

# Alcohol-Specific Deaths in Northern Ireland, 2023

Frequency: Annual

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This report presents statistics on Northern Ireland (NI) alcohol-specific mortality in 2023. Figures are based on deaths registered in NI that are known to have an alcohol-specific cause.

Alcohol-specific death statistics are published by NISRA as the number of deaths **registered** within a calendar year, rather than the number of deaths that **occurred** in that period. This method ensures annual data do not continuously change; however, it introduces a limitation to the statistics as registration-based figures build in delays in procedural systems and processes which can drive annual fluctuations in the series; and do not enable occurrence-based analyses which may be important in informing operational and policy responses. Annual changes in the numbers of registered deaths should therefore be interpreted with caution and a three-year rolling average has been provided in Figure 1 with this in mind.

## Key points

- The total number of alcohol-specific deaths registered in 2023 was 341. This was 15 less than the previous year (356) and accounted for 2.0% of all deaths registered in 2023.
- Since 2013, Northern Ireland has seen deaths due to alcohol-specific causes rise by 65.5% from 206 to the latest reported figure of 341.
- The alcohol-specific age-standardised mortality rate per 100,000 people was 18.5 in 2023 lower than in the previous three years.
- Almost two-thirds (65.4%) of the 341 deaths were male. Similarly, the age standardised mortality rate per 100,000 population of alcohol-specific deaths for males was almost twice that of the rate for females (24.7 and 12.5 respectively).
- Alcohol-specific deaths continue to be more prevalent among the 45-54 and 55-64 age groups, which together accounted for 63.9% of all alcohol-specific deaths registered in 2023; however, the age group 55-64 continues to have the highest age-specific mortality rate at 47.6 per 100,000 in 2023.
- Since 2013, alcoholic liver diseases have accounted for, on average, just over two thirds of alcohol-specific deaths, increasing from 69.4% in 2013 to 72.7% in 2023.

- The Northern Trust had the highest number of alcohol-specific deaths in 2023 (79), followed by the Belfast Trust (74). The South-Eastern Trust had the lowest number (59) of alcohol-specific deaths in 2023.
- Belfast Local Government District (LGD) had the highest number of alcohol-specific deaths in 2023 (77), followed by Derry City & Strabane LGD (49). Fermanagh & Omagh LGD had the lowest number (10) of alcohol-specific deaths in 2023.
- Between 2019 and 2023, the percentage of alcohol-specific deaths in Northern Ireland's most deprived areas (37.6%) was almost four times that of the least deprived areas (9.8%).
- Across the United Kingdom the most recent year with comparable data is 2022, wherein Scotland and Northern Ireland had the highest alcohol-specific death rates, recording 22.6 and 19.5 deaths per 100,000 respectively. In contrast, England and Wales had lower rates of alcohol-specific deaths, with 14.5 and 15.4 deaths per 100,000 respectively. It should be noted, however, that cross country comparisons may be affected by differences in data collection and collation processes in the separate jurisdictions.

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## What you need to know

Alcohol death figures were first published in Northern Ireland in 2001.

The methodology for selecting alcohol-specific deaths was revised following a consultation led by the Office for National Statistics (ONS) in 2017. The consultation document, [Alcohol Mortality Definition Review](#), is available from the ONS website.

The current definition includes conditions known to be exclusively caused by alcohol (that is, wholly attributable causes) and excludes conditions which may only be partially attributed to alcohol use. Details of these differences are shown in Table 1.

**Table 1: Conditions included in the new definition of alcohol-specific deaths and the previous NS definition of alcohol-related deaths<sup>1,2</sup>**

Condition	ICD-10 Code	Alcohol-specific	Alcohol-related
<b>Wholly attributable conditions</b>			
Alcohol-induced pseudo-Cushing's syndrome <sup>2</sup>	E24.4	X	
Mental and behavioural disorders due to use of alcohol	F10	X	X
Degeneration of nervous system due to alcohol	G31.2	X	X
Alcoholic polyneuropathy	G62.1	X	X
Alcoholic myopathy <sup>2</sup>	G72.1	X	
Alcoholic cardiomyopathy	I42.6	X	X
Alcoholic gastritis	K29.2	X	X
Alcoholic liver disease	K70	X	X
Alcohol-induced acute pancreatitis <sup>2</sup>	K85.2	X	
Alcohol induced chronic pancreatitis	K86.0	X	X
Fetal alcohol syndrome (dysmorphic) <sup>2</sup>	Q86.0	X	
Excess alcohol blood levels <sup>2</sup>	R78.0	X	
Accidental poisoning by and exposure to alcohol	X45	X	X
Intentional self-poisoning by and exposure to alcohol	X65	X	X
Poisoning by and exposure to alcohol, undetermined intent	Y15	X	X
<b>Partially attributable conditions</b>			
Chronic hepatitis, not elsewhere classified	K73		X
Fibrosis and cirrhosis of liver	K74.0-K74.2, K74.6-K74.9		X

Notes:

1. The conditions included in each definition are defined using codes from the International Classification of Diseases (10th Revision; ICD-10)
2. Wholly attributable conditions that have been added to the new definition of alcohol-specific deaths

The current definition has been applied to previous years to allow presentation of the current series on a consistent basis. However, historical statistics using the former methodology are also available on the [NISRA website](#).

