ ); housing status (owns home, 1.0%; does not own home 5.1%,  $p < 0.001$ ); and shift working (shift worker, 6.4%; non-shift worker 2.7%;  $p < 0.05$ ; Table A10).

**Figure 20: Prevalence of Class A drug use by age group (years) and gender**



### 3.4 Associations between substance use and health harming behaviours and health indicators.

#### Poor diet

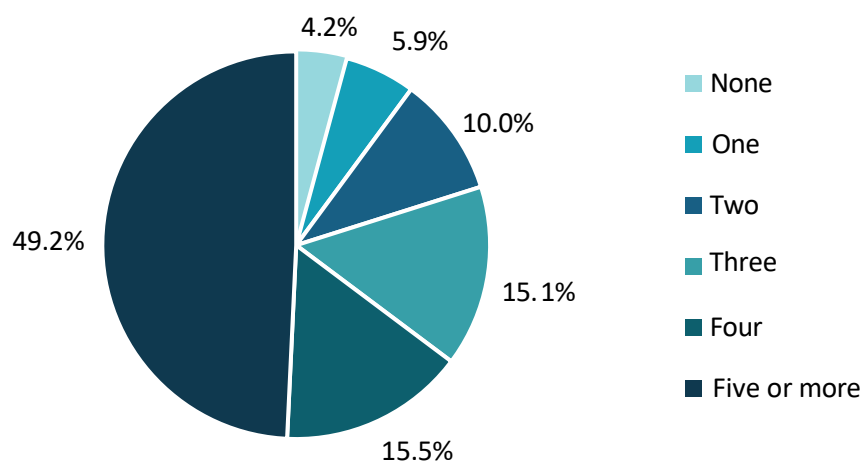


*<2 pieces of fruit and/or vegetables a day*

**10.1% of all adults**

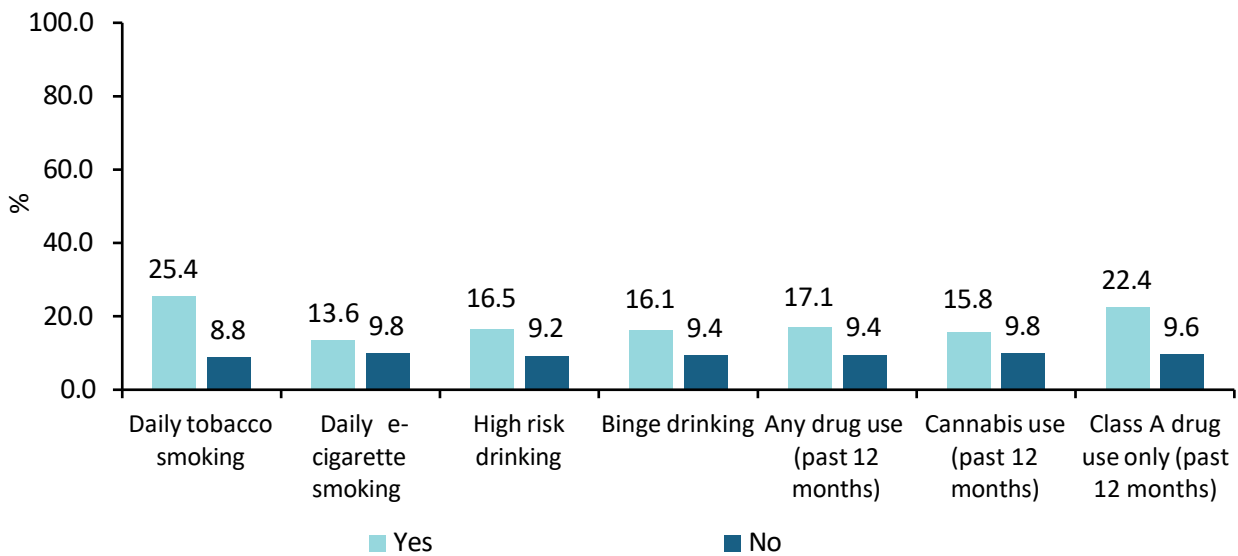
- Just under half (49.2%) of adults had consumed the recommended five or more pieces of fruit and vegetables on the previous day (Figure 21; Table A11), 15.5% had consumed four pieces, 15.1% three, and 10.0% two. Approximately one in ten (10.1%) adults had consumed one or no fruit and vegetables on the previous day (Figure 21; Table A11).

**Figure 21: Portions of fruit and vegetables consumed yesterday.**



- The proportion of adults reporting a poor diet varied by substance use activity; a quarter (25.4%) of those who smoked daily also had a poor diet, whilst 22.4% of adults who took a Class A drug in the past 12 months had a poor diet (Figure 22).

**Figure 22: Prevalence of poor diet by substance use**



- In sample (unweighted) analyses, having a poor diet was significantly associated with daily tobacco smoking (21.8%, non-smokers 7.6%, smokers;  $p < 0.001$ ; high risk drinkers and binge drinking (14.3% high risk drinker; 8.1% non-high-risk drinkers;  $p < 0.05$ ; 15.7% binge drinking, 8.0% non-binge drinkers;  $p < 0.01$ ). As well as drug taking in the past 12 months, cannabis use in the past 12 months and use of a Class A drug in the past 12 months (17.4% drug taking in the past 12 months, 7.9% non-drug takers;  $p < 0.001$ ; 16.4% cannabis use in the past 12 months, 8.3% non-cannabis users;  $p < 0.05$ ); and 22.2% Class A drug use in the past 12 months, 8.3% non-class A drug users;  $p < 0.01$ ; Table A12).

