# ALCOHOL RELATED DEATHS REGISTERED IN NORTHERN IRELAND (1999-2009)



# 9.30am – Thursday, 16 December 2010

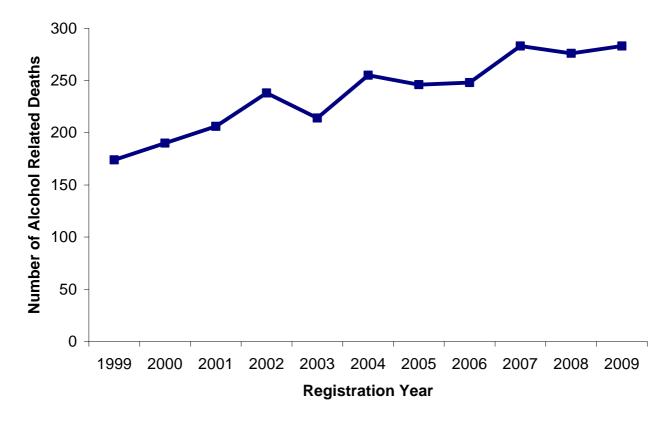
## Introduction

- This report looks at the most recent official death registration data available on alcohol related mortality. The figures in this report are based on the UK-wide harmonised definition of alcohol related deaths. The definition of alcohol related deaths only includes those causes of death regarded as most directly due to alcohol consumption. The definition includes all deaths from chronic liver disease and cirrhosis (excluding biliary cirrhosis), even when alcohol is not specifically mentioned on the death certificate.
- 2. Apart from deaths due to poisoning with alcohol (accidental, intentional or undetermined), this definition **excludes** any other external causes of death, such as road traffic deaths and other accidents. The definition also **excludes** other diseases where alcohol has been shown to have some causal relationship, such as cancers of the mouth, oesophagus and liver.
- 3. Further details on the UK definition and a list of the ICD-09 and ICD-10 codes used to code alcohol related deaths can be found in Annex A.
- 4. The report contains five tables and three charts on alcohol related deaths:
  - Table 1: Number of alcohol related deaths by sex and registration year, 1999-2009
  - Figure 1: Alcohol related deaths by registration year, 1999-2009
  - Table 2: Number of alcohol related deaths by age and registration year, 1999-2009
  - Figure 2: Alcohol related deaths by age, 1999-2009
  - Table 3: Number of alcohol related deaths by underlying cause of death and registration year, 2001-2009
  - Table 4: Number of alcohol related deaths by Health and Social Care Trust and registration year, 1999-2009
  - Table 5: Number of alcohol related deaths by deprivation quintile and death rate per 100,000 population, 2003-2009
  - Figure 3: Alcohol related death rate per 100,000 population by deprivation quintile, 2003-2009

Registration Year	Person	Male	Female
1999	174	116	58
2000	190	134	56
2001	206	131	75
2002	238	165	73
2003	214	132	82
2004	255	174	81
2005	246	171	75
2006	248	173	75
2007	283	199	84
2008	276	185	91
2009	283	187	96
Total (1999-2009)	2,613	1,767	846

Table 1: Number of alcohol related deaths by sex and registration year, 1999-2009

#### Figure 1: Alcohol related deaths by registration year, 1999-2009

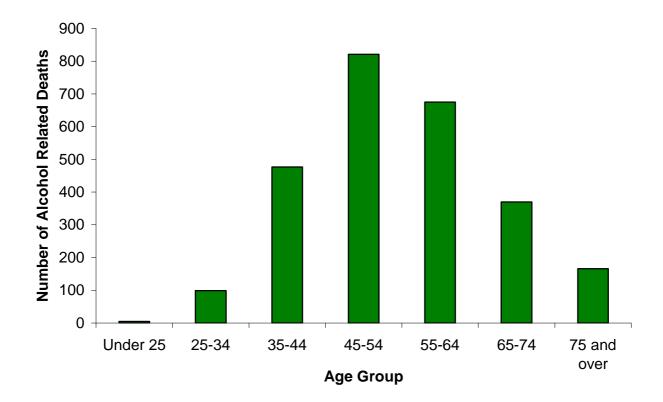


5. Between 1999 and 2009, the number of alcohol related deaths has generally increased. The annual average number of alcohol related deaths registered between 1999 and 2001 was 190, this compares to an annual average of 281 alcohol related deaths registered between 2007 and 2009, a 48 per cent increase. The number of alcohol related deaths is higher for males than females, with males accounting for just over two-thirds (68 per cent) of alcohol related deaths between 1999 and 2009.