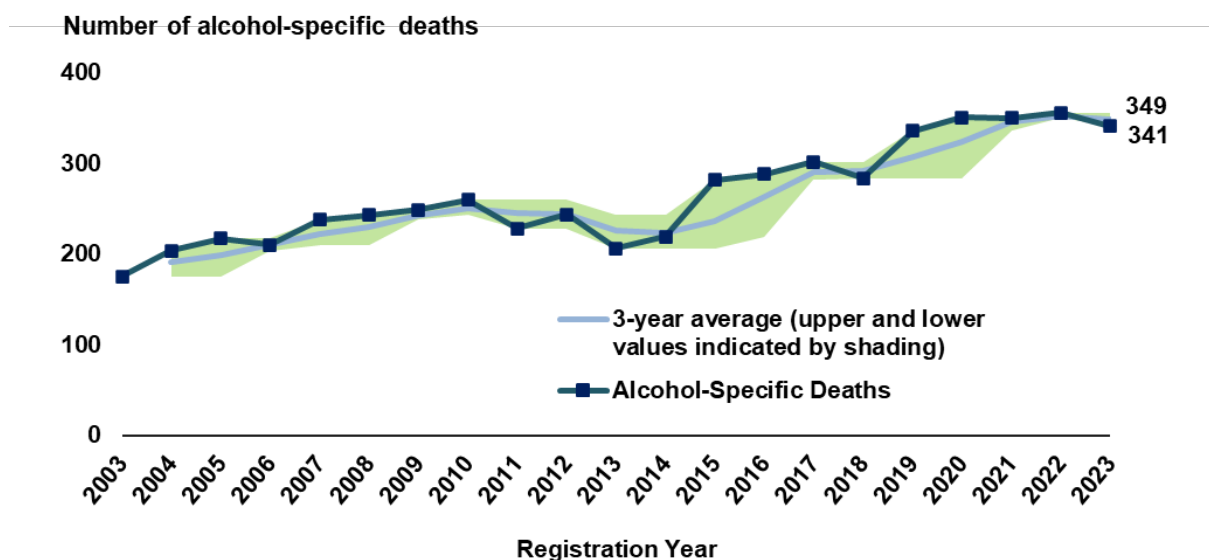
On 29 June 2023 NISRA published the [rebased population and migration estimates Northern Ireland \(2011-2021\)](#). This statistical report provided updated population estimates from mid-2011 to mid-2021, based on the results of Census 2021. The death rates in this report for sex and age groupings are based on the updated population estimates for 2023. Table 7 in the accompanying [spreadsheet](#) provides updated population estimates for Local Government District, 2013-2022. Population estimates by LGD for 2023 are not yet available. Rebased population data for the years 2013 onwards is not yet available at Health and Social Care Trust.

## Section 1: Number of Alcohol-Specific Deaths

There has been a general increase in the number of alcohol-specific registered deaths in NI over the past 20 years, from 175 in 2003 to 341 in 2023. The 2023 total is 65.5% higher than the number registered a decade ago (206). It should however be remembered that registration-based statistics will always be subject to fluctuations in the time which lapses between the date of death and the date the Coroner is able to close the investigation (and thereafter be incorporated in the registration based statistics). Therefore, the number of alcohol specific deaths registered in a particular year may differ to the total which occurred in the same period, and the latter will be subject to ongoing change, particularly in most recent reporting years.

Every death reported to the Coroner is carefully considered and is influenced by several factors specific to each case. These include whether the Coroner orders a post mortem, whether an inquest is required, the complexity of each case, and the number of cases reported to and being investigated by the Coroner at any point in time. It is therefore important to look at the trend over a longer period of time. Figure 1 below, shows the number of registered alcohol-specific deaths from 2003 to 2023 along with a three-year rolling average from 2004. Looking at the three-year rolling average, the number of alcohol-specific deaths has fallen slightly by 3.3 from 352.3 (2020-2022 three-year average) to 349 (2021-2023 average). The three-year average has been generally increasing since 2002.

