

# Revision to ICD10 codes used for reporting alcohol-related discharges from Scottish hospitals

11<sup>th</sup> February 2009

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## 1. Overview

The Substance Misuse Team at the Information Services Division, NHS Scotland (ISD), routinely reports on the number of discharges from Scottish hospitals that have an alcohol-related diagnosis. This information is published annually as a National Statistic on the ISD website<sup>1</sup>. It is also used to report on alcohol-related hospital activity in local and national publications, to respond to information requests and parliamentary questions, and to support a wide range of other projects including public health intelligence, service planning and the reporting of national targets.

ISD defines alcohol-related discharges with its own selected set of ICD10 codes (World Health Organization International Classification of Diseases 10th Revision)<sup>2</sup>. There is no standard national or international set of codes that defines alcohol-related hospital discharges. The original ISD code set was developed in consultation with experts including clinicians, analysts and clinical coders. It is subject to periodic review and refinement in consultation with stakeholders. The diagnoses included in the set are those for which alcohol is considered 100% attributable and do not include conditions where alcohol is only a contributory factor, for example, head injuries.

ISD is currently undertaking the development of a separate code set to define those conditions for which alcohol is *partly* attributable. This will allow a fuller reporting of the overall burden of alcohol related harm.

In conjunction with this process ISD has carried out an **in-depth internal review** of its core alcohol-related code set. The purpose of the review was to define more precisely the set of ICD10 codes that best capture those conditions that are wholly attributable to alcohol. This requires consideration not only of the definitions of the codes but also the ways in which they are used in practice. The review has resulted in some changes to the current set of codes. New codes have been added and others removed. The revised set of codes is presented below in Table 1.1. A comparison between the revised and original set of ICD10 codes is presented in Appendix 1.

The publication of hospital alcohol statistics in February 2009 on the ISD website<sup>1</sup> will be based on the revised code set and all historical trends presented in the report will be re-calculated for consistency. In future all publications and all alcohol-related information requests will also be based on the revised set.

The effect of using the revised code set to calculate alcohol-related discharges from acute hospitals is to produce a slight decrease in the figures; this decrease is broadly consistent over the last 10 years. **Note: this does not equate to a real decline in hospital discharges and the trend over time using the revised set of codes is very similar to that using the previous set** (see Figure 1.1 and Table 1.2 below).

The percentage reduction in discharges over the last 5 years due to the use of the revised code set lies between 8% and 10% of discharges and approximately 75% of this fall in numbers is due to the removal of a single code, Z86.4 ("personal history of psychoactive substance abuse").

For reporting alcohol-related mortality there is a recently revised set of standard codes agreed at UK level across different organisations (ISD, General Registry Office Scotland (GROS) and Office of National Statistics (ONS))<sup>3</sup>.

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<sup>1</sup> <http://www.alcoholinformation.isdscotland.org>

<sup>2</sup> <http://www.who.int/classifications/icd/en/>

<sup>3</sup> <http://www.gro-scotland.gov.uk/statistics/deaths/alcohol-related-deaths/index.html>  
[http://www.statistics.gov.uk/downloads/theme\\_health/Summary\\_responses.pdf](http://www.statistics.gov.uk/downloads/theme_health/Summary_responses.pdf)

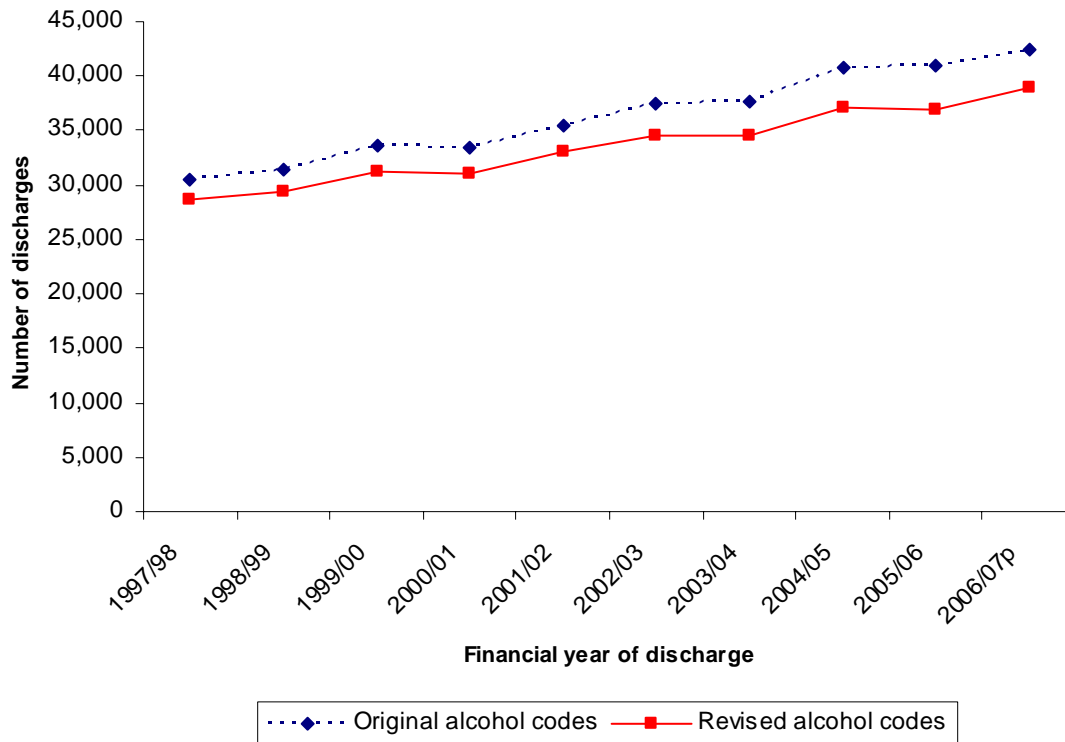
**Table 1.1: Revised set of ICD10 codes for reporting alcohol-related discharges from Scottish hospitals**

