

Monitoring and Evaluating Scotland's Alcohol Strategy (MESAS)

**Monitoring
Report 2022**



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All alcohol sales and price data presented in this report and in accompanying datasets are copyrighted to Nielsen and/or CGA Strategy.

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Key points

- In 2021, COVID-19 restrictions continued to affect alcohol sales through on-trade premises (such as pubs, clubs and restaurants). In 2021, 85 % of all pure alcohol sold in Scotland was sold through the off-trade (supermarkets and other off-licences): this is a decrease from 90 % in 2020 but an increase from 72 % in 2019.
- In 2021, 9.4 litres (L) of pure alcohol were sold per adult in Scotland, equivalent to 18.1 units per adult per week. This maintains a similar level to that seen in 2020, the lowest level seen in Scotland over the available time series. The volume of pure alcohol sold per adult in Scotland in 2021 was 4 % higher than in England & Wales, the smallest difference seen in the available time series.
- In 2021, the average price of alcohol sold in the off-trade in Scotland was 64p per unit, an increase from 63p in 2020 (England & Wales: 59p in 2020 to 60p in 2021). The average on-trade price in Scotland was £2.04 per unit, an increase from £2.00 in 2020 (England & Wales: £1.93 in 2020 to £2.05 in 2021).
- In 2021, 62 % of the pure alcohol sold in Scotland was recorded as being sold at between 50.0p and 64.9p per unit, compared with 32 % before Minimum Unit Pricing (MUP) was implemented.
- In 2021, alcohol sold in the UK was 78 % more affordable than it was in 1987. In recent years the general upward trend in the affordability of alcohol has been driven by increases in disposable income and a slight fall in the real price of alcohol in the UK.
- Self-reported alcohol consumption data show that 24 % of adults in Scotland in 2019 exceeded the low-risk weekly drinking guideline (14 units), a decline from 34 % in 2003. Of those exceeding the guideline, mean weekly consumption was highest among those in the lowest income groups.
- In 2020, 1,190 people died in Scotland due to a cause wholly attributable to alcohol, an average of nearly 23 people per week. Alcohol-specific death rates increased between 2019 and 2020, an increase that was largely driven by deaths among males aged 45 years and over. Alcohol-specific death rates are consistently higher in Scotland than in England & Wales.
- 21,480 people in Scotland were admitted to a general acute hospital with an alcohol-related diagnosis in 2020/21, with a total of 33,015 alcohol-related inpatient stays. Rates of alcohol-related hospital stays were four times higher than in the early 1980s.
- The most recent data show that rates of alcohol-specific death and alcohol-related hospital stays were at least twice as high for men as women and were highest in the 55–64 year age group. Inequalities by area deprivation were stark: in the 10 % most deprived areas of Scotland, rates of alcohol-specific death were nearly five times higher, and rates of alcohol-related hospital stays nearly eight times higher, than in the 10 % least deprived areas.
- In 2020/21, rates of 'driving under the influence of alcohol' offences remained low at 15 per 10,000 population, as did rates of other 'drunkenness and disorderly conduct' offences at 11 per 10,000 population.

Introduction

In 2010 NHS Health Scotland (now part of Public Health Scotland (PHS)) was tasked by the Scottish Government to lead the monitoring and evaluation of Scotland's alcohol strategy. This was to be delivered through the Monitoring and Evaluating Scotland's Alcohol Strategy (MESAS) work programme. A key MESAS output was the annual publication of the latest analyses of alcohol retail sales and price data in Scotland and England & Wales. This was supplemented by the annual MESAS report, which also presented trends in other important indicators of alcohol consumption and related health and social harms.

In March 2016, the final report from the first phase of the MESAS evaluation of wider alcohol policy in Scotland was published. A key recommendation of the report was that:

‘Monitoring of alcohol price, affordability, consumption and alcohol-related deaths and hospital admissions should continue. Bringing these together in an annual overview will facilitate early identification and exploration of emerging issues.’

This is the sixth MESAS Monitoring Report that responds to this recommendation. It aims to provide the latest available information on key alcohol statistics in Scotland in a clear, concise and accessible way. It should be noted that this report does not present all data and charts that were included in previous MESAS reports. Instead, it presents the headline statistics for high-level indicators particularly relevant to the outcomes that Scotland's alcohol strategy set out to achieve. Additional data and charts are available in the accompanying spreadsheets found at <https://publichealthscotland.scot/publications/mesas-monitoring-report-2022/> or from alternative sources highlighted throughout the report.

Information on the data sources and methods used to obtain the results presented in this report are provided in **Appendix 1**.

COVID-19 pandemic

COVID-19 was declared a pandemic in March 2020. In the same month the first person died of COVID-19 in the UK, and a government-enforced lockdown began. For the remainder of 2020, and through 2021, various restrictions affected opportunities to purchase alcohol and socialise, as well as people's economic circumstances and general wellbeing. The extent to which the data presented in this report are likely to capture any effects on alcohol consumption and related health and social harms in Scotland will depend on the data available, which differ between the measures of consumption and harms being used. Data for alcohol sales, price, hospital admissions and recorded crime include the whole of 2021, while the other datasets used predate the pandemic. A reduced set of self-reported consumption data were available for August/September 2020 from the Scottish Health Survey, but due to methodological differences were not comparable with earlier years; these data are presented in places to provide an idea of how the pandemic may have influenced alcohol consumption. Comparable data for 2021 have not yet been published. These points should be taken into consideration when interpreting the data presented in this report.

Alcohol retail sales

The alcohol retail sales data include the whole of 2021, and therefore represent the situation during the COVID-19 pandemic and related restrictions.

In 2021, a total of 43.0 million litres of pure alcohol were sold in Scotland.

- 9.4 litres (L) of pure alcohol were sold per adult in Scotland. This is equivalent to 18.1 units of alcohol per adult per week.
- Of the total volume of pure alcohol sold per adult in Scotland in 2021, spirits accounted for 31 %, wine for 30 %, beer for 29 % and cider for 5 %.
- In 2021, COVID-19 restrictions affected alcohol sales through on-trade premises (such as pubs, clubs and restaurants). Off-trade premises (supermarkets and other off-licences) sold 85 % of all alcohol purchased in 2021 (up from 73 % in 2019 but down from 90 % in 2020). For further information on alcohol sales and harm through the COVID-19 pandemic, see [Alcohol sales and harms in Scotland during the COVID-19 pandemic](#).
- 25 % of all alcohol (natural volume) sold off-trade through larger multiple retailers (excluding discount retailers) in Scotland was sold on promotion; this has fallen from 55 % in 2011.

In 2021, 4% more alcohol was sold per adult in Scotland than in England & Wales.

- 9.4L pure alcohol was sold per adult in Scotland in 2021, compared with 9.0L in England & Wales.
- Off-trade sales were more than 0.5L per adult (6 %) higher in Scotland than in England & Wales, whereas on-trade sales were 0.2L (13 %) lower.
- In 2021, off-trade sales of spirits in Scotland exceeded those in England & Wales by 0.6L per adult (29 %); this was 7 % higher than the total difference in off-trade sales.
- Vodka accounts for 67 % of the difference in off-trade sales; per-adult sales of vodka through the off-trade in Scotland were 68 % higher than in England & Wales.

In 2021, the volume of pure alcohol sold per adult in Scotland was maintained at a similar level to 2020, the lowest level seen over the available time series.

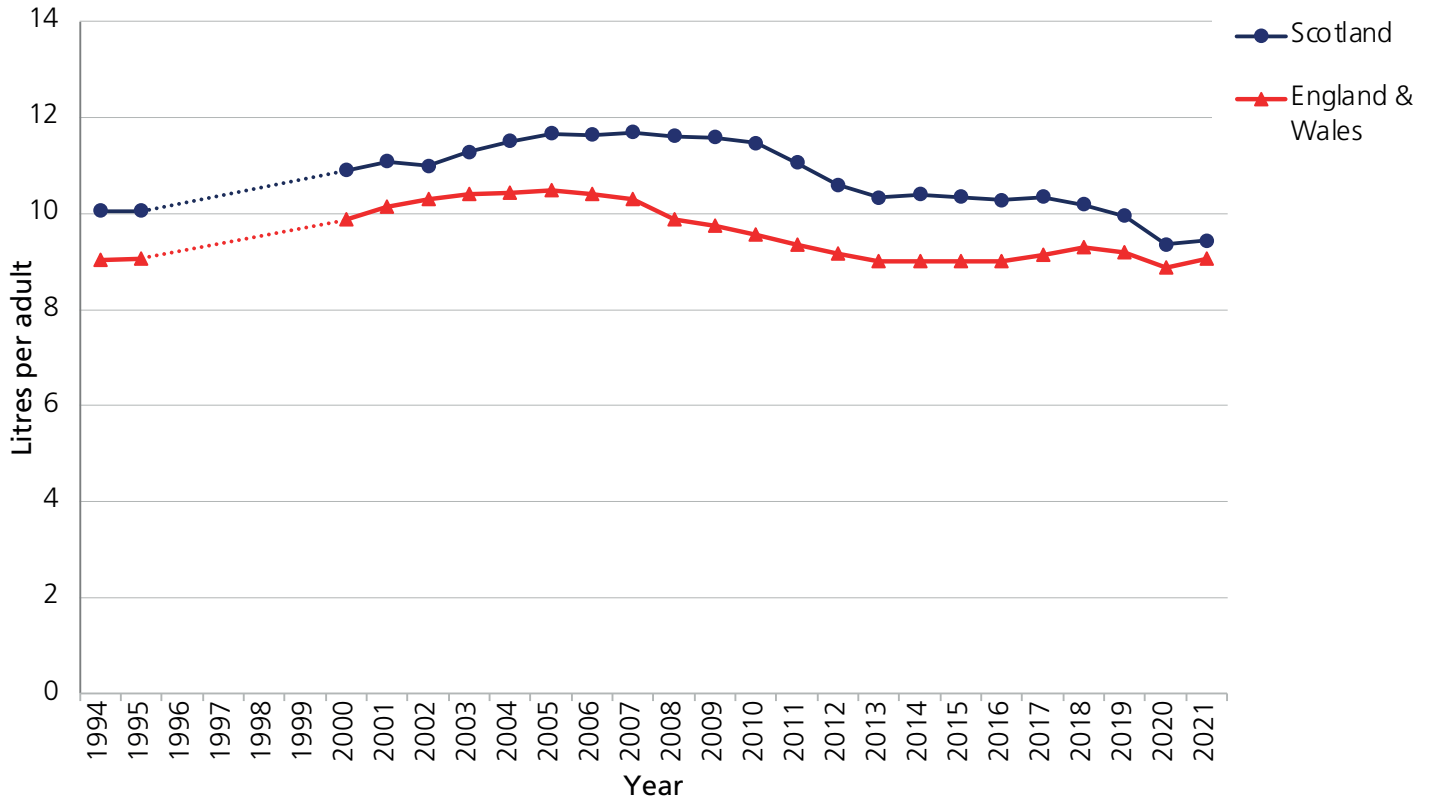
- From 10.1L per adult in 1994, the average volume of pure alcohol sold increased and stabilised at around 11.6L per adult between 2005 and 2010. Following a period of decline to 2013, the volume of pure alcohol sold per adult remained relatively stable, at around 10.3L per adult, until 2017. Since then it decreased gradually to 9.4L per adult in 2020 and was maintained at a similar level in 2021.
- From January to May 2021, total alcohol sales were 16 % lower than the average for January to May 2017–19. See [Alcohol sales and harm in Scotland during the COVID-19 pandemic](#)
- COVID-19 restrictions continued to result in the dominance of off-trade sales: per adult off-trade sales in 2021 were 15 % higher than the average for 2017–2019, while on-trade sales were 95 % lower than the average for 2017–2019.

Excluding the proportion of the population that does not drink alcohol gives a total consumption figure of 11.3L per adult drinker, rather than 9.4L per adult.

- This is equivalent to 21.7 units of alcohol per adult drinker per week.

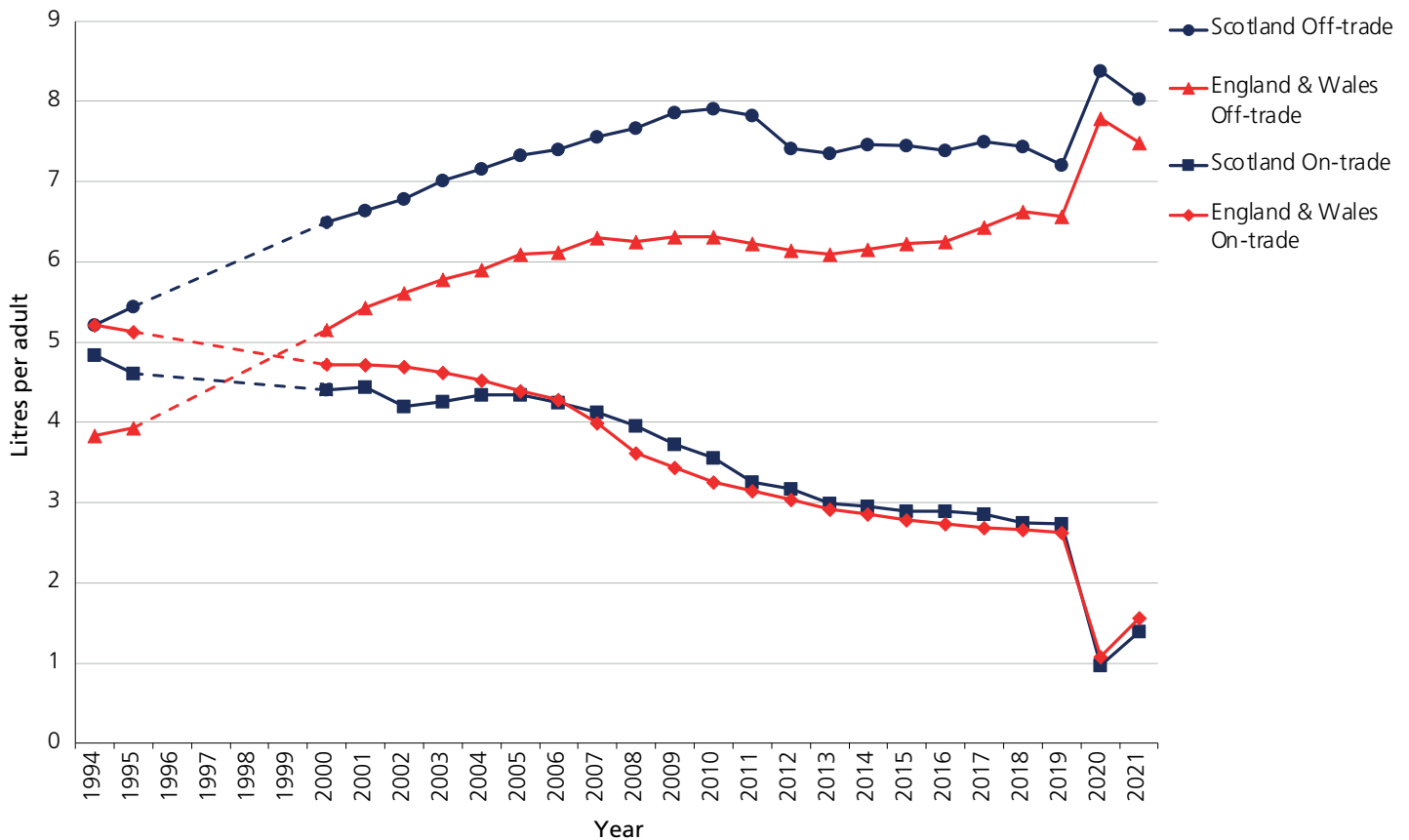
Additional alcohol sales data are available in the [alcohol sales spreadsheet](#).

