Office for National Statistics

Consultation

Response to consultation on the National Statistics definition of alcohol-related deaths

6 October 2017

Contents

1. Executive summary

ONS ran a public consultation to review the National Statistics (NS) definition on alcohol-related deaths, between 28 June and 31 August 2017[1]. Responses were invited via an online survey or e-mail. ONS would like to thank all of the respondents for taking the time to respond to the consultation.

The consultation included three options for the definition:

1. Keep the NS definition of alcohol-related deaths, which is currently used by ONS and the devolved administrations;
2. Adopt the Public Health England (PHE) current definition of alcohol-specific deaths;
3. Introduce a new alcohol-specific deaths definition, modified to address the shortcomings of the first two options.

Respondents were asked to comment on each of the options, and indicate which definition they would prefer ONS to use in future.

Twenty responses to the consultation were received. Respondents strongly supported the need for a harmonised approach across government to measuring deaths caused by alcohol misuse. The majority recommended that ONS use a revised indicator of alcohol-specific deaths (option 3), agreeing that this addresses the main limitations of the other options. ONS therefore proposes to use this option as the new definition from the date of the next publication.

Several respondents were concerned that option 3 excludes deaths from unspecified hepatitis and cirrhosis and fibrosis of the liver, noting that more UK based evidence on the aetiology of these deaths is needed before they are discounted entirely. To deal with this concern, ONS will include data on these deaths in the statistical release - for information – but will lead with option 3 as the preferred indicator of alcohol-specific deaths.

To communicate the impact of the definition change, ONS will publish a brief article by the end of October 2017.

2. Background

Why did we consult on the National Statistics definition of alcohol-related deaths?

The definition of alcohol-related deaths was reviewed because:

- there are currently different definitions used across government of deaths associated with alcohol consumption. These definitions provide varying estimates of alcohol-related harm, which may give contradictory messages and confuse users of the statistics;
- the NS definition of alcohol-related deaths has not been reviewed in over 10 years. ONS took the opportunity to review which causes of death are appropriate to include in the definition, with a view to having a harmonised approach across the UK.

What options were consulted on?

Three options for the definition of alcohol-related or alcohol-specific deaths were presented. The options are briefly outlined below, and were explained fully in the consultation document. The focus was on a ‘narrow’ definition which counts deaths from conditions specifically caused by alcohol, rather than a ‘wide’ definition which tries to quantify the harm connected to alcohol in a broad sense. The conditions covered by each definition are shown in Box 1.

[1] See https://consultations.ons.gov.uk/health-and-life-events/alcohol-mortality-definition-review/

Option 1
Keep the current NS definition of alcohol-related deaths. The definition benefits from a long time series, was agreed following a previous ONS user consultation in 2006, and mainly includes causes of death which are wholly attributable to alcohol misuse (that is, conditions where every death is caused by alcohol) in addition to some partially attributable conditions (that is, where only a proportion of deaths are caused by alcohol).

Option 2
Adopt the PHE current definition of alcohol-specific mortality. This would remove the partially attributable conditions included in the NS definition, and includes some wholly attributable conditions currently excluded from the NS definition. The PHE alcohol-specific definition also counts any death that mentions alcohol poisoning, methanol poisoning, or the toxic effect of alcohol.

Option 3
Introduce a new alcohol-specific definition which includes all deaths known to be caused exclusively by alcohol, and excludes all deaths from conditions which are only partly attributable to alcohol. This takes only the wholly attributable conditions from both the current NS and PHE definitions.