Revised ICD 10 codes	Original ICD 10 Codes
<p><b>E24.4 - Alcohol induced Pseudo-Cushing's syndrome</b>  <b>E51.2 - Wernicke's Encephalopathy</b></p> <p>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  K86.0 - Alcohol-induced chronic pancreatitis  O35.4 - Maternal care for (suspected) damage to foetus from alcohol  P04.3 - Fetus and newborn affected by maternal use of alcohol  Q86.0 - Fetal alcohol syndrome (dysmorphic)  R78.0 - Finding of alcohol in blood</p> <p>T51.0 - Toxic effect of ethanol  <b>T51.1 - Toxic effect of methanol</b>  T51.9 - Toxic effect of alcohol, unspecified  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  Y57.3 - Alcohol deterrents</p> <p>Y90 - Evidence of alcohol involvement determined by blood alcohol level  Y91 - Evidence of alcohol involvement determined by level intoxication  Z50.2 - Alcohol rehabilitation  Z71.4 - Alcohol abuse counselling and surveillance  Z72.1 - Alcohol use</p>	<p><b>E52 - Niacin deficiency [pellagra]</b></p> <p>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  K86.0 - Alcohol-induced chronic pancreatitis  O35.4 - Maternal care for (suspected) damage to foetus from alcohol  P04.3 - Fetus and newborn affected by maternal use of alcohol  Q86.0 - Fetal alcohol syndrome (dysmorphic)  R78.0 - Finding of alcohol in blood</p> <p><b>T50.6 - Antidotes and chelating agents, not elsewhere classified</b>  T51.0 - Toxic effect of ethanol</p> <p>T51.9 - Toxic effect of alcohol, unspecified  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  Y57.3 - Alcohol deterrents</p> <p>Y90 - Evidence of alcohol involvement determined by blood alcohol level  Y91 - Evidence of alcohol involvement determined by level intoxication  Z50.2 - Alcohol rehabilitation  Z71.4 - Alcohol abuse counselling and surveillance  Z72.1 - Alcohol use</p> <p><b>Z81.1 - Family history of alcohol abuse</b>  <b>Z13.3 - Special screening exam for mental/behavioural disorders</b>  <b>Z63.7 - Other stressful life events affecting family and household</b>  <b>Z86.4 - Personal History of psychoactive substance abuse</b></p>

**Blue - ICD10 codes added**

**Red - ICD10 codes removed**

**Figure 1.1: General acute inpatient discharges<sup>1</sup> with an alcohol-related diagnosis in any position<sup>2,3</sup>: Scotland 1997/98 to 2006/07<sup>p</sup>**



**Table 1.2: General acute inpatient discharges<sup>1</sup> with an alcohol-related diagnosis in any position<sup>2,3</sup>: Scotland 1997/98 to 2006/07<sup>p</sup>: percentage decline in discharges**

Financial year	Original alcohol codes	Revised alcohol codes	% change in discharges
1997/98	30,536	28,638	-6%
1998/99	31,346	29,404	-6%
1999/00	33,574	31,268	-7%
2000/01	33,411	31,122	-7%
2001/02	35,446	33,039	-7%
2002/03	37,489	34,560	-8%
2003/04	37,565	34,588	-8%
2004/05	40,816	37,038	-9%
2005/06	40,868	36,903	-10%
2006/07 <sup>p</sup>	42,520	38,879	-9%

1. Excludes mental illness hospitals, psychiatric units and maternity hospitals. Transfer cases have also been excluded.
  2. Diseases recorded using the World Health Organisation's International Classification of Diseases 10th Revision (ICD10).  
Original alcohol codes: F10, R78.0, Y90, Y91, Z63.7, Z81.1, Z86.4, Z71.4, Z50.2, T50.6, Y57.3, T51.0, T51.9, X45, X65, Y15, O35.4, Q86.0, P04.3, Z72.1, Z13.3, G62.1, G72.1, K86.0, I42.6, K70, K29.2, G31.2, E52.  
Revised alcohol codes: F10, K70, X45, X65, Y15, Y90, Y91, E244, E512, G312, G621, G721, I426, K292, K860, O354, P043, Q860, R780, T510, T511, T519, Y573, Z502, Z714, Z721.
  3. Caution is necessary when interpreting these figures. The recording of alcohol misuse may vary from hospital to hospital. Where alcohol misuse is suspected but unconfirmed it may not be recorded by the hospital.
- p Provisional.