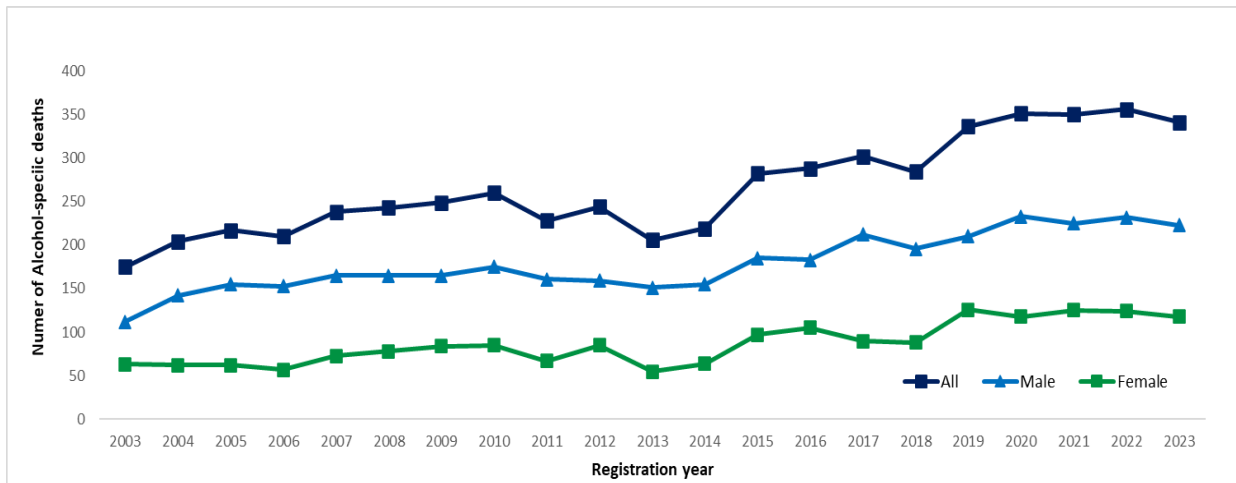
**Figure 1: Alcohol-specific deaths by registration year**



## Section 2: Sex and Age

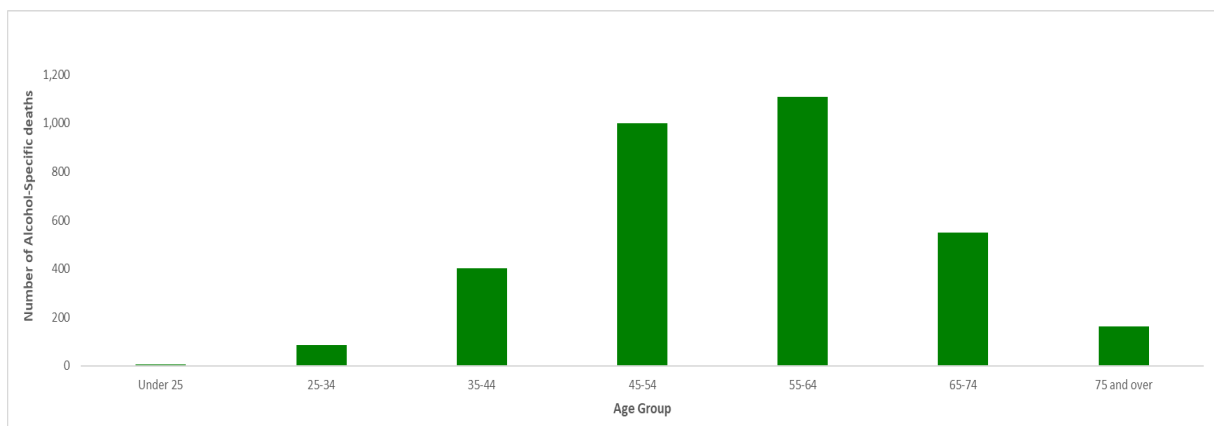
Figure 2 shows the number of alcohol-specific deaths by sex and year of registration between 2003 and 2023. Almost two-thirds (65.4%) of the 341 deaths were male, with the remaining 34.6% female. Males have consistently accounted for more such deaths each year than females, accounting for 66.5% of alcohol-specific deaths registered between 2013 and 2023.

**Figure 2: Number of alcohol-specific deaths by registration year and sex**



Looking at the number of deaths by age, the 45-54 and 55-64 age groups consistently account for most alcohol-specific deaths. Figure 3 illustrates the number of alcohol-specific deaths by age-group in NI for the combined years of 2013 to 2023. In 2023 these two age groups accounted for 63.9% of all alcohol-specific deaths, which is in line with the average across the combined years of 2013-2023 (63.7%).

**Figure 3: Alcohol-specific deaths by age, 2013-2023**



### What is an age-specific mortality Rate?

This is a measure of the number of deaths in a specified age group scaled to the size of the population of the same age group. In this bulletin, age-specific mortality rates are presented per 100,000 population.

The age-specific mortality rate per 100,000 population was higher for the 45-54 and 55-64 age groups (40.5 and 47.6 respectively) compared to those in the 25-34 age group (2.5). (see Table 2 in the accompanying [spreadsheet](#)).

