

Lausanne, 05.04.2013

Alcohol-attributable mortality in Switzerland between 1997 and 2011

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This project receives financial support from the Swiss Federal Office of Public Health (Contract 12.005688/204.00011- 1016)

Acknowledgment

We would like to thank the Swiss Federal Office of Public Health for supporting this study. We would also like to thank Ruth Flury, Christiane Gmel, Elisabeth Grisel and Michelle Tortolo for their work on the Layout and other administrative work.

Impressum

Auskunft:	Gerhard Gmel, Tel. 021 321 29 59, E-Mail: ggmel@suchtschweiz.ch
Bearbeitung:	Addiction Suisse: Simon Marmet, Gerhard Gmel, CAMH: Gerrit Gmel, Hannah Frick, Jürgen Rehm
Grafik/Layout:	Addiction Suisse
Copyright:	© Bundesamt für Gesundheit, Bern 2013
Zitierhinweis:	Beispiel: Marmet S., Gmel G., Gmel G., Frick H., Rehm J. (2013). <i>Alcohol-attributable mortality in Switzerland between 1997 and 2011</i> . Lausanne: Addiction Suisse.

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Executive summary

Alcohol consumption has been identified as a major risk factor for mortality and burden of disease. Switzerland has a consumption level which is more than 50% above the global average, and consequently it incurs a comparatively high level of mortality. In 2011, the most recent year with data on exposure, we estimate 2'683 deaths due to alcohol. In the age group of 15-74 years of age, where more reliable data on cause of deaths are available compared to the age group 75 and older, 1'600 people died due to alcohol, 1'181 men and 419 women. This corresponds to 1 out of 10 premature deaths in adult men and more than 1 out of 17 in adult women caused by alcohol. These numbers are net numbers, already taking into account the protective effects of light to moderate consumption on ischaemic disease and diabetes. Three main broad causes of death are mainly contributing to this mortality toll, cancers, injury and digestive disease. Although alcohol causes considerable cardiovascular deaths, these deaths are cancelled out by the above described protective effects on ischaemic diseases, mainly ischaemic heart disease. The causes of death underlying alcohol-attributable deaths change over the life course. In young adulthood, they are mainly due to injury, in middle adulthood, digestive diseases become more prevalent, and for last decades up to 74 years of age, cancers are the leading cause of alcohol-attributable death. Overall, the relative proportion of alcohol-attributable mortality to all mortality is highest in young adulthood, but the absolute numbers of alcohol-attributable diseases increase with age. As a consequence, alcohol-attributable years of life lost (YLL) make up even a larger proportion of all years of life lost than alcohol-attributable deaths of all deaths. Overall, 42'627 years (men: 30'880; women: 11'747) of life are lost by premature death among the 15-74 year olds.

Overall, 62% of the net deaths were attributable to heavy drinking as defined by 40 g/day or more of pure alcohol for women and 60 g/day or more for men. The proportion was larger (67%) for men than for women (48%). In other words, the majority of alcohol-attributable deaths among 15-74 year olds in Switzerland had been caused by heavy drinking. There are no protective effects of heavy drinking.

The level of alcohol consumption has gone down since 1997, the starting date for our investigation. As binge drinking (5 or more standard drinks for men and 4 or more standard drinks for women) did not seem to increase, it is no surprise that the rates of alcohol-attributable deaths have gone down as well. However, this effect is restricted to men, and for women we do not see any decrease in alcohol-attributable mortality. The death rate per 100'000 resident women remained stable only because the residential population increased. Over the time period observed in this study, there is a more than 20% increase in the absolute number of alcohol-attributable deaths among women (1997: 340; 2011: 419), and also the proportion of alcohol-attributable death on all deaths increased from 4.3% to 6.0%.

The results have some implications. Policies should be implemented to further support the overall positive trend of decreasing alcohol-attributable mortality burden. A particular focus should be given to women. As a large share of alcohol-attributable mortality is due to heavy drinking, policies but also preventive actions should not only be universal but also selective targeting heavy drinkers including sufficient provision of treatment options.