## 2. Consultation Process

Initially ISD undertook an **in-depth internal review** of its core alcohol-related code set. This review resulted in some proposed changes to the current set of codes. New codes were added and others removed. The purpose of the review was to define more precisely the set of ICD10 codes that best capture those conditions that are wholly attributable to alcohol and to provide a basis for the consultation process. The proposed revised set of ICD 10 codes is shown below in Table 2.1.

Three codes were added to the proposed list for consultation. These are codes that have been mentioned in other national reports and in alcohol-related brain damage code lists. They are “alcohol-induced pseudo-Cushing’s syndrome” (E24.4), “Wernicke’s encephalopathy” (E51.2), and “toxic effect of methanol” (T51.1). Three codes were removed from the proposed list for consultation. These are all lifestyle codes and are not 100% attributable to alcohol misuse: “special screening exam for mental and behavioural disorders” (Z13.3), “other stressful life events affecting family and household” (Z63.7), and “personal history of psychoactive substance abuse” (Z86.4).

In accordance with the ISD Public Consultation protocols, the **Substance Misuse Team invited comments on the proposed revised set of ICD10 codes** using the following as guiding principles:

- Diagnoses selected should be 100% attributable to alcohol misuse.
- The codes should be comprehensive and suitable for national reporting purposes.
- Where appropriate, the codes should be comparable with other national and international reporting conventions (e.g. North West Public Health Observatory (NWPHO), Office of national Statistics (ONS), Hospital Episode Statistics (HES) and General Registry Office Scotland (GROS)).
- Codes common to all other sets should be included unless there is good reason for exclusion.

**Table 2.1: Proposed revised set of ICD10 codes – for consultation**

<b>Proposed Revised ICD 10 codes</b>
E24.4 - Alcohol induced Pseudo-Cushing's syndrome
E51.2 - Wernicke's Encephalopathy
E52 - Niacin deficiency [pellagra]
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
K86.0 - Alcohol-induced chronic pancreatitis
O35.4 - Maternal care for (suspected) damage to foetus from alcohol
P04.3 - Fetus and newborn affected by maternal use of alcohol
Q86.0 - Fetal alcohol syndrome (dysmorphic)
R78.0 - Finding of alcohol in blood
T50.6 - Antidotes and chelating agents, not elsewhere classified
T51.0 - Toxic effect of ethanol
T51.1 - Toxic effect of methanol
T51.9 - Toxic effect of alcohol, unspecified
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
Y57.3 - Alcohol deterrents
Y90 - Evidence of alcohol involvement determined by blood alcohol level
Y91 - Evidence of alcohol involvement determined by level intoxication
Z50.2 - Alcohol rehabilitation
Z71.4 - Alcohol abuse counselling and surveillance
Z72.1 - Alcohol use
Z81.1 - Family history of alcohol abuse

All briefing notes and background documents were made available on the ISD Alcohol Information website<sup>4</sup> from the end of June 2008, for a period of 12 weeks. These are shown in Appendix 2.

The briefing notes were provided to assist reviewers by providing information about codes that appear in other lists but not in the original ISD set and also to provide a basis for assessing the merits of continuing to include codes that do appear in the original ISD set.

### **3. Outcomes of consultation process**

The consultation process came to an end in September 2008. The comments were collated and used to create a revised list of codes.

Twenty-four experts were invited to participate in the consultation process. These included members of The Scottish Ministerial Advisory Committee on Alcohol Problems (SMACAP), Scottish Health Action on Alcohol Problems (SHAAP), ISD, Scottish Association of Alcohol and Drug Action Teams (SAADAT), Health Scotland, General Registry Office Scotland (GROS), Scottish Prison Service (SPS), North West Public Health Observatory (NWPHO), clinical coders, academics and clinicians. The consultation process was also made open to the public. All

<sup>4</sup> <http://www.alcoholinformation.isdscotland.org>

documentation was made available on the ISD Alcohol Information website and the consultation was featured in the ScotPHO newsletter.

ISD received 14 responses in total. Four of the responses came from people who had not been invited to join in the consultation process but had seen the consultation documentation on the website. Three respondents agreed completely with the proposed revised set of codes. The comments received from other respondents were very similar and related to three main issues: (1) moving to a list of codes that is 100% attributable to alcohol; (2) removing lifestyle codes (i.e. Z-codes) and (3) moving towards a list of codes that is more consistent with other areas in the UK. These three areas of concern reflect the guiding principles that were laid out at the start.