Box 1: Conditions included in each of the options

Condition	ICD-10 Code	Option 1	Option 2	Option 3
Alcohol-induced pseudo-Cushing's syndrome	E24.4		✓	✓
Mental and behavioural disorders due to use of alcohol	F10	✓	✓	✓
Degeneration of nervous system due to alcohol	G31.2	✓	✓	✓
Alcoholic polyneuropathy	G62.1	✓	✓	✓
Alcoholic myopathy	G72.1		✓	✓
Alcoholic cardiomyopathy	I42.6	✓	✓	✓
Alcoholic gastritis	K29.2	✓	✓	✓
Alcoholic liver disease	K70	✓	✓	✓
Chronic hepatitis, not elsewhere classified[1]	K73	✓		
Fibrosis and cirrhosis of liver[1]	K74.0-K74.2, K74.6-K74.9	✓		
Alcohol-induced acute pancreatitis	K85.2		✓	✓
Alcohol induced chronic pancreatitis	K86.0	✓	✓	✓
Fetal alcohol syndrome (dysmorphic)	Q86.0		✓	✓
Excess alcohol blood levels	R78.0		✓	✓
Ethanol poisoning[2]	T51.0		✓	
Methanol poisoning[2]	T51.1		✓	
Toxic effect of alcohol, unspecified[2]	T51.9		✓	
Accidental poisoning by and exposure to alcohol	X45	✓	✓	✓
Intentional self-poisoning by and exposure to alcohol	X65	✓	✓	✓
Poisoning by and exposure to alcohol, undetermined intent	Y15	✓	✓	✓
Evidence of alcohol involvement determined by blood alcohol level[3]	Y90		✓	
Evidence of alcohol involvement determined by level of intoxication[3]	Y91		✓	

[1] Conditions which are considered partially attributable to alcohol;
[2] Codes mentioning alcohol-poisoning as a secondary cause;
[3] Codes not used to define the underlying cause of death.

3. Summary of responses

ONS received 20 responses to the consultation from a range of organisations including academics, government departments and agencies, and charities. A list of the responding organisations can be found at the back of this document. A summary of the responses is provided below for each of the five questions asked. The responses are split into themes where applicable.

Question 1: What is the relative value to users of statistics of more comparable definitions of alcohol-related harm across government, versus a longer comparable time series?

The majority of respondents were in agreement that the current situation of having multiple definitions of alcohol-related deaths is confusing for anyone wishing to use the data and may result in contradictory conclusions from the data. The respondents mainly discussed advantages and disadvantages of having a comparable, harmonised, definition versus a longer time series.

Comparability
At present, there are different definitions used across government to measure deaths associated with alcohol consumption. The majority of respondents explained that having a comparable definition of alcohol-specific deaths is especially important, and that this should be the main priority for a revised definition. Respondents said that:

- a comparable definition of alcohol-related deaths is important for a wide range of users, particularly to allow comparisons between different areas;
- a comparable definition would enable government, public health agencies and researchers to evaluate more effectively the impact on mortality of alcohol policies in different parts of the UK;
- for a comparable definition to work, the same definition would need to be agreed and used by different government agencies across the UK. There needs to be consensus on the terminology used to refer to the indicators.

Time Series
The current definition used by ONS (option 1) benefits from having comparable codes in two versions of the International Classification of Diseases (ICD; 9th and 10th revisions), meaning that counts of deaths can be produced from 1979 to the present. In the annual ONS alcohol-related deaths publication[2], the time series begins in 1994 due to the method used to standardise the rates. The majority of respondents said that a long time series is beneficial, for users to monitor trends over time.

For the proposed new definition (option 3), the time series would be somewhat shorter than currently, beginning in 2001, when ONS began coding deaths using the 10th revision of the ICD. This is because some of the relevant codes do not translate directly into the previous version of the ICD (9th revision). Respondents said that:

- the benefit of a more accurate and robust definition should take priority over long-term trends;
- policy and interventions are less concerned with what happened 15 years ago. As such, a time series beginning in 2001 is sufficient;
- a break in the time series is a temporary problem which can be explained and managed; it is often possible to back-calculate trends if a change of definition takes place, albeit with caveats;
- the time series should be a minimum of 30 years, longer than that presently published, but did not give a reason.

[2] See https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/alcoholrelateddeathsintheunitedkingdom/previousReleases

Further comments
Other comments on issues relevant to this question were:

- several respondents stated that the terms used by different agencies across the UK need to be identical and refer to the same thing;
- if a decision is made to change the definition, it would be helpful for the ONS to include figures from the National Statistics definition of alcohol-related deaths, for a period of time;
- where possible, definitions in the UK should align with international standards of best practice.