## Low physical activity

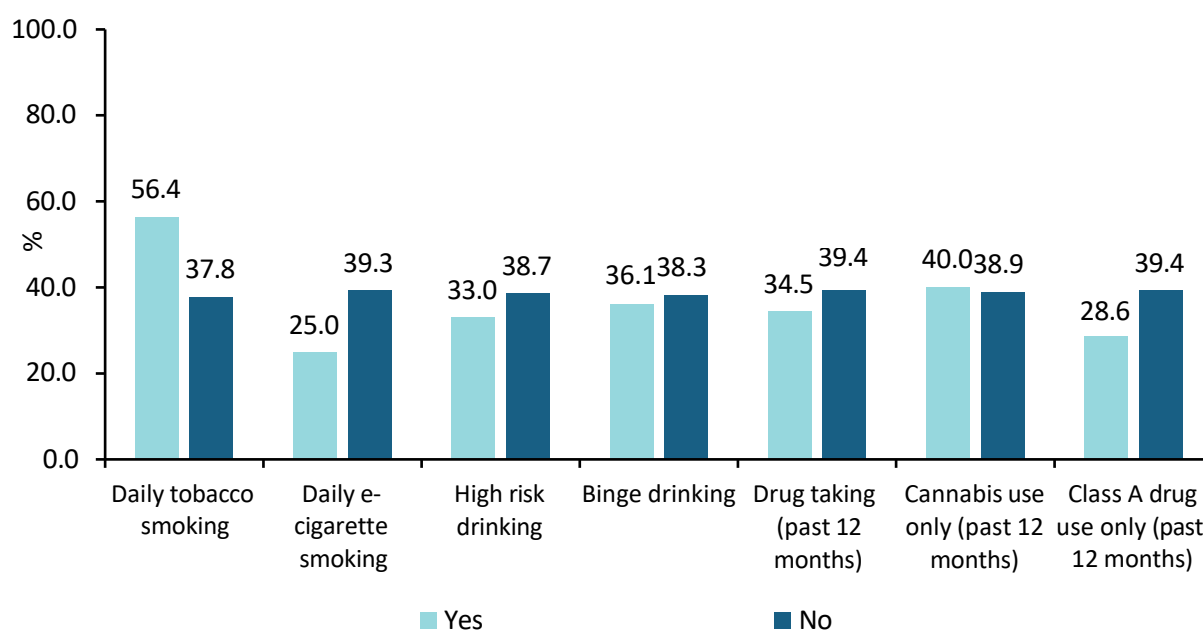


Taking part in less than 2.5 hours of physical activity (e.g., walking quickly, cycling, sports or exercise) in the past week.

**39.5% of all adults**

The proportion of adults reporting low physical activity varied by substance use with over half (56.4%) of those who smoked daily reporting low physical activity, whilst 40.0% of adults who only used cannabis in the past 12 months reported low physical exercise (Figure 23; Table A12).

● **Figure 23: Prevalence of low physical activity by substance use**



In sample (unweighted) analyses, low physical exercise was significantly associated with daily tobacco smoking (55.7%; 39.3% non-smokers;  $p < 0.001$ ; Table A12).

## Overweight or obese

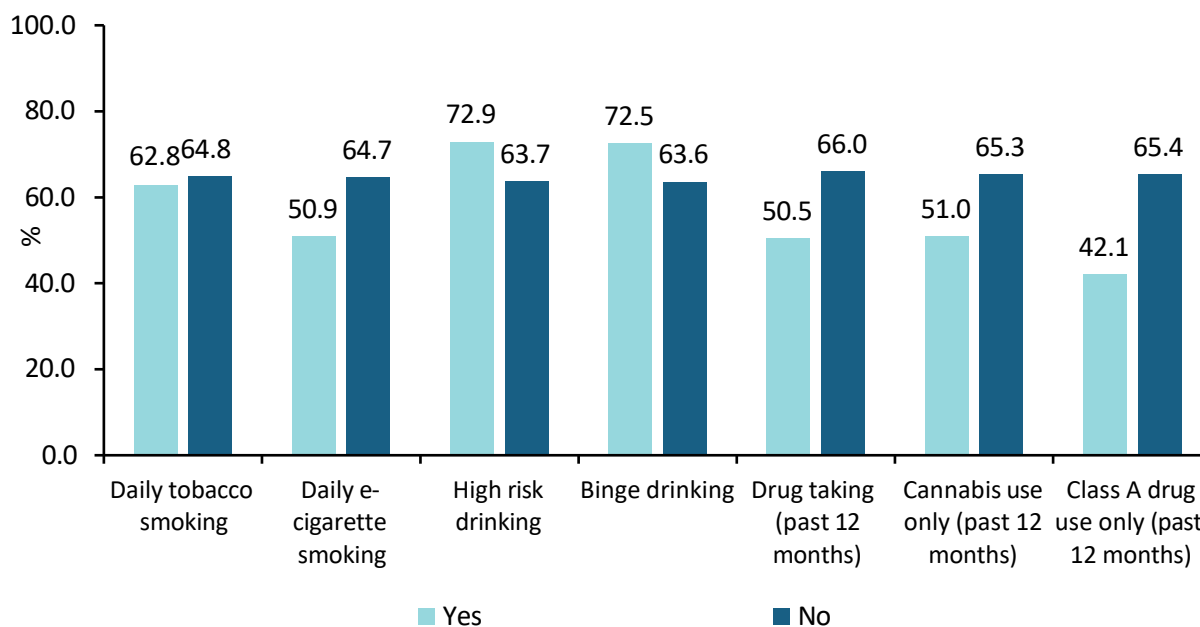


Body Mass Index (BMI) of 25 or more

64.2% of all adults

The proportion of adults classified as overweight or obese varied by substance use activity. Three quarters (72.9%) of those who are high risk drinkers were classified as being overweight or obese, similarly 72.5% of adults who were binge drinkers were also overweight or obese. Participants who reported any type of smoking or drug taking were less likely to report being overweight or obese (Figure 24; Table A12).

**Figure 24: Prevalence of overweight/obesity by substance use**



In sample (unweighted) analyses, being overweight or obese was only significantly associated with high-risk drinking (77.3%; non-high-risk drinkers 64.1%;  $p < 0.05$ ), binge drinking (75.6%; non-binge drinkers 64.1%;  $p < 0.05$ ) and using Class A drugs only in the past 12 months (44.0%; and not only using Class A drugs 65.7%;  $p < 0.05$ ; Table A12).