More specific comments included:

- A discussion on whether **Wernicke's Encephalopathy (E51.2)** is 100% attributable to alcohol. It was suggested by several respondents that this diagnosis could arise from non alcohol-related causes, eg. drug abuse, head injury.
- A number of respondents advocated the removal of the **Niacin deficiency (E52)** code because it is not always alcohol-related.
- Comments were provided on code **R78.0 (finding of alcohol in blood)**, and whether this code should be considered 100% attributable without further specification of the level of alcohol found in the blood.
- It was suggested that code **T50.6 (antidotes and chelating agents)** is not 100% attributable to alcohol because it does not specify whether the person poisoned was prescribed the drug.
- Code **Z81.1 (family history of alcohol abuse)** was considered inappropriate because it refers solely to "family history".

These points were used to help guide the final decision process. The rationale for inclusion and exclusion of specific codes is explained below in section 3.1.

### 3.1 Rationale for inclusion/ exclusion of codes

The guiding principles used to decide on the inclusion/ exclusion of codes are as follows:

- Diagnoses selected should be 100% attributable to alcohol misuse\*.
- The codes should be comprehensive and suitable for national reporting purposes.
- Where appropriate, the codes should be comparable with other national and international reporting conventions (e.g. NWPHO, ONS, HES and GROS).

Codes common to all other sets should be included unless there is good reason for exclusion.

\*In studies looking at alcohol attributable conditions the definition of conditions that are 100% attributable to alcohol is as follows:

*Conditions that are 100% attributable to alcohol are those that are entirely caused by alcohol consumption; these conditions are generally identifiable through the wording (e.g. alcohol dependence, accidental poisoning by alcohol).*

### 3.2 Specific codes

Those responding to the consultation were in agreement about the inclusion of most of the codes in the proposed list. In Table 3.2.1 these codes are highlighted in **blue**. In addition, those codes that are also present in the GROS or ONS or NWPHO code lists are highlighted in **bold**. Those codes that are present in GROS, ONS *and* NWPHO sets are further marked with an asterisk.

**Table 3.2.1: Proposed revised set of ICD10 codes**

Revised ICD 10 codes	Consultation group response
<b>E24.4 - Alcohol induced Pseudo-Cushing's syndrome</b>	Agreed
E51.2 - Wernicke's Encephalopathy	
E52 - Niacin deficiency [pellagra]	
<b>F10* - Mental and behavioural disorders due to use of alcohol</b>	Agreed
<b>G31.2* - Degeneration of nervous system due to alcohol</b>	Agreed
<b>G62.1* - Alcoholic polyneuropathy</b>	Agreed
<b>G72.1 - Alcoholic myopathy</b>	Agreed
<b>I42.6* - Alcoholic cardiomyopathy</b>	Agreed
<b>K29.2* - Alcoholic gastritis</b>	Agreed
<b>K70* - Alcoholic liver disease</b>	Agreed
<b>K86.0* - Alcohol-induced chronic pancreatitis</b>	Agreed
O35.4 - Maternal care for (suspected) damage to foetus from alcohol	Agreed
P04.3 - Fetus and newborn affected by maternal use of alcohol	Agreed
Q86.0 - Fetal alcohol syndrome (dysmorphic)	Agreed
R78.0 - Finding of alcohol in blood	
T50.6 - Antidotes and chelating agents, not elsewhere classified	
<b>T51.0 - Toxic effect of ethanol</b>	Agreed
<b>T51.1 - Toxic effect of methanol</b>	Agreed
<b>T51.9 - Toxic effect of alcohol, unspecified</b>	Agreed
<b>X45* - Accidental poisoning by and exposure to alcohol</b>	Agreed
<b>X65 - Intentional self-poisoning by and exposure to alcohol</b>	Agreed
<b>Y15 - Poisoning by and exposure to alcohol undetermined intent</b>	Agreed
Y573 - Alcohol deterrents	
Y90 - Evidence of alcohol involvement determined by blood alcohol level	Agreed
Y91 - Evidence of alcohol involvement determined by level intoxication	Agreed
Z50.2 - Alcohol rehabilitation	
Z71.4 - Alcohol abuse counselling and surveillance	
Z72.1 - Alcohol use	
Z81.1 - Family history of alcohol abuse	

**Highlighted codes** - approved unanimously by the consultation group.

**BOLD** codes – Present in GROS or ONS or NWPFO code sets.

\*These codes are present in GROS, ONS and NWPFO sets.

### 3.2.1 Resolution of codes for which unanimous agreement was not reached

The respondents were not unanimous in their submissions about nine of the codes on the proposed list (see Table 3.2.1 above). A summary of the decision made for each of these ICD 10 codes is given below.

#### 3.2.1.1 Wernicke's Encephalopathy (E512)

This code is not present in any other code list; however it is included by ISD for analysis of alcohol-related brain damage (ARBD).

Some clinicians commented that Wernicke's is not wholly attributable to alcohol and can be caused by Thiamine Deficiency as well as by alcohol abuse. However, others stated that the evidence suggests that whilst this is true the great majority of cases of Wernicke's in Scotland are attributable to alcohol.

