



ALCOHOL AND CANCER RISKS

*A Guide for Health
Professionals*

SHAAP

Scottish Health Action
on Alcohol Problems

Introduction

Alcohol and cancer risks

Drinking alcohol is a risk factor for several cancers. This guide updates previous guidance from SHAAP to summarise for health professionals the links between alcohol consumption and cancers using the latest data* so that health professionals can use opportunities in their work to intervene to reduce risks.

The role of health professionals

Raising the issue of alcohol consumption with patients can be difficult. However, evidence from many sources suggests that patients are accepting of tactful or empathetic enquiry about aspects of their lifestyle which may have an impact on their health. Health professionals are well placed to raise the level of awareness with their patients and clients as part of a comprehensive review of their health and lifestyle.

Most patients and clients welcome guidance and support to help them find the motivation to improve their health and wellbeing. Reducing alcohol consumption is often only one of a number of changes that could be made to improve quality of life, but it is one that is achievable.

Health professionals can help reduce alcohol-related cancer risks by:

- Informing patients and clients about the risks of cancer from drinking alcohol.
- Providing guidance and support to help patients and clients reduce the amount of alcohol they drink.

*Up to December 2022, published in November 2024 by Scottish Cancer Registry and Public Health Scotland

Contents

Executive Summary	<u>Page 3</u>
Alcohol consumption and cancer risk	<u>Page 4</u>
Alcohol-attributable cancer in Scotland	<u>Page 5</u>
Cancer of the lip, oral cavity, and pharynx	<u>Page 5</u>
Cancer of the larynx	<u>Page 6</u>
Cancer of the oesophagus	<u>Page 7</u>
Cancer of the female breast	<u>Page 8</u>
Colorectal cancer	<u>Page 10</u>
Cancer of the liver and intrahepatic bile ducts	<u>Page 11</u>
Cancer of the stomach	<u>Page 12</u>
Opportunities for interventions	<u>Page 13</u>
Alcohol Brief Interventions (ABIs)	<u>Page 14</u>
Alcohol and cancer treatment	<u>Page 15</u>
Recommendations	<u>Page 16</u>
Alcohol consumption in Scotland	<u>Page 17</u>
References	<u>Page 21</u>
Acknowledgements	<u>Page 23</u>

Executive summary

The impact of alcohol consumption in Scotland and the loss to health and life it entails has been well documented. Approximately 6.5% of deaths in Scotland in 2015 (the last time these figures were calculated) were attributable to alcohol consumption. More than one in four (28%) of these alcohol-attributable deaths were due to cancer.¹

According to the 2016 UK Chief Medical Officers' low risk drinking guidelines, in relation to cancer risk there is no safe level of alcohol consumption. The risks associated with cancer start from any level of regular drinking and rise with the amounts of alcohol being drunk.²

This guidance provides a summary of patterns of alcohol use in Scotland by age, gender and area deprivation³ and also provides statistics regarding alcohol-attributable deaths to cancer in Scotland. There is strong epidemiological evidence to suggest that alcohol increases your risk of developing the following types of cancer:⁴

- Cancer of the lip, oral cavity and pharynx
- Cancer of the larynx
- Cancer of the oesophagus
- Cancer of the breast
- Colorectal cancer
- Cancer of the liver and intrahepatic bile ducts

There is also a relationship between alcohol and cancer of the stomach, although this relationship is different from that of the cancers mentioned above. This will be expanded upon in the stomach cancer section. Additionally, there is some evidence that alcohol is associated with several other cancers such as pancreatic cancer, lung cancer, and melanoma.^{4,5}

The guidance concludes with an outline of the different avenues for treatment and prevention of harmful or hazardous alcohol use, and provides recommendations on how best to mitigate the risk of alcohol-attributable cancer and support those with alcohol-related problems.

Alcohol consumption and cancer risk

How alcohol causes cancer

Strong evidence has emerged of plausible mechanisms that may explain why alcohol increases the risk of developing cancer. These mechanisms are as follows:

Increased absorption of carcinogens

Alcohol can affect the cells between the mouth and throat, which may make it easier for other carcinogens to be absorbed.⁶

Acetaldehyde

When alcohol is consumed, it is partially converted to acetaldehyde in the body. This happens mainly in the liver, but also in other cells and in bacteria in the gut and mouth. Acetaldehyde can cause cancer by damaging DNA and stopping our cells from repairing this damage.⁶

Hormone changes

Alcohol can increase the levels of oestrogen, insulin and other hormones. Hormones act as messengers in the body, giving our cells instructions - including when to grow and divide.⁶

Alcohol and tobacco together

Tobacco smoking and alcohol consumption are well established major risk factors for cancer of the oral cavity, pharynx, and larynx. A synergistic effect of these two factors has been consistently reported, meaning that consuming tobacco and alcohol together multiplies risk. Combined exposure to both substances leads to a steep increase of cancer risk. People consuming 10.5 units of alcohol and 10 cigarettes per day have up to a 35-fold higher risk of developing cancer.⁷ This is because:

- Alcohol affects the skin of the mouth allowing tobacco toxins to pass through more easily.
- Tobacco smoke contains formaldehyde, a poisonous chemical similar to acetaldehyde produced by the breakdown of alcohol.
- These two chemicals together can overwhelm the body's defence mechanisms.⁸

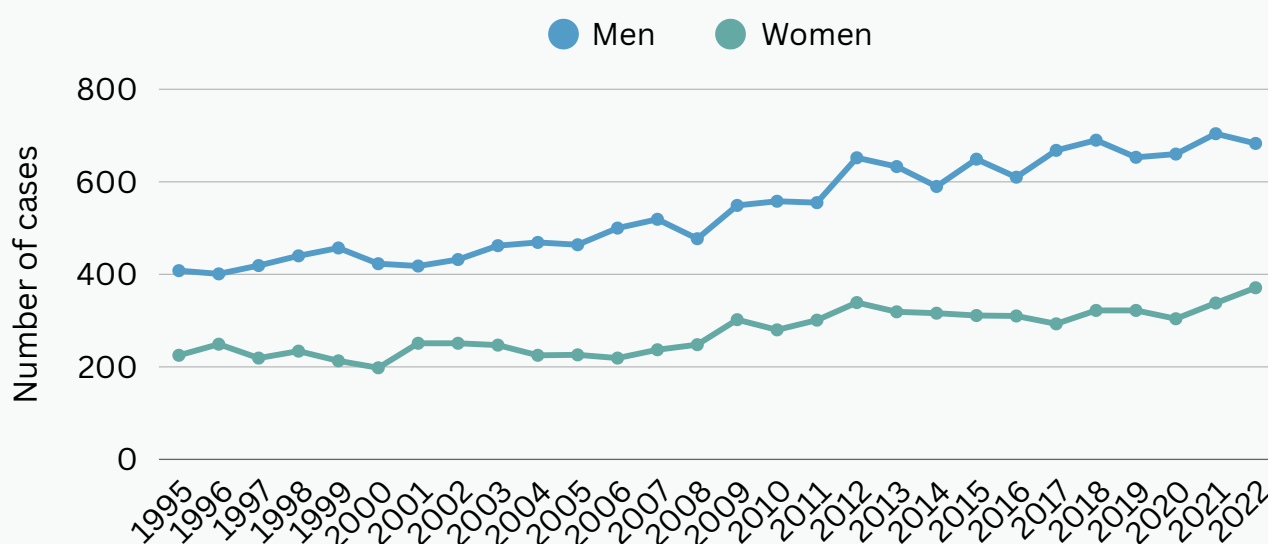
Alcohol-attributable cancer in Scotland

The following tables show the number of new cancer cases reported by Scottish Cancer Registry and Public Health Scotland by year for men and women (age-adjusted cancer incidence rates are also available from these sources). For the cancers included in this guidance, the overall trend over the last 25 years is the same for both the number and the rate of new cases, with the exception of male colorectal cancer which is noted in that section. Readers can refer to [Public Health Scotland's website](#) for the latest data.