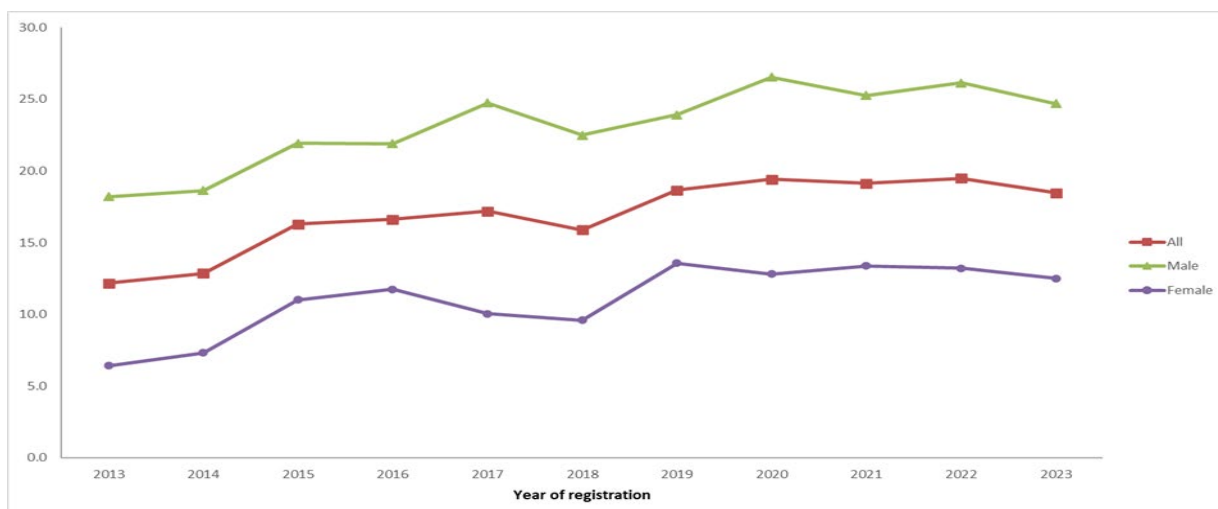
Trends in alcohol-specific deaths by sex can be compared by removing potential impact of the age profile of each sex through standardising for age.

### What are Age-Standardised Mortality Rates (ASMRs)?

Mortality rates generally increase with age. A population with a greater proportion of older people is expected to have more deaths per population. Age-standardised mortality rates adjust for differences in the age structure of populations and therefore allow valid comparisons to be made between, for example, geographical areas, the sexes and over time. In this bulletin, age-standardised mortality rates are presented per 100,000 people and standardised to the 2013 European Standard Population.

Figure 4 presents age-standardised mortality rates (ASMRs) for alcohol-specific deaths from 2013 to 2023. The ASMR increased from 12.2 per 100,000 population in 2013 to 18.5 per 100,000 in 2023 – a lower rate than seen in the previous three years. The ASMR for males in 2023 was 24.7 per 100,000, almost double the rate for females, which was 12.5 deaths per 100,000. Between 2013 and 2023 the age-standardised alcohol-specific ASMR increased for males by 35.7%, from 18.2 per 100,000 to 24.7 per 100,000. The rate for females also increased by 95.3% from 6.4 per 100,000 to 12.5 per 100,000.

**Figure 4: Age-Standardised Mortality Rate (ASMR) of alcohol-specific deaths by sex, 2013-2023**



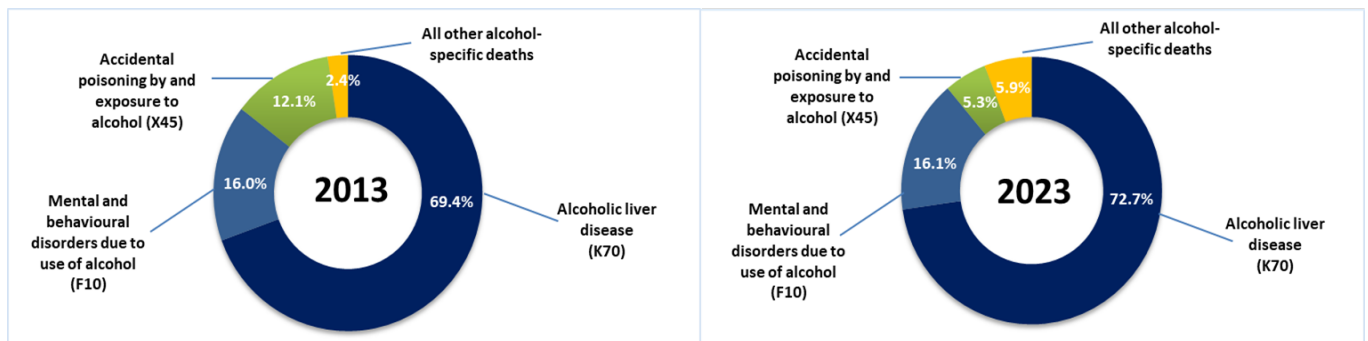


### Section 3: Cause of death (ICD-10 code)

The majority (72.7%) of the 341 alcohol-specific deaths registered in 2023 had an underlying cause of alcoholic fatty liver disease (K70). Since 2013 this cause was present in an average of two thirds of alcohol-specific deaths, increasing from 69.4% in 2013 (Figure 5).

Mental and behavioural disorders due to use of alcohol has consistently been the second most common cause of death among alcohol-specific deaths in NI. In 2023, 16.1% of alcohol-specific deaths were due to this cause.