On balance it was decided to include this code in the finalised set.

### **3.2.1.2 Niacin Deficiency [pellagra] (E52)**

Pellagra is a vitamin deficiency of niacin (Vitamin B3). In Western societies it is commonly but not exclusively observed in those with chronic alcohol problems. This code is not present in any code set used elsewhere. As it does not meet any of the guiding principles listed in section 3.1 this code has been excluded.

### **3.2.1.3 Finding of alcohol in blood (R780)**

After consultation with clinical coders it was noted that R78 is used only if the clinician has stated in the notes that the patient had a specific level of alcohol in their blood. The code Y90 is used in conjunction with R78 to provide a more specific estimate of that level. The guidance states that it is desirable to include Y90 with R78.

Under advice from the clinical coders the decision was made to continue including this code.

### **3.2.1.4 Antidotes and chelating agents, not elsewhere classified (T506)**

This code is not present in any other set and is not wholly attributable. As this does not meet any of the guiding principles listed in section 3.1 this code has been excluded.

### **3.2.1.5 Alcohol deterrents (Y573)**

Although this code is not present in any other set the decision was made to include it in the final list of codes because it is “wholly attributable”. Alcohol deterrents, such as Antabuse, are prescribed for those with serious alcohol problems. It is very unlikely that hospitalisation would result from side effects other than that induced by consumption of alcohol whilst using deterrent.

### **3.2.1.6 Alcohol rehabilitation (Z502)**

This code has been included because of the explicit and specific reference to alcohol rehabilitation. It has been noted that it is not in any other set.

### **3.2.1.7 Alcohol abuse counselling and surveillance (Z714)**

This code is not present in any other code set. However, it has been included here because of its explicit and specific reference to alcohol abuse.

### **3.2.1.8 Alcohol use (Z721)**

This code is also not present in any other set. However, on obtaining advice from clinical coders it was noted that this code is used when the medical notes mention alcohol use (e.g. heavy drinker) but do not state that there is dependence or abuse. For this reason this code has been included in the final set.

### **3.2.1.9 Family history of alcohol abuse (Z811)**

This code does not meet with any of the guiding principles listed in section 3.1. As a result this code has been excluded from the final set.

## **3.3 Summary**

There is no standard national or international set of codes that defines alcohol-related hospital discharges. ISD defines alcohol-related discharges with its own selected set of ICD 10 codes, which is subject to periodic review and refinement in consultation with stakeholders. The diagnoses included in the set are those for which alcohol is considered 100% attributable and do not include conditions where alcohol is only a contributory factor.

ISD is currently undertaking the development of a separate code set to define those conditions for which alcohol is *partly* attributable. In conjunction with this process ISD has carried out a review of its core alcohol-related code set to define more precisely the set of ICD10 codes that best captures those conditions that are *wholly* attributable to alcohol. In combination the reporting of wholly and partly attributable conditions will provide information about the overall burden of harm due to alcohol consumption. The review of the core alcohol-related code set took the form of an

internal and external consultation process and has resulted in some changes to the current set of codes; six codes have been added and four codes removed.

The revised list has been used in the production of the alcohol hospital statistics to be published by ISD in February 2009. The overall effect of the revisions to the code list is to reduce the number of alcohol-related discharges. This reduction is broadly consistent over the last 10 years and so trends are largely unaffected.

## Appendix 1: Original and revised ICD 10 code set

Original ICD 10 Codes	Revised ICD 10 codes
<p><b>E52 - Niacin deficiency [pellagra]</b></p> <p>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            K86.0 - Alcohol-induced chronic pancreatitis            O35.4 - Maternal care for (suspected) damage to foetus from alcohol            P04.3 - Fetus and newborn affected by maternal use of alcohol            Q86.0 - Fetal alcohol syndrome (dysmorphic)            R78.0 - Finding of alcohol in blood</p> <p><b>T50.6 - Antidotes and chelating agents, not elsewhere classified</b></p> <p>T51.0 - Toxic effect of ethanol</p> <p>T51.9 - Toxic effect of alcohol, unspecified</p> <p>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            Y57.3 - Alcohol deterrents            Y90 - Evidence of alcohol involvement determined by blood alcohol level            Y91 - Evidence of alcohol involvement determined by level intoxication            Z50.2 - Alcohol rehabilitation            Z71.4 - Alcohol abuse counselling and surveillance            Z72.1 - Alcohol use</p> <p><b>Z81.1 - Family history of alcohol abuse</b></p> <p><b>Z13.3 - Special screening exam for mental/behavioural disorders</b></p> <p><b>Z63.7 - Other stressful life events affecting family and household</b></p> <p><b>Z86.4 - Personal History of psychoactive substance abuse</b></p>	<p><b>E24.4 - Alcohol induced Pseudo-Cushing's syndrome</b></p> <p><b>E51.2 - Wernicke's Encephalopathy</b></p> <p>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            K86.0 - Alcohol-induced chronic pancreatitis            O35.4 - Maternal care for (suspected) damage to foetus from alcohol            P04.3 - Fetus and newborn affected by maternal use of alcohol            Q86.0 - Fetal alcohol syndrome (dysmorphic)            R78.0 - Finding of alcohol in blood</p> <p>T51.0 - Toxic effect of ethanol</p> <p><b>T51.1 - Toxic effect of methanol</b></p> <p>T51.9 - Toxic effect of alcohol, unspecified</p> <p>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            Y57.3 - Alcohol deterrents            Y90 - Evidence of alcohol involvement determined by blood alcohol level            Y91 - Evidence of alcohol involvement determined by level intoxication            Z50.2 - Alcohol rehabilitation            Z71.4 - Alcohol abuse counselling and surveillance            Z72.1 - Alcohol use</p>