Cancer of the lip, oral cavity and pharynx

In 2022, there were 683 new cases of cancer of the lip, oral cavity and pharynx in men and 371 in women in Scotland. This is a 67% and 65% increase, respectively, since 1995. The incidence of these cancers is two times greater in men than in women.^{9,10}

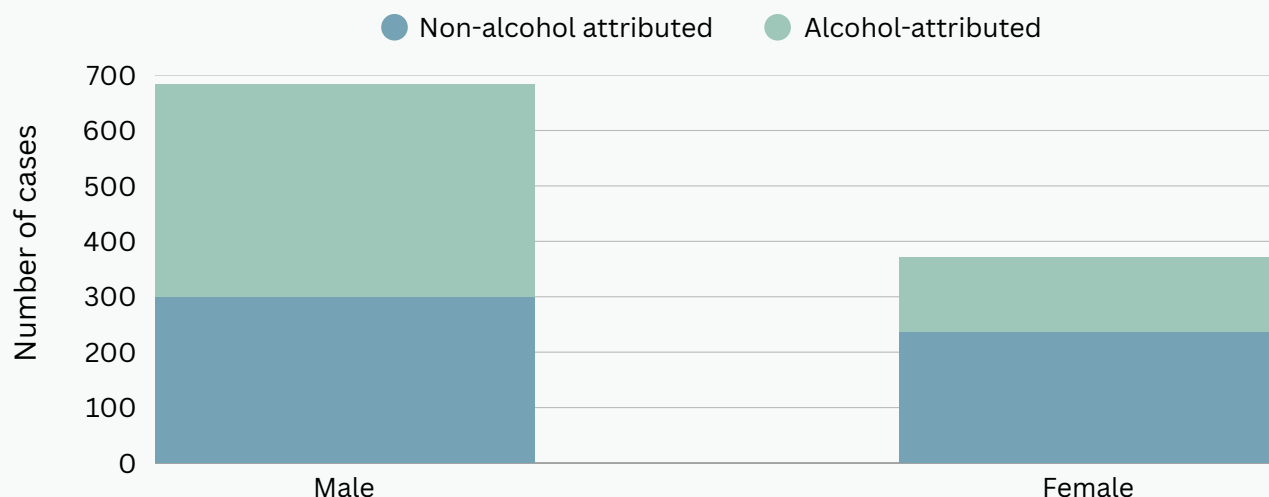
Cancer of the lip, oral cavity and pharynx



It is estimated that for men, 56% of cases of cancers of the lip, oral cavity and pharynx can be attributed to alcohol consumption. For women, it is 36%.¹

The incidence of cancer of the lip, oral cavity and pharynx increases with increasing levels of deprivation. This is associated with other lifestyle effects correlated with deprivation, particularly smoking.

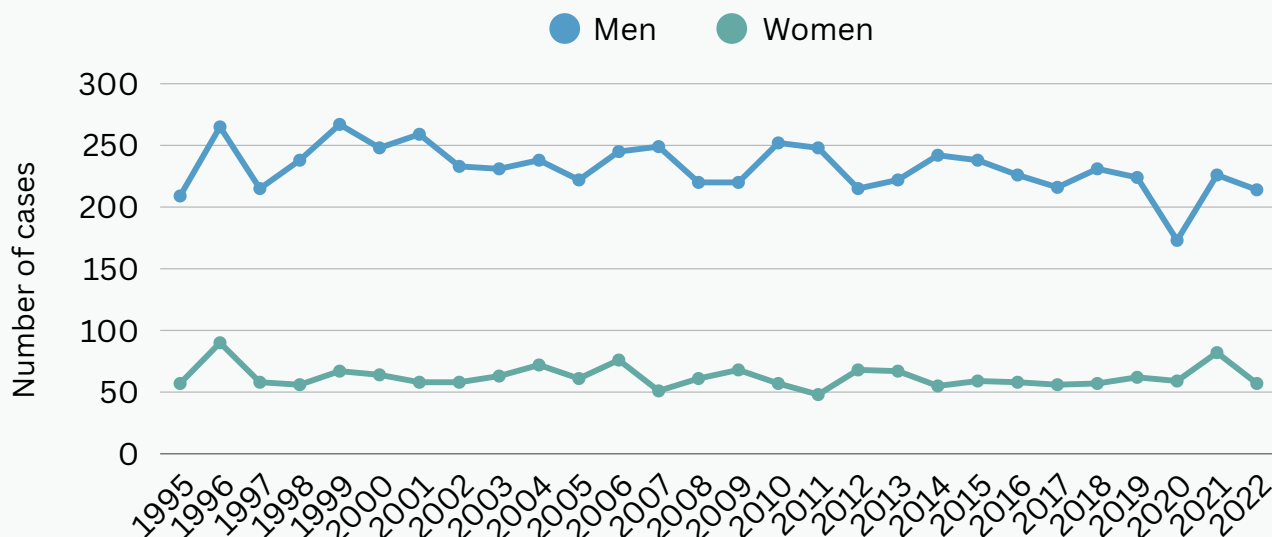
Alcohol-attributable cancer of the lip, oral cavity and pharynx: 2022



Cancer of the larynx

In 2022, there were 214 new cases of cancer of the larynx in men in Scotland, and 57 new cases among women, which is of a similar incidence rate to figures from 1995.⁹

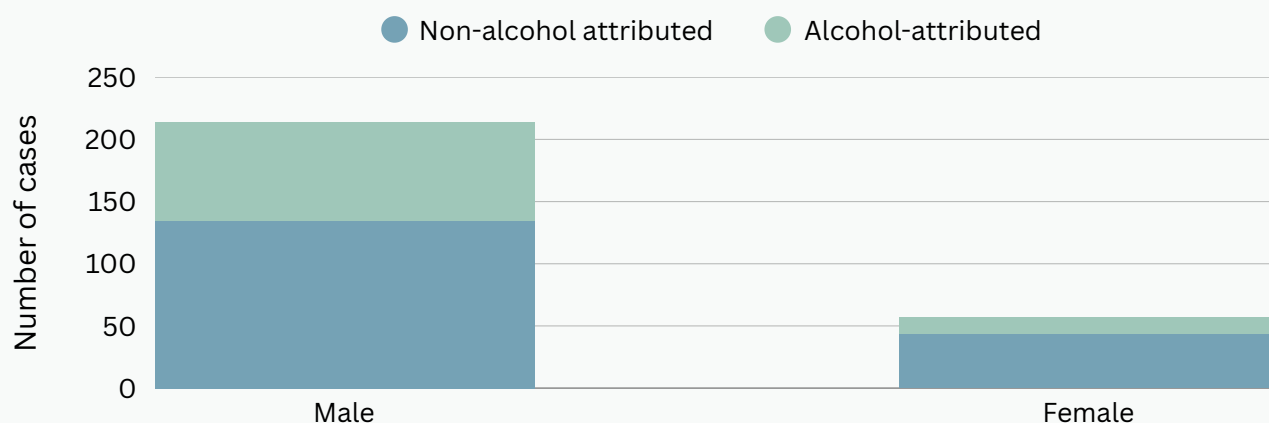
Cancer of the larynx, by sex: 1995-2022



It is estimated that 37% of laryngeal cancer cases in men can be attributable to alcohol use, compared to 23% of cases for women.⁴