## Poor general health

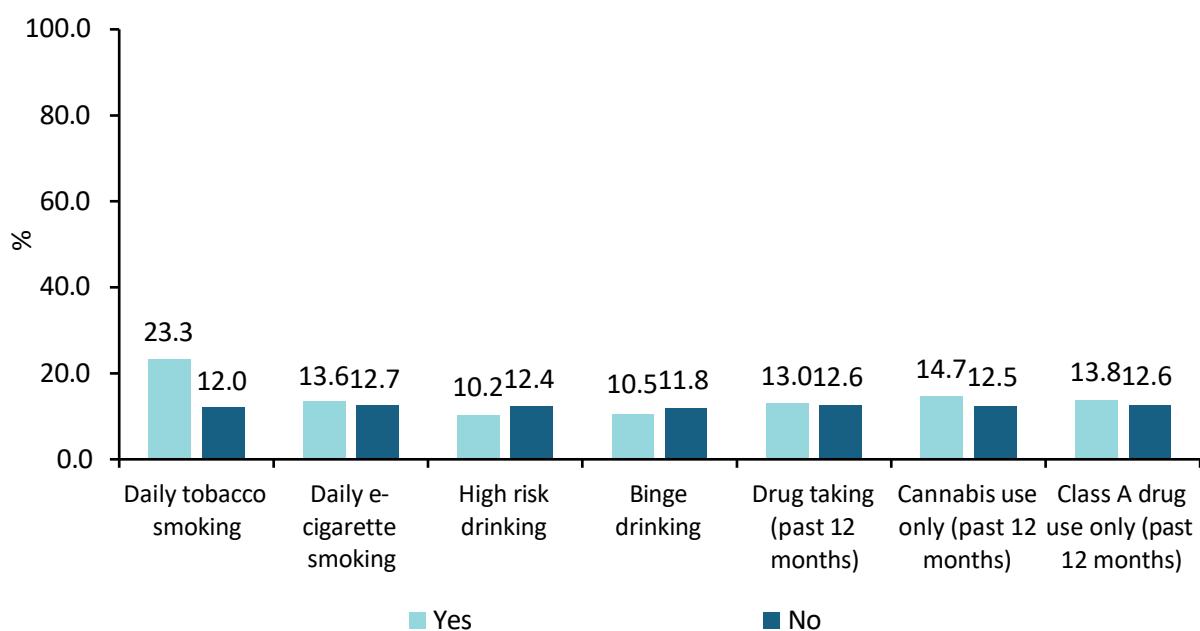


One standard deviation (19.4) below the sample mean score (77.6) on the self-reported health measure (EQ VAS).

**14.2% of all adults**

The proportion of adults reporting poor general health varied by substance use activity. Approximately a quarter (23.3%) of those who were daily tobacco smokers also had poor general health, whilst 14.7% of adults who used cannabis in the past 12 months also reported poor general health (Figure 25; Table A12).

**Figure 25: Prevalence of poor general health by substance use**



In sample (unweighted) analyses, poor general health was significantly associated with daily tobacco smoking (25.0%; non-daily tobacco smokers 13.3%;  $p < 0.001$ ; Table A12).

## Low mental wellbeing

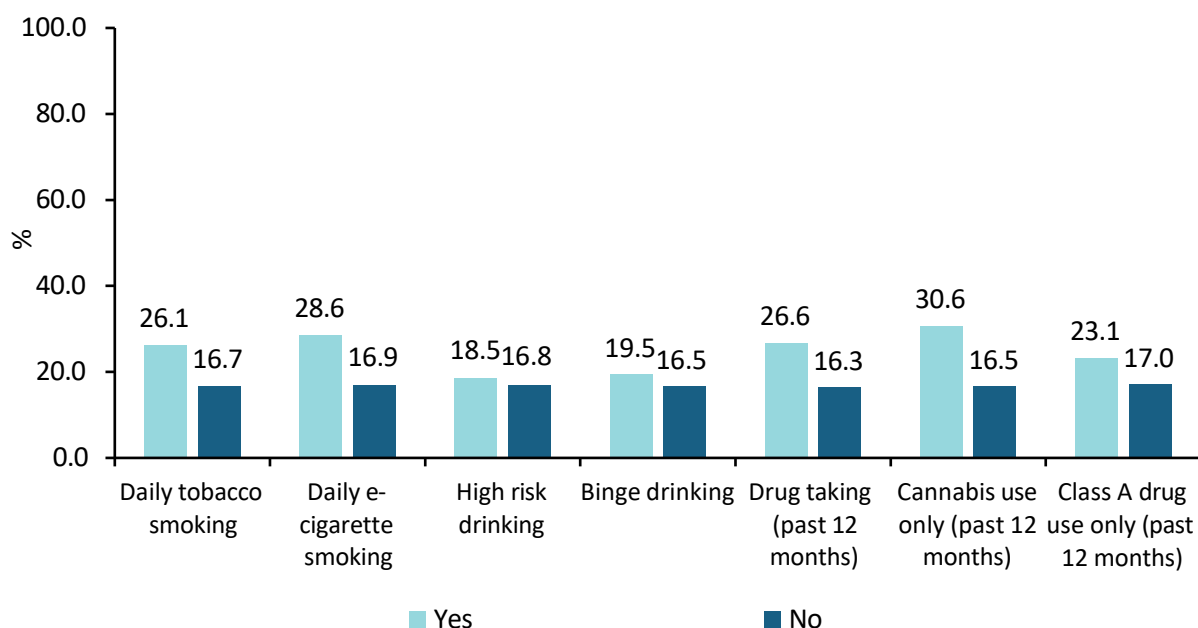


One standard deviation (9.6) below the average score (50.7) on WEMWBS

**17.4% of all adults**

The proportion of adults reporting low mental wellbeing varied by substance use activity. Three in ten (30.6%) adults who used cannabis in the past 12 months also reported low mental wellbeing. Similarly, 28.6% of adults who use e-cigarettes daily also had low mental wellbeing (Figure 26; Table A13).

**Figure 26: Prevalence of low mental wellbeing by substance use**



In sample (unweighted) analyses, low mental wellbeing was significantly associated with: daily tobacco smoking (23.6%; non-daily tobacco smoking 15.8%;  $p < 0.05$ ); daily e-cigarette smoking (26.4%; non-daily e-cigarette smoking 16.1%;  $p < 0.05$ ); any drug taking in the past 12 months (27.5%; non-drug takers in the past 12 months 15.1%;  $p < 0.01$ ); and cannabis use in the past 12 months (29.8%; and not only using cannabis 15.4%;  $p < 0.01$ ; Table A13).