Volume of pure alcohol sold per adult in Scotland and England & Wales, 1994–2021



Source: Nielsen/CGA sales dataset (off-trade sales from 2011 onwards adjusted to account for the lack of data from discount retailers; see [Appendix 1](#) for more details).

Volume of pure alcohol sold per adult in Scotland and England & Wales, by trade sector, 1994–2021



Source: Nielsen/CGA sales dataset (off-trade sales from 2011 onwards adjusted to account for the lack of data from discount retailers; see [Appendix 1](#) for more details).

Alcohol price and affordability

The alcohol price and affordability data include the whole of 2021, and therefore represent the situation during the COVID-19 pandemic and related restrictions.

In 2021, the average price per unit of alcohol in Scotland was 64p in the off-trade and £2.04 in the on-trade.

- The average price paid per unit of off-trade alcohol in Scotland increased from 63p in 2020 to 64p in 2021. In England & Wales it increased from 59p in 2020 to 60p in 2021.
- The average on-trade price in Scotland has increased steadily over time, more than doubling from 95p in 2000 to £2.04 in 2021; in England & Wales, the trend in average on-trade price has been similar.
- The average price paid per unit of alcohol (on- and off-trade sales combined) decreased sharply from 99p in 2019 to 77p in 2020 in Scotland; this was due to the dominance of off-trade sales during the COVID-19 pandemic. In 2021, this increased to 85p per unit, driven by the increase in on-trade sales compared to 2020. The trend in average combined price has been similar in England & Wales.

In 2021 almost two-thirds (62%) of pure alcohol sold in Scotland was recorded as being sold at between 50.0p and 64.9p per unit.

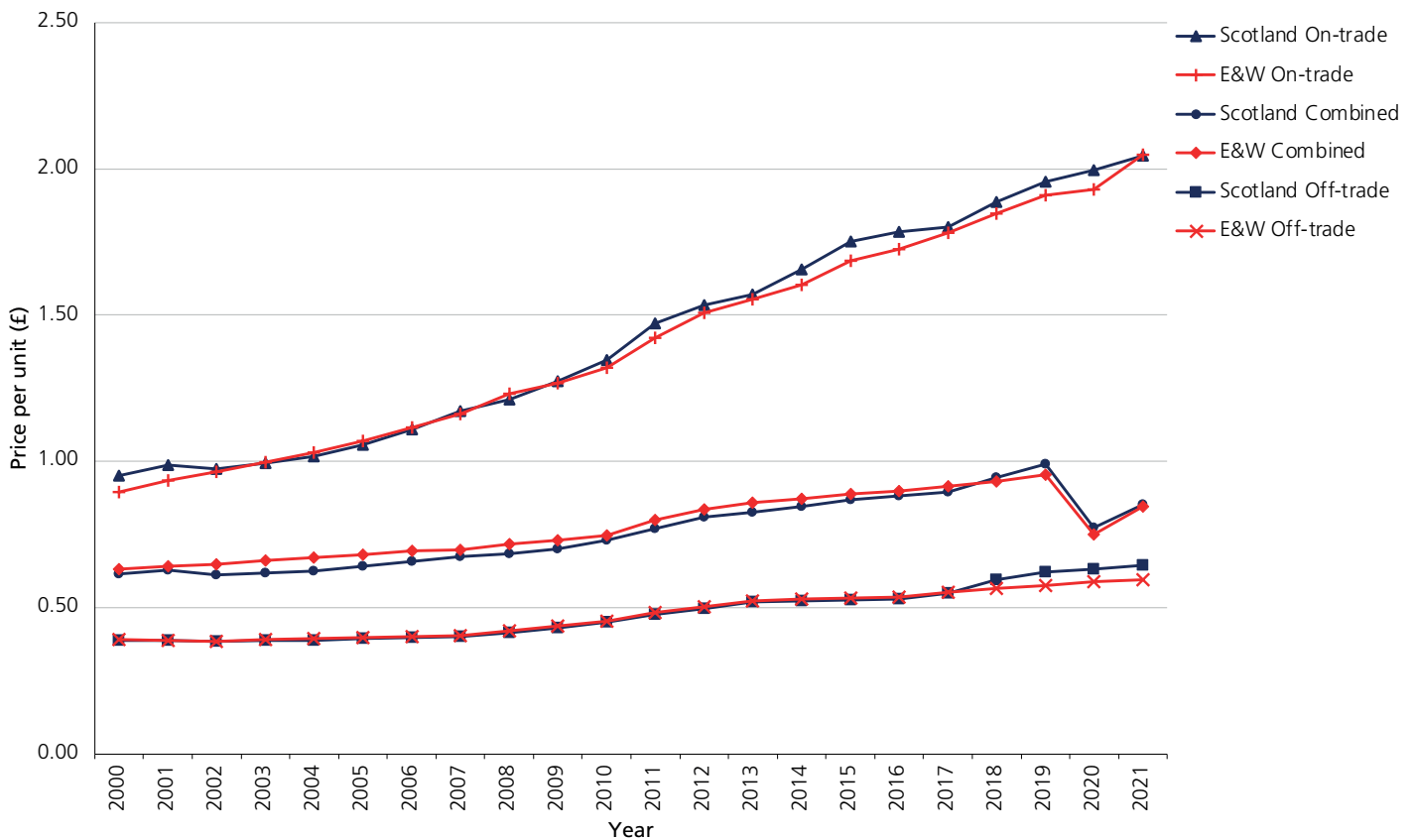
- This is in contrast to the 2017 price distribution (prior to the implementation of Minimum Unit Pricing (MUP) in 2018), in which about one-third (32%) was recorded in this price range.
- In England & Wales the price distribution in 2021 was more similar to the price distribution in Scotland in 2017 than in 2021. The share of alcohol sold in the 50.0p to 64.9p per unit range in England & Wales increased from 32% in 2017 to 35% in 2021.
- A proportion of alcohol was recorded as being sold below 50p per unit in 2021 in Scotland (5%). It should be noted that the volume of alcohol sold in each price band is an estimate and there are a number of reasons that could account for this. See [Appendix 2](#) and the PHS report [Evaluating the impact of Minimum Unit Pricing \(MUP\) on the price distribution of off-trade alcohol in Scotland](#) for further details.

Alcohol sold in the UK was 78% more affordable in 2021 than it was in 1987.

- The affordability of alcohol in the UK rose steadily between 1987 and 2007. Between 2007 and 2011 it reduced slightly, predominantly due to a fall in disposable incomes. From 2011 to 2019 alcohol became steadily more affordable as household disposable income increased and the price of alcohol fell, relative to other retail prices. Alcohol affordability decreased slightly in 2020 due to a real-terms decrease in disposable income but increased again in 2021.

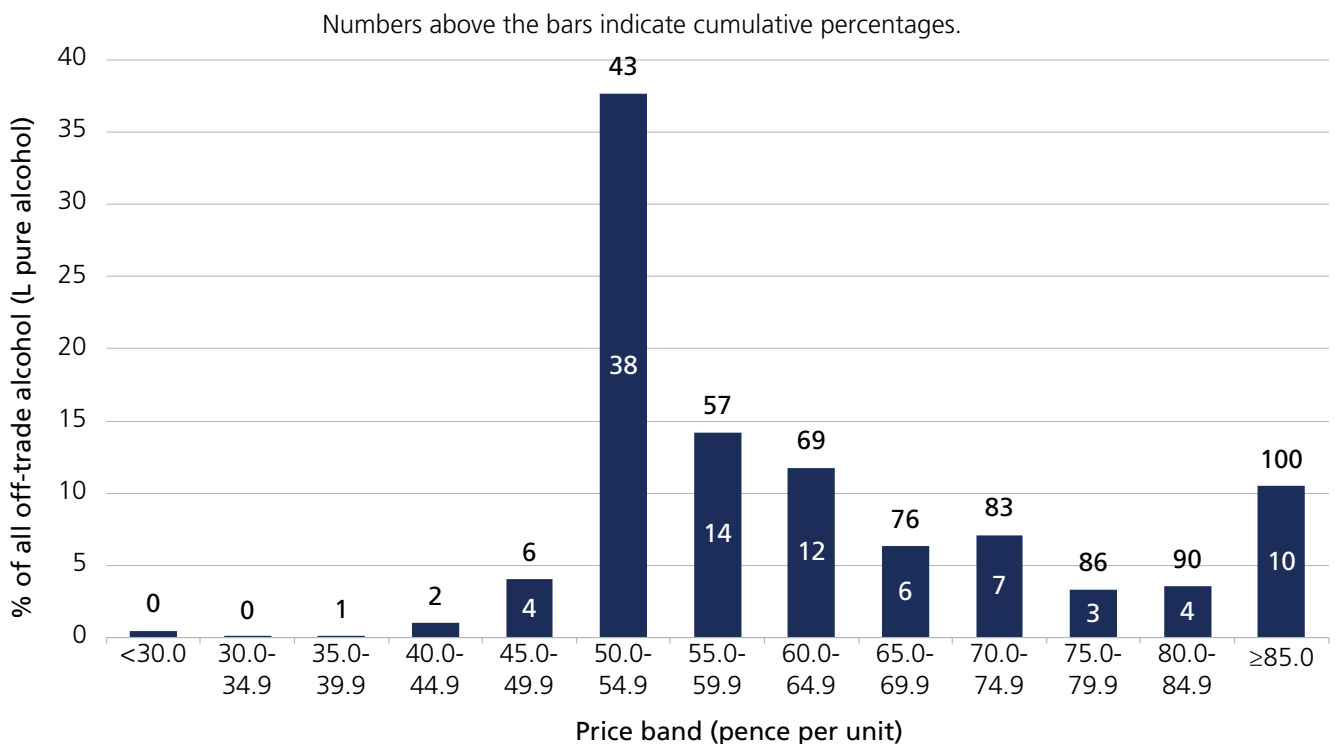
Additional price and affordability data are available in the [alcohol price and affordability spreadsheet](#).

Average price per unit of alcohol sold in Scotland and England & Wales, by trade sector, 2000 to 2021



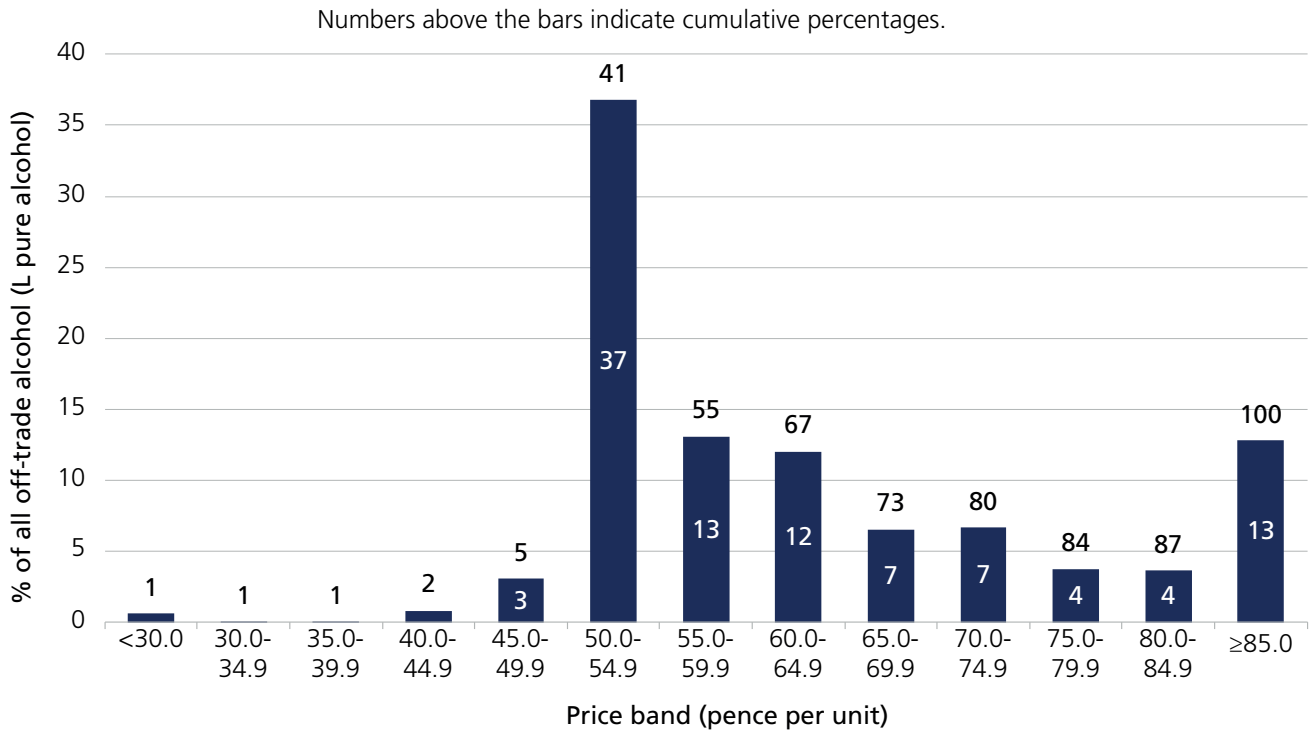
Source: Nielsen/CGA sales dataset (off-trade sales from 2011 onwards adjusted to account for the lack of data from discount retailers; see [Appendix 1](#) for more details).

Price distribution (%) of off-trade pure alcohol sales in Scotland, 2020



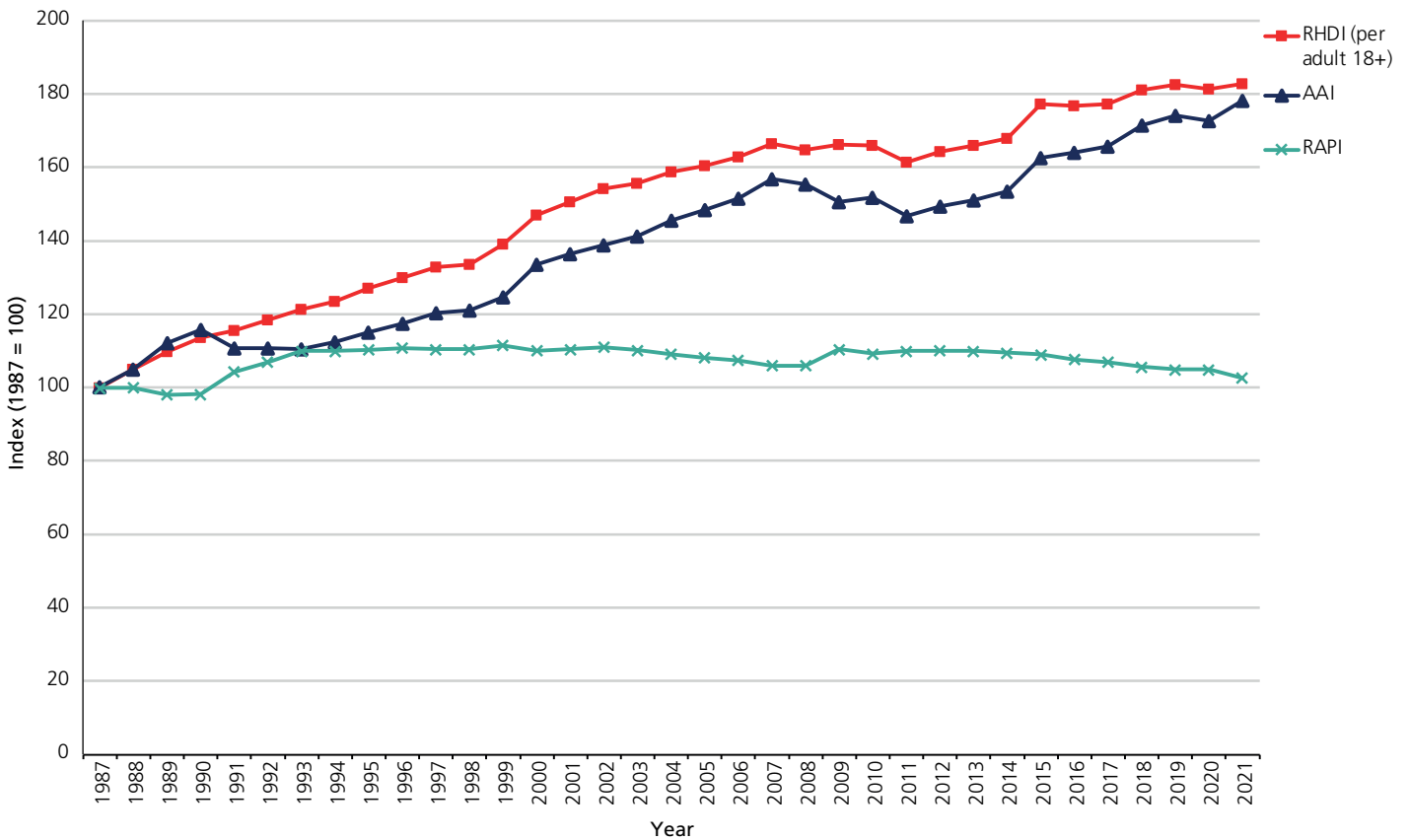
Source: Nielsen off-trade price band dataset. The data exclude discount retailers; see [Appendix 1](#) for more details. Individual values may not add up to 100%; this is due to rounding.