Incidence of laryngeal cancer is highest within disadvantaged communities¹⁰ and is associated with the additional effects of other lifestyle factors such as smoking. In contrast to areas of social and economic affluence, the incidence of tobacco use within the most deprived communities has not shown a significant decrease over the past 30 years.³

Alcohol-attributable cancer of the larynx: 2022



Cancer of the oesophagus

Alcohol consumption at any level is associated with an increased risk of oesophageal cancer. The risks, compared with no alcohol consumption, range from 1.3-fold higher for light* drinking to nearly 5-fold higher for heavy* drinking.⁵

In 2022 there were 666 new cases of oesophageal cancer in men in Scotland and 326 in women, representing a 47% increase in men and a 2% decrease for women since 1995.⁹

* Bagnardi et al.⁵ use the terms 'light', 'moderate' and 'heavy' to categorise alcohol consumption:

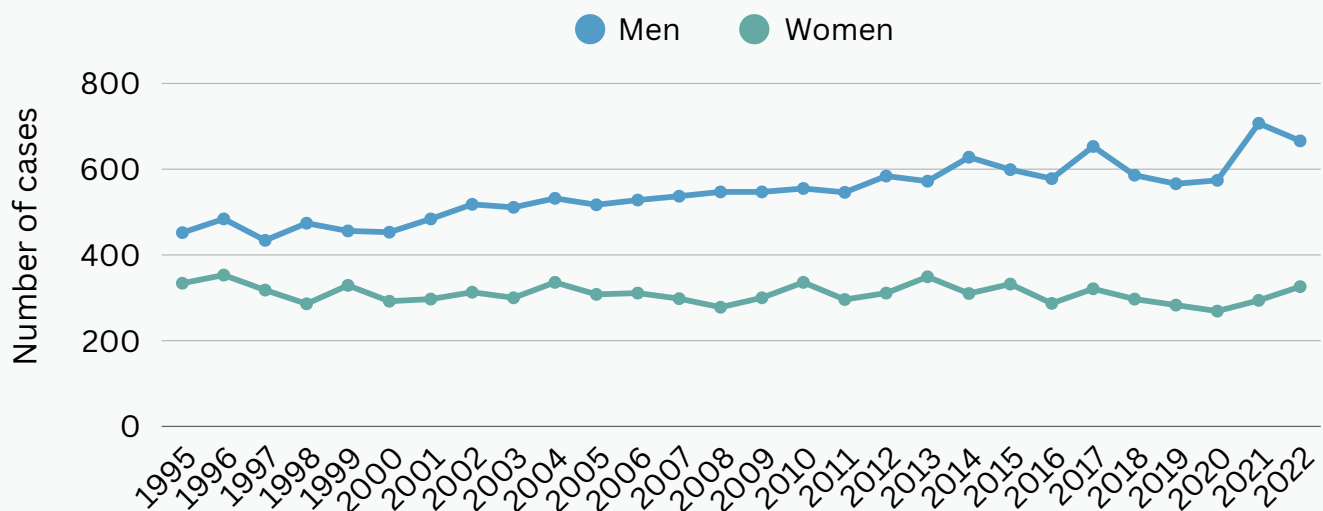
Light drinking: Equal to or less than 1.56 units per day;

Moderate drinking: Equal to or less than 6.25 units per day;

Heavy drinking: More than 6.25 units per day.

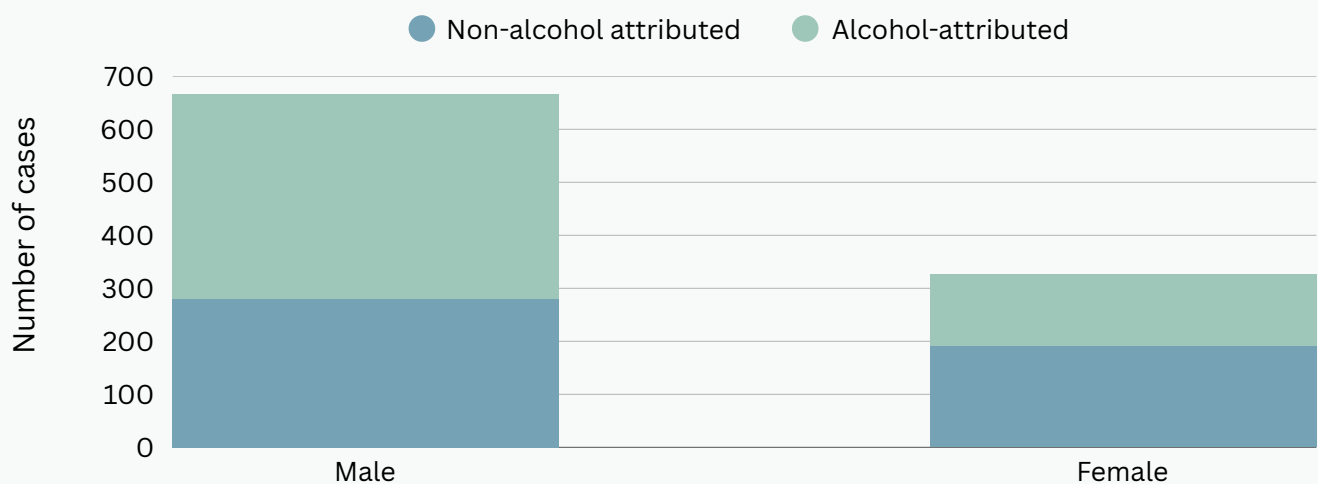
(Bagnardi et al. use grams of ethanol to measure alcohol intake. For sake of ease these have been converted to UK units. 1 unit = 8 grams of ethanol)

Cancer of the oesophagus, by sex: 1995-2022



It is estimated that 58% of new cases of oesophageal cancer in men can be attributable to alcohol use, compared to 41% of cases for women.¹

Alcohol-attributable cancer of the oesophagus: 2022



Cancer of the female breast

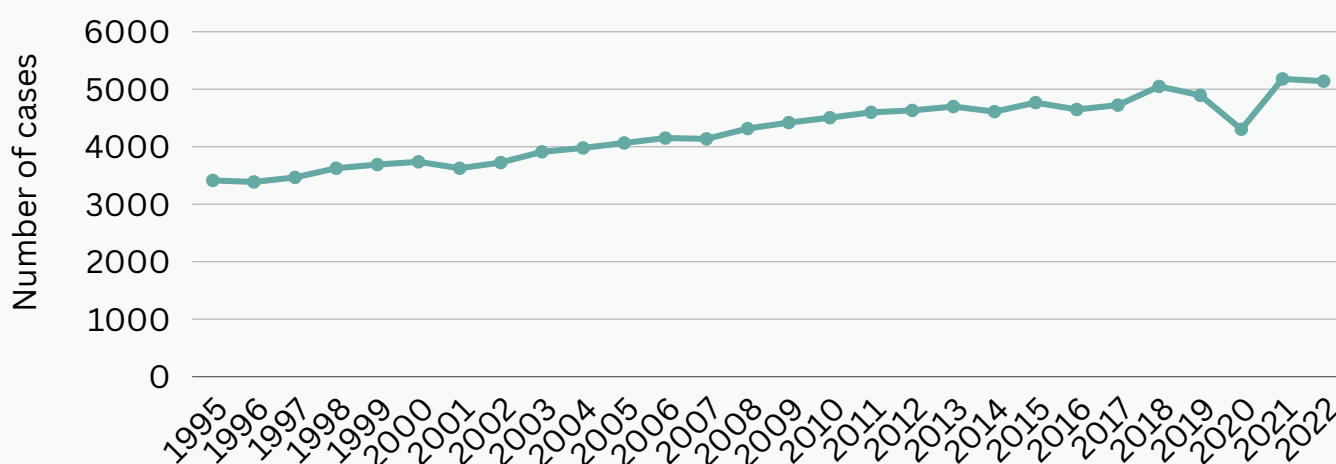
Breast cancer is the most common form of cancer in women. Epidemiological studies have consistently found an increased risk of breast cancer with increasing alcohol intake. Evidence indicates that light* drinkers have slightly increased (1.04-fold higher) risks of breast cancer, compared to non-drinkers. The risk