## Sleep quality

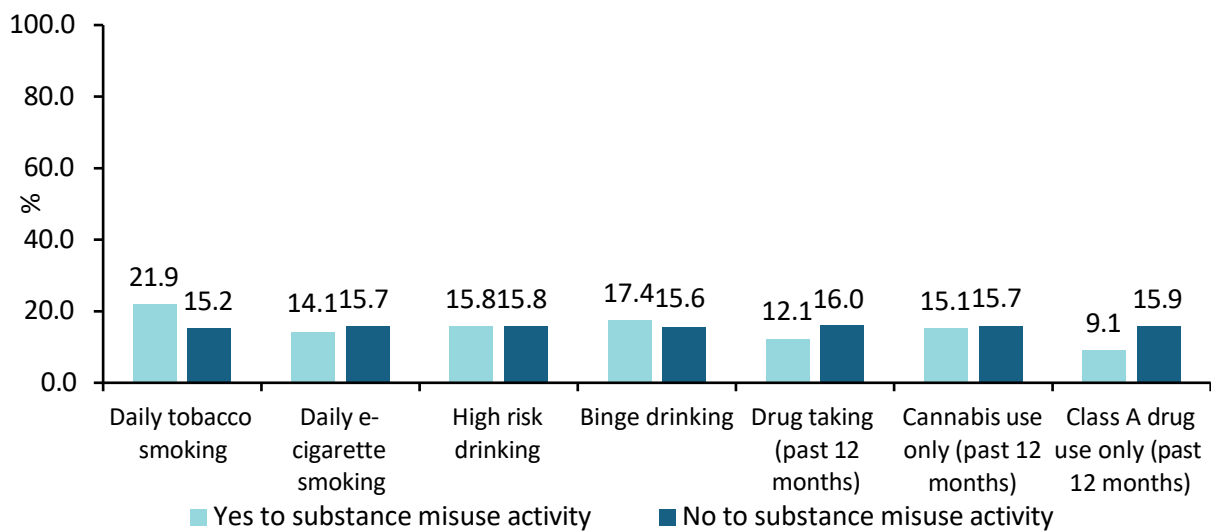


**15.8% of adults had bad/very bad sleep quality.**

The proportion of adults reporting poor sleep varied by substance use activity. One in five (21.9%) of those who smoked tobacco daily also reported poor sleep, whilst 17.4% of binge drinkers had poor sleep (Figure 27; Table A13).



**Figure 27: Prevalence of poor sleep by substance use**



In sample (unweighted) analyses, poor sleep was not significantly associated with any substance use activities (Table A13).

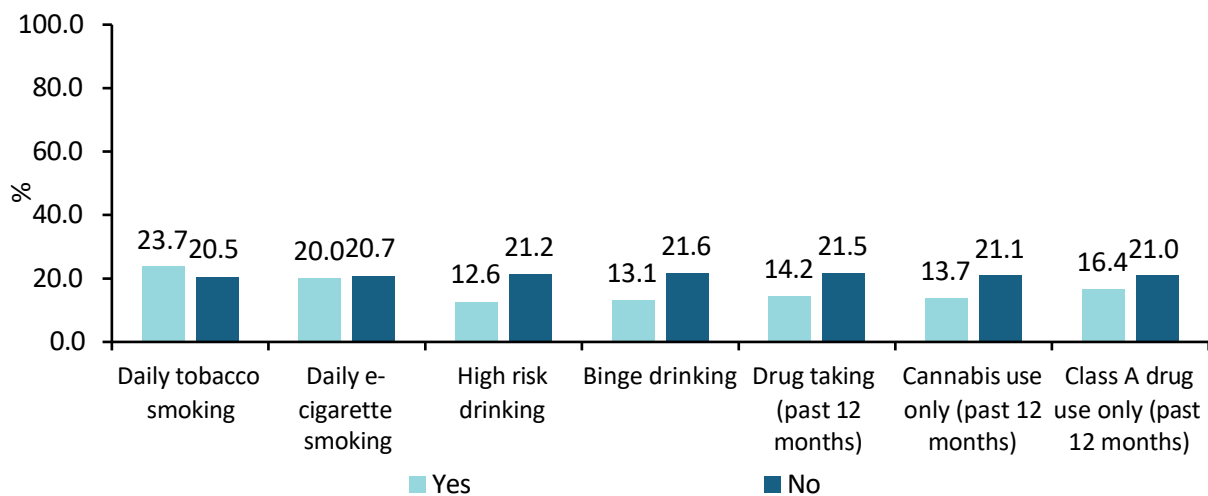
### Low social interaction



**20.7% of adults have low social interaction<sup>7</sup>**

The proportion of adults reporting low social interaction varied by substance misuse activity. Nearly a quarter (23.7%) of those who smoked tobacco daily reported low social interaction, whilst 14.2% of individuals who had taken drugs in the past 12 months reported low social interaction (Figure 28; Table A13).

**Figure 28: Prevalence of low social interaction by substance use**



<sup>7</sup> Had some but not enough social contact with people they like or had little social contact with people and felt socially isolated.

In sample (unweighted) analyses, low social interaction was not significantly associated with any substance use activity (Table A13).

## High loneliness

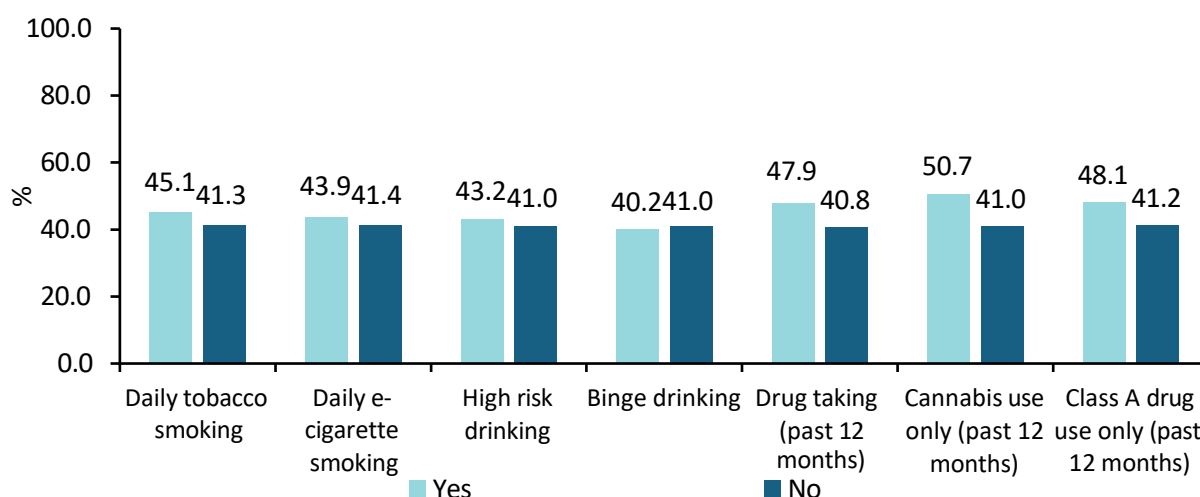


*Always/often, sometimes, or occasionally feeling lonely.*

**41.4% of all adults reported high loneliness.**

The proportion of adults reporting high loneliness varied by substance misuse activity. Over a quarter (43.9%) of those who smoked e-cigarettes daily reported high loneliness, and similarly 43.2% of individuals who were high risk drinkers reported high loneliness (Figure 29; Table A13).

**Figure 29: Prevalence of high loneliness by substance use**



In sample (unweighted) analyses, high loneliness was significantly associated with drug taking in the past 12 months (49.5%; no drug taking in the past 12 months 39.5%;  $p < 0.05$ ; Table A13).