Zusammenfassung

Alkoholkonsum ist ein bedeutsamer Risikofaktor bezüglich Mortalität und Krankheitslast. Die Schweiz hat einen Alkoholkonsum, der mehr als 50% über dem globalen Durchschnitt liegt, entsprechend fällt die alkoholbedingte Mortalität vergleichsweise hoch aus. Für das Jahr 2011 – das letzte Jahr mit verfügbaren Konsumdaten – schätzen wir 2'683 alkoholbedingte Todesfälle. Betrachten wir nur die Altersgruppe der 15 bis 74-Jährigen, in der im Vergleich zu den über 74-Jährigen zuverlässigere Angaben zu den Todesursachen vorliegen, beträgt die geschätzte Anzahl der alkoholbedingten Todesfälle 1'600, wovon 1'181 Männer und 419 Frauen betreffen. Das entspricht 1 von 10 vorzeitigen Todesfällen bei Männern und 1 von 17 bei Frauen, die durch Alkohol bedingt sind. Diese Zahlen berücksichtigen bereits die protektiven Effekte von Alkohol auf ischämische Krankheiten und Diabetes, es handelt sich also um Netto-Zahlen. Krebse, Unfälle und Verletzungen sowie Krankheiten des Verdauungssystems machen den Grossteil der alkoholbedingten Todesfälle aus. Alkohol verursacht zwar auch eine beträchtliche Anzahl von Herztoden, diese werden aber durch die bereits erwähnten protektiven Effekte auf ischämische Krankheiten, primär ischämische Herzkrankheiten, wieder ausgeglichen. Die Art der alkoholbedingten Todesursachen verändert sich mit dem Verlauf des Alters. Bei jungen Erwachsenen sind es primär Unfälle und Verletzungen, während im mittleren Erwachsenenalter vermehrt Krankheiten des Verdauungssystems auftreten und im höheren Alter bis 74 Jahre mehrheitlich Krebse. Der relative Anteil der alkoholbedingten Todesfälle an allen Todesfällen ist am grössten bei den jungen Erwachsenen, hingegen steigt die absolute Anzahl der alkoholbedingten Todesfälle mit dem Alter an. Folglich ist der Anteil der alkoholbedingt verlorenen Lebensjahre an allen verlorenen Lebensjahren noch höher als der Anteil der alkoholbedingten Tode. Insgesamt gehen 42'627 Lebensjahre (Männer: 30'880, Frauen 11'747) aufgrund von vorzeitigen Todesfällen bis zum Alter von 74 Jahren durch Alkohol verloren.

Insgesamt waren 62% der alkoholbedingten Netto-Tode auf starken Alkoholkonsum zurückzuführen. Starker Alkoholkonsum wurde definiert als mehr als 40 Gramm pro Tag bei Frauen und mehr als 60 Gramm pro Tag bei Männern. Anders ausgedrückt geht die Mehrheit der alkoholbedingten Tode in der Schweiz auf chronisch starken Alkoholkonsum zurück. Es gibt keine protektiven Effekte bei chronisch starkem Alkoholkonsum.

Seit 1997, dem ersten berücksichtigten Jahr in dieser Studie, ist der Pro-Kopf-Alkoholkonsum stetig zurückgegangen. Da es auch keine Anzeichen für eine Zunahme im Rauschtrinken gab, ist es nicht überraschend, dass die alkoholbedingten Todesfälle auch rückläufig sind. Dieser Trend ist allerdings auf Männer beschränkt, bei Frauen ist kein Rückgang der alkoholbedingten Todesfälle feststellbar. Die Todesraten per 100'000 Einwohnerinnen bleiben stabil, da auch die Population angestiegen ist. Die absolute Zahl der alkoholbedingten Todesfälle bei Frauen stieg um über 20% (1997: 340; 2011: 419) an, und auch der Anteil der alkoholbedingten Todesfälle an allen Todesfällen stieg von 4.3% auf 6.0%.

Aus diesen Resultaten lassen sich einige Schlussfolgerungen ableiten. Es sollten Massnahmen implementiert werden, um den insgesamt positiven Trend zurückgehender alkoholbedingter Todesopfer weiter zu unterstützen. Dem Alkoholkonsum von Frauen sollte dabei spezielle Aufmerksamkeit zukommen. Da ein grosser Teil der alkoholbedingten Todesfälle auf chronisch starken Konsum zurückzuführen ist, sollten präventive Massnahmen nicht nur universell die Allgemeinheit betreffen, sondern sich auch selektiv an stark Alkoholkonsumierende richten. Dies schliesst insbesondere die ausreichende Bereitstellung von indizierten Behandlungsmöglichkeiten ein.

Résumé

La consommation d'alcool constitue un facteur de risque majeur de mortalité et de fardeau des maladies. Le niveau de consommation en Suisse est de plus de 50% au dessus de la moyenne mondiale, ce qui par conséquent implique un niveau élevé de mortalité. En 2011, année la plus récente avec des données sur l'exposition, nous estimons à 2'863 le nombre de décès dus à l'alcool. Parmi les personnes de 15 à 74 ans, pour lesquelles des données plus fiables sont disponibles que pour celles de 75 ans et plus, 1'600 sont mortes à cause de l'alcool (1'181 hommes et 419 femmes). Cela correspond à 1 décès prématuré sur 10 pour les hommes et 1 sur 17 pour les femmes. Il s'agit de chiffres nets, qui tiennent compte de l'effet protecteur d'une consommation légère à modérée sur les maladies ischémiques et le diabète. Trois causes de décès en général ont principalement contribué à ce bilan de mortalité : les cancers, les blessures et les maladies digestives. Bien que l'alcool provoque un nombre considérables de décès liés aux maladies cardiovasculaires, ce nombre est contrebalancé par les effets protecteurs sur les maladies ischémiques décrits ci-dessus, et particulièrement les maladies ischémiques cardiaques. Les causes sous-jacentes des décès attribuables à l'alcool changent au cours de la vie: chez les jeunes adultes, les décès sont principalement dus à des blessures, au milieu de l'âge adulte, les maladies digestives deviennent plus répandues, et, pour les plus âgés jusqu'à 74 ans, les cancers sont la première cause de décès attribuables à l'alcool. D'une manière générale, la proportion relative de mortalité attribuable à l'alcool parmi toutes les causes de mortalité est la plus élevée chez les jeunes adultes, mais le nombre absolu de maladies attribuables à l'alcool augmente avec l'âge. En conséquence, la part des années de vie perdues à cause de l'alcool parmi toutes les années de vie perdues est nettement plus importante que celle des décès liés à l'alcool. Au total, 42'627 années de vie (30'880 pour les hommes et 11'747 pour les femmes) sont perdues pour cause de décès prématuré, parmi les personnes de 74 ans ou moins.