Price distribution (%) of off-trade pure alcohol sales in Scotland, 2021



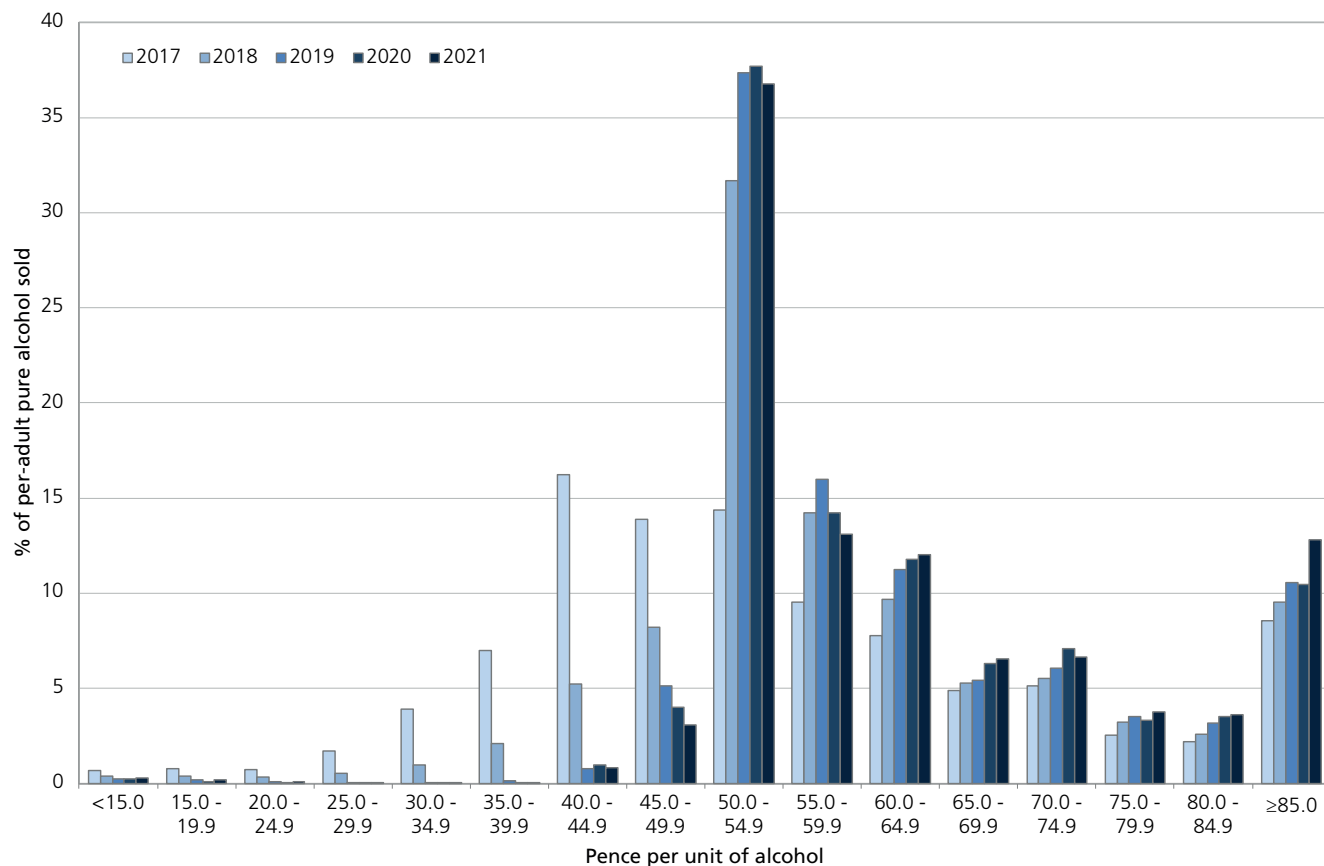
Source: Nielsen off-trade price band dataset. The data exclude discount retailers; see [Appendix 1](#) for more details. Individual values may not add up to 100%; this is due to rounding.

Trends in affordability of alcohol, disposable incomes and alcohol retail prices, UK, 1987–2021



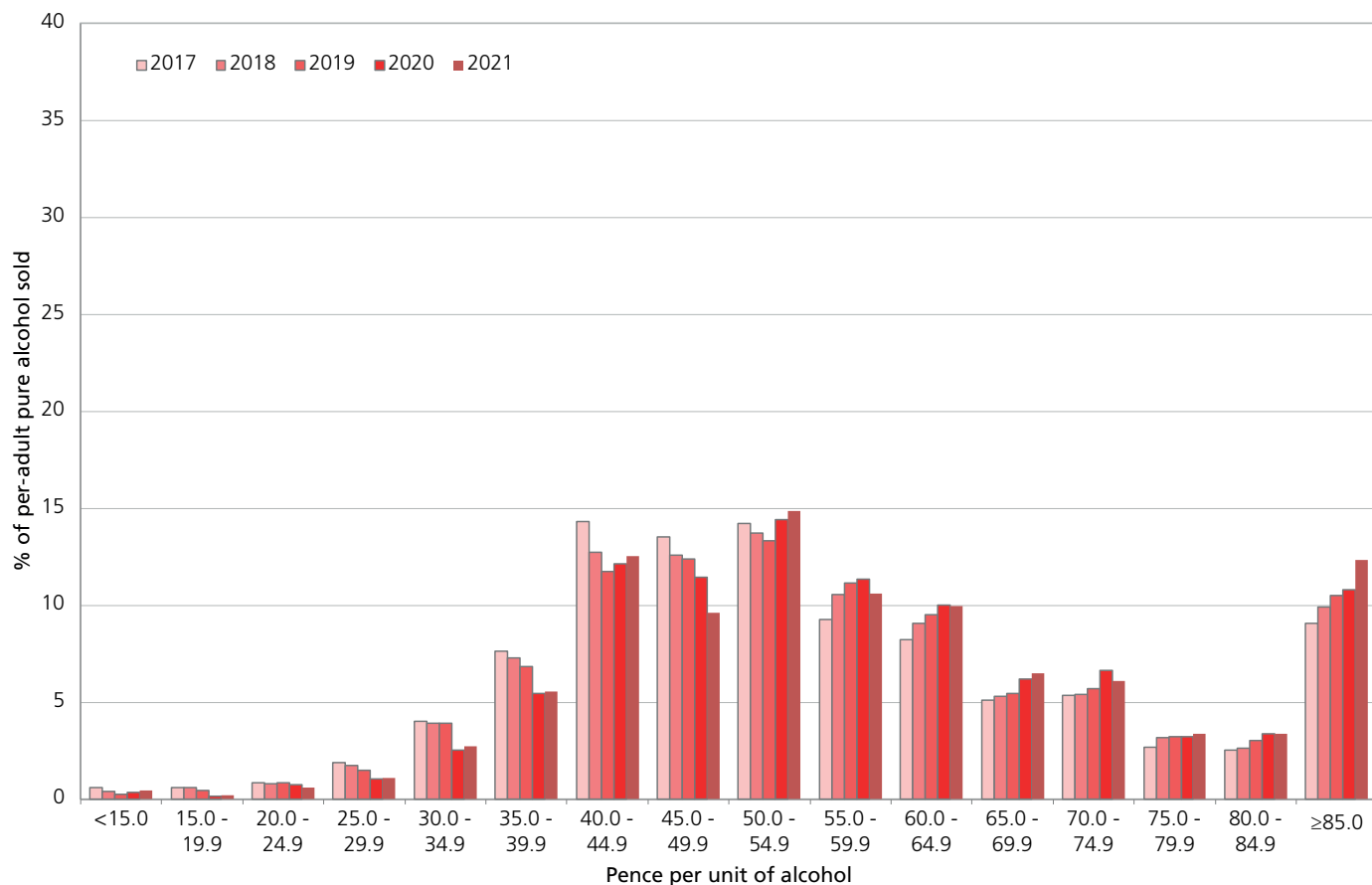
Source: Derived from Office for National Statistics data. RHD = Real Household Disposable Income index. AAI = Alcohol Affordability Index. RAPI = Relative Alcohol Price Index. See [Appendix 1](#) for more details on methods.

Price distribution of pure alcohol sold off-trade in Scotland, 2017–2021



Source: Nielsen off-trade price band dataset. The data exclude discount retailers; see [Appendix 1](#) for more details.

Price distribution of pure alcohol sold off-trade in England & Wales, 2017–2021



Source: Nielsen off-trade price band dataset. The data exclude discount retailers; see [Appendix 1](#) for more details.

Self-reported alcohol consumption

Adults

The latest available Scottish Health Survey data that are comparable with the earlier time series are from 2019, so predate the COVID-19 pandemic. Survey data from 2020 are not comparable due to methodological differences during the COVID-19 pandemic, but do give a picture of alcohol consumption at that time.

Mean self-reported weekly alcohol consumption by drinkers in Scotland fell from 16.1 units in 2003 to 12.2 units in 2013. It has since remained at a similar level (12.1 units in 2019).

- Average weekly consumption for men fell from 21.8 units in 2003 to 15.5 units in 2019. For women, the average fell from 10.6 units in 2003 to a low of 8.6 units in 2013, and has remained stable since.
- The proportion of adults drinking more than 14 units a week (the low-risk weekly drinking guideline), fell from 34 % in 2003 to 24 % in 2019; the proportion has been stable since 2013.
- The proportion of adults in Scotland who reported being non-drinkers increased from 11 % in 2003 to 16 % in 2013; it has remained at a similar level since (17 % in 2019).
- In 2019, alcohol consumption estimates based on self-reported data accounted for 53 % of those based on retail sales data.
- Between 23 March and August/September 2020, 12 % of respondents reported an increase in alcohol consumption, 18 % reported a decrease and 71 % reported no change (% do not sum to 100 due to rounding).

On their heaviest drinking day in the past week, 33% of adults in 2019 drank above three units (women) or four units (men): a decline from 41% in 2003.

- Similarly, the proportion of all adults who reported binge drinking (drinking above six units (women) or eight units (men) on the heaviest drinking day in the past week) decreased from 24 % in 2003 to 17 % in 2017, and remained at a similar level in 2019 (18 %).
- Survey data for 2020 show that on their heaviest drinking day in the last week, 34 % of adults in Scotland reported drinking above three units (women) or four units (men), and 15 % reported binge drinking.

Self-reported alcohol consumption varies across different population subgroups.

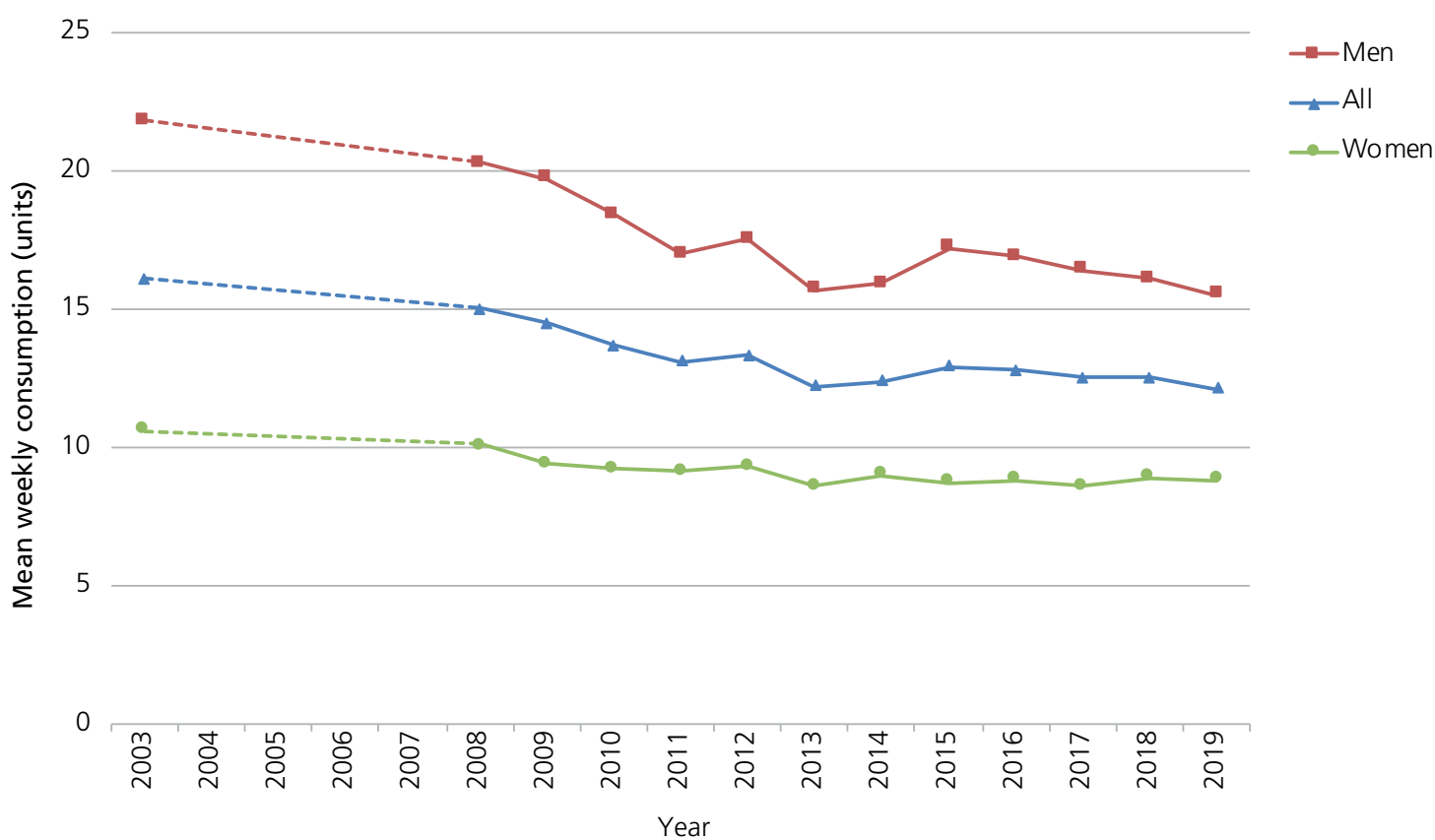
- In 2019, 32 % of men and 16 % of women drank more than the low-risk weekly drinking guideline.
- In 2019, adult drinkers aged 45–54 and 55–64 years reported the highest mean weekly consumption (13.8 and 14.1 units respectively), while those aged 75 and over reported the lowest (8.2 units).
- In 2018/19 (combined) the proportion of adults exceeding the low-risk weekly drinking guideline increased with income, but mean weekly consumption for those who exceeded the guideline was highest (42.8 units) in the lowest income group.
- In 2018/19 (combined), the 10 % of adults who drank most heavily consumed 48 % of all self-reported consumption in Scotland.
- In 2019, 17 % of adults in Scotland reported problem drinking (a score of eight or more on the Alcohol Use Disorders Identification Test, AUDIT): 14 % reported hazardous drinking, 1 % harmful drinking and 1 % had possible alcohol dependency (% do not sum due to rounding).