## Anxiety



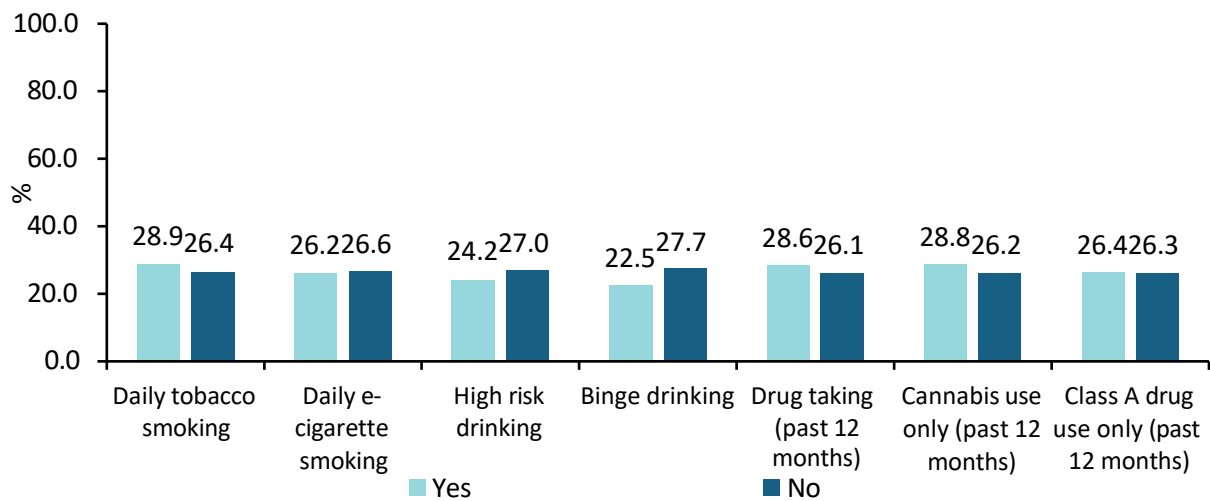
**26.6% of adults were highly anxious<sup>8</sup>**

The proportion of adults reporting being highly anxious varied by substance use activity. Approximately three in ten (28.9%) adults who smoked tobacco daily also reported anxiety,

<sup>8</sup> Scores  $\geq 6$  on a scale of 0 (not at all) to 10 (completely).

whilst similar numbers (28.6%) of adults who took drugs in the past 12 months reported being highly anxious (Figure 30; Table A14).

**Figure 30: Prevalence of anxiety by substance use**



In sample (unweighted) analyses, anxiety was not significantly associated with any substance use activities (Table A14).

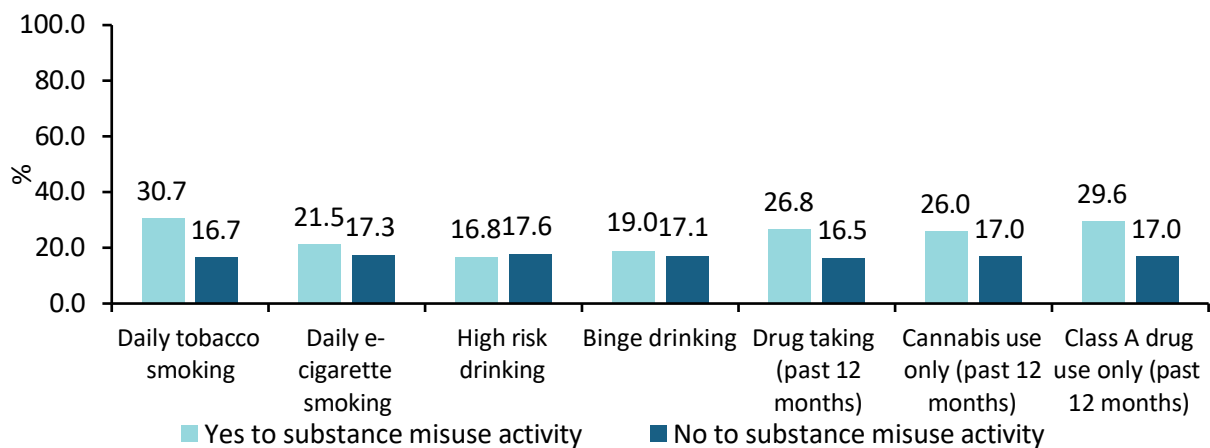
### Low life satisfaction



**17.9% of adults had low life satisfaction<sup>9</sup>**

The proportion of adults reporting low life satisfaction varied by substance misuse activity. Three in ten (30.7%) adults who smoked tobacco daily also reported low life satisfaction, whilst 26.8% of individuals who took drugs in the past 12 months had low life satisfaction (Figure 31; Table A14).

**Figure 31: Prevalence of low life satisfaction by substance use**



<sup>9</sup> Scores <6 on scale from 0 (not at all) to 10 (completely).

In sample (unweighted) analyses, low life satisfaction was significantly associated with: daily smoking (28.8%; non-daily smoking 16.7%;  $p < 0.01$ ); drug taking in the past 12 months (27.6%; no drug taking in the past 12 months 16.4%;  $p < 0.01$ ); cannabis use only in the past 12 months (27.6%; non-cannabis user in the past 12 months 16.7%;  $p < 0.05$ ); and Class A drugs only in the past 12 months (32.4%; non-class A drug user in the past 12 months, 16.8%;  $p < 0.05$ ; Table A14).

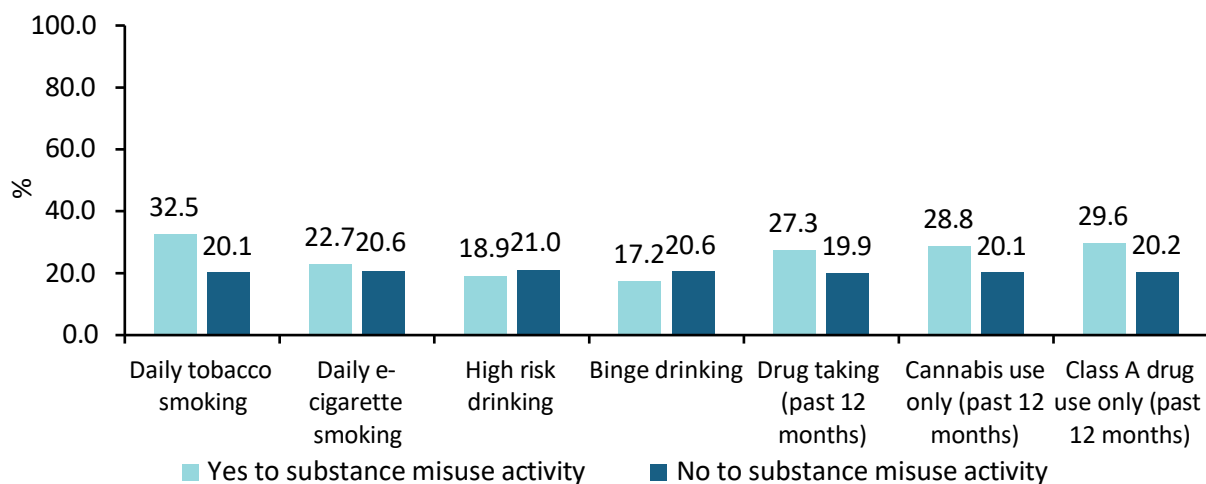
## Low Happiness



**21.1% of adults had low happiness<sup>9</sup>**

The proportion of adults reporting low happiness varied by substance misuse activity. Almost three in ten (32.5%) adults who smoked tobacco daily also reported low happiness, whilst 27.3% of individuals who took drugs in the past 12 months reported low happiness (Figure 32; Table A14).