D'une manière générale, 62% du nombre net de décès est attribuable à la consommation chronique élevée d'alcool, définie comme la consommation de 40g/jour ou plus d'alcool pur pour les femmes et 60g/jour ou plus pour les hommes. Cette proportion était plus élevée parmi les hommes (67%) que les femmes (48%). En d'autres termes, la majorité des décès attribuables à l'alcool parmi les personnes de 15 à 74 en Suisse ont été causés par la consommation chronique élevée d'alcool. Il n'y a pas d'effet protecteur de la consommation chronique élevée d'alcool.

Le niveau de consommation d'alcool a diminué depuis 1997, année de départ de notre étude. Comme la consommation épisodique à risque (aussi appelée binge drinking), définie comme la consommation de 5 verres standard ou plus pour les hommes et 4 ou plus pour les femmes, ne semble pas en augmentation, il n'est pas surprenant que le taux de décès attribuable à l'alcool ait aussi baissé. Toutefois, cette diminution n'est observable que pour les hommes. Le taux de mortalité pour 100'000 femmes résidentes n'est resté stable que parce que la population résidente dans son ensemble a augmenté. Sur l'ensemble de la période étudiée, il y a une augmentation de plus de 20% du nombre absolu de décès attribuables à l'alcool chez les femmes (1997: 340, 2011: 419) et la proportion de décès attribuable à l'alcool sur l'ensemble des causes de décès a également augmenté, passant de 4.3% à 6.0%.

Ces résultats ont des implications. Il faudrait mettre en œuvre des mesures visant à soutenir la tendance générale positive allant vers une diminution du fardeau de la mortalité attribuable à l'alcool. Une attention particulière devrait être accordée aux femmes. De plus, comme une part importante de la mortalité attribuable à l'alcool est due à la consommation chronique élevée, les mesures et actions de prévention ne devraient pas uniquement s'adresser à l'ensemble de la population, mais aussi sélectivement aux consommateurs excessifs, et notamment la mise à disposition de suffisamment d'options de traitement.

1 Monitoring of alcohol-attributable mortality

In 2010, the World Health Assembly endorsed a Global Strategy to reduce the harmful use of alcohol (World Health Organization, 2010). Part of this strategy was the call to all member states to establish monitoring systems for alcohol consumption and alcohol-attributable harm. Such monitoring systems enable countries not only to assess and quantify alcohol-attributable health burden, but also to track such burden over time, quickly identify problematic developments and plan appropriate action (Rehm and Scafato, 2011, Rehm and Room, 2009). Mortality is the most severe consequence linked to alcohol, and has been identified to be the key part of any such monitoring system (Rehm and Scafato, 2011). To track alcohol-attributable mortality in a country, basically three elements are necessary:

- Information about alcohol exposure for the dimensions relevant for the outcome;
- Information about risk relations (i.e., which level of alcohol exposure is linked to which risk in comparison to no alcohol consumption)
- Information about the outcomes, i.e. distribution of causes of death.

For Switzerland, all these information are present given the good data infrastructure with respect to

- ⇒ routine data collection to estimate *per capita* alcohol consumption by the Eidgenössische Alkoholverwaltung (Swiss Alcohol Board, latest overview: (Eidgenössische Alkoholverwaltung, 2012)), which is a federal agency and part of the Swiss Federal Department of Finance;
- ⇒ regular surveys which include detailed assessment of relevant dimensions of consumption stemming from the Swiss Health Surveys (Delgrande and Notari, 2011); http://www.bfs.admin.ch/bfs/portal/de/index/infothek/erhebungen_quellen/blank/blank/ess/04.html and, more recently from the Addiction Monitoring System in Switzerland (Gmel et al., 2012); and
- ⇒ a vital registration system providing yearly data on causes of death as published by Swiss Statistics (http://www.bfs.admin.ch/bfs/portal/en/index/infothek/erhebungen_quellen/blank/blank/cod/02.html).

Thus, Switzerland has all the necessary elements to start a monitoring system on alcohol-attributable mortality as outlined by the World Health Organization. This report will provide