Self-reported weekly alcohol consumption in England has fallen a little since 2011.

- In 2019, mean weekly alcohol consumption by drinkers in England was 12.2 units, a fall from 13.4 units in 2011. Twenty percent of adults reported that they did not drink at all while 23 % exceeded the low-risk weekly drinking guideline of 14 units.
- Comparisons between Scottish and English estimates should be treated with caution due to slight differences in the methods used by the Scottish Health Survey and the Health Survey for England.

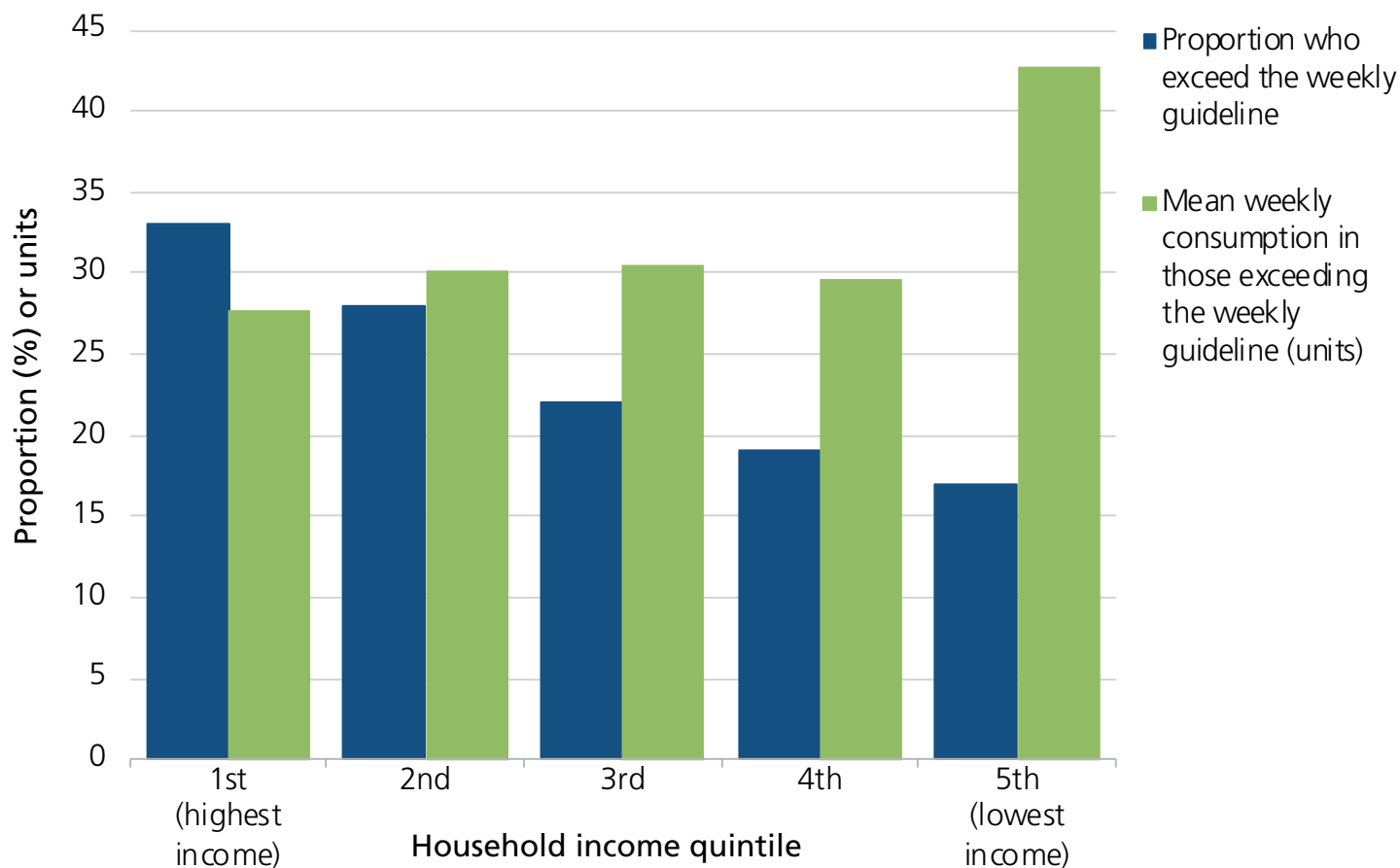
Additional adult self-report alcohol consumption data are available at www.gov.scot/collections/scottish-health-survey

Self-reported average (mean) weekly alcohol consumption in Scotland, 2003–2019



Source: Scottish Health Survey (SHeS)

Proportion of drinkers in Scotland exceeding the weekly drinking guideline and their estimated average (mean) weekly consumption, by household income quintile, 2018/19 (combined)



Source: Scottish Health Survey (SHeS)

Young people

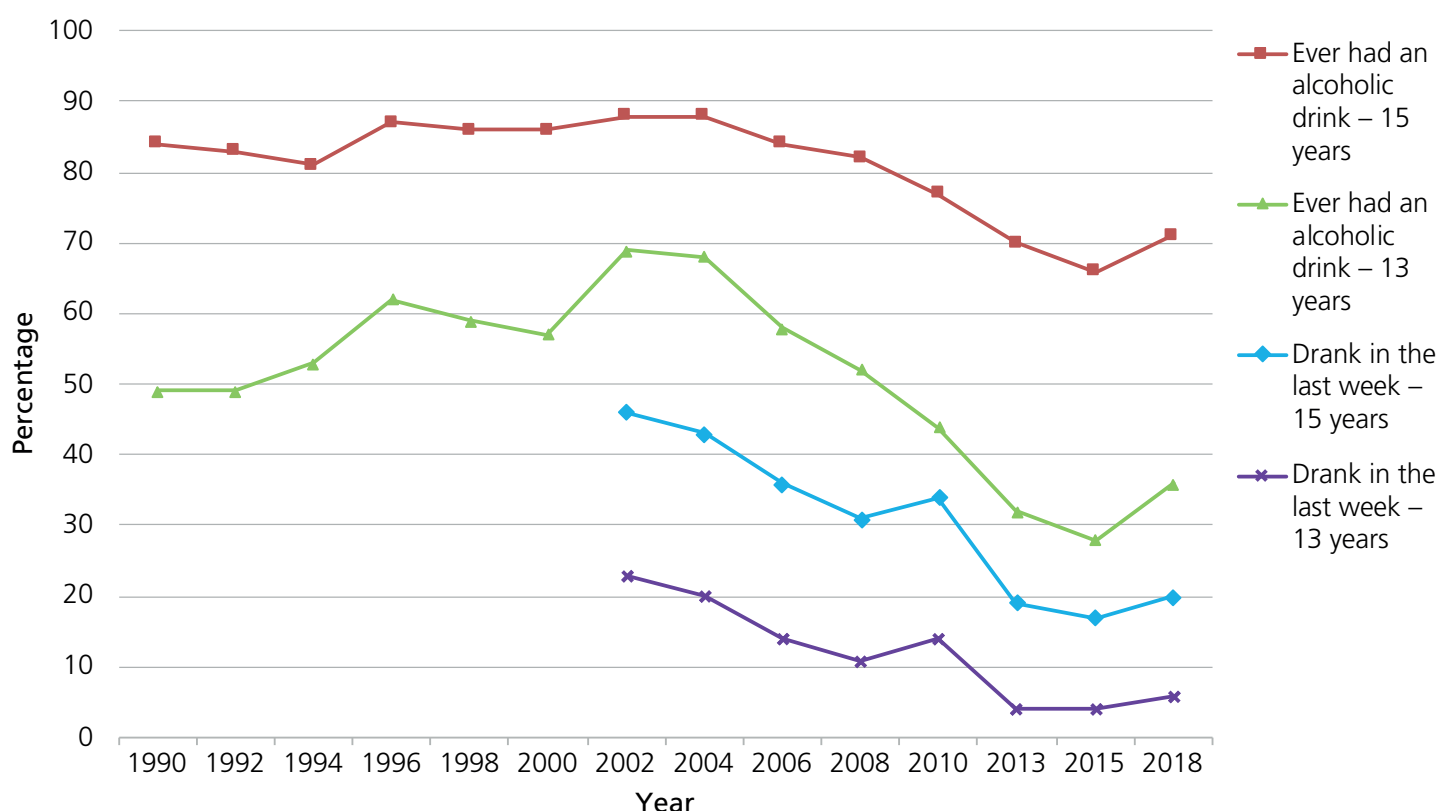
The most recent wave of the Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) was conducted in 2018 and its findings were presented in the 2020 and 2021 MESAS Monitoring Reports. This section has therefore not been updated, but is included here for completeness.

SALSUS shows that overall, alcohol consumption among young people has declined over time; however latest figures show a rise between 2015 and 2018.

- Prior to 2018, the proportion of 13-year-olds reporting ever having a drink fell from 49% in 1990 to 28% in 2015, and for 15-year-olds from 84% in 1990 to 66% in 2015. In 2018 these figures rose to 36% and 71%, respectively.
- The proportion of children reporting drinking in the last week has also declined over time, falling from 23% in 2002 to 4% in 2015 for 13-year-olds and from 46% in 2002 to 17% in 2015 for 15-year-olds. The most recent data suggest that this decline has stalled (6% for 13-year-olds and 20% for 15-year-olds in 2018).

Additional data on consumption of alcohol by young people are available at www.gov.scot/collections/scottish-schools-adolescent-lifestyle-and-substance-use-survey-salsus/

Alcohol consumption by young people aged 13 and 15 years in Scotland, 1990–2018



Source: Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS)

Alcohol health harms

The definitions used for reporting alcohol-specific deaths, alcohol-related hospital admissions and the wider impact of alcohol are different. Please see [Appendix 1](#) and the original sources for more information on the clinical codes included in each measure.

Alcohol-specific deaths

The latest available finalised deaths data extend to the end of 2020, and therefore include the first year of the COVID-19 pandemic.

In 2020, 1,190 people in Scotland died from a cause wholly attributable to alcohol (alcohol-specific); that is an average of nearly 23 people every week.

- This equates to an age-sex standardised alcohol-specific death rate of 22.0 deaths per 100,000 population.
- In 2020, the alcohol-specific death rate for men was more than twice that for women (31.3 deaths per 100,000 population for men compared with 12.7 deaths per 100,000 population for women).
- Rates vary with age: in 2020 the highest rate was for the 55–64 year age group (53.2 deaths per 100,000 population). The rate in this group was more than 30% higher than the rate for any other age group.
- In 2020, rates of alcohol-specific death were nearly five times higher in the 10% most deprived areas in Scotland than in the 10% least deprived areas.

In 2020, rates of alcohol-specific death in Scotland were 2.7 times higher than in 1981.

- From 1992, sharp increases in rates of alcohol-specific death were seen in both men and women. Rates peaked in 2003 for men (at 42.6 deaths per 100,000 population) and 2006 for women (at 16.9 deaths per 100,000 population). Following this peak a relatively prolonged downward trend was seen until 2012. From 2012, rates for women gradually increased until 2018 before levelling off at 12.7 per 100,000 population in 2020. Alcohol-specific death rates for men rose overall from 2012 but in 2019 a sharp fall (to 25.2 per 100,000 population) followed by a sharp increase (to 31.3 per 100,000 population) was observed.
- In 2019, the alcohol-specific death rate for Scotland fell to 18.9 per 100,000 population, one of the lowest levels seen since the peak in the mid-2000s. However in 2020, the rate for Scotland increased to 22.0 per 100,000, the highest since 2011. This increase was largely driven by alcohol-specific deaths among males aged 45 and over.

Rates of alcohol-specific death in Scotland have consistently been higher in areas of greater deprivation, but the inequality has narrowed over time.

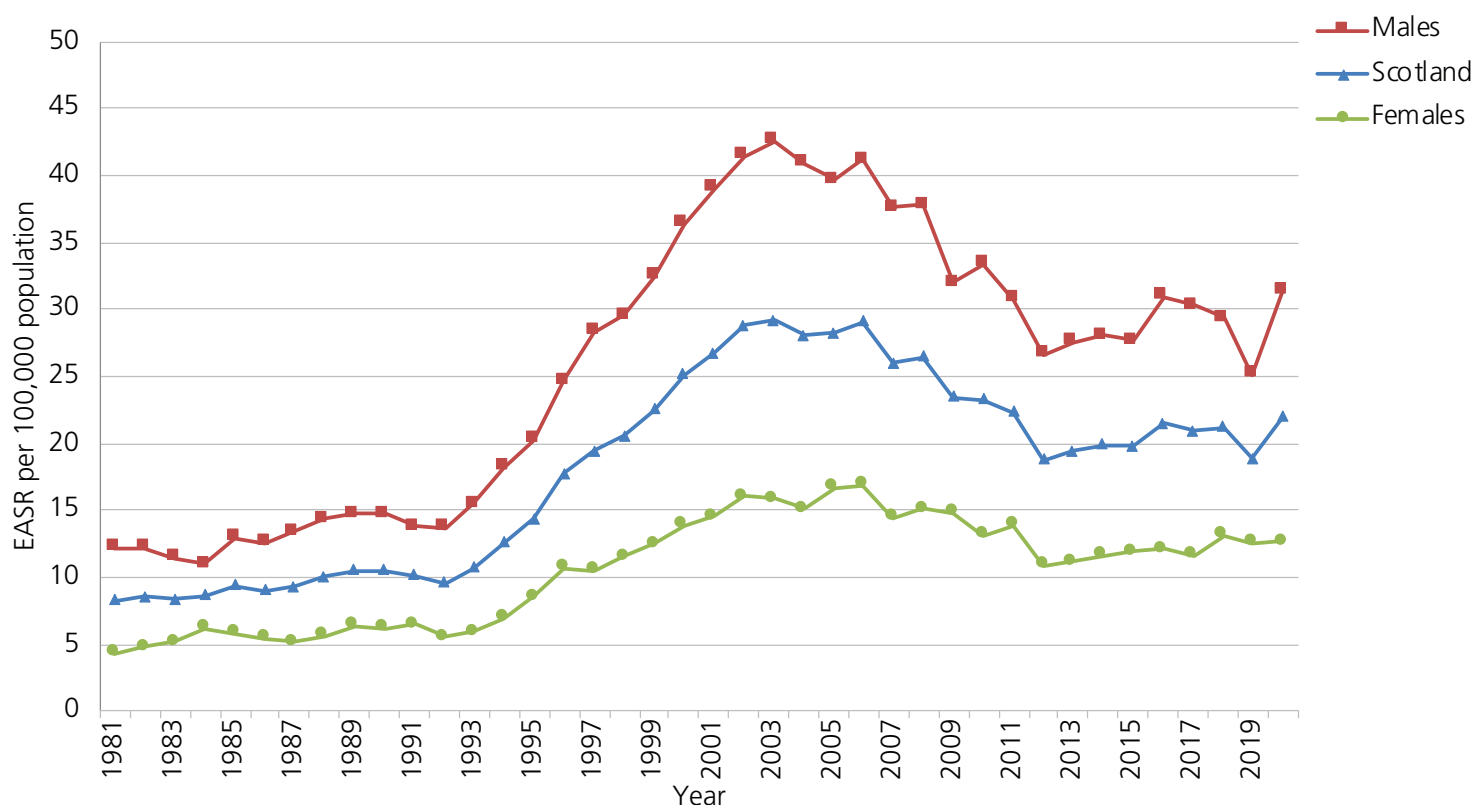
- In 2020, alcohol-specific death rates were nearly five times higher in the 10% most deprived areas in Scotland than in the 10% least deprived areas, compared with 13 times higher in 2002 (when rates in the most deprived areas peaked). The change is mostly down to a fall in rates in the 10% most deprived areas.
- Since 2013, the narrowing of the inequality between the most and least deprived groups has stalled, as shown by the stability in absolute (Slope Index of Inequality (SII)) and relative (Relative Index of Inequality (RII)) measures of inequality. (See [Appendix 1](#) for a definition of SII and RII).