Table 2: Number of alcohol related deaths by age and registration year, 1999-2009

			Age Group						
	All	Under						75 and	Median
Registration Year	Ages	25	25-34	35-44	45-54	55-64	65-74	over	Age
1999	174	-	12	27	51	46	23	15	55
2000	190	1	10	39	46	54	27	13	55
2001	206	-	10	38	71	46	27	14	53
2002	238	1	5	52	65	60	35	20	54
2003	214	-	11	31	66	52	37	17	55
2004	255	1	9	55	72	72	32	14	54
2005	246	-	12	48	78	61	37	10	53
2006	248	1	6	43	83	61	35	19	54
2007	283	1	9	66	89	68	33	17	52
2008	276	-	6	34	102	75	48	11	55
2009	283	-	9	44	98	80	36	16	54
Total (1999-2009)	2,613	5	99	477	821	675	370	166	54

Figure 2: Alcohol related deaths by age, 1999-2009



6. Between 1999 and 2009, 31 per cent of alcohol related deaths were to persons aged 45 to 54 and a further 26 per cent of alcohol related deaths were to persons in the 55 to 64 age group. Just five alcohol related deaths were to persons aged under 25 while 166 deaths were to those aged 75 and over.

7. For alcohol related deaths, the median age at death for 1999 to 2009 was 54 years; this is significantly below the median age at death, 78 years, for all deaths registered between 1999 and 2009. This shows the additional potential years of life lost due to alcohol related mortality, with 24 years of potential life lost for each alcohol related death.

#### Table 3: Number of alcohol related deaths by underlying cause of death and registration year, 2001-2009

Underlying Cause <sup>1</sup>		Registration Year					Total			
(ICD-10 codes)	2001	2002	2003	2004	2005	2006	2007	2008	2009	(2001-2009)
Mental and behavioural disorders	75	74	52	68	86	79	94	46	39	613
due to use of alcohol (F10) <sup>2</sup>	75	74	52	00	00	13	34	40	- 39	015
Accidental poisoning by and	0	5	1	-	2	-	2	26	26	<u> </u>
exposure to alcohol (X45) <sup>2</sup>	2	5								64
Intentional self-poisoning by and										
exposure to alcohol or poisoning	_		-	-	-	-	1	-	1	2
by and exposure to alcohol,	-	-								
undetermined intent (X65, Y15)										
All other alcohol related deaths										
(G31.2, G62.1, I42.6, K29.2, K70,	129	159	161	187	158	169	186	204	217	1,570
K73, K74, K86.0)										
All alcohol related deaths	206	238	214	255	246	248	283	276	283	2,249

<sup>1</sup> From 2001, cause of death is coded to ICD-10, prior to this year ICD-09 was used and as the codes are not comparable the earlier years have been excluded from the table above.

<sup>2</sup> WHO coding definitions have changed such that deaths previously coded to F10.0 are now coded to X45. This has been implemented in Northern Ireland for 2008 registrations onwards.

8. Between 2001 and 2009, 70 per cent of alcohol related deaths were other alcohol related deaths such as alcoholic liver disease. Mental and behavioural disorders due to alcohol use accounted for 27 per cent of alcohol related deaths, while accidental poisoning accounted for just 3 per cent of all alcohol related deaths between 2001 and 2009. Over the period there were just two deaths due to Intentional self-poisoning by and exposure to alcohol, undetermined intent.

Table 4: Number of alcohol related deaths by Health and Social Care Trust andregistration year, 1999-2009

	Health and Social Care Trust					
			South			
Registration Year	Belfast	Northern	Eastern	Southern	Western	Total
1999	61	33	31	25	24	174
2000	60	49	31	22	28	190
2001	75	50	28	29	24	206
2002	88	50	35	24	41	238
2003	71	39	43	33	28	214
2004	70	39	58	41	47	255
2005	83	49	50	39	25	246
2006	69	59	41	29	50	248
2007	89	60	43	43	48	283
2008	86	67	50	38	35	276
2009	75	58	56	40	54	283
Total (1999-2009)	827	553	466	363	404	2,613