**Figure 5 Proportion of alcohol-specific deaths by underlying cause of death, 2013 & 2023**

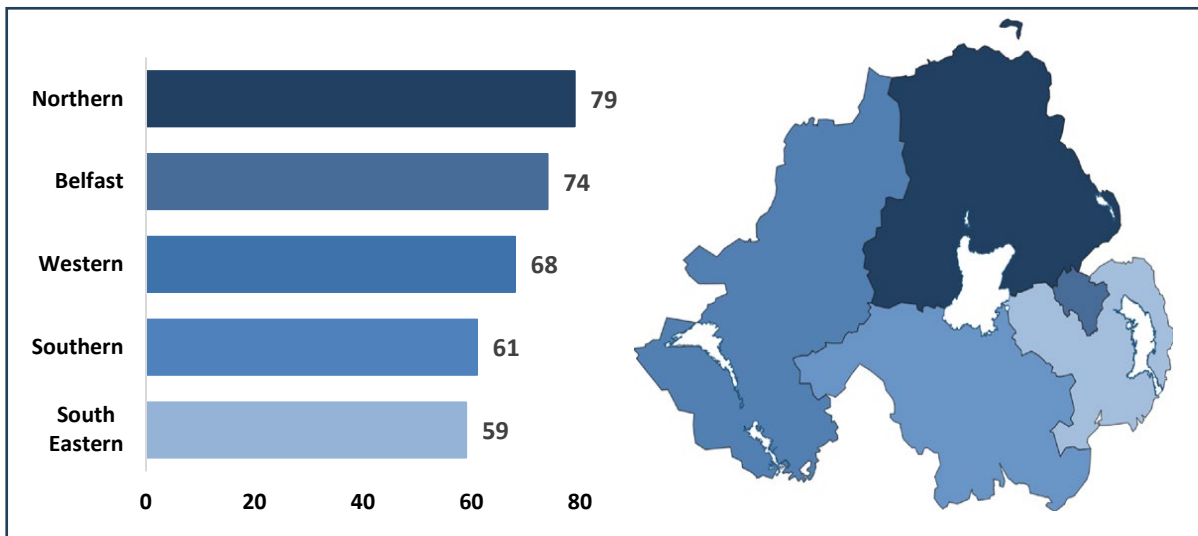


Compared with 2013, alcohol-specific deaths in more recent years were less likely to be caused by accidental poisoning by, and exposure to alcohol (X45), falling from 12.1% of alcohol deaths in 2013 to 5.3% in 2023.

## Section 4: Health and Social Care Trust (HSCT)

Rebased population data for the years 2012 onwards is not yet available at Health and Social Care Trust level to calculate age-standardised mortality rates for the full time series. It has therefore not been possible to produce ASMRs for HSCT. Figure 6 shows that, of the five Health and Social Care Trusts, the Northern Trust had the highest number of alcohol-specific deaths in 2023 (79). This was followed by the Belfast Trust. The South-Eastern Trust had the lowest number of alcohol-specific deaths in 2023 at 59.

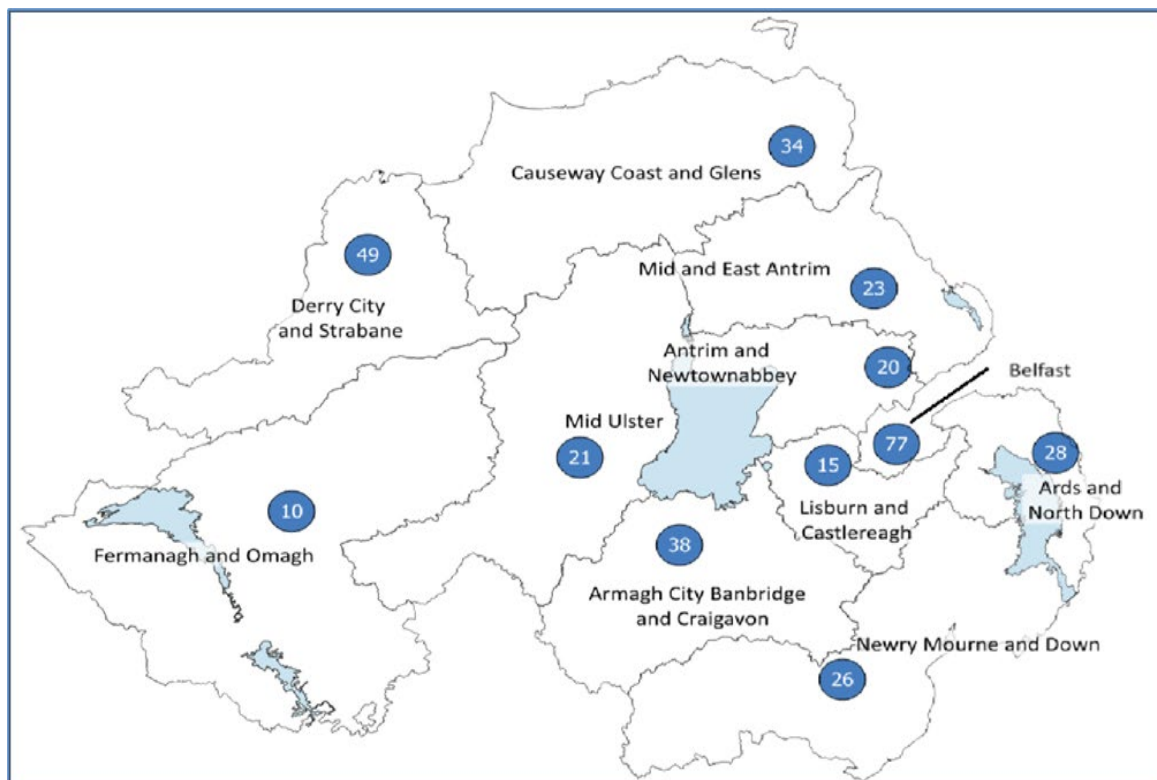
**Figure 6: Number of alcohol-specific deaths in NI by Health Trust, 2023**