Alcohol-specific death rates are consistently higher in Scotland than in England & Wales.

- In 2020, alcohol-specific death rates were 78 % higher for men and 46 % higher for women in Scotland compared with England & Wales.
- The difference between alcohol-specific deaths rates in Scotland and England & Wales has reduced over time. The greatest differences were in 2002 when rates were 3.3 times higher for men in Scotland and 2.8 times higher for women.

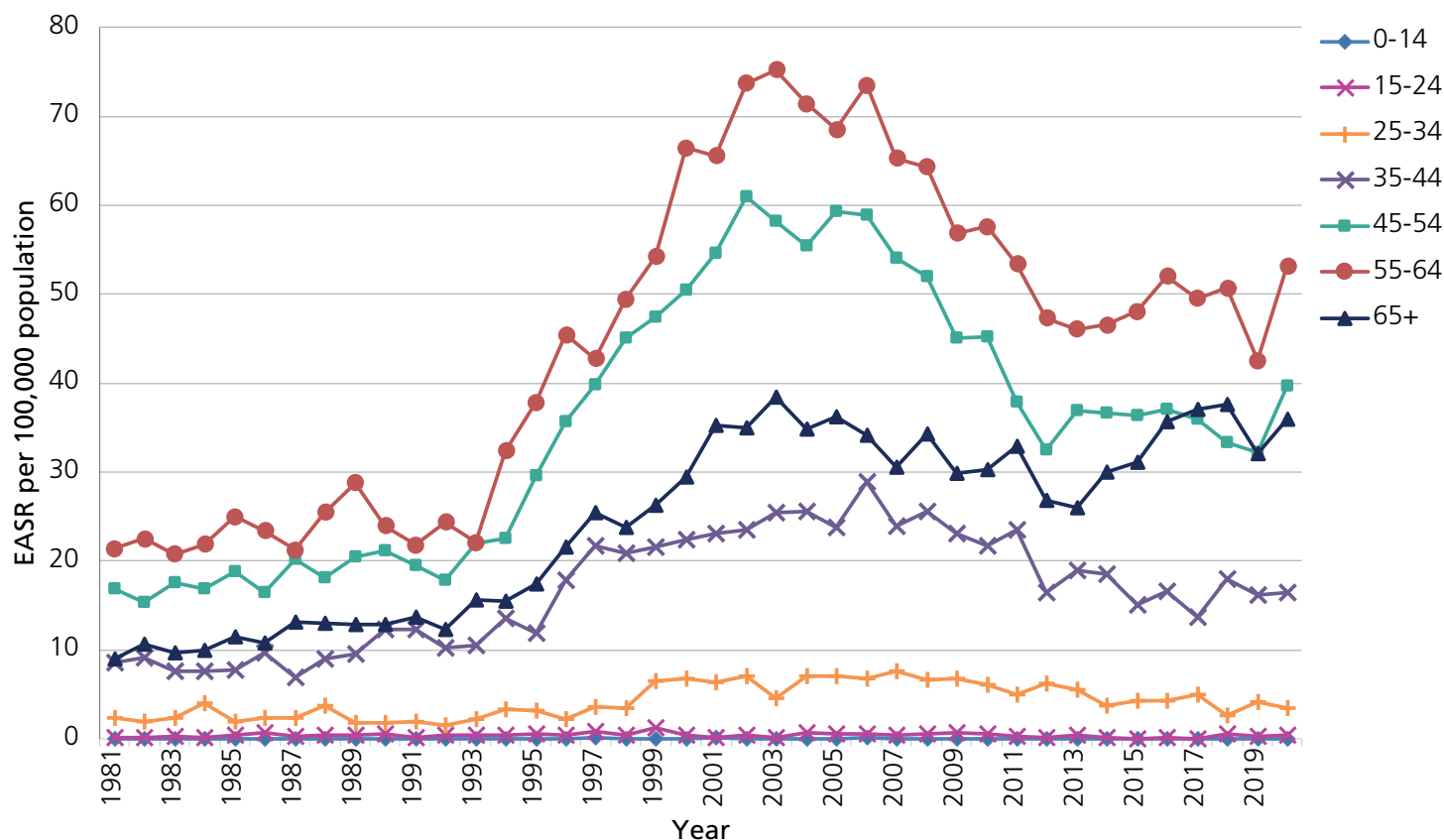
Additional alcohol-specific deaths data are available in the [alcohol-specific deaths spreadsheet](#) and at www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/alcohol-deaths.

Alcohol-specific deaths in Scotland, by sex, 1981–2020



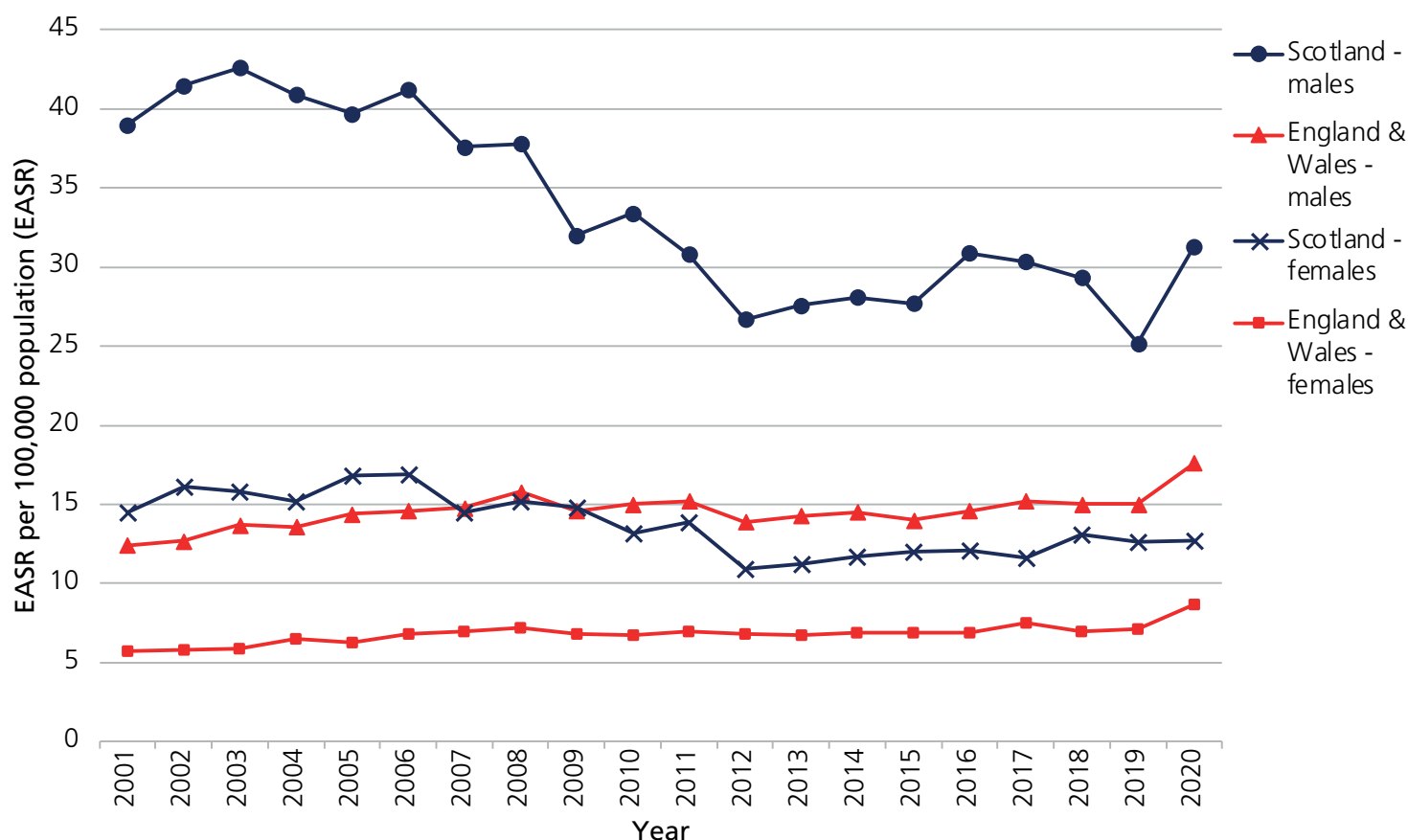
Source: National Records of Scotland. EASR = European Age-sex Standardised Rate.

Alcohol-specific deaths in Scotland, by age group (in years), 1981–2020



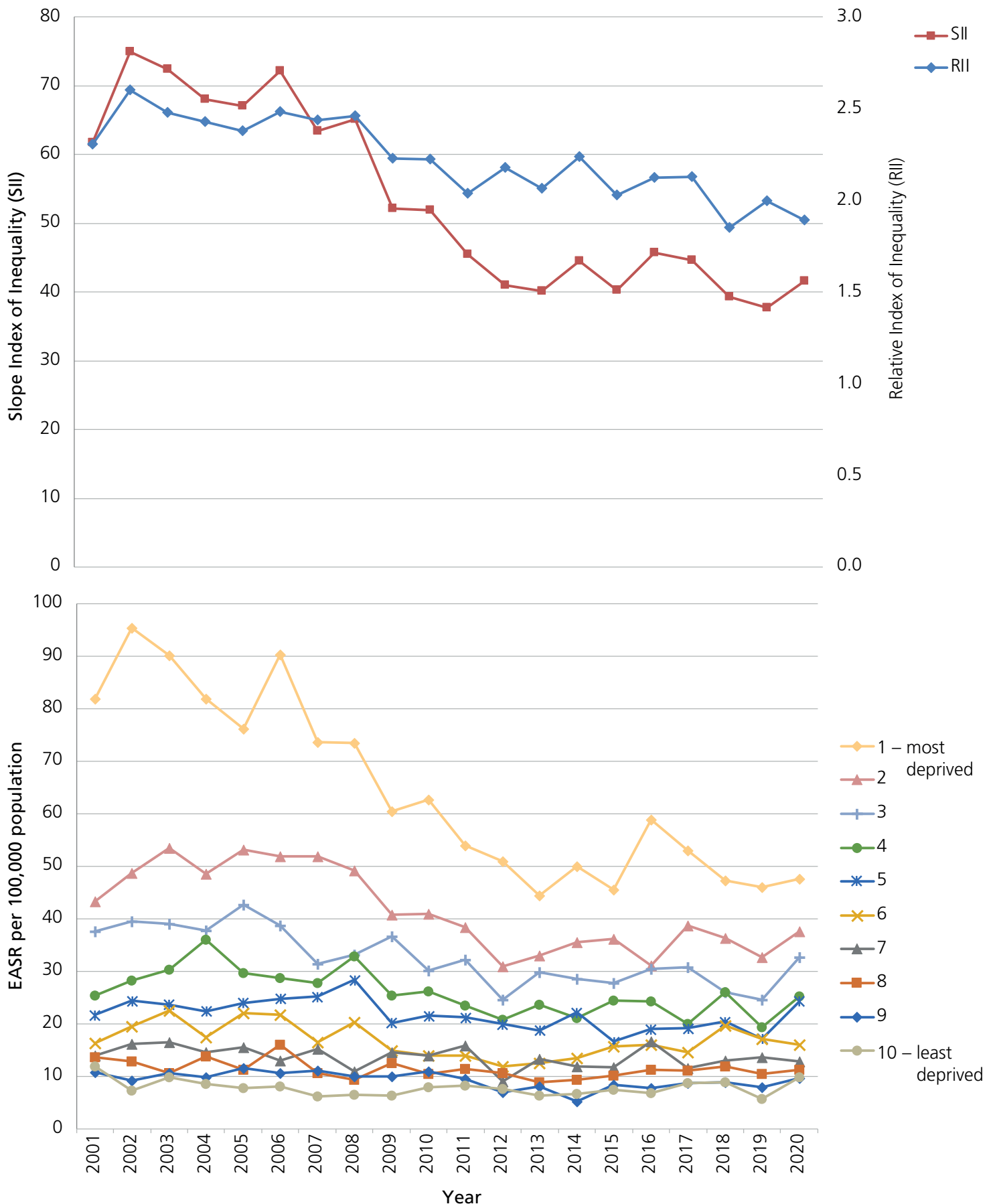
Source: National Records of Scotland. EASR = European Age-sex Standardised Rate.

Alcohol-specific deaths in Scotland and England & Wales, by sex, 2001–2020



Source: National Records of Scotland; Office for National Statistics. EASR = European Age-sex Standardised Rate.

Inequalities in alcohol-specific death rates in Scotland, 2001–2020



Source: National Records of Scotland. EASR = European Age-sex Standardised Rate. RII = Relative Index of Inequality. SII = Slope Index of Inequality. SIMD = Scottish Index of Multiple Deprivation. SIMD1 = 10% most deprived areas of Scotland, SIMD10 = 10% least deprived areas of Scotland). See [Appendix 1](#) for a definition of SII and RII.

Alcohol-related hospital admissions

The latest available finalised hospital admissions data extend to the end of March 2021, and therefore include the first year of the COVID-19 pandemic.

In 2020/21 there were 33,015 alcohol-related hospital stays in general acute hospitals. This is equivalent to an age-sex standardised rate of 614 inpatient stays per 100,000 population.

- In total 21,480 people were admitted to a general acute hospital with an alcohol-related diagnosis in 2020/21, meaning that some people had more than one admission in the year.
- In 2020/21, rates of alcohol-related hospital stays in Scotland were 2.3 times higher among men (851 per 100,000 population) than women (376 per 100,000 population).
- Rates also differ by age: in 2020/21, the 55–64 year age group had the highest rate of alcohol-related hospital stays at 993 per 100,000 population.
- In 2020/21, rates of alcohol-related stays were eight times higher in the 10% most deprived areas in Scotland than in the 10% least deprived areas.

Rates of alcohol-related hospital stays in general acute hospitals in Scotland were 3.9 times higher in 2020/21 than they were in 1981/82.

- Rates of alcohol-related hospital stays rose slowly and steadily during the 1980s and early 1990s. This was followed by a steep increase through the 1990s and 2000s, reaching a peak of 855 per 100,000 population in 2007/08. Alcohol-related hospital stay rates in Scotland decreased between 2007/08 and 2014/15, and remained relatively stable until 2019/20. A sharp decrease in alcohol-related hospital stays was seen in Scotland in 2020/21; this decrease was associated with the COVID-19 pandemic and was not specific to alcohol-related hospital admissions. For further information on alcohol sales and harm through the COVID-19 pandemic, see [Alcohol sales and harms in Scotland during the COVID-19 pandemic](#).
- The rate of patients being admitted to hospital with an alcohol-related diagnosis follows a broadly similar pattern to the rate of alcohol-related stays. However, since the mid 1990s the rate of individual patients being admitted has been notably lower than the rate of stays, indicating that some patients are being admitted more than once in a given time period.
- The rate of admission of new patients (defined as patients who have not been admitted to hospital with an alcohol diagnosis within the last 10 years) remained fairly stable from the late 1990s to 2007/08 while the rate of stays and total patients increased. This indicates that the same people were being admitted multiple times in a 10-year period. Since the peak in 2007/08, the rate of new patients has fallen in line with rates of hospital stays and total patients.