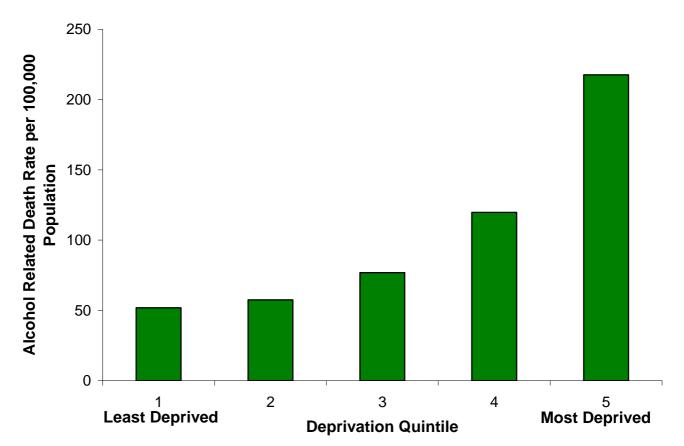
9. Between 1999 and 2009, 32 per cent of alcohol related deaths were to residents of Belfast Health and Social Care Trust. This was followed by the Northern Trust with 21 per cent, the South Eastern Trust with 18 per cent and the Western Trust with 15 per cent. The Southern Trust had the smallest percentage of alcohol related deaths registered between 1999 and 2009 at 14 per cent.

# Table 5: Number of alcohol related deaths by deprivation quintile1 and death rate per100,000 population, 2003-2009

		Deprivation Quintile <sup>1</sup>					
	Least	Least Most					
	Deprived				Deprived		
Cause of Death	1	2	3	4	5		
Alcohol related deaths	173	206	278	428	720		
All deaths	17,478	18,820	20,504	22,315	22,367		
Rate per 100,000 population	52	58	77	120	218		

<sup>1</sup> 2010 measures of multiple deprivation have been used. Further information can be found at: <u>http://www.nisra.gov.uk/deprivation/nimdm\_2010.htm</u>

Figure 3: Alcohol related death rate per 100,000 population by deprivation quintile, 2003-2009



- 10. There is a clear gradient of increasing alcohol related deaths with increasing deprivation. Table 5 looks at all deaths and alcohol related deaths by deprivation quintile using the latest 2010 measures of multiple deprivation.
- 11. In the least deprived quintile 52 deaths per 100,000 population were alcohol related compared to 218 deaths per 100,000 population in the most deprived quintile. Thus latest evidence is that people living in deprived communities are around four times more likely to die from alcohol related mortality than those who live in the least deprived areas.

# **Further Information**

12. Further information on the statistics provided in this publication can be obtained from:

NISRA Customer Services McAuley House 2-14 Castle Street BELFAST BT1 1SA Phone: 028 90348160 Fax: 028 90348161 E-mail: census.nisra@dfpni.gov.uk Responsible Statistician: David Marshall

13. Information on alcohol misuse, drinking patterns and alcohol treatment services is published by the DHSSPSNI. For further information please contact:

Public Health Information and Research Branch Annex 2, Castle Buildings Stormont BELFAST BT4 3SQ Phone: 028 90522520 E-mail: phirb@dhsspsni.gov.uk

14. Information on the 2010 Measures of Multiple Deprivation can be found at:

http://www.nisra.gov.uk/deprivation/nimdm\_2010.htm

For further information please contact:

Neighbourhood Statistics NISRA McAuley House 2-14 Castle Street Belfast BT1 1SA Phone: 02890 348112 E-mail: deprivation.nisra@dfpni.gov.uk

# Annex A: Definition of an Alcohol Related Death

- In Northern Ireland, all deaths are coded according to the International Classification of Diseases Ninth Revision (ICD-09) for 1999 to 2000 and Tenth Revision (ICD-10) for 2001 onwards. This is in line with the rest of the United Kingdom.
- 2. Deaths are identified as being **alcohol related deaths** using the underlying cause of death according to the current National Statistics definition:

ICD-09 Code	Description
291	Alcoholic psychoses
303	Alcohol dependence syndrome
305.0	Non-dependent abuse of alcohol
425.5	Alcoholic cardiomyopathy
571	Chronic liver disease and cirrhosis (Excluding 571.6 – Biliary cirrhosis)
E860	Accidental poisoning by alcohol