**Figure 32: Prevalence of low happiness by substance use**



In sample (unweighted) analyses, low happiness was significantly associated with daily smoking (28.2%; non-daily smoking 19.4%;  $p < 0.05$ ); and drug taking in the past 12 months (27.2%; no drug taking in the past 12 months 19.0%;  $p < 0.05$ ; Table A14).

## Feeling life is unworthwhile.

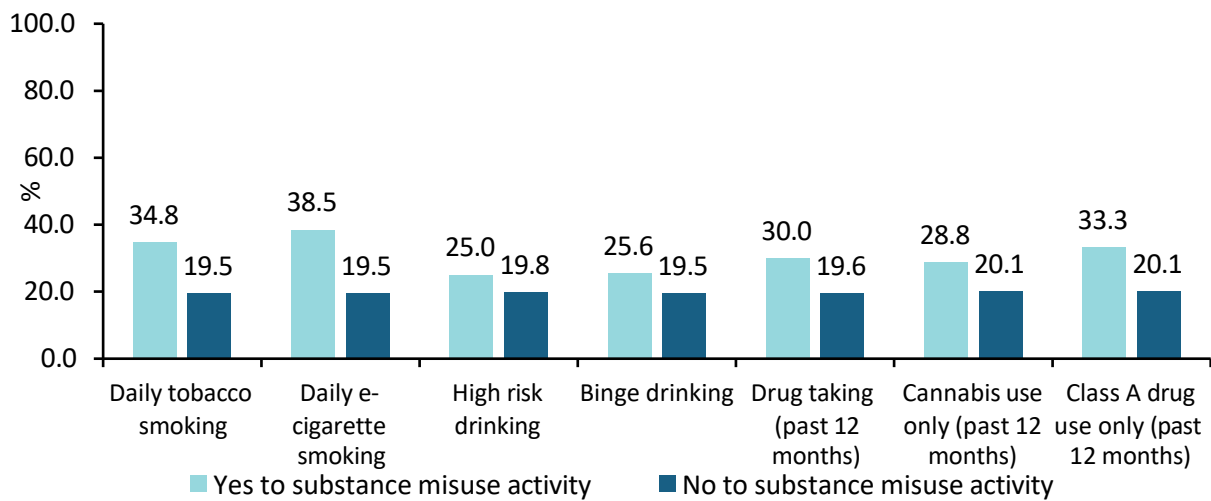


**20.6% of adults felt the things they do in life are unworthwhile<sup>9</sup>**

The proportion of adults feeling life is unworthwhile varied by substance misuse activity. Over a third (34.8%) of those who smoked tobacco daily also reported feeling life is unworthwhile,

whilst 30.0% of individuals who took drugs in the past 12 months reported feeling life is unworthwhile (Figure 33; Table A14).

**Figure 33: Prevalence of feeling life is unworthwhile by substance use.**



In sample (unweighted) analyses, feeling life is unworthwhile was significantly associated with daily smoking (33.0%; non-daily smoking 18.9%;  $p < 0.001$ ); daily e-cigarette smoking (37.5%; non-daily e-cigarette smoking, 19.0%;  $p < 0.001$ ); drug taking in the past 12 months (29.8%; no drug taking in the past 12 months 19.0%;  $p < 0.01$ ); and Class A drug user in the past 12 months (35.3%; non-class A drug user in the past 12 months, 19.4%;  $p < 0.05$ ; Table A14).

### 3.5 Clustering of substance use

A derived variable was created from questions on smoking, alcohol consumption, and drug use to examine the clustering of substance use amongst adults on the Isle of Man. For the purposes of this analysis: smoking was defined as daily tobacco smoking and or daily e-cigarette use (See Box 1 and 2); alcohol consumption was defined as binge drinking (see Box 4); and drug use was defined as any drug use in the past 12 months (see Box 5).

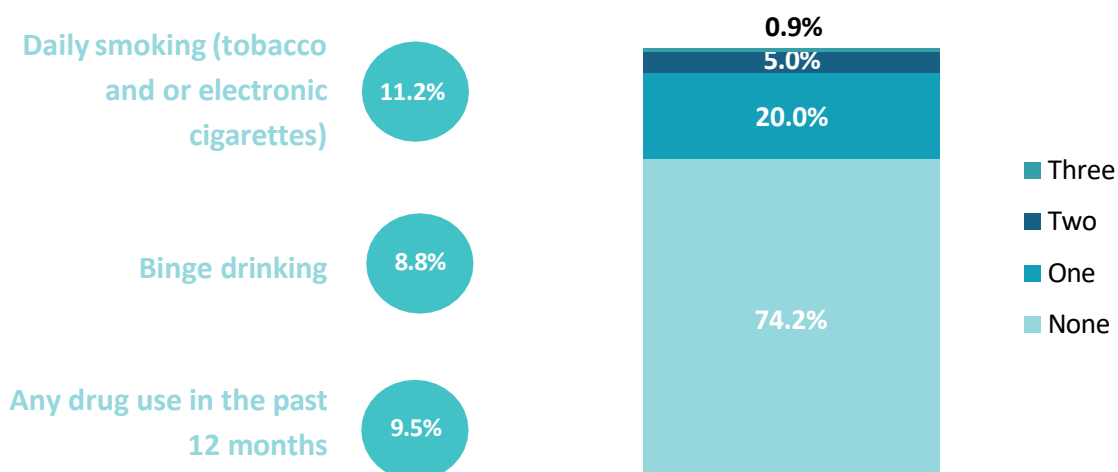
#### Types and extent of clustering



**25.8% of adults used at least one substance.**

- The most prevalent substance used was tobacco smoking (11.2% of adults), followed by any drugs (9.5% of adults), and binge drinking (8.8% of adults; Figure 34).
- Three quarters (74.2%) of adults did not use any substances, 20.0% used one substance, 5.0% used two, and 0.9% used three substances (Figure 34; Table A15).