Relative inequalities in alcohol-related hospital admissions in Scotland have been persistent over time.

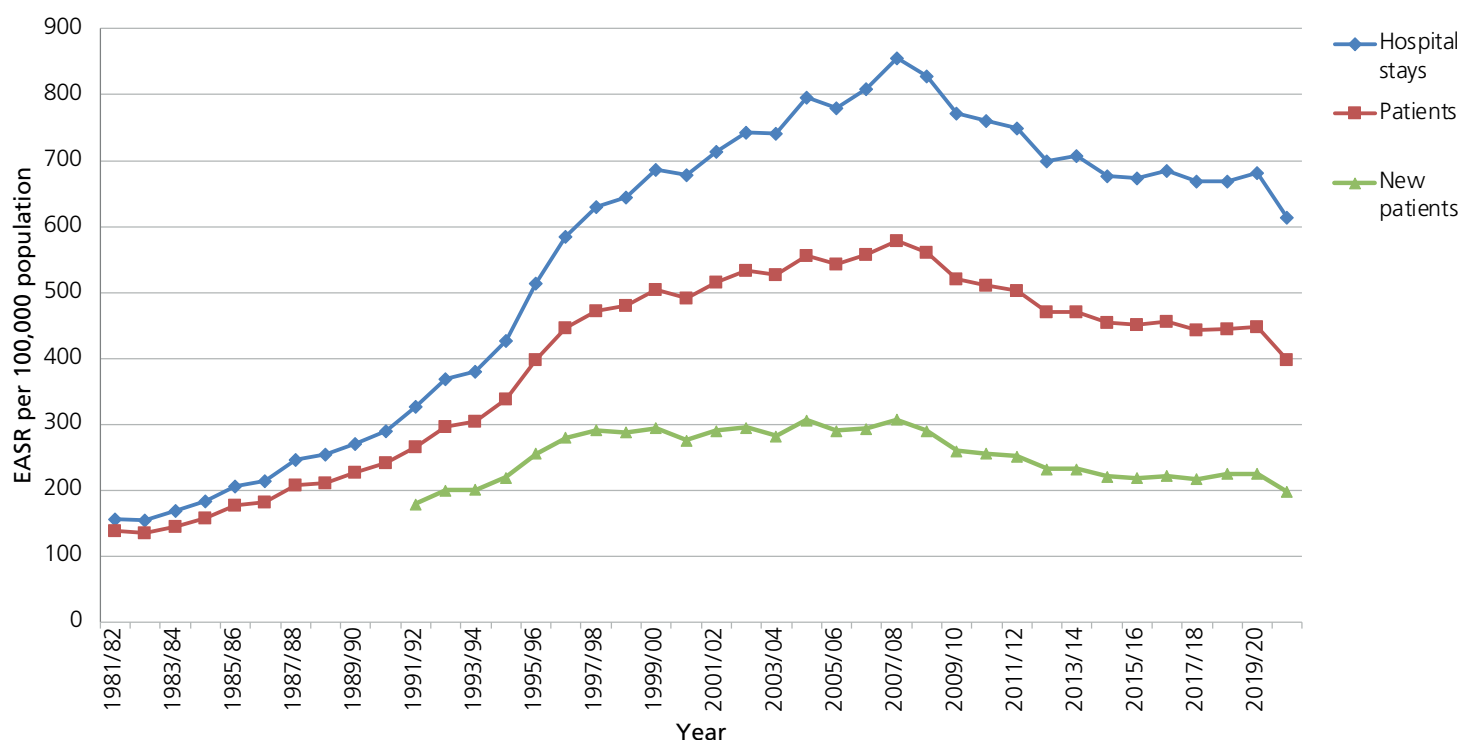
- In 2020/21, the rate of alcohol-related hospital stays was nearly eight times higher in the 10% most deprived areas of Scotland compared with the 10% least deprived areas.
- Across the time series since 1997/98, alcohol-related hospital stays peaked for all deciles between 2006/07 and 2008/09, with particularly marked peaks seen for the more deprived areas. Since then, the largest absolute reductions in alcohol-related hospital stays have been seen in the more deprived areas, though these reductions have slowed in recent years.
- These observed differences in alcohol-related hospital stay rates are reflected in measures of absolute (SII) and relative (RII) inequality (see [Appendix 1](#) for a definition of SII and RII). Both measures of inequality decreased between 2019/20 and 2020/21, and the SII in 2020/21 was the lowest in the time series.

Rates of alcohol-related admission to psychiatric hospitals are much lower than to general acute hospitals.

- Around 94 % of the alcohol-related stays in Scotland were in general acute hospitals and around 6 % were in psychiatric hospitals. The rate of alcohol-related psychiatric hospital stays in 2020/21 was 40 per 100,000 population.
- In 2020/21, men were more than twice as likely as women to have an alcohol-related psychiatric hospital stay. The rate of alcohol-related psychiatric hospital stays was 53.4 per 100,000 population for men compared with 25.4 per 100,000 population for women.
- The inequality by area deprivation is more marked in alcohol-related psychiatric admissions than in general admissions: in 2020/21, stay rates were almost 11 times higher in the 10 % most deprived areas compared with the 10 % least deprived.
- Rates of alcohol-related admissions to psychiatric hospitals have fallen steadily since 1997/98. In 2020/21, the stay rate (40 stays per 100,000 population) was less than half that in 1997/98 (103 stays per 100,000 population).

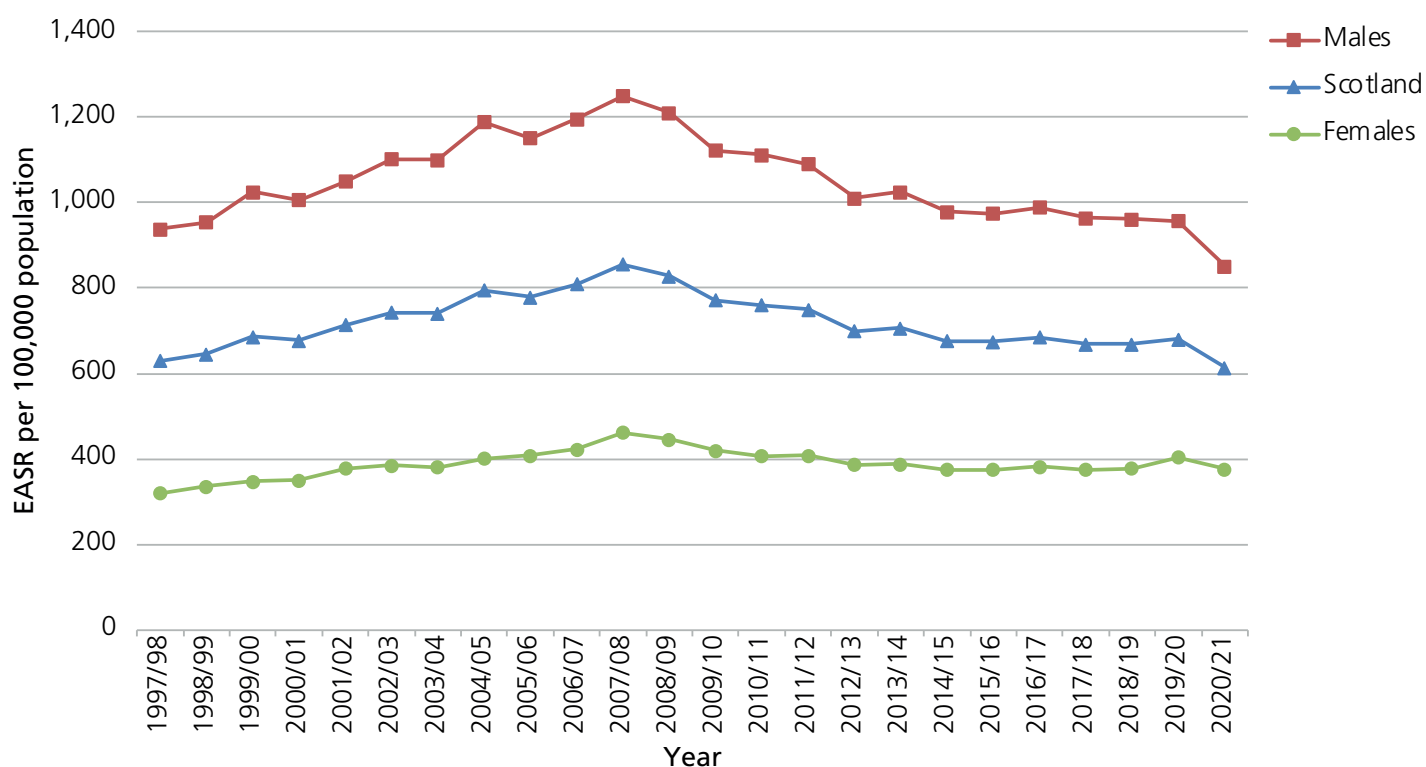
Alcohol-related hospital admissions data are available at <https://beta.isdscotland.org/find-publications-and-data/lifestyle-and-behaviours/substance-use/alcohol-related-hospital-statistics>

Alcohol-related hospital admission rates in general acute hospitals in Scotland, 1981/82–2020/21



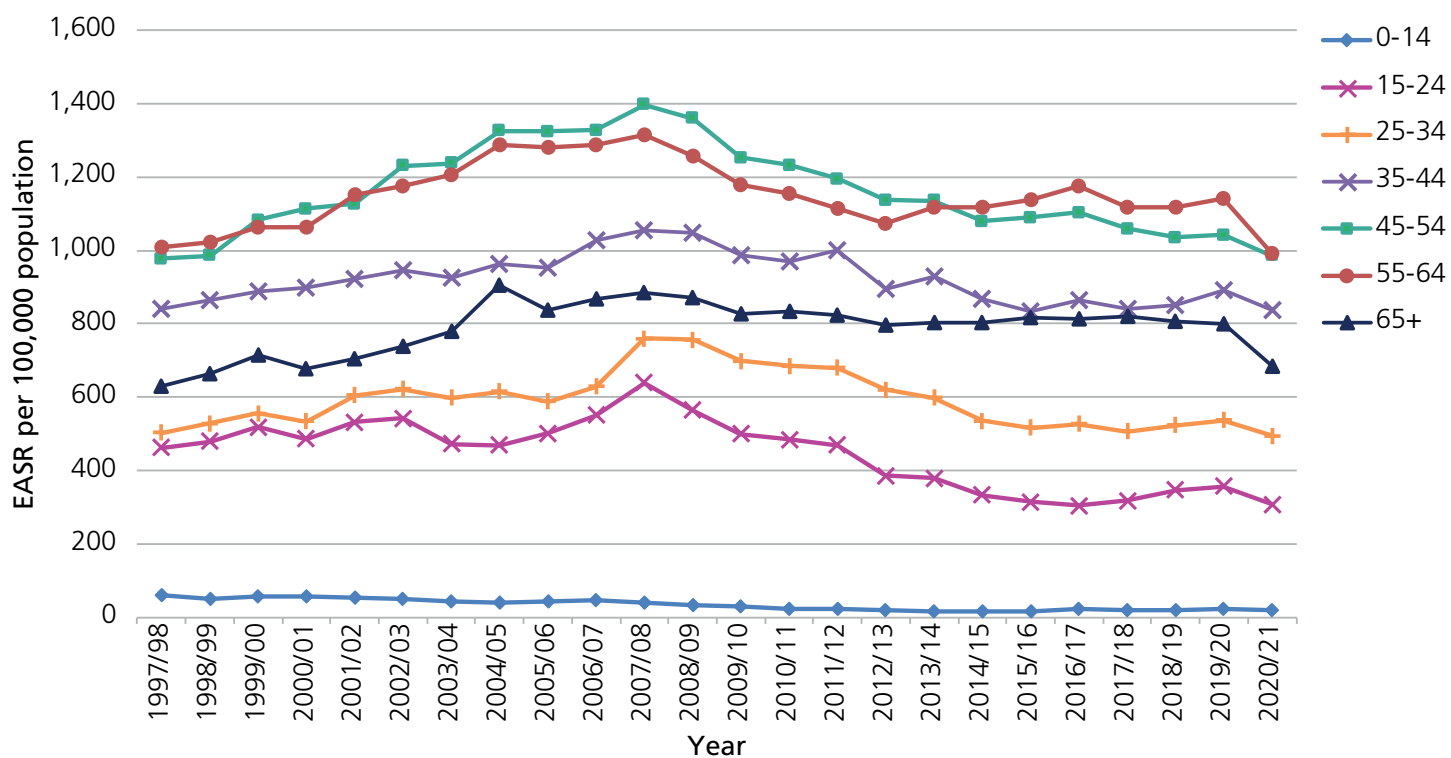
Source: Public Health Scotland. EASR = European Age-sex Standardised Rate.

Alcohol-related hospital stay rates in general acute hospitals in Scotland, by sex, 1997/98–2020/21



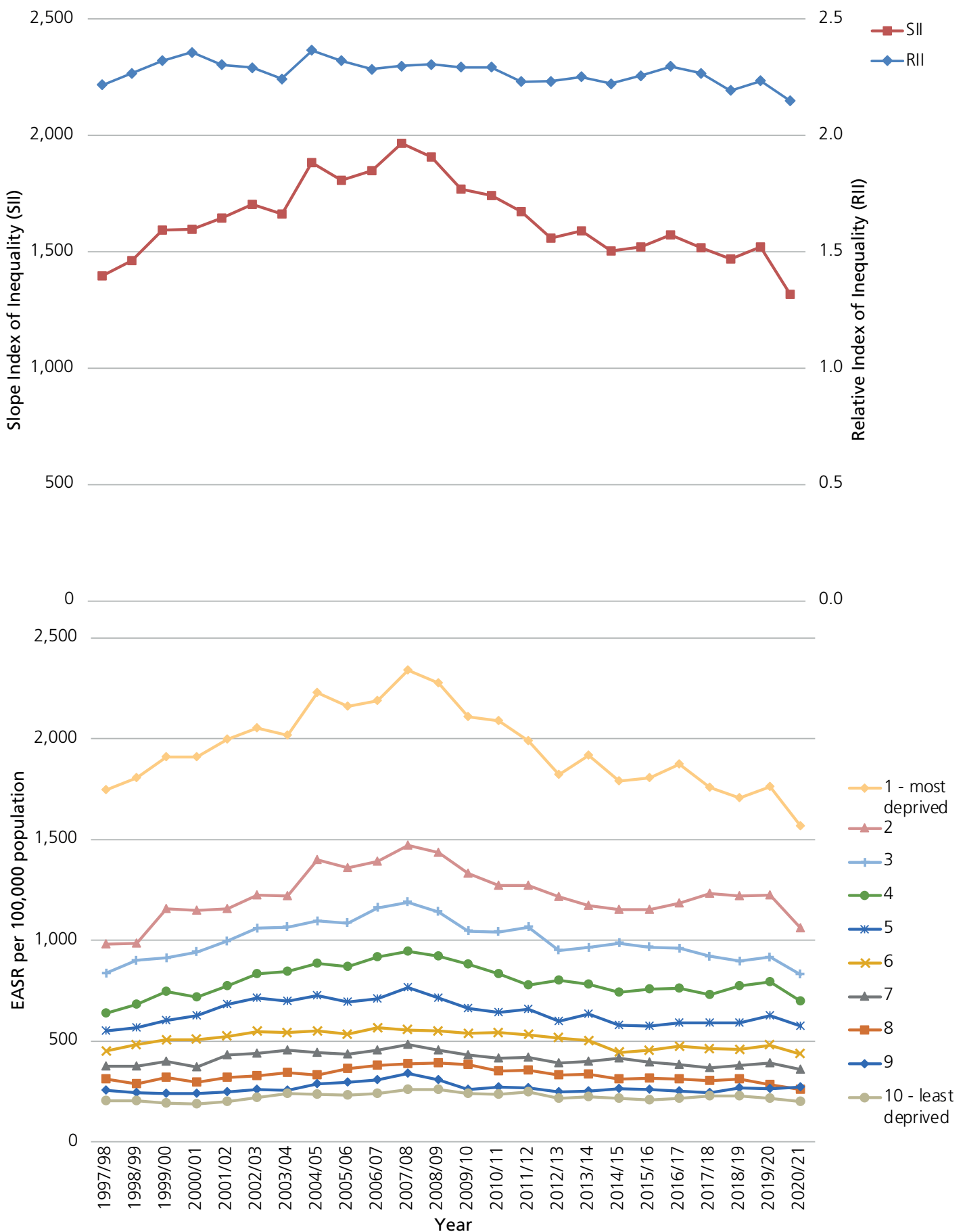
Source: Public Health Scotland. EASR = European Age-sex Standardised Rate.