## Section 5: Local Government District (LGD)

Figure 7 shows that, Belfast LGD had the highest number of alcohol-specific deaths registered in Northern Ireland in 2023, at 77, accounting for over a quarter (22.6%) of all alcohol-specific deaths. Conversely, Fermanagh and Omagh LGD had the lowest number at 10, or 2.9% of the total 341 alcohol-specific deaths (see Table 5 in accompanying [spreadsheet](#)).

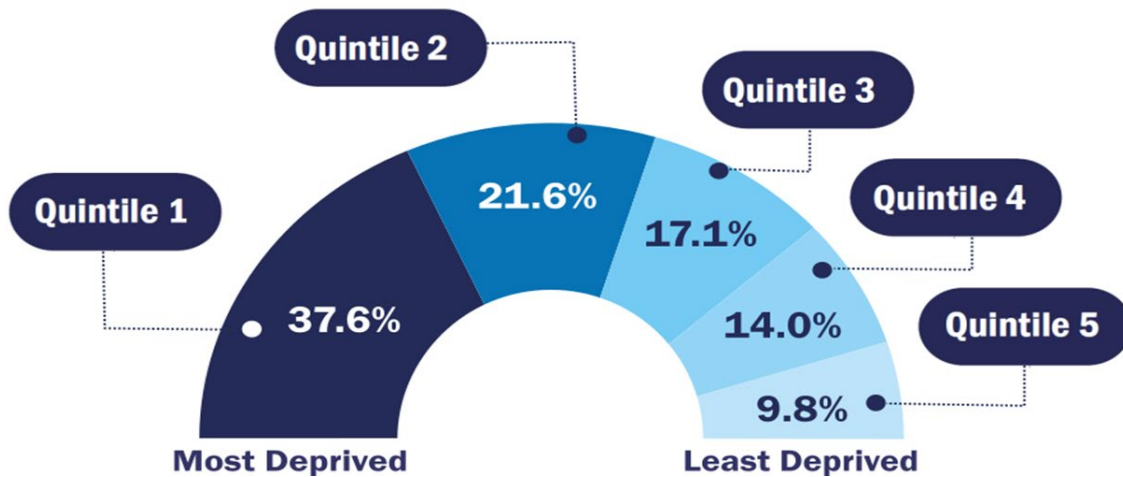
**Figure 7 – Map of alcohol-specific deaths by Local Government District, 2023**



## Section 6: Multiple Deprivation Measure (MDM)

The top 20% most deprived areas (quintile) in Northern Ireland experienced the highest number of alcohol-specific deaths at 652 (37.6%) in the last 5 years (2019-2023), compared with 170 (9.8%) in areas in the least deprived quintile, see figure 8.