Question 2: What are the relative merits of the current NS definition, the PHE narrow definition and the PHE wide definition?

The majority of the respondents provided detailed answers to this question, weighing up the advantages and disadvantages of each definition and suggesting what would be most beneficial for their specific needs.

The current NS definition of alcohol-related deaths
Several respondents said that they preferred the definition currently used by ONS, because:

- it benefits from a long time series, which allows sensitive and comparable monitoring of alcohol-specific mortality over time and across countries in the UK;
- it includes all deaths with an underlying cause of fibrosis and cirrhosis of the liver, which make up some 20 per cent of the total;
- there is not yet enough UK-based evidence to suggest that these conditions should be excluded from a revised indicator (for further detail on this point, see question 3).

Other respondents criticised the NS definition of alcohol-related deaths, because it does not capture the overall burden of mortality caused by alcohol.

PHE narrow definition of alcohol-specific deaths
Several respondents stated that current PHE's definition of alcohol-specific deaths is advantageous due to including a number of wholly attributable causes of death not currently included in NS definition. These are: alcohol-induced pseudo-Cushing's syndrome (E24.4); alcoholic myopathy (G72.1); alcohol-induced chronic pancreatitis (K85.2); foetal induced alcohol syndrome (dysmorphic) (Q86.0); and excess alcohol blood levels (R78.0).

Other respondents were critical due to the definition including any death which mentions alcohol poisoning, even when the underlying cause of death was not an alcohol-specific condition.

PHE wide definition of alcohol-related deaths
A number of respondents said that the PHE wide definition provides the best estimate of the full burden of alcohol on mortality. Others thought that wide definitions are subject to fluctuations and uncertainty due to changing patterns in risky behaviour (e.g. drinking habits) and in the prevalence of other risk factors such as smoking and obesity.

Further comments
Other comments relevant to this question were:

- narrow definitions generally are more useful for providing robust estimates of trends in alcohol mortality, and better for studying causality;
- the estimate produced by narrow measures is likely to represent just 45 per cent of the total burden of mortality connected to alcohol in England, as shown by recent estimates from the Sheffield Alcohol Policy Model;

- wide definitions generally are dependent on a regular review of the epidemiological evidence, and need up-to-date information on relative risks and comparable population consumption estimates on which to calculate attributable fractions;
- ONS and the public health bodies should coordinate their work so that wide and narrow measures are published together. In a similar vein, it was suggested that due to the relative benefits of each measure, organisations should use both narrow and wide measures to understand the impact of alcohol on a range of levels.

Question 3: Should the NS definition of alcohol-related deaths be kept as it is (option 1), replaced with the PHE definition (option 2), replaced with the proposed definition of alcohol-specific deaths (option 3), or changed in some other way?

Option 1: Keep the current NS definition of alcohol-related deaths
There was limited support for option 1 and no further information was provided beyond a preference for this option.

Option 2: Adopt the PHE current definition of alcohol-specific deaths
It was suggested that option 2 should only be considered if ONS and PHE cannot come to an agreement on a third option. A few respondents considered the inclusion of deaths which mention alcohol poisoning as a secondary cause (when the underlying cause is not alcohol-specific) to be desirable, because removing them results in undercounting of deaths where alcohol was involved.

Option 3: Introduce a new definition of alcohol-specific mortality
The majority of respondents confirmed this to be their preferred option. Respondents said that:

- the codes suggested for the new definition do not change the overall public health messages in the UK countries, when compared to time series produced using the current NS definition;
- the new definition addresses minor limitations in both the current NS definition and PHE's narrow definition, and is closely aligned with current international consensus (see Rehm et al., 2017);
- it will be important for PHE and the devolved administrations to adopt the same narrow definition;
- the suggested new NS definition will not measure the full burden of alcohol on mortality, and therefore should be presented alongside a wider definition.

Some disagreed with the suggested exclusion of unspecified hepatitis and/or fibrosis and cirrhosis of the liver, arguing that:

- these make up a substantial proportion of the deaths covered by the current NS definition, and their removal would result in a potentially misleading reduction in the estimate of deaths due to alcohol;
- the proportion of cirrhosis deaths in the UK which are alcohol-related is not clear, and more research on this is needed before these are discounted entirely;
- ONS should make a special case for K73 and K74, perhaps developing a fractional approach to estimate the alcohol-specific mortality rate from these conditions.