Blue - ICD10 codes added as a result of the consultation process

Red - ICD10 codes removed as a result of the consultation process

## **Appendix 2: Alcohol codes consultation briefing document**

### **ICD10 codes used for reporting on alcohol related hospital discharges (SMR01 & SMR04) in Scotland and England**

The Substance Misuse team at ISD (Information Services Division, NHS Scotland) routinely uses a cluster of ICD-10 (International Classification of Diseases Revision 10) codes to extract hospital discharge data from hospital discharge data databases. These data form the basis of the national statistics ISD publishes on alcohol-related discharges. The purpose of this paper is to:

- Describe/outline alcohol related codes used by ISD (Information Services Division, NHS Scotland)
- Describe alcohol related codes used in England
- Illustrate/highlight any discrepancies

This appendix sets out codes used for **alcohol related discharges only**. For reporting mortality, there is a recently revised set of standard codes agreed at UK level across different organisations (ISD, GROS and ONS).

#### **1 Alcohol related codes in Scotland**

For the last five years, ISD has used a standard set of alcohol codes developed in house. These codes are used to report on hospital activity in national and local publications. Diagnoses based on ICD10 (International Classification of Diseases Revision 10) coding are given below.

ICD-10 codes currently used by ISD to define alcohol-related hospital discharges

**E52 Niacin deficiency (pellagra)**  
**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**  
**K86.0 Alcohol-induced chronic pancreatitis**  
**O35.4 Maternal care for (suspected) damage to foetus from alcohol**  
**P04.3 Fetus and newborn affected by maternal use of alcohol**  
**Q86.0 Fetal alcohol syndrome (dysmorphic)**  
**R78.0 Finding of alcohol in blood**  
**T50.6 Antidotes and chelating agents, not elsewhere classified**  
**T51.0 Toxic effect of ethanol**  
**T51.9 Toxic effect of alcohol, unspecified**  
**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**  
**Y57.3 Alcohol deterrents**  
**Y90 Evidence of alcohol involvement determined by blood alcohol level**  
**Y91 Evidence of alcohol involvement determined by level intoxication**  
**Z13.3 Special screening exam for mental and behavioural disorders**  
**Z50.2 Alcohol rehabilitation**  
**Z63.7 Other stressful life events affecting family and household**  
**Z71.4 Alcohol abuse counselling and surveillance**  
**Z72.1 Alcohol use**  
**Z81.1 Family history of alcohol abuse**  
**Z86.4 Personal history of psychoactive substance abuse**

## **2 Alcohol related codes in England**

There appears to be no standard set of alcohol codes for reporting alcohol related morbidity in England; different institutions use different (overlapping) sets of codes to report on alcohol related hospital discharges. Some of these are described below.

### **2.1 Comparison of Statistics for Alcohol, England (2007 and 2008) codes with ISD codes**

The lists below show alcohol related codes from HES (Hospital Episode Statistics), the national statistical data warehouse for England of the care provided by NHS hospitals. Codes common to HES & ISD are in **green**, codes **not** currently used by ISD and only used in HES are in **red**.

The most recently published statistics from HES (Statistics on Alcohol, England, May 2008)<sup>5</sup> are based on the following set of ICD10 codes:

**F10 Mental and behavioural disorders due to use of alcohol**  
**K70 Alcoholic liver disease**  
**T51.0 Toxic effect of ethanol**  
**T51.1 Toxic effect of methanol**  
**T51.2 Toxic effect of 2-Propanol**  
**T51.3 Toxic effect of fusel oil**  
**T51.8 Toxic effect of other alcohols**  
**T51.9 Toxic effect of alcohol, unspecified**

Additional codes used by ISD but not in Alcohol Statistics England 2008:

**E52 Niacin deficiency (pellagra)**  
**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**  
**K86.0 Alcohol-induced chronic pancreatitis**  
**O35.4 Maternal care for (suspected) damage to foetus from alcohol**  
**P04.3 Fetus and newborn affected by maternal use of alcohol**  
**Q86.0 Fetal alcohol syndrome (dysmorphic)**  
**R78.0 Finding of alcohol in blood**  
**T50.6 Antidotes and chelating agents, not elsewhere classified**  
**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**  
**Y57.3 Alcohol deterrents**  
**Y90 Evidence of alcohol involvement determined by blood alcohol level**  
**Y91 Evidence of alcohol involvement determined by level intoxication**  
**Z13.3 Special screening exam for mental and behavioural disorders**  
**Z50.2 Alcohol rehabilitation**  
**Z63.7 Other stressful life events affecting family and household**  
**Z71.4 Alcohol abuse counselling and surveillance**  
**Z72.1 Alcohol use**  
**Z81.1 Family history of alcohol abuse**  
**Z86.4 Personal history of psychoactive substance abuse**

Prior to this publication HES used the following ICD 10 codes for Statistics on Alcohol, England 2007<sup>6</sup>.

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<sup>5</sup> [www.ic.nhs.uk/pubs/alcohol08](http://www.ic.nhs.uk/pubs/alcohol08)

<sup>6</sup> <http://www.ic.nhs.uk/webfiles/publications/alcoholeng2007/Statistics%20on%20Alcohol-England%202007v6.pdf>

**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**  
**K73 Chronic hepatitis, not elsewhere specified**  
**K74 Fibrosis and cirrhosis of liver**  
**T51.0 Toxic effect of ethanol**  
**T51.1 Toxic effect of methanol**  
**T51.2 Toxic effect of 2-propanol**  
**T51.3 Toxic effect of fusel oil**  
**T51.8 Toxic effect of other alcohols**  
**T51.9 Toxic effect of alcohol, unspecified**

Additional codes used by ISD but not in Statistics on Alcohol, England, 2007, are presented below in a separate list for comparison and are in **blue**.

**E52 Niacin deficiency [pellagra]**  
**K86.0 Alcohol-induced chronic pancreatitis**  
**O35.4 Maternal care for (suspected) damage to foetus from alcohol**  
**P04.3 Fetus and newborn affected by maternal use of alcohol**  
**Q86.0 Fetal alcohol syndrome (dysmorphic)**  
**R78.0 Finding of alcohol in blood**  
**T50.6 Antidotes and chelating agents, not elsewhere classified**  
**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**  
**Y57.3 Alcohol deterrents**  
**Y90 Evidence of alcohol involvement determined by blood alcohol level**  
**Y91 Evidence of alcohol involvement determined by level intoxication**  
**Z13.3 Special screening exam for mental and behavioural disorders**  
**Z50.2 Alcohol rehabilitation**  
**Z63.7 Other stressful life events affecting family and household**  
**Z71.4 Alcohol abuse counselling and surveillance**  
**Z72.1 Alcohol use**  
**Z81.1 Family history of alcohol abuse**  
**Z86.4 Personal history of psychoactive substance abuse**

The HES output suggests that the most commonly used codes for analysis are F10, K70 and T51 (ISD set includes all of F10 and K70 codes but only the T510 and T519 subset from T51).

In the 2007 publication discharges from patients with a diagnosis of accidental poisoning by and exposure to alcohol (ICD 10 code X45) is also presented, although in a separate table. HES refer to X45 as a 'cause code' and do not include it in any other output or discuss it further elsewhere. The explanation given for this is that in most cases the recording of cause codes coincides with the recording of primary or secondary diagnoses of the alcohol specific ICD 10 codes.

## **2.2 Comparison of Cabinet Office Strategy Unit codes with Scottish codes**

The 'National Alcohol Harm Reduction Strategy' study background notes<sup>7</sup> (published by the Cabinet Office, Strategy Unit in 2004) used a different set of codes from those used in the English Statistics on Alcohol. Again, codes which are common to the ISD list are in **green**, codes **not** included in the ISD list and only used in this report are in **red**. Codes used by ISD but not in the Cabinet Office report are also given below in a separate list for comparison and are in **blue**.

- E24.4 Alcohol-induced pseudo-Cushing's syndrome**
- F10 Mental and behavioural disorders due to use of alcohol**
- G62.1 Alcoholic polyneuropathy**
- G72.1 Alcoholic myopathy**
- I426 Alcoholic cardiomyopathy**
- K29.2 Alcoholic gastritis**
- K70 Alcoholic liver disease**
- K73 Chronic hepatitis not elsewhere classified**
- K74 Fibrosis and cirrhosis of liver**
- K76 Other diseases of the liver**
- K86.0 Alcohol-induced chronic pancreatitis**
- T51.0 Toxic effect of ethanol**
- T51.1 Toxic effect of methanol**
- T51.2 Toxic effect of 2-Propanol**
- T51.3 Toxic effect of fusel oil**
- T51.8 Toxic effect of other alcohols**
- T51.9 Toxic effect of alcohol, unspecified**
- 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**
- Y90 Evidence of alcohol involvement determined by blood alcohol level**
- Y91 Evidence of alcohol involvement determined by level intoxication**
- Z50.2 Alcohol rehabilitation**
- Z72.1 Alcohol use**