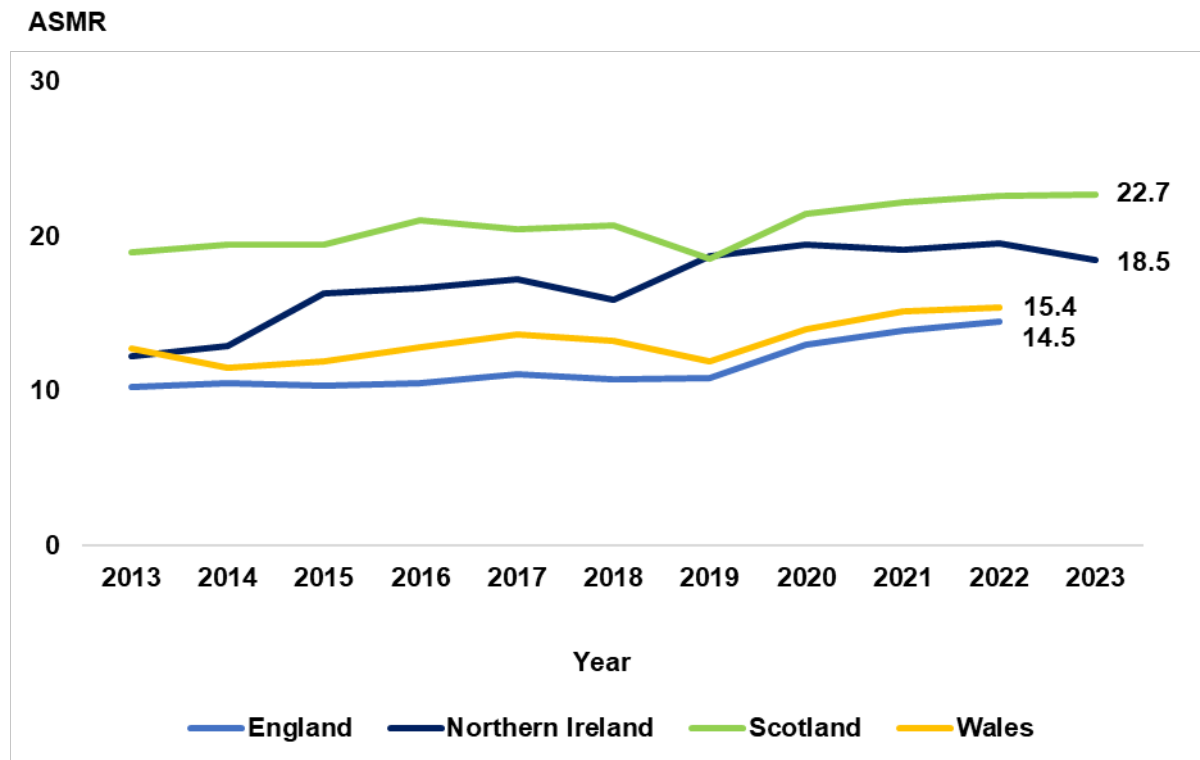
**Figure 8 – Percentage of alcohol-specific deaths by NI Multiple Deprivation Measure (2017), 2019-2023**



## Section 7: Age-standardised Mortality Rates by UK Country

The latest year for which comparable data is available across the United Kingdom is 2022 where [Scotland](#), followed by Northern Ireland had the highest alcohol-specific death rates at 22.6 and 19.5 deaths per 100,000, respectively. [England and Wales](#) continued to have lower rates of alcohol-specific deaths, with 14.5 and 15.4 deaths per 100,000, respectively, see figure 9.

**Figure 9: Age-Standardised alcohol-specific mortality rates by country**



## Section 8: Occurrence Year Analysis

A death which is accidental, unexpected, or suspicious must be referred to the coroner and can only be registered after the coroner has completed their investigation. Registration of some alcohol-specific deaths can therefore take months or even years.

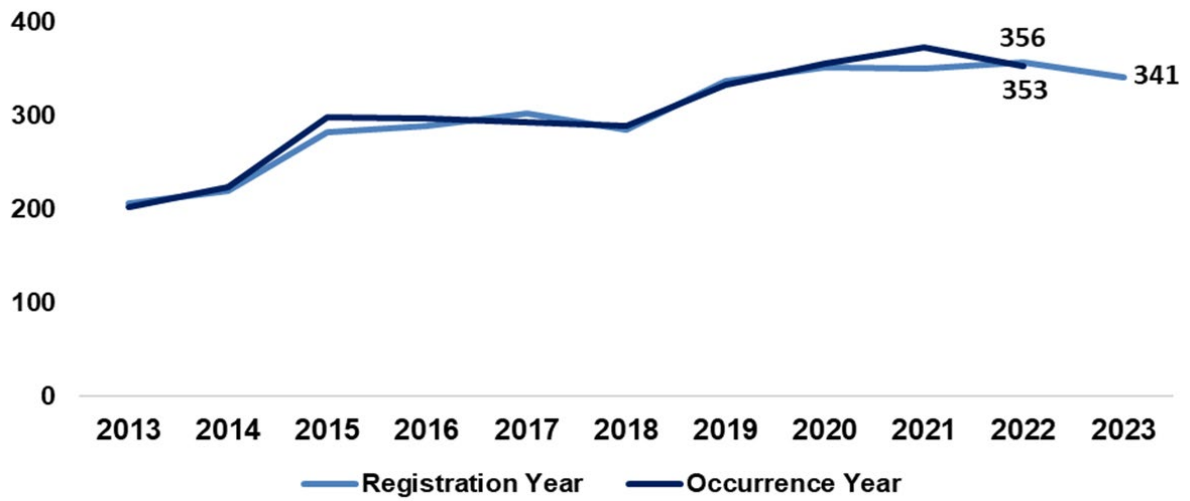
NISRA is only notified that a death has occurred once it is registered with the General Register Office (GRO) and a significant number of alcohol deaths registered in any year will have occurred in earlier years. For example, of the 341 such deaths registered in 2023, 280 occurred in 2022, 57 in 2022, two in 2021 and one in 2020, and 2018 respectively.

Alcohol-specific death statistics and mortality statistics more generally are published by NISRA as the number of deaths **registered** within a calendar year, as opposed to the number of deaths that **occurred** in that period. This method ensures timely and unchanging data over time; however, it also introduces some limitations to the statistics as they can be impacted by delays in procedural systems and do not enable occurrence-based analyses which may be important in informing operational and policy responses.

