BRIEFING

ALCOHOL-*SPECIFIC* AND ALCOHOL-*RELATED* DEATHS: WHAT DOES IT ALL MEAN?

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Introduction

Drinking alcohol is a leading cause of premature and preventable deaths. Two main measures are used to estimate the number of deaths caused by alcohol consumption: alcohol-**specific** deaths and alcohol-**related** deaths.

Both definitions are used by World Health Organization (WHO) member countries for clinical, epidemiological, and health management purposes, such as for researching alcohol harm or for death certificates.

The alcohol death *rate* for both metrics is also measured. All death rates are age standardised as this allows for comparisons across geographical areas by controlling for differences in the age structure of local populations.

Alcohol-specific deaths

Alcohol-**specific** deaths are deaths from conditions caused entirely or exclusively by alcohol consumption, for example, alcohol-related liver disease. This definition primarily covers long-term conditions associated with alcohol consumption and also includes deaths from alcohol poisoning, whether accidental, intentional, or of undetermined intent. However, it excludes other external causes of death, such as road traffic accidents or other injuries, even when alcohol is a contributing factor.

The majority of alcohol-specific deaths – around three quarters – are caused by alcohol-related liver disease, a condition that develops after years of heavy alcohol consumption. Research suggests that the risk of developing this disease does not increase gradually, but instead accelerates the more a person drinks over time.

As a result, alcohol-specific deaths mainly reflect the effects of long-term, heavy alcohol consumption rather than lower or moderate drinking patterns. The alcohol-related liver disease that accounts for most of these deaths is best understood as “acute on chronic” - while it takes several years of heavy drinking to develop, a person’s recent patterns of consumption play a major role in determining if and when they die from the condition.

Alcohol-specific deaths are the best way to compare mortality trends over time and the best comparator between geographical areas. By only including deaths from conditions that are solely caused by alcohol consumption, a consistent measure of mortality exists, allowing for

reliable comparison over time and across government agencies and departments. However, since this definition excludes diseases that are linked to risk factors other than alcohol, it significantly underestimates the number of deaths caused by alcohol consumption.

Alcohol-related deaths

Alcohol-**related** deaths refer to *all* deaths where alcohol is a contributing factor. This includes alcohol-specific deaths, but also deaths from conditions that are partly, not solely caused by alcohol, such as cancer and heart disease. These deaths are calculated using alcohol-attributable fractions (AFFs). AFFs estimate how much alcohol contributes to each condition, based on the latest research. Alcohol-related death figures are then calculated using the latest data on the risk of each disease combined with the level of drinking across the population.

For example, in England in 2023 there were 8,274 alcohol-**specific** deaths – mostly from alcohol-related liver disease, mental and behavioural disorders caused by alcohol, and alcohol poisoning. Yet there were an estimated 22,644 alcohol-**related** deaths, which will include the specific deaths but will also include deaths from alcohol-related cancers, heart disease, and other causes.

By tracking alcohol-related deaths we are able to capture a broader scope of alcohol-related harm than the one covered by alcohol-specific deaths only.

Multiple datasets

Due to health being a devolved matter across the UK, each country publishes alcohol death data separately and at different times. The Office for National Statistics (ONS) then publishes the UK data.

- **England**: OHID publishes England's alcohol-specific and -related data via its Alcohol Profile usually around December here: https://fingertips.phe.org.uk/profile/local-alcohol-profiles
- **Scotland**: The National Records of Scotland publishes alcohol-specific data only, usually in the late summer here: https://www.nrscotland.gov.uk/publications/
- **Northern Ireland**: The Northern Ireland Statistics and Research Agency publishes alcohol-specific data here: https://www.nisra.gov.uk/statistics/cause-death/alcohol-deaths
- **Wales**: alcohol-specific deaths are published with the ONS release

Hospital admissions due to alcohol

The impact of alcohol on the health of a population can also be monitored by looking at the number of hospital admissions for diseases, injuries, and conditions that are linked to alcohol consumption.

Alcohol-related hospital admissions are calculated using AFFs which capture the proportion of a condition that is estimated to have been caused by alcohol. AFFs are then applied to Hospital Episode Statistics to estimate the number of alcohol-related hospital admissions.

All hospital admissions must be given a primary diagnosis (main reason for admission) and can also be given a secondary diagnosis (contributory). Based on these, two measures of alcohol-related hospital admissions are used:

- **Narrow measure**: a measure of hospital admissions where the main reason, or primary diagnosis, recorded is an alcohol-related condition. Since this measure only considers the primary diagnosis, it is less sensitive to coding practices, providing the best indication of trends in alcohol-related hospital admissions, but it understates the part alcohol plays in hospital admissions.
- **Broad measure**: a measure of hospital admissions where either the primary or secondary diagnosis is an alcohol-related condition. This represents a broad measure of alcohol-related admissions because it covers admissions where alcohol is the main reason for admission as well as those where alcohol is a contributory factor. As a result, it provides a better indication of the full impact of alcohol on hospital admissions and the burden placed on the NHS. However, this measure is sensitive to changes in coding practice over time.

References

- https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/theimpactofusingthenewdefinitionofalcoholspecificdeaths/2017-10-27
- https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/methodologies/alcoholrelateddeathsintheukqmi#concepts-and-definitions
- https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/alcoholspecificdeathsintheuk/2021registrations#glossary
- https://fingertips.phe.org.uk/profile/local-alcohol-profiles/supporting-information/mortality2
- Alcohol Profile - Hospital admissions due to alcohol | Fingertips | Department of Health and Social Care
- Part 1: Alcohol-related hospital admissions - NHS England Digital