**Figure 34: Clustering of substance misuse**



- Amongst adults who smoked daily, half (50.6%) had used at least one other substance (Table 1). Amongst adults who smoked daily: 28.4% also used drugs in the past 12 months, and 20.3% were also binge drinkers (Table 1).
- Amongst adults who were binge drinkers, 37.0% had used at least one substance (Table 1). Amongst adults who were binge drinkers: 25.6% were also daily smokers, and 19.8% had used drugs in the past 12 months (Table 1).
- Amongst adults who had used drugs in the past 12 months, more than four in ten (42.2%) had used at least one other substance (Table 1). Amongst adults who had used drugs in the past 12 months: 34.6% were daily smokers, and 17.4% were binge drinkers (Table 1).

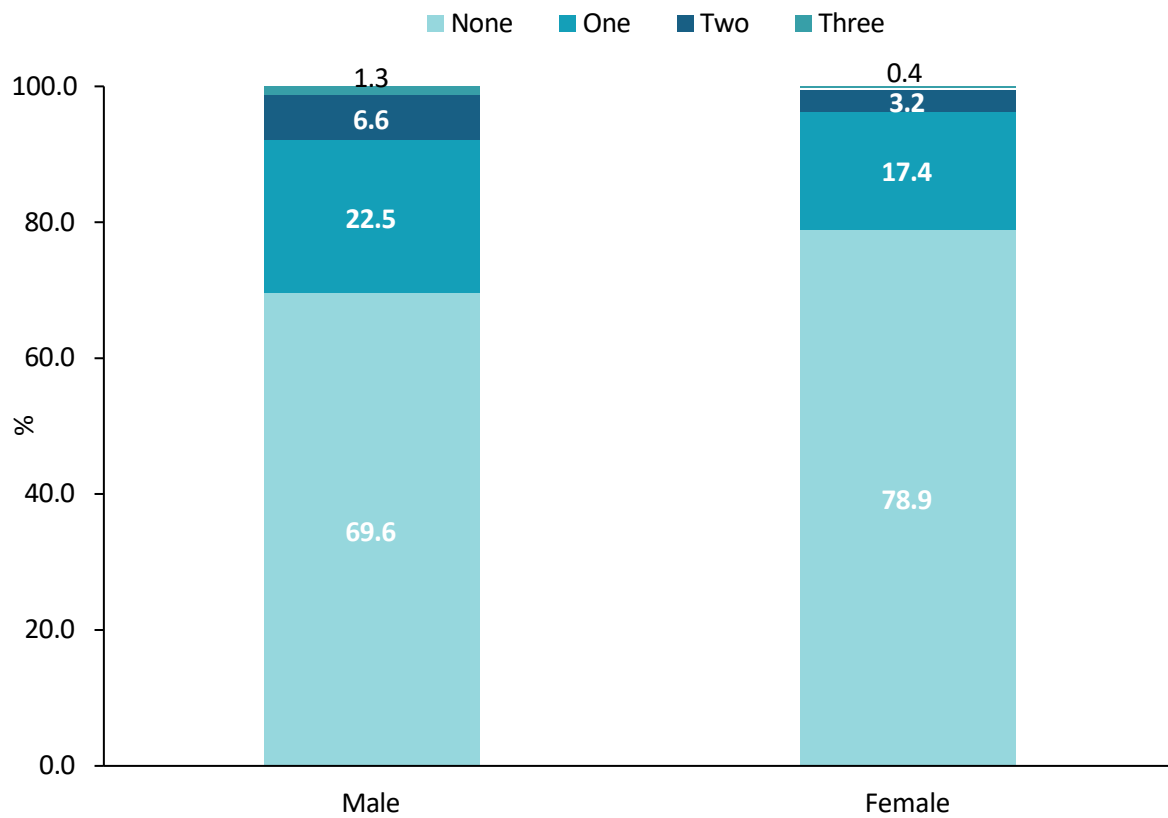
**Table 1: Combinations of substance misuse**

	Daily smoking (Tobacco and/or e-cigarette)	Binge drinking	Any drug use in the past 12 months
% Misused at least one substance	50.6	37.0	42.2
<b>Type of unhealthy behaviour</b>			
% Daily smoking (Tobacco and/or e-cigarette)	-	25.6	34.6
% Binge drinking	20.3	-	17.4
% Any drug use in the past 12 months	28.4	19.8	-

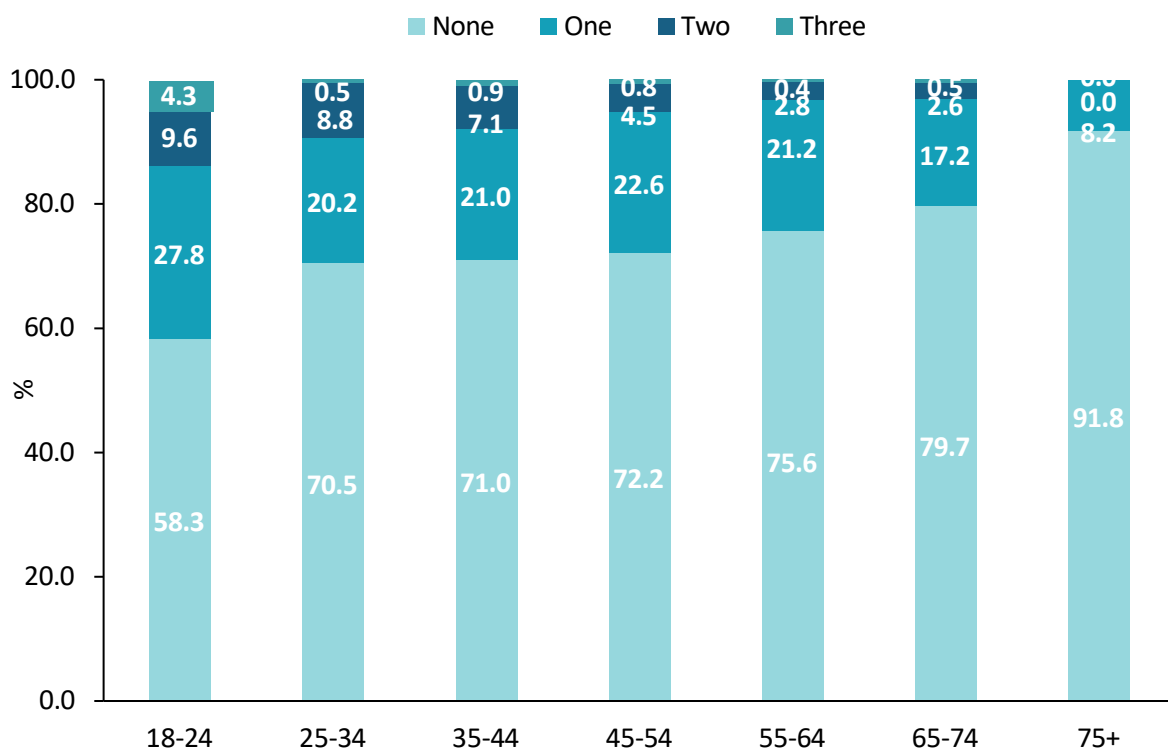
### Clustering of unhealthy behaviours and sociodemographics

- A higher proportion of males (30.4%) than females (21.1%) had used at least one substance (Figure 35; Table A16).
- The proportion of adults who had used at least one substance was highest amongst aged 18-24 years (Figure 36; Table A16).
- The proportion of adults who had used at least one substance was highest amongst the lowest income group and decreased as income group increased (<£20,000, 31.0%; £20,000-79,999, 24.4%; £80,000+, 20.9%; Figure 37; Table A16).