While annual data based on the date of occurrence are accurate if enough time has lapsed, for more recent years they will be incomplete as more registrations are more likely to follow. Most alcohol-specific deaths (97 per cent) are registered within one year of the death occurring.

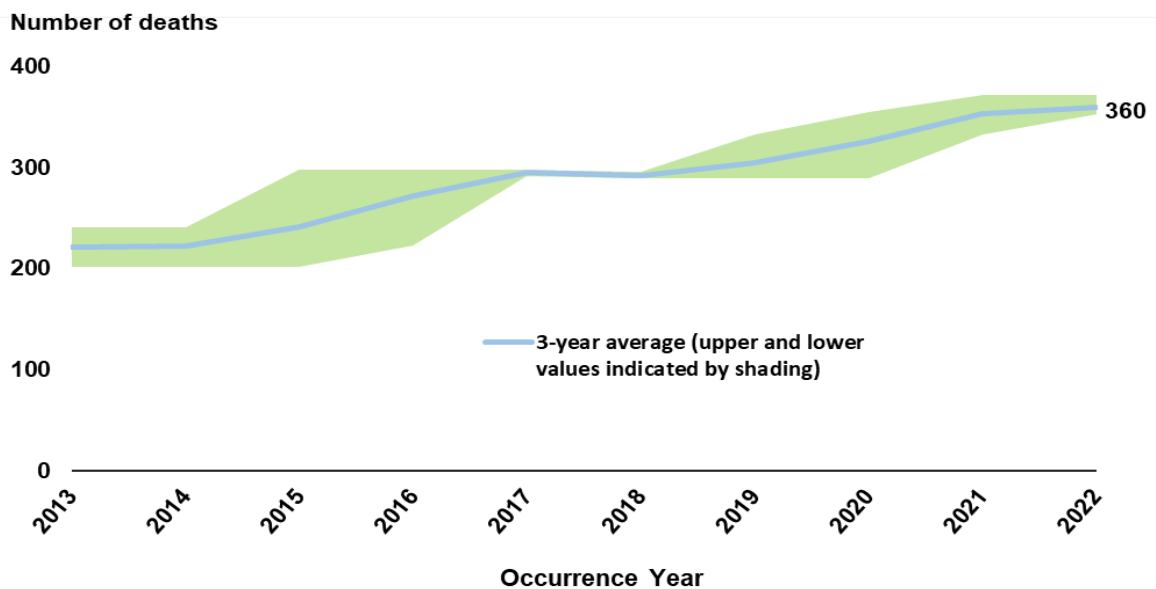
Figure 10 presents a comparison of the number of alcohol deaths registered in Northern Ireland over time along with the number occurring. The number of occurrences for 2023 is not presented here as it will still be subject to notable change and may therefore be misleading. Annual fluctuations are expected between these two series, given the median time from death to registration is constantly changing.

**Figure 10 Number of alcohol-specific deaths in NI by registration & occurrence year, 2013-2023**



Users are therefore cautioned against drawing inferences based on 1-year changes. Information is presented in Figure 11 on occurrence trends based on a '3-year rolling average' approach.

**Figure 11 Number of alcohol-specific deaths (three-year rolling average) in NI by occurrence year, 2013-2022**



## Definitions and further information

### National Statistics definition of Alcohol-specific deaths [Note 1]

The definition of alcohol-specific deaths includes any death that has an underlying cause listed below.

ICD-10 code	Description of condition
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

[Note 1] The definition, agreed via a 2017 user consultation, includes conditions that are wholly attributable to alcohol, based on codes from the International Classification of Diseases (10th Revision; ICD-10).

**Underlying cause:** underlying cause of death is the disease or injury that initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence that produced the fatal injury.

**MDM:** The Measure of Multiple Deprivation in Northern Ireland (MDMNI) for 2017. Northern Ireland is split into 890 spatial areas known as Super Output Areas (SOAs), with an average population of around 2,100 people. Distinct types, or domains, of deprivation are made up from one or more indicators. The 7 domains of deprivation are:

- Income Deprivation Domain
- Employment Deprivation Domain
- Health Deprivation & Disability Domain



- Education, Skills & Training Deprivation Domain
- Access to Services Domain
- Living Environment Domain
- Crime & Disorder Domain

The indicators in each domain were analysed to produce a domain specific deprivation ranking of the 890 SOAs in Northern Ireland, from 1 (most deprived) to 890 (least deprived). The ranks of the 7 domains were weighted and combined, to provide a ranking of multiple deprivation (MDM) for the 890 SOAs.

More information on the 2017 MDMNI is available from the [NISRA website](#).

**Quintile:** The 890 SOAs have been divided in 5 even groups, or quintiles, according to their MDM ranks, with quintile 1 representing the most deprived areas in Northern Ireland.

[Links to relevant publications](#)

[Alcohol-specific deaths registered in the UK](#)

[Alcohol-specific deaths registered in Scotland](#)

[Deaths in Ireland \(including cause\)](#)

### List of Tables

Data accompanying this bulletin are available from the NISRA website in Excel format. The [spreadsheet](#) includes the following tables.

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#### Feedback

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