**Codes in the ISD list that are not in the 'National Alcohol Harm Reduction Strategy' study list:**

- E52 Niacin deficiency [pellagra]**
- G31.2 Degeneration of nervous system due to alcohol**
- O35.4 Maternal care for (suspected) damage to foetus from alcohol**
- P04.3 Fetus and newborn affected by maternal use of alcohol**
- Q86.0 Fetal alcohol syndrome (dysmorphic)**
- R78.0 Finding of alcohol in blood**
- T50.6 Antidotes and chelating agents, not elsewhere classified**
- Y57.3 Alcohol deterrents**
- Z13.3 Special screening exam for mental and behavioural disorders**
- Z63.7 Other stressful life events affecting family and household**
- Z71.4 Alcohol abuse counselling and surveillance**
- Z81.1 Family history of alcohol abuse**
- Z86.4 Personal history of psychoactive substance abuse**

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<sup>7</sup> [http://www.cabinetoffice.gov.uk/strategy/work\\_areas/alcohol\\_misuse.aspx](http://www.cabinetoffice.gov.uk/strategy/work_areas/alcohol_misuse.aspx)

### **2.3 Codes used by the North West Public Health Observatory (NWPHO)**

The NWPHO have done extensive reporting on alcohol and do so for all Public Health Observatories (PHOs) in England. They have produced both a national report on alcohol in the UK (though not including the Scotland PHO), and also local reports. The eighth in a series of national reports produced for the Chief Medical Officer (CMO) by the Association of Public Health Observatories (APHO) was on alcohol: Indications of Public Health in the English Regions 8 (Alcohol)<sup>8</sup>, published in August 2007. Codes used to report on alcohol-related discharges were described as 'alcohol-specific' and included:

- 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**
- I426 Alcoholic cardiomyopathy**
- K29.2 Alcoholic gastritis**
- K70 Alcoholic liver disease**
- T51.0 Toxic effect of ethanol**
- T51.1 Toxic effect of methanol**
- X45 Accidental poisoning by and exposure to alcohol**

All codes in **green** are in the ISD set. Codes in **red** are not. Codes in **blue**, below, are in the ISD list, but have not been used in the NWPHO report.

- E52 Niacin deficiency (pellagra)**
- K86.0 Alcohol-induced chronic pancreatitis**
- O35.4 Maternal care for (suspected) damage to foetus from alcohol**
- P04.3 Fetus and newborn affected by maternal use of alcohol**
- Q86.0 Fetal alcohol syndrome (dysmorphic)**
- R78.0 Finding of alcohol in blood**
- T50.6 Antidotes and chelating agents, not elsewhere classified**
- T51.9 Toxic effect of alcohol, unspecified**
- X65 Intentional self-poisoning by and exposure to alcohol**
- Y15 Poisoning by and exposure to alcohol undetermined intent**
- Y57.3 Alcohol deterrents**
- Y90 Evidence of alcohol involvement determined by blood alcohol level**
- Y91 Evidence of alcohol involvement determined by level intoxication**
- Z13.3 Special screening exam for mental and behavioural disorders**
- Z50.2 Alcohol rehabilitation**
- Z63.7 Other stressful life events affecting family and household**
- Z71.4 Alcohol abuse counselling and surveillance**
- Z72.1 Alcohol use**
- Z81.1 Family history of alcohol abuse**
- Z86.4 Personal history of psychoactive substance abuse**

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<sup>8</sup> [http://www.nwph.net/nwpho/Publications/Alcohol\\_Indications.pdf](http://www.nwph.net/nwpho/Publications/Alcohol_Indications.pdf)

### **3 Proposed set of revised ICD10 codes for Scotland**

An initial review (within ISD) in 2007/08 resulted in development of the following set of codes for reporting alcohol-related discharges for acute hospitals. It is presented here as a basis for discussion and consultation.

- E24.4 Alcohol-induced pseudo-Cushing's syndrome**
- E51.2 Wernicke's encephalopathy**
- E52 Niacin deficiency [pellagra]**
- 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**
- K86.0 Alcohol-induced chronic pancreatitis**
- O35.4 Maternal care for (suspected) damage to foetus from alcohol**
- P04.3 Fetus and newborn affected by maternal use of alcohol**
- Q86.0 Fetal alcohol syndrome (dysmorphic)**
- R78.0 Finding of alcohol in blood**
- T50.6 Antidotes and chelating agents, not elsewhere classified**
- T51.0 Toxic effect of ethanol**
- T51.1 Toxic effect of methanol**
- T51.9 Toxic effect of alcohol, unspecified**
- 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**
- Y57.3 Alcohol deterrents**
- Y90 Evidence of alcohol involvement determined by blood alcohol level**
- Y91 Evidence of alcohol involvement determined by level intoxication**
- Z50.2 Alcohol rehabilitation**
- Z71.4 Alcohol abuse counselling and surveillance**
- Z72.1 Alcohol use**
- Z81.1 Family history of alcohol abuse**