**Figure 35: Clustering of unhealthy behaviours by gender**

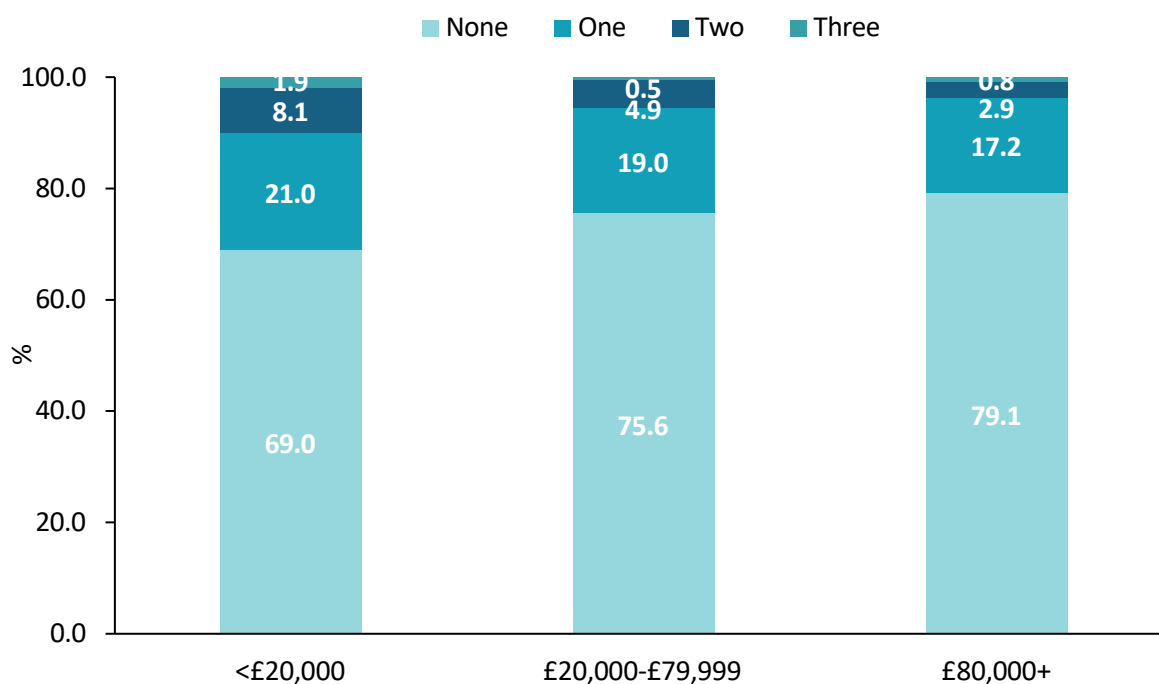


**Figure 36: Clustering of unhealthy behaviours by age group (years)**





**Figure 37: Clustering of unhealthy behaviours by income level**



## Clustering of substance misuse and health outcomes

### Poor diet

- In sample (unweighted) analyses there was a significant association between number of substances used and poor diet. Prevalence of having a poor diet was lowest amongst those who used zero substances and highest amongst those who misused two substances (none, 6.8%; one, 14.8%; two, 25.5%; and three, 11.1%;  $p < 0.001$ ).

### Poor general health

- In sample (unweighted) analyses there was a significant association between number of substances used and poor general health. There was a graded relationship between the number of substances used and poor general health, with the prevalence of poor general health increasing as the number of substances used increased (none, 11.6%; one, 17.1%; two, 17.3%; and three, 33.3%;  $p < 0.05$ ).

### Low mental wellbeing

- In sample (unweighted) analyses there was a significant association between number of substances misused and low mental wellbeing. There was a graded relationship between the number of substances used and low mental wellbeing, with the prevalence of low mental wellbeing generally increasing as the number of substances used increased (none, 13.6%; one, 23.9%; two, 20.4%; and three, 33.3%;  $p < 0.001$ ).

### Low life satisfaction

- In sample (unweighted) analyses there was a significant association between number of substances used and low life satisfaction. There was a graded relationship between the number of substances used and low life satisfaction, with the prevalence of low

life satisfaction increasing as the number of substances used increased (none, 14.3%; one, 23.0%; two, 26.9%; and three, 33.3%;  $p < 0.001$ ).

#### *Low happiness*

- In sample (unweighted) analyses there was a significant association between number of substances used and low happiness. Prevalence of low happiness highest among those who misused two substances (none, 17.0%; one, 24.5%; two, 26.9%; and three, 11.1%;  $p < 0.05$ ).

#### *Feeling life is unworthwhile*

- In sample (unweighted) analyses there was a significant association between numbers of substances used and feeling life is unworthwhile. There was a graded relationship between the number of substances used and feeling life is unworthwhile, with the prevalence of feeling life is unworthwhile increasing as the number of substances used increased (none, 16.4%; one, 28.5%; two, 33.3%; and three, 33.3%;  $p < 0.001$ ).

#### *Other health indicators*

- There were no significant associations between the number of substances used and low physical exercise, being overweight/obese, poor sleep, low social interaction, high loneliness, and high anxiety.

## 6. References

- [1] T. F. Babor, J. C. Higgins-Biddle, J. B. Saunders and M. G. Monterio, "AUDIT: The Alcohol Use Disorders Identification Test: guidelines for use in primary care," World Health Organization, Geneva, 2001.
- [2] M. van Reenen and B. Janssen, "EQ-5D-5L user guide," EuroQol Research Foundation, Rotterdam, 2015.
- [3] R. Tennant, L. Hiller, R. Fishwick, S. Platt, S. Joseph, S. Weich, J. Parkinson, J. Secker and S. Stewart-Brown, "The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS): development and UK validation," *Health and Quality of Life Outcomes*, vol. 5, no. 63, 2007.