Further comments

Other comments relevant to this question were:

- none of the proposed options were optimal. Some said that ONS should consider using a wider indicator as these are better for measuring the true burden of alcohol misuse on mortality;
- the production and reporting of a wider indicator can be done by public health agencies as opposed to ONS. The risks vary between countries, meaning that the precise methodology for each UK country could be different.

Question 4: Should the NS definition include both narrow (alcohol-specific) and wide (alcohol-related or alcohol-attributable) options?

The majority of respondents supported the need for figures based on both narrow and wide definitions, as they address fundamentally different questions. Respondents said that:

- narrow definitions make it clear that a death/condition could not have been caused by anything other than alcohol, something which is easier to explain to a lay audience;
- wide definitions allow further analysis on how alcohol misuse relates to a range of causes (e.g. types of cancer), helping users to understand the wider burdens of alcohol;
- if ONS uses a narrow definition, it will be important to make clear that it gives a particularly conservative estimate of the effects of alcohol on mortality, and to direct users to wider-based figures produced by other organisations;
- it seems appropriate for ONS to retain control of the narrow definition, while public health bodies such as PHE and the Scottish Public Health Observatory calculate separate wider measures.

Question 5: Do you have any other comments on indicators of alcohol-related deaths or related issues?

Those who answered this question largely welcomed the opportunity to respond to the consultation and expressed the importance of having a comparable definition of alcohol mortality across the UK. Some emphasised that, if ONS adopts a new definition of alcohol-specific deaths, the change and its impact will have to be fully explained to users. One respondent suggested signposting to other relevant data sources, such as police statistics on accidents involving alcohol consumption.

4. Conclusions and next steps

New definition of alcohol-specific deaths

The consultation identified broad support for the introduction of a revised, narrow NS definition of alcohol-specific deaths as described above (that is, option 3), although some reservations were expressed. This revised definition was also found to be the most consistent with international common practice. ONS therefore proposes to apply the new definition (Box 2) from the date of the next publication.

Box 2: New definition of alcohol-specific deaths

ICD-10 code	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

ICD-10 code	Condition
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

Unspecified hepatitis and fibrosis and cirrhosis

As described above (see question 3), several respondents disagreed with excluding unspecified hepatitis and fibrosis and cirrhosis of the liver, noting that more research is needed before these conditions are discounted. To address this concern, ONS will include separate data on these deaths in the statistical release - for information.

Implementation and communication

ONS will take the following steps to ensure the definition change is understood by users and promote the availability of full and coherent information on deaths related to alcohol consumption:

- Publish a brief article to communicate the definition change, the reasons for it, and its impact on the existing time series.
- ONS will make clear in all future publications that this is a narrow definition, and covers only conditions which are wholly attributable to alcohol.
- In the first publication based on the new definition, include figures from the previous NS definition of alcohol-related deaths. Subsequently, ONS will no longer publish statistics based on the previous NS definition;
- in future publications on alcohol-specific deaths, ONS will signpost to published data based on wider definitions from public health agencies across the UK, so that users can understand the wider burden of alcohol on mortality;
- facilitate further work with public health agencies and the devolved administrations to ensure greater consistency in terminology.

Coordination with other organisations

Throughout this consultation, ONS worked closely with PHE and the devolved administrations. It has been agreed to implement the revised NS indicator of alcohol-specific deaths as the narrow definition in all relevant publications. Wide definitions used by these organisations are not affected.

5. List of responding organisations

Of those giving their permission to be acknowledged, the responding organisations included:
Alcohol Concern
Alcohol Focus Scotland
Alcohol Health Alliance
Alcohol Research UK
Department of Health
Health Scotland
Information Services Division National Services Scotland
Institute of Alcohol Studies
London Borough of Tower Hamlets
Public Health Wales
UK Health Forum
University of Glasgow
University of Sheffield
Wiltshire Council