Alcohol-related hospital stay rates in general acute hospitals in Scotland, by age group (in years), 1997/98–2020/21



Source: Public Health Scotland. EASR = European Age-sex Standardised Rate.

Inequalities in alcohol-related hospital stay rates in general acute hospitals in Scotland, 1997/98–2020/21



Source: Public Health Scotland. EASR = European Age-sex Standardised Rate. RII = Relative Index of Inequality. SII = Slope Index of Inequality. SIMD = Scottish Index of Multiple Deprivation. SIMD1 = 10% most deprived areas of Scotland, SIMD10 = 10% least deprived areas of Scotland. See [Appendix 1](#) for a definition of SII and RII.

The wider impact of alcohol on health

The definitions of alcohol-specific deaths and alcohol-related hospital admissions used in this report include only those conditions that are directly attributable to alcohol. However, there are a wider range of conditions in which alcohol may be partially attributable, such as cardiovascular disease and a range of cancers. Work published by the Scottish Public Health Observatory (ScotPHO)¹ in 2018 used this broader definition of alcohol-related harm to report on the overall burden of disease caused by alcohol. The work has not been updated since then but is included here for completeness.

Deaths caused by alcohol:

- There were an estimated 3,705 deaths attributable to alcohol consumption in 2015 among adults aged 16 years and over in Scotland. This equates to 6.5 % of the total number of deaths (57,327).
- Men were almost twice as likely to die from an alcohol-attributable condition in 2015 compared with women (8.4 % and 4.7 % respectively).
- More than one in four (28 %) alcohol-attributable deaths were due to cancer.

Hospital admissions caused by alcohol:

- In 2015, a total of 41,161 adults aged 16 years and over were admitted to hospital at least once with a wholly or partially attributable condition (6.4 % of 644,574 total individuals admitted at least once in 2015).
- Men were twice as likely to be hospitalised with an alcohol-attributable condition in 2015 compared with women (8.8 % and 4.3 % respectively).
- Of the adult patients hospitalised due to alcohol in 2015, more than one in four (27 %) were admitted for an unintentional injury.

Total impact of alcohol on health:

- Alcohol consumption accounted for 8 % of the overall burden of disability in Scotland in 2015 (104,573 out of a total of 1,315,087 disability-adjusted life years (DALYs)).

¹ Hospital admissions, deaths and overall burden of disease attributable to alcohol consumption in Scotland. Tod E et al. Edinburgh: NHS Health Scotland; 2018. Data reproduced with permission of the author.

www.scotpho.org.uk/publications/reports-and-papers/hospital-admissions-deaths-and-overall-burden-of-disease-attributable-to-alcohol-consumption-in-scotland

Alcohol-related social harms

The latest available recorded crime and hospital admissions data extend to the end of March 2021, and therefore include the first year of the COVID-19 pandemic. The other social harms datasets reported here predate the pandemic.

Alcohol-related crime

Two groups of offences recorded by Police Scotland are 100% attributable to alcohol.

- Rates of 'driving under the influence' offences fell from 22 per 10,000 population in 2004/05 to 12 per 10,000 population in 2019/20; rates increased to 15 per 10,000 in 2020/21.
- Rates of 'drunkenness and other disorderly conduct' offences showed a general upward trend between 2008/09 and 2013/14, rising from 60 to 81 per 10,000 population. This fell to 10 per 10,000 population in 2019/20 and 11 per 10,000 population in 2020/21.

Alcohol use is a likely contributory factor in many crimes.

- Between 2010/11 and 2020/21, alcohol was a factor in 74% of homicides where the drug or alcohol status of the accused was known (57% of cases). In 2020/21, 76% of people accused of homicide were recorded as being under the influence of alcohol or under the influence of alcohol and drugs at the time of the offence, where the status of the accused was known (69% of cases).
- In 2019/20, of those respondents to the Scottish Crime and Justice Survey who report being the victim of violent crime, and could say anything about the offender, almost half (44%) thought the offender was under the influence of alcohol.
- In 2019, 40% of prisoners reported being under the influence of alcohol at the time of their arrest; this has fluctuated between 39% and 50% since 2005. About one fifth (19%) of prisoners also reported that drinking affected their ability to hold down a job and one third (33%) reported that it affected their relationship with their family.

Additional data on crime and justice in Scotland are available at www.gov.scot/collections/recorded-crime-in-scotland/ and www.gov.scot/collections/scottish-crime-and-justice-survey

Adverse effects of alcohol for young people

The Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) collects information on the adverse effects of alcohol experienced by young people in Scotland. The latest available data from SALSUS are from 2018/19, so predate the COVID-19 pandemic.

- Between 2002 and 2010, the proportion of both 13-year-olds and 15-year-olds who reported experiencing negative effects from drinking alcohol was relatively stable. Between 2010 and 2018 the proportion rose for both age groups.

Alcohol-related hospital admissions for children aged under 15 years have increased after a sustained period of decrease.

- Rates of alcohol-related stays in general acute hospitals for children aged under 15 years in Scotland fell from a peak of 59.7 per 100,000 population in 1997/98 to a low of 14.9 per 100,000 in 2014/15; by 2020/21 this had risen to 21.0 per 100,000 population.

Additional data are available at [SALSUS](#) and [Alcohol-related hospital statistics](#).

Appendix 1

Data sources and methods

Alcohol retail sales

Data on alcohol retail sales in Scotland and England & Wales were obtained from market research specialists, Nielsen and CGA Strategy (CGA) (hereafter 'Nielsen/CGA'), for 1994, 1995 and 2000–2021. The volume of alcohol sold (litres) was provided for the on-trade by CGA and for the off-trade by Nielsen across eight alcoholic drink categories: spirits, wine, beer, cider, ready-to-drink beverages (RTDs), perry, fortified wine and 'other'. The volume of each drink category sold was converted into pure alcohol volume using a category-specific percentage alcohol by volume (ABV). The ABV used was based on the typical strength of drinks sold in that category (except for wine where the same standard ABV was applied across all years due to the complexity of the wine market) and was provided by the data suppliers. Nielsen also provided data on the volume of alcohol sold on promotion by large, multiple retailers for each drink category.

Per adult alcohol sales were calculated by dividing pure alcohol volumes (litres of pure alcohol) by the total population aged 16 years and over. Mid-year population estimates and projections for Scotland were obtained from National Records of Scotland and for England & Wales from the Office for National Statistics. To calculate alcohol sales per adult drinker, the denominator was adjusted to account for the proportion of the population reporting non-drinking in the Scottish Health Survey or the Health Survey for England, as appropriate. The prevalence of non-drinking in Wales was assumed to be the same as in England, as a reliable estimate over time could not be obtained from the Welsh Health Survey or National Survey for Wales. The prevalences of non-drinking in 2020 and 2021 were assumed to be the same as in 2019, as an update to the Health Survey for England had not been published at the time of the analysis, and the 2020 Scottish Health Survey data were not comparable with previous years due to COVID-19 related methodological issues. The 2021 Scottish Health Survey was not published at the time of analysis so could not be included in this report. These data are presented in the accompanying alcohol sales spreadsheet. A detailed description of the methods used by Nielsen/CGA to produce alcohol retail sales estimates is provided in an earlier MESAS report available at www.healthscotland.com/documents/5761.aspx

Retail sales estimates may differ slightly to those previously published as they continue to be improved retrospectively after being supplied. Consequently, the most recent data provided by Nielsen/CGA are considered the best available because they provide the most robust picture of the alcohol market.

Since 2011, off-trade sales data were provided by week (Sunday to Saturday), and were aggregated to produce annual volumes and values. In cases where the week started in one year and finished in another the volumes and values were split in direct proportion to the portion of the week in each year. This is a change to the method previously used and has been applied from 2011 onwards, the years for which weekly data are available. Prior to 2011 each year is an aggregated 52-week period as defined by Nielsen.

Adjustment for discount retailers

From September 2011, Nielsen was no longer able to estimate off-trade sales by discount retailers Aldi and Lidl. As such, all off-trade sales data provided since September 2011 (including estimates for the full 2011 calendar year) have been defined as 'Off-trade excluding discount retailers'.

To enable continuation of the time series presented in earlier reports, adjustment factors have been applied to off-trade sales estimates from 2011 onwards.

Adjustment factors have been based on the market share of Aldi and Lidl drawn from Kantar Worldpanel consumer panel data. Kantar Worldpanel data are collected by a panel of households (participants aged 18 years and over) who record their grocery purchases, including alcohol, using a barcode reader. Data are only collected on purchases brought into the home and include details such as quantity, price and the store of purchase. Kantar analysts use these data to estimate the market share of discounters in Scotland and England & Wales by drink category. Market share estimates based on both sales volumes and values are provided on an annual basis. These volume market share estimates are then applied to the drink category pure volumes (described above) resulting in adjusted pure volumes. The adjusted pure volumes are used to calculate per-adult sales as described above.

Alcohol price and affordability

Average (mean) sales price was calculated using Nielsen/CGA data by dividing retail sales value (£) by pure alcohol volumes for the period 2000 to 2021. Prices are expressed as price per unit of alcohol.

Annual estimates of the volume of alcohol sold off-trade in different price bands were provided by Nielsen for 2017–2021. The natural volume of each item sold was converted into units of alcohol using its percentage ABV, enabling the price per unit of alcohol to be calculated. The item was then coded into one of seventeen price bands. Estimates were provided for all alcohol and by drink type. The 'price band' dataset excludes discount retailers. Please also see [Appendix 2](#) for more detail on changes to the methodology and limitations to consider when interpreting the data.

The relative affordability measure presented here incorporates relative changes in the price of alcohol and changes in households' disposable income per capita over the same period (with both allowing for inflation). Trends in affordability are measured using the Alcohol Affordability Index (AAI); the AAI was calculated using the formulae below and data on retail price indices, household disposable income and population from the Office for National Statistics.

To calculate the alcohol affordability index, the alcohol price index (API) is divided by the retail price index (RPI) to create a relative alcohol price index (RAPI). The RAPI is an index of change in alcohol prices relative to trends in prices in general:

$$\text{RAPI} = (\text{Alcohol price index} / \text{Retail price index}) * 100$$

The alcohol affordability index (AAI) is then calculated by dividing an index of households' real disposable income (RHDI) by the relative alcohol price index:

$$\text{AAI} = (\text{RHDI} / \text{RAPI}) * 100$$

If the affordability index is above 100, then alcohol is relatively more affordable than in the base year, 1987.

The main limitation of the index is that it covers the whole of the UK and does not account for differences between countries in the variables from which the index is calculated (i.e. retail prices, alcohol prices and disposable incomes).

An additional consideration to be borne in mind is that the ONS RPI and API estimates for 2021 are based on purchasing behaviour weights derived from largely pre-pandemic data (Living Costs and Food survey, July 2019 to June 2020). As COVID-19 restrictions increased off-trade sales and reduced on-trade sales in 2020 and 2021, these weights will have overestimated purchasing of on-trade alcohol (more expensive) and underestimated purchasing of off-trade alcohol (less expensive). The affordability of alcohol purchased in 2021 is therefore likely to be underestimated by the AAI.

Self-reported alcohol consumption

Adults

Adult self-reported alcohol consumption data were obtained from the Scottish Health Survey; data for the relevant survey years from 2003 to 2019 are presented as a time series, while the 2020 data are used to provide a snapshot of alcohol consumption during the pandemic. The 2020 data could not be included in the time series as the survey was conducted by telephone using a reduced questionnaire, and response rates were low. The results were released as experimental statistics, as their comparability with previous years could not be assured. For the 2003 to 2019 time series, data on mean weekly consumption, consumption on the heaviest drinking day in the past week, adherence to recommended drinking guidelines and score on the Alcohol Use Disorders Identification Test (AUDIT) questionnaire are presented. It should be noted that weekly drinking guidelines for men were reduced from 21 units per week to 14 units per week in 2016, in line with the recommendation for women; all affected analyses have been adjusted for this change. Analysis is presented by age, sex and socioeconomic deprivation. Where possible, results are compared with England using the Health Survey for England (HSE).

More information on the Scottish Health Survey can be found at:

www.gov.scot/collections/scottish-health-survey

More information on the Health Survey for England can be found at:

<https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england>

Young people

Data collected through the Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) between 1990 and 2018 were used to monitor self-reported alcohol consumption in young people. SALSUS includes second year (S2) and fourth year (S4) secondary school pupils. These are reported as 13-year-olds and 15-year-olds, although may include a small proportion of 14-year-olds and 16-year-olds. Data analysed include children reporting ever having consumed alcohol, alcohol consumption in the last week and adverse consequences of alcohol consumption.

More information on the SALSUS can be found at:

www.gov.scot/collections/scottish-schools-adolescent-lifestyle-and-substance-use-survey-salsus/

Alcohol-specific deaths

The National Statistics definition of alcohol-specific deaths includes only those cases that are a direct consequence of alcohol misuse, otherwise known as wholly attributable (Tables 1 and 2). Most of the conditions included in the definition are chronic (longer-term) conditions associated with prolonged misuse of alcohol. The definition of alcohol-specific deaths does not include diseases that are partially attributable to alcohol, such as certain cancers, where the evidence shows that only a proportion of the deaths are caused by alcohol. The definition for alcohol-specific deaths is therefore a more conservative measure than the total harm to health caused by alcohol. For more information on the total burden of disease caused by alcohol in Scotland please see the ScotPHO report [Hospital admissions, deaths and overall burden of disease attributable to alcohol consumption in Scotland](#).

From 2000 onwards the conditions are defined using the International Classification of Diseases (Tenth Revision; ICD-10) (Table 1). Prior to 2000 an approximately equivalent set of conditions identified in the International Statistical Classification of Diseases and Related Health Problems, Ninth Revision (ICD-9) are used (Table 2). The National Statistics definition was developed to include ICD-10 codes only. In 2016 NHS Health Scotland carried out a mapping exercise to identify the equivalent ICD-9 codes, thus allowing the time series to be extended back to 1979. National Records of Scotland (NRS) has since adopted this definition and provides alcohol-specific deaths data as far back as 1979. More detail on how the mapping exercise was conducted and the impact this has on the figures can be found in the [MESAS Monitoring Report 2018](#).