The risk increase is greater in moderate* drinkers (1.23-fold higher) and heavy* drinkers (1.6-fold higher).⁵ Women should be aware of the accumulated risk of consuming alcohol over the course of their lifetime. There is evidence to suggest that drinking in adolescence and early adulthood increases breast cancer risk as well as drinking post-menopause.⁴ For premenopausal women, there is a breast cancer risk increase of 5% with 10g of ethanol per day. For post-menopausal women there is a 9% risk increase with 10g of ethanol per day⁵ (10 grams of ethanol is 1.25 units of alcohol).

There is a relationship between deprivation and breast cancer: incidence decreases with levels of deprivation, however mortality increases. This seems to be explained by lower survival rates for women in deprived areas.¹¹

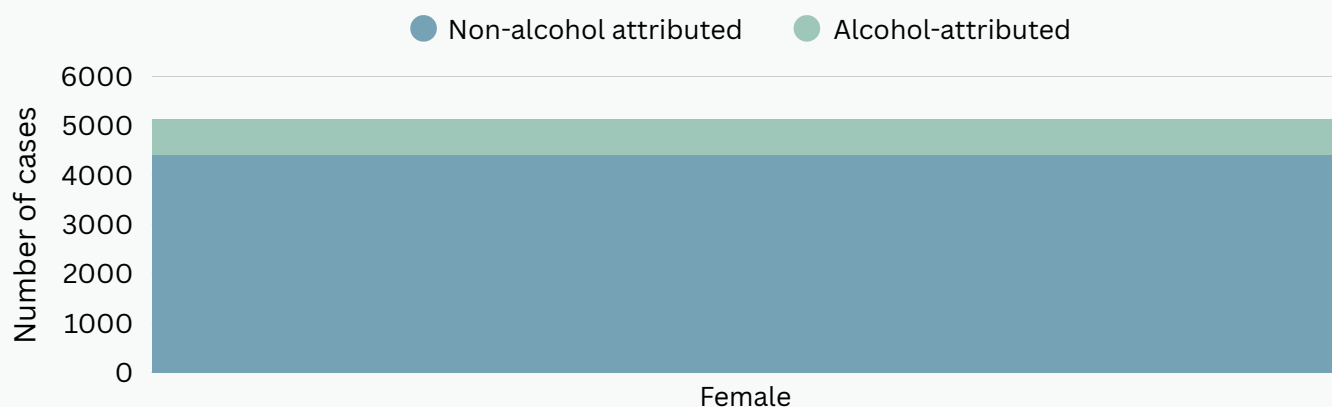
In 2022, there were 5,139 new cases of female breast cancer in Scotland, a 51% increase since 1995.⁹

Cancer of the female breast, by sex: 1995-2022



It is estimated that 14% cases of breast cancer were attributable to drinking alcohol.¹

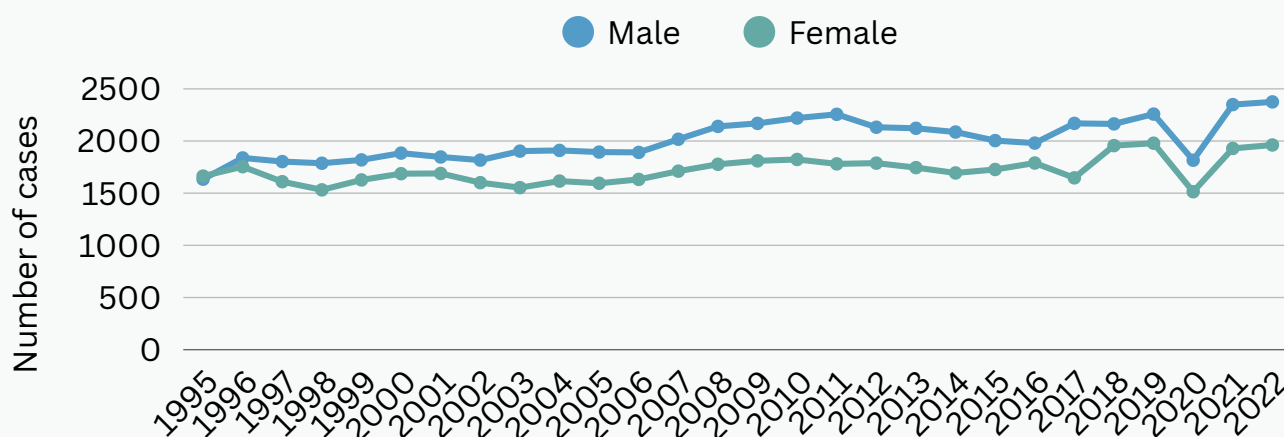
Alcohol-attributable cancer of the female breast: 2022



Colorectal cancer

Colorectal cancer is the fourth most common cancer.⁹ In 2022, there were 2,375 new cases of colorectal cancer in men and 1,962 in women in Scotland.⁹ In terms of the number of cases, there has been an increase of 45% for men and a 18% increase for women since 1995.

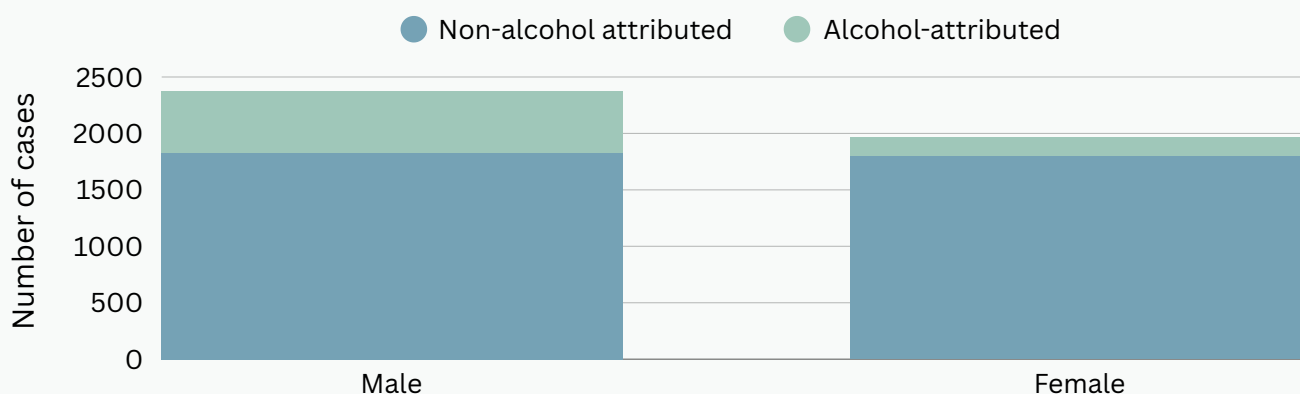
Colorectal cancer, by sex: 1995-2022



Moderate* to heavy* alcohol consumption is associated with 1.2- to 1.5-fold increased risk of colorectal cancer compared with no alcohol consumption.⁵

There is a relationship between colorectal cancer and deprivation: incidence and mortality in men increases with levels of deprivation. Women show a similar pattern though with a less pronounced association. It is estimated that 23% of colorectal cancer in men can be attributed to drinking alcohol. For women, it is 8%.¹

Alcohol-attributable colorectal cancer: 2022

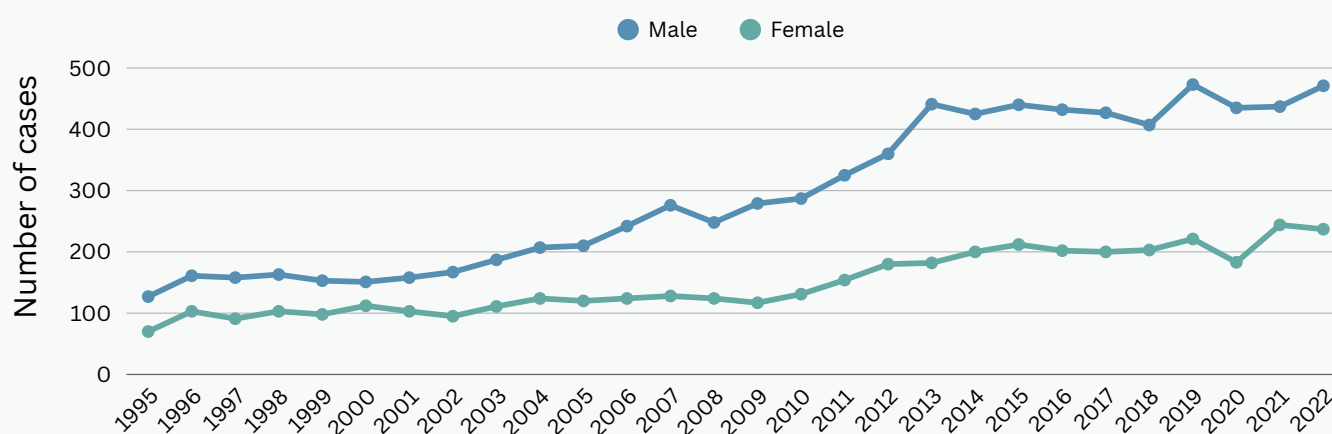


Cancer of the liver and intrahepatic bile ducts

In 2022, there were 471 new cases of cancers of the liver and intrahepatic bile ducts in men and 237 in women in Scotland. This represents a 271% increase in cases for men and a 239% increase for women since 1995.⁹

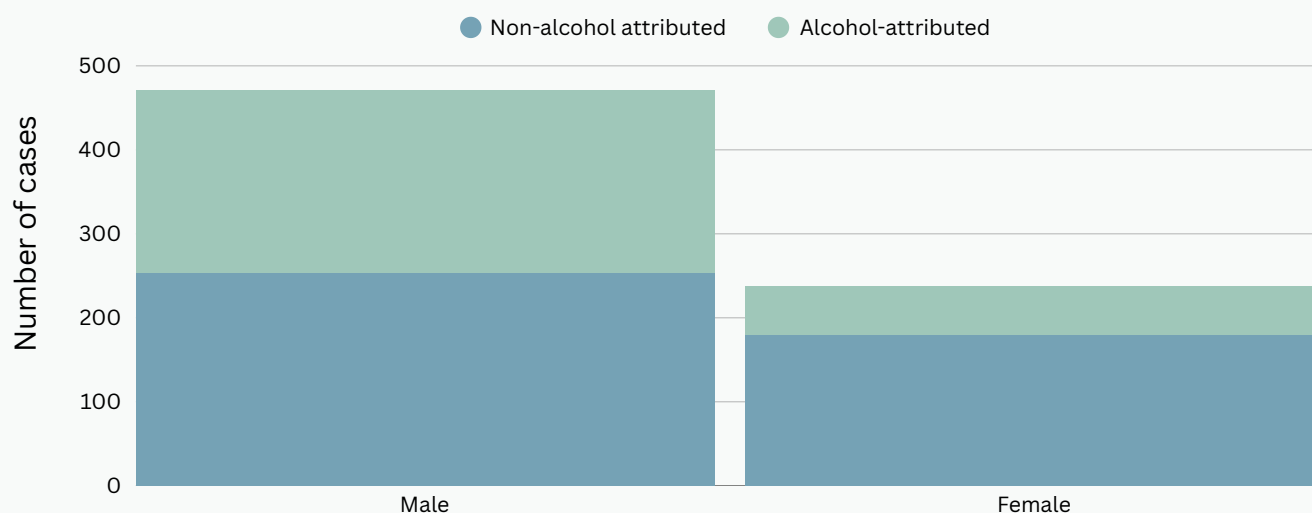
Heavy alcohol consumption is associated with approximately 2-fold increased risks of two types of liver cancer (hepatocellular carcinoma and intrahepatic cholangiocarcinoma).⁵ Alcohol-related liver disease can lead to cirrhosis of the liver, and increase the risk of liver cancer. Nearly all cases of hepatocellular carcinoma develop in patients with cirrhosis.

Liver and intrahepatic bile ducts, by sex: 1995-2022



It is estimated that 46% of liver cancer cases reported in men can be attributed to alcohol use. For women, it is 24%.

Alcohol-attributable cancer of the liver and intrahepatic bile ducts: 2022



Cancer of the stomach

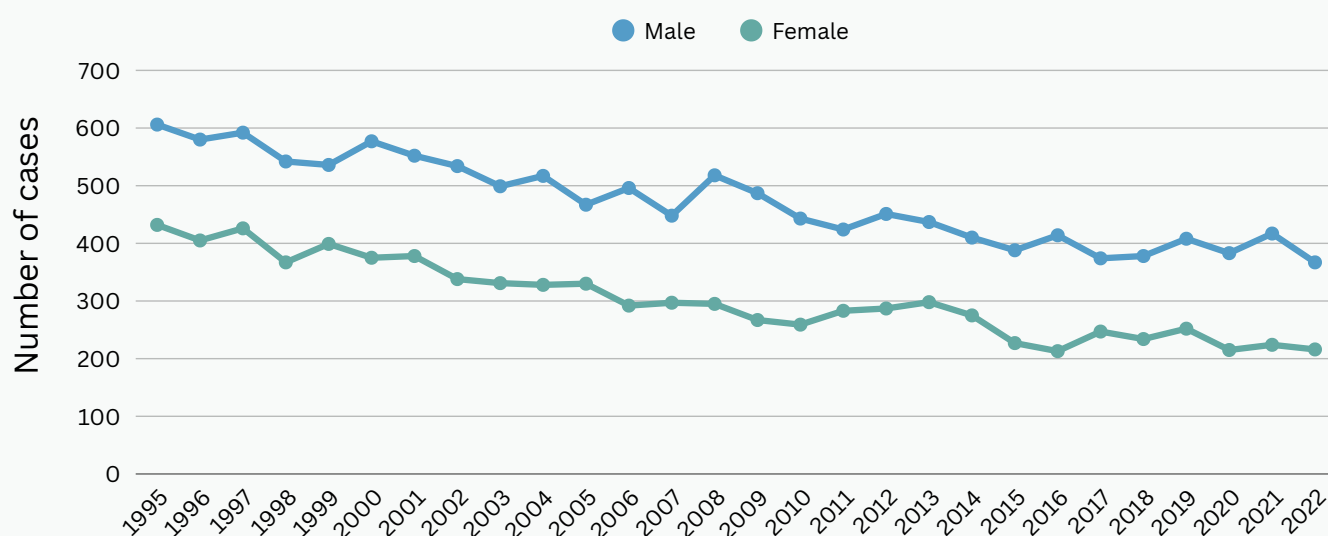
In 2022, there were 367 cases of stomach cancer in men and 216 cases for women in Scotland. This represents a 39% decrease for men and a 50% decrease for women since 1995.⁹

Stomach cancer and alcohol have a different risk relationship than the other cancers outlined in this report.

For the other cancers, any level of drinking increases risk. For stomach cancer, there is no conclusive evidence to suggest that there is a relationship between drinking less than 45 grams of ethanol per day (i.e. 5.6 units per day) and stomach cancer.

The risk of stomach cancer is associated with alcohol intake at above approximately 5.6 units of alcohol per day.⁴

Cancer of the stomach, by sex: 1995-2022



Opportunities for interventions

UK Chief Medical Officers' low risk drinking guidelines

The UK Chief Medical Officers' alcohol guidelines offer advice in order to improve health and wellbeing and lower health risks. Drinking alcohol increases the risk of developing a range of cancers. These risks start from any level of drinking and rise with the amount of alcohol consumed. For both men and women, the UK Chief Medical Officers advise the following:²

Weekly drinking guidelines

- You are safest not to drink regularly more than 14 units per week, to keep health risks from drinking alcohol to a low level.
- If you do drink as much as 14 units per week, it is best to spread this evenly over 3 days or more.
- If you have one or two heavy drinking sessions, you increase your risks of death from long-term illnesses and from accidents and injuries.
- The risk of developing a range of illnesses (including cancer) increases with any amount you drink on a regular basis.
- If you wish to cut down the amount you are drinking, a good way to help achieve this is to have several drink-free days each week.



How much is 14 units of alcohol?

One unit is equal to 10ml (or 8g) of pure alcohol. Because alcoholic drinks come in different strengths and sizes units are a good way of telling how strong a drink is.

The alcohol unit guidelines are equivalent to six pints of average strength beer (4%) or six 175ml glasses of average strength wine (13%).

For further information on alcohol units:

Count 14: <https://www.count14.scot/>

Healthy living and alcohol: <https://www.nhsinform.scot/healthy-living/alcohol>

Making a change: <https://publichealthscotland.scot/media/19242/making-a-change-april2020-english.pdf>

Alcohol Brief Interventions (ABIs)

ABIs have been identified as an effective strategy for treating people whose alcohol consumption is posing a risk to their health. There are a number of evidence-based brief interventions for a variety of treatment settings that can be used to modify a range of lifestyle habits. Although ABIs are a useful tool, healthcare professionals should also aim to embed alcohol in any lifestyle conversations about cancer risks.

The aim of the intervention is to help individuals moderate their levels of drinking and so reduce their risk of developing more serious alcohol-related problems, such as cancer. National guidance defines an ABI as follows:

“A short, evidence-based, structured conversation about alcohol consumption with a patient/client that seeks in a non-confrontational way to motivate and support the individual to think about and/or plan a change in their drinking behaviour in order to reduce their consumption and/or their risk of harm.”¹²

ABIs are delivered to individuals who are drinking at hazardous (over 14 units per week) and harmful levels (over 35 units per week for women, 50 units for men). They are identified through screening, part of which involves a structured conversation focused on obtaining an accurate picture of the client’s alcohol consumption to assess whether they are suitable for an ABI, whether they should be signposted to another service, or if no action is required.¹³

In 2024 Public Health Scotland published a review of the Alcohol Brief Intervention Programme in Scotland. At the time of writing, the Scottish Government is yet to set out if and how it will respond to the review's recommendations.

For further information and support in delivery of ABIs visit:

Local delivery plan standard: Alcohol Brief Interventions

<https://www.gov.scot/publications/alcohol-brief-interventions-national-guidance/>

Alcohol and cancer treatment

Alcohol and chemotherapy

Alcohol may interfere with the way some chemotherapy drugs work. Healthcare professionals providing treatment will be able to give specific advice about whether drinking alcohol is safe with chemotherapy drugs.

Drug interactions

With some drugs it is very important not to drink alcohol as they interact. Procarbazine and lomustine are two such chemotherapeutic drugs. If taking either of these, consult a health professional about what not to eat or drink during this period.

Chemotherapy side effects

Some chemotherapy drugs can cause nausea or loss of appetite. If able to drink, a small amount of alcohol may help to boost appetite. However, excessive drinking is not advisable whatever type of chemotherapy a patient is on.

Some patients develop a sore mouth while having chemotherapy and may find that alcohol stings, particularly spirits.¹⁴

Alcohol and breast cancer recurrence

According to a 2019 report on breast cancer from the National Institute for Health and Care Excellence (NICE), there was some evidence that cancer recurrence is more likely in people who drink more than 3 or 4 alcoholic drinks per week which equates to approximately 5 units of alcohol per week. They therefore recommend that breast cancer patients be advised that they should limit alcohol intake to below 5 units per week.¹⁵

Recommendations

People have the right to make an informed decision about their alcohol use. Our recommendations are as follows:

Communication

- Healthcare professionals need to be well-informed and open with patients about the risks that consuming alcohol poses with regards to cancer, as well as how to reduce these.
- Further promotion and awareness of the low risk drinking guidelines and what this means in terms of common drinks in order to increase understanding of units of alcohol and related risks.
- Information regarding the association between cancer and alcohol use needs to be disseminated through other channels alongside messages from healthcare professionals: educators, support workers, policymakers and the media among others all have a role to play in raising awareness.

Support

- People affected by alcohol problems should be flagged as priority cases for screening for cancers which may be more likely to affect them.
- These individuals and where acceptable, their families, should receive up to date information on the risks posed by alcohol related to cancer.
- Support for those affected by alcohol problems should be free of judgemental attitudes.

Policy

- The Scottish Government should set out its response to *ABIs: A review of strategy and recommendations for policy* and ensure that past progress made by the programme is built upon.
- The Scottish Government – ideally in tandem with the UK government – should mandate alcoholic drink manufacturers to label their products with health warnings including the risk of cancer.

Research

- Further research is needed in order to substantiate suggestions that other types of cancer, such as pancreatic cancer, is linked to alcohol usage.
- Further research is needed in order to understand more about how patterns of alcohol usage impact on cancer risks and harms.
- Further research in Scotland about how best to communicate alcohol related harms to the public and measure levels of awareness and action taken as a result.

Alcohol consumption in Scotland

Overview

Alcohol consumption in Scotland differs by gender, age, and deprivation:³

Generally the proportion of adults in Scotland drinking over the CMO's 'low-risk' levels is declining: from 34% in 2003 to 20% in 2023. However, men are twice as likely as women to drink above this recommended 'low-risk' level of alcohol.



Levels of hazardous or harmful alcohol consumption in the population of Scotland varies across age groups. In 2023, hazardous or harmful drinking levels were highest among those 65-74 years old (27%), followed by 55-64 (25%), and 16-24 (24%). People aged 25-34 years old were the least likely to report harmful or hazardous consumption.

Although the largest share of people drinking at a hazardous or harmful rates in Scotland are in the least deprived areas, the highest levels of alcohol-related hospital admissions and alcohol-specific deaths are seen in the most deprived areas.¹⁶



Alcohol consumption in Scotland

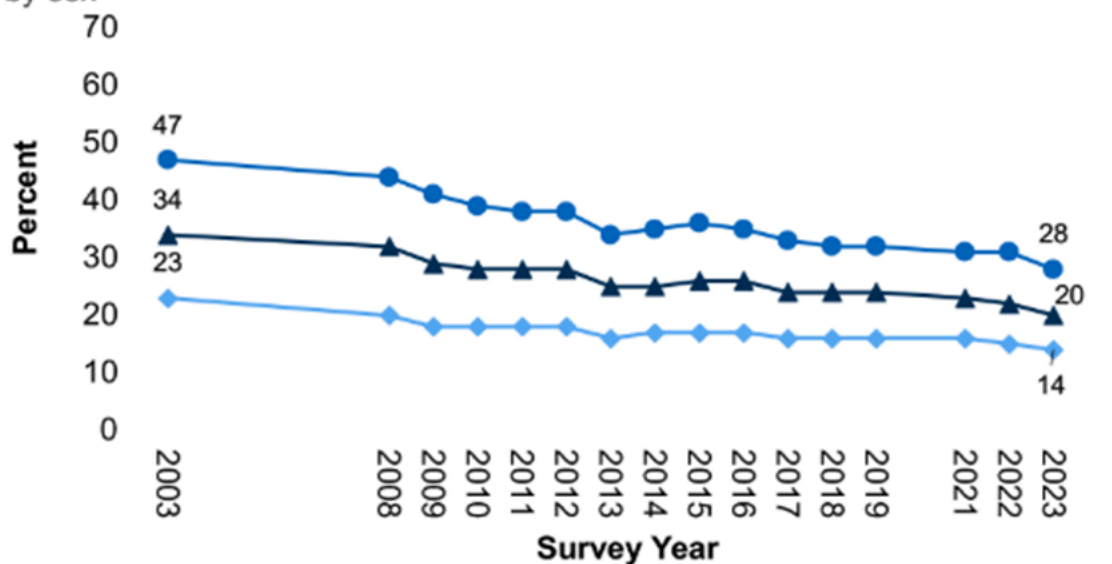
Patterns of alcohol consumption: Gender and age

Gender

Men tend to drink more units of alcohol than women. In 2023, the average alcohol unit consumption per week was 15.2 units for men, and 8.0 units for women.³ Male drinkers are twice as likely to drink above the recommended maximum of 14 units a week as female drinkers. Overall average weekly alcohol consumption for men in Scotland is 15.2 units while for women, the average is 8.0 units.

Figure 8A, Table 8.1

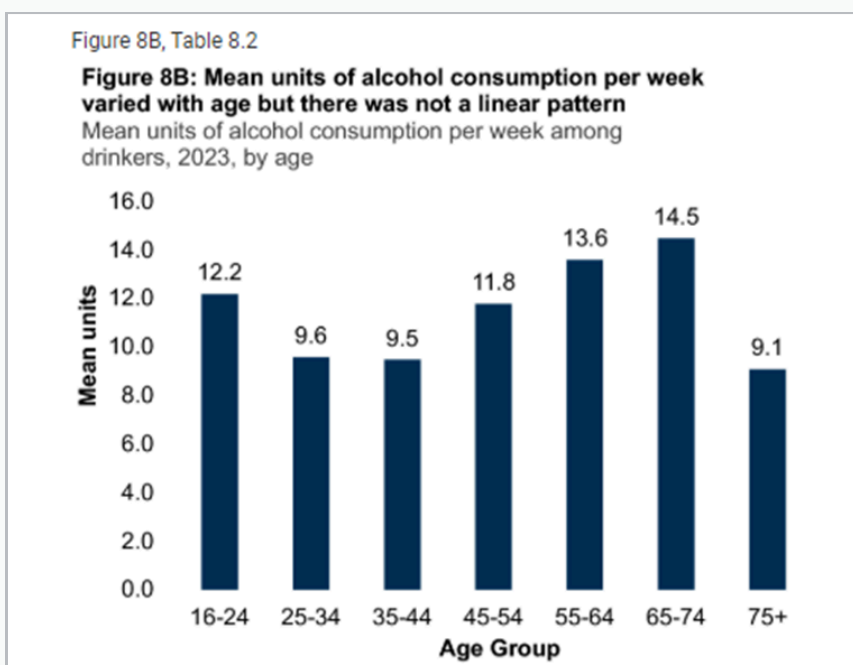
Figure 8A: The prevalence of hazardous/ harmful alcohol consumption continued to decline
Hazardous/ harmful weekly alcohol consumption, 2003 - 2023, by sex



Source: The Scottish Health Survey 2023³

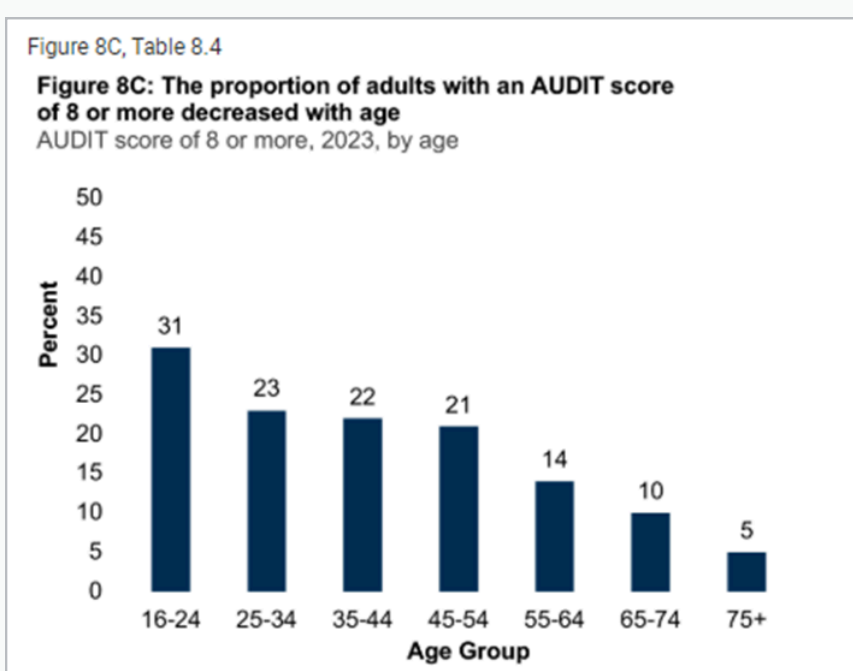
Age

Consumption levels differ by age group in Scotland. Mean unit of alcohol consumption was highest among those in the 65-74 age range, followed by those who were in the 55-64 and 16-24 age ranges. Those in the 75+ category has the lowest average alcohol unit consumption.³



Source: The Scottish Health Survey 2023³

Levels of adult hazardous and harmful drinking varies by age group in Scotland. The proportion with an AUDIT score of 8 or more varied significantly by sex in 2023, 24% among men and 13% among women.



Source: The Scottish Health Survey 2023³

Patterns of alcohol consumption: Area deprivation

Average weekly levels of self-reported alcohol consumption tend to be higher in more affluent groups.

In 2023, the prevalence of hazardous and harmful drinking levels was highest among those living in the most deprived areas of Scotland (21-23%) and was lowest among those living in the least deprived areas (12-18%).³

The higher mean consumption levels in the most affluent groups yet higher prevalence of AUDIT scores (and alcohol-related morbidity and mortality) in the least affluent groups is potentially explained by:

- People who drink in the most deprived areas in Scotland are more likely to score 8 or more on the AUDIT screening tool.³
- The heaviest drinkers are less likely to be fully represented in surveys.
- Heavy drinkers in less affluent groups tend to consume more than heavy drinkers in other groups.

This means that alcohol-related harm is socially patterned with higher levels of alcohol-related harm in less affluent groups.

Inequalities in alcohol-related harm have been falling in Scotland, but they remain wide. According to Public Health Scotland's Alcohol Consumption and Harms Dashboard:¹⁷

- Alcohol-related mortality rates for those living in the most deprived areas are four times the rate for those in the least deprived areas.
- The rate of alcohol-related hospital admissions for those living in the most deprived areas are six times the rate for those in the least deprived areas.

References

1. Tod, Grant I, Wyper G, Stockton D, Robinson M, McCartney G, et al. Hospital admissions, deaths and overall burden of disease attributable to alcohol consumption in Scotland. NHS Health Scotland & ScotPHO; 2018. Available from: <https://www.scotpho.org.uk/media/1597/scotpho180201-bod-alcohol-scotland.pdf>
2. Department of Health. UK Chief Medical Officers' Low Risk Drinking Guidelines [Internet]. 2016. Available from: <https://www.gov.uk/government/publications/alcohol-consumption-advice-on-low-risk-drinking>
3. The Scottish Government. Scottish Health Survey 2023 - volume 1: main report [Internet]. 2024. Available from: <https://www.gov.scot/publications/scottish-health-survey-2023-volume-1-main-report/pages/14/>
4. World Cancer Research Fund, American Institute for Cancer Research. Continuous Update Project Report 2018. Alcoholic drinks and the risk of cancer. [Internet]. 2018. Available from: <https://www.wcrf.org/wp-content/uploads/2024/10/Alcoholic-Drinks.pdf>
5. Bagnardi V, Rota M, Botteri E, Tramacere I, Islami F, Fedirko V, et al. Alcohol consumption and site-specific cancer risk: a comprehensive dose-response meta-analysis. British Journal of Cancer [Internet]. 2014 Nov 25;112(3):580–93. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4453639/>
6. Cancer Research UK. Does alcohol cause cancer? [Internet]. Cancer Research UK. CRUK; 2018. Available from: <https://www.cancerresearchuk.org/about-cancer/causes-of-cancer/alcohol-and-cancer/does-alcohol-cause-cancer>
7. Dal Maso L, Torelli N, Biancotto E, Di Maso M, Gini A, Franchin G, et al. Combined effect of tobacco smoking and alcohol drinking in the risk of head and neck cancers: a re-analysis of case-control studies using bi-dimensional spline models. European Journal of Epidemiology. 2015 Apr 9;31(4):385–93. Available from: <https://link.springer.com/article/10.1007/s10654-015-0028-3>
8. Mouth Cancer Foundation. Alcohol | Mouth Cancer Foundation [Internet]. Mouth Cancer Foundation. 2022. Available from: <https://www.mouthcancerfoundation.org/alcohol/>
9. Public Health Scotland. Annual Cancer Incidence. Incidence at Scotland Level [Internet]. Public Health Scotland. 2024. Available from: <https://publichealthscotland.scot/publications/cancer-incidence-in-scotland/cancer-incidence-in-scotland-to-december-2022/>
10. Public Health Scotland. Annual Cancer Incidence. Incidence at Scotland Level [Internet]. Public Health Scotland. 2021. Available from: <https://publichealthscotland.scot/publications/cancer-incidence-in-scotland/cancer-incidence-in-scotland-cancer-incidence-and-prevalence-in-scotland-to-december-2019/>

11. Macmillan UK. Deprivation and survival analysis reports [Internet]. 2017. Available from: <https://www.macmillan.org.uk/about-us/what-we-do/evidence/research-funding/our-partnerships/information-services-division-scotland.html>
12. The Scottish Government. Local Delivery Plan Standards: Alcohol Brief Interventions. National Guidance: 2019-20. 2018. Available from: <https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2018/11/alcohol-brief-interventions-national-guidance/documents/alcohol-brief-interventions-national-guidance-2019-2020/alcohol-brief-interventions-national-guidance-2019-2020/govscot%3Adocument/Alcohol%2BBrief%2BInterventions%2BNational%2BGuidance%2B2019-2020.pdf>
13. Public Health Scotland. Alcohol Brief Interventions: A review of strategy and recommendations for policy [Internet]. Public Health Scotland. 2024. Available from: <https://publichealthscotland.scot/media/29653/alcohol-brief-interventions-a-review-of-strategy-and-recommendations-for-policy.pdf>
14. Cancer Research UK. Social life and activities during chemotherapy | Cancer in general | Cancer Research UK [Internet]. www.cancerresearchuk.org. 2020. Available from: <https://www.cancerresearchuk.org/about-cancer/cancer-in-general/treatment/chemotherapy/living-with/social-life-activities>
15. National Institute for Health and Care Excellence. Early and locally advanced breast cancer: diagnosis and management. NICE Guideline [NG101] [Internet]. Available from: <https://www.nice.org.uk/guidance/ng101/chapter/Recommendations#lifestyle>
16. Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., Monteiro, M. G., & World Health Organization. (2001). AUDIT: the alcohol use disorders identification test: guidelines for use in primary health care (No. WHO/MSD/MSB/01.6 a). World Health Organization. Available from: https://iris.who.int/bitstream/handle/10665/67205/WHO_MSD_MSB_01.6a-eng.pdf?sequence=1
17. Public Health Scotland. Alcohol consumption and harms dashboard [Internet]. 2024. Available from: <http://www.healthscotland.scot/health-topics/alcohol/alcohol-overview>

Images

Cover Image © pixelshot via Canva.com
Pint glass graphic © Caroline Mackay via Canva.com
Wine glass graphic © DAPA Images via Canva.com
Male figure © tmvectorart via Canva.com
Standing Woman Icon © Viktor Morozuk via Canva.com
Arrow graphic © Impro Studio via Canva.com
Scotland map silhouette © cundra via Canva.com

Acknowledgements

This publication has been written with contributions from SHAAP team and Steering Group.

SHAAP would also like to acknowledge, with gratitude, the contributions of the following external people and organisations to the first addition of this guidance:

- Ian Grant, Principal Researcher, Information Services Division
- Annie Anderson, Co-Director of the Scottish Cancer Prevention Network
- Public Health Scotland

SHAAP

Scottish Health Action on Alcohol Problems

SHAAP is a partnership of the Medical Royal Colleges and the Faculty of Public Health in Scotland and is based at the Royal College of Physicians of Edinburgh (RCPE).

Using the best available evidence, SHAAP provides the authoritative clinical voice on how policy makers and clinicians can reduce alcohol-related harms in Scotland.

Updated June 2025

Contact us

Scottish Health Action on Alcohol Problems
Royal College of Physicians of Edinburgh
12 Queen Street
Edinburgh
EH12 1JQ

Tel: +44 (0) 131 247 3667

Email: shaap@rcpe.ac.uk

Website: www.SHAAPAlcohol.org

You can also find us here:

[X/ Twitter](#)

[Bluesky](#)

[LinkedIn](#)

[Eventbrite](#)