Table: ICD-09 codes relating to alcohol related deaths

#### Table: ICD-10 codes relating to alcohol related deaths

ICD-10 Code	Description
F10	Mental and behavioural disorders due to use of alcohol
G31.2	Degeneration of nervous system due to alcohol
G62.1	Alcoholic polyneuropathy
142.6	Alcoholic cardiomyopathy
K29.2	Alcoholic gastritis
K70	Alcoholic liver disease
K73	Chronic hepatitis, not elsewhere classified
K74	Fibrosis and cirrhosis of liver (Excluding K74.3-K74.5 – Biliary cirrhosis)
K86.0	Alcohol induced chronic pancreatitis
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

3. Similar information on alcohol related deaths is also published for other countries in the United Kingdom. The Office for National Statistics (ONS) publish annual figures for the United Kingdom in their Statistical Bulletin<sup>1</sup> and the General Register Office for Scotland (GROS) publish annual figures on their website<sup>2</sup>.

# **Issues Concerning Alcohol Related Deaths**

- 4. The definition of alcohol related deaths which is used across the United Kingdom only includes those causes regarded as being most directly due to alcohol consumption. It does not include other diseases where alcohol has been shown to have some causal relationship, such as cancers of the mouth, oesophagus and liver.
- 5. Apart from deaths due to accidental poisoning with alcohol, the definition excludes any other external causes, such as road traffic deaths and other accidents, and suicides and homicides where alcohol may have played a role in the circumstances leading to death. The definition also does not include any proportions of causes where alcohol has been shown to have some causal link.
- 6. Estimates of the annual total number of deaths, in which alcohol has played a role, can however vary widely depending on the criteria used.
- 7. The ICD-10 codes currently being used in the UK came about after research by the Office for National Statistics (ONS). In November 2005, ONS circulated a discussion paper on potential options for revising its existing definition of alcohol related deaths to individuals with relevant topic expertise in the following organisations: Alcohol Concern, British Association for the Study of the Liver, British Liver Trust, Department of Health, General Register Office for Scotland, Health and Social Care Information Centre, Imperial College, ISD Scotland, Northern Ireland Statistics and Research Agency, Preston Primary Care Trust, Royal College of Physicians and Welsh
- Assembly Government. The responses to this discussion paper<sup>3</sup> formed the current ICD-10 codes being used across the UK.

<sup>&</sup>lt;sup>1</sup> "Alcohol related deaths in the United Kingdom in 2008". Available at: <u>http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=14496</u>

<sup>&</sup>lt;sup>2</sup> "Alcohol related deaths in Scotland in 2009". Available: at <u>http://www.gro-scotland.gov.uk/statistics/deaths/alcohol-related-deaths/index.html</u>

<sup>&</sup>lt;sup>3</sup> "Summary of responses to discussion paper on defining alcohol related deaths". Available at: <u>http://www.statistics.gov.uk/downloads/theme\_health/Summary\_responses.pdf</u>

 Although ICD-09 and ICD-10 are not comparable for alcohol related deaths, research in England and Wales showed that the introduction of ICD-10 resulted in a difference of less than one per cent in the number of deaths from alcohol related causes compared to using ICD-09.

#### **Civil Registration Process/Timing of Alcohol Related Deaths**

- 9. Usually after someone dies, a Medical Certificate of Cause of Death (MCCD) is signed by the doctor confirming the cause of death. For funeral arrangements a MCCD or equivalent must be available to the undertaker. For cremation purposes a further medical practitioner must confirm the person is deceased this is usually dealt with by the undertaker/crematorium. The undertaker also informs the deceased's family about the civil registration process. Therefore there are no strict requirements for a civil death certificate to be issued prior to burial/cremation.
- 10. By law, deaths occurring in Northern Ireland must be registered on the Northern Ireland civil register. A death should be registered no later than five days from the date of death. In practice this does not always happen for a number of reasons. The most relevant being coroner's cases, around 21 per cent of all deaths are referred to the Coroner, however, between 1999 and 2009, 49 per cent of alcohol related deaths were referred to the Coroner.
- 11. All the data presented in this paper relates to the date of registration of the event and not to the date of occurrence. For events such as alcohol related deaths, which may be referred to the coroner, it can take some time for the event to be registered. However 78 per cent of the alcohol related deaths recorded between 1999 and 2009 were registered in the year in which they occurred, so these deaths, are much less affected by being referred to the coroner as some other causes of death, for example, drug related deaths.