Table 1: Causes of death wholly specific to alcohol consumption, 2000 onwards

ICD-10 code	Description
E24.4	Alcohol-induced pseudo-Cushing's syndrome
F10	Mental and behavioural disorders due to use of alcohol
G31.2	Degeneration of nervous system due to alcohol
G62.1	Alcoholic polyneuropathy
G72.1	Alcoholic myopathy
I42.6	Alcoholic cardiomyopathy
K29.2	Alcoholic gastritis
K70	Alcoholic liver disease
K85.2	Alcohol-induced acute pancreatitis
K86.0	Alcohol-induced chronic pancreatitis
Q86.0	Fetal induced alcohol syndrome (dysmorphic)
R78.0	Excess alcohol blood levels
X45	Accidental poisoning by and exposure to alcohol
X65	Intentional self-poisoning by and exposure to alcohol
Y15	Poisoning by and exposure to alcohol, undetermined intent

Table 2: Causes of death wholly specific to alcohol consumption, prior to 2000

ICD-9 code	Description
291	Alcoholic psychoses
303	Alcohol dependence syndrome
305.0	Nondependent abuse of alcohol
357.5	Alcoholic polyneuropathy
425.5	Alcoholic cardiomyopathy
535.3	Alcoholic gastritis
571.0	Alcoholic fatty liver
571.1	Acute alcoholic hepatitis
571.2	Alcoholic cirrhosis of liver
571.3	Alcoholic liver damage, unspecified
790.3	Excessive blood level of alcohol
E860	Accidental poisoning by alcohol

Data for deaths analysis are provided by NRS. In this publication only the underlying (primary) cause of death has been used for reporting. The number of deaths are analysed and presented as a directly European age-sex standardised rate (EASR) per 100,000 population; the EASR is calculated using the 2013 European Standard Population. Mid-year population estimates are published by NRS and have been used in the calculation of rates.

Data are presented by age, sex and socioeconomic deprivation. Where available, comparable data are presented for alcohol-related deaths for England & Wales, published by the Office for National Statistics (ONS).

More information on alcohol deaths in Scotland can be found at:

www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/deaths/alcohol-deaths

More information on Scottish mid-year population estimates can be found at:

www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates

More information on the 2013 European Standard Population can be found at:

www.isdscotland.org/Products-and-Services/GPD-Support/Population/Standard-Populations/

More information on alcohol-specific deaths in England & Wales can be found at:

www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/alcoholrelateddeathsintheunitedkingdom/registeredin2019

Alcohol-related hospital admissions

Data relating to alcohol-related hospital admissions are taken from 'Alcohol-related hospital statistics, Scotland 2020/21' published by Public Health Scotland (PHS) (Feb 2021). Scottish hospital statistics are derived from data collected on day-case and inpatient episodes in non-obstetric and non-psychiatric hospitals in Scotland submitted to PHS as part of the Scottish Morbidity Record 01 (SMR01) data set. Additionally, data are presented for hospitalisations to psychiatric hospitals from the Scottish Morbidity Record 04 (SMR04). Due to limited data completeness, psychiatric hospital admissions were not available for the financial year 2019/20. Some of the figures reported here for 2019/20 differ slightly from the 2021 Monitoring Report due to increased completeness of the dataset. Only records from Scottish residents are included in these analyses, determined by their postcode within the Scottish NHS Board boundaries. The number of hospitalisations are presented as European age-sex standardised rates (EASR) per 100,000 population; the EASR is calculated using the 2013 European Standard Population. Data are presented by age, sex and socioeconomic deprivation.

PHS reports three types of hospital activity measures: 'continuous inpatient stays (referred to as 'stays'), patient counts and new patient counts. Stays are distinct alcohol-related hospital admissions which occur within a year. Counts of patients are the number of people who have had at least one alcohol-related hospital admission during a particular year. New patient counts describe how many people each year have an alcohol-related admission that have not had an alcohol-related admission in the past 10 years.' The full list of ICD codes used in the analysis of alcohol-related hospital admissions can be found at the link below.

More information on alcohol-related hospital statistics can be found at:

<https://beta.isdscotland.org/find-publications-and-data/lifestyle-and-behaviours/substance-use/alcohol-related-hospital-statistics>

Alcohol-related social harms

Data on crimes wholly attributable to alcohol were extracted from the 'Recorded Crime in Scotland' statistical series, published by the Scottish Government. More information on the Recorded Crime in Scotland statistics can be found at:

www.gov.scot/collections/recorded-crime-in-scotland

Data on homicide, attempted murder and serious assault were extracted from the 'Homicide in Scotland' statistical series, also published by the Scottish Government. More information on the Homicides in Scotland statistics can be found at:

<https://www.gov.scot/publications/homicide-scotland-2020-2021/>

Data on the proportion of offenders being under the influence of alcohol were extracted from the Victim Form tables of the Scottish Crime and Justice Survey. More information on the Scottish Crime and Justice Survey can be found at:

www.gov.scot/collections/scottish-crime-and-justice-survey

Data on the prison population are from the Scottish Prisoner Survey. More information on the latest Scottish Prisoner Survey can be found at:

www.sps.gov.uk/Corporate/Publications/Publication-7196.aspx

Adverse effects of alcohol consumption in young people is taken from the Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) as described above. Hospital admissions for young people are taken from 'Alcohol-related hospital statistics, Scotland 2020/21', published by PHS, as described above.

Deprivation

Alcohol-specific deaths and alcohol-related hospital stays have been matched to deciles of the Scottish Index of Multiple Deprivation (SIMD) based on the person's datazone of residence, and the year of the death or hospital stay, in line with PHS guidance. Alcohol-specific deaths occurring before 2004 were assigned to SIMD 2004 deciles, SIMD 2006 for 2004–06, SIMD 2009 for 2007–09, SIMD 2012 for 2010–13, SIMD 2016 for 2014–16, SIMD 2020 for 2017–19, and SIMD 2020_v2 for 2020. Alcohol-related hospital admissions were assigned to deciles in the same way, with the exception of those in 2012 and 2013, which were assigned to SIMD 2016 rather than SIMD 2012 deciles. SIMD 2020 was not available at the time of the 2020 Monitoring Report analyses, resulting in deaths and hospital stays for 2017 and 2018 being assigned to deciles of SIMD 2016, and slight differences between the inequalities results there and in this report.

Population-weighted SIMD deciles have been used for the data presented here. After the datazones are ranked from most to least deprived on the basis of SIMD score they are split into deciles based on population counts: decile 1 therefore contains the 10% of the Scottish population that live in the most deprived datazones in Scotland. These differ from SIMD categories used by the Scottish Government or National Records of Scotland: these are based on datazone counts, meaning that decile 1 would contain the 10% most deprived datazones in Scotland. More information is available from Public Health Scotland: www.isdscotland.org/Products-and-Services/GPD-Support/Deprivation/SIMD

Measures of health inequality

The Slope Index of Inequality (SII) is a measure of **absolute** inequality of a health outcome (e.g. alcohol-related death rates) in a population. It gives a measure of the difference in rates between the most and least deprived in the population while also taking into account the distribution of the whole population across the deprivation deciles.

The Relative Index of Inequality (RII) is a measure of **relative** inequality of a health outcome. Like SII, it is based on the rates across all levels of area deprivation, however RII compares ratios rather than absolute differences – a measure of the relative difference across the whole population.

SII and RII are considered better than measuring the absolute difference or ratio between the most and least deprived groups because they take into account the whole population not just the extremes.

Appendix 2

Price distribution data: revision to methodology and limitations

Commercial alcohol retail sales data are used to derive the price distribution of alcohol sold in Scotland and England & Wales. The price distribution data are derived from alcohol sales data and supplied to PHS by market research company Nielsen. Data received for the current report (covering 2017 to 2021) were produced using a different method of assigning ABV to products than the data used in MESAS Monitoring Reports prior to 2021 (covering 2008 to 2018). Category-level ABVs were used, meaning that all products in, for example, the standard-strength beer category were assumed to have had an ABV of 4%. For the most recent data received, Nielsen was able to assign actual product ABV (as stated on the pack) to at least 80% of the sales of branded products in each drink category and 30% of those in the wine category (due to the size and diversity of the wine market). Nielsen then assigned the sales-weighted average ABV for the category to remaining products (including all supermarket own brand products) that had not been assigned a product-level ABV.

Figures 1 and 2 below show that the price distributions calculated for 2017 and 2018 from Nielsen data prepared using the two methodologies are broadly similar, with small shifts between adjacent price bands. Given that allocation of the majority of products to a price band is done using the more accurate product-level ABV, it is highly likely that the estimated price distribution data are more accurate using the new methodology. The differences between the two methodologies should be borne in mind when interpreting the data presented in this report. In particular, caution should be exercised when interpreting recent trends in the context of the longer time period.

Even with the more accurate product-specific ABV being used to calculate prices, a degree of price band misallocation will occur in the data. There are several potential reasons why this may happen:

- Using a category-average rather than product-specific ABV (as described above).
- Multipacks being split and sold as individual items.
- Due to the degree of accuracy in the calculations used at each step to derive the price distribution, a margin of error is to be expected within each price band.

As Nielsen is unable to determine the degree to which each of these things contribute to the misallocation of products to price bands, the data presented here cannot be used to assess compliance with the MUP legislation. Nonetheless, these data are the best available to describe and understand the price distribution of off-trade alcohol sales in Scotland. We go into further detail on the limitations of the data described above in the PHS report **Evaluating the impact of Minimum Unit Pricing (MUP) on the price distribution of off-trade alcohol in Scotland**.

Figure 1. Price distribution (%) of off-trade pure alcohol sales in Scotland, 2017, calculated from two Nielsen datasets (previous and revised methodology)

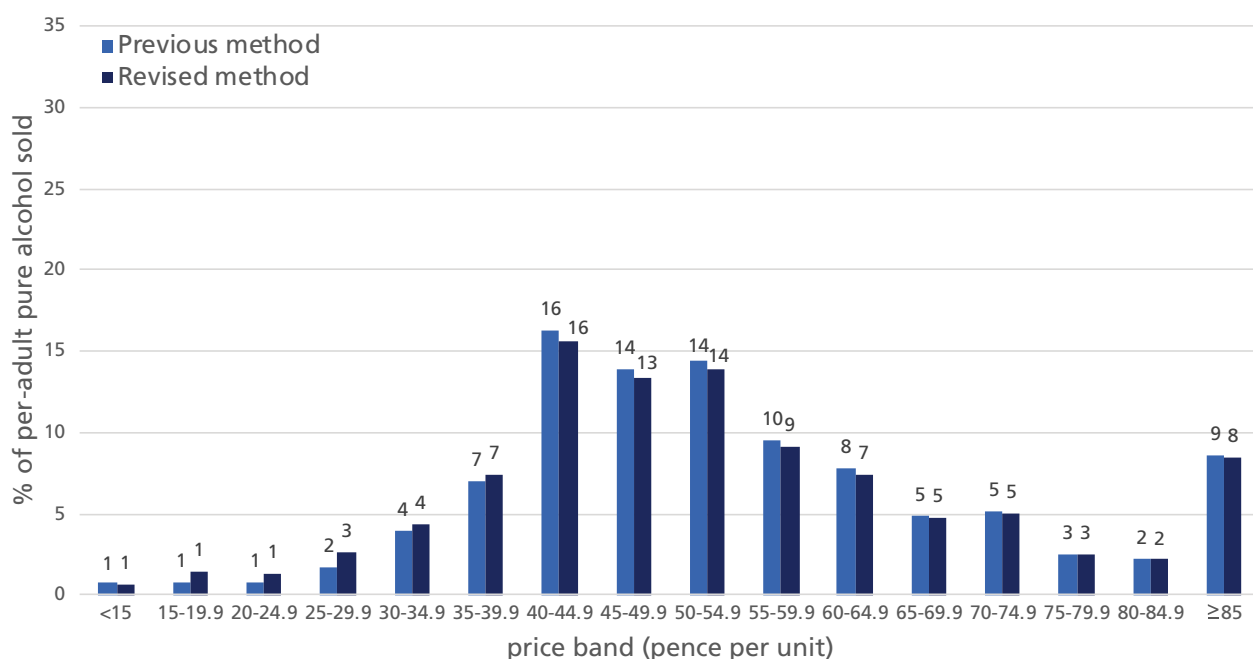
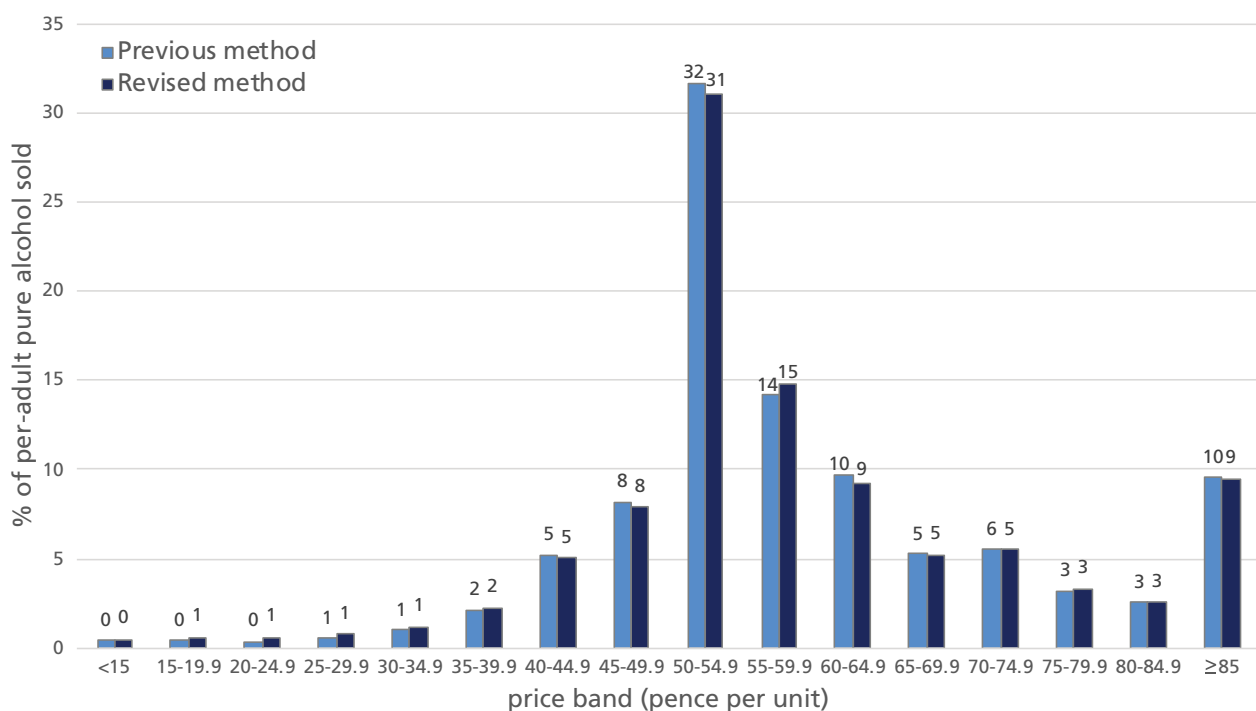
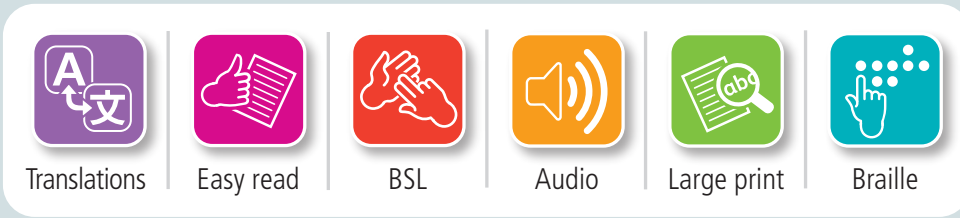




Figure 2. Price distribution (%) of off-trade pure alcohol sales in Scotland, 2018, calculated from two Nielsen datasets (previous and revised methodology)





Translations and other formats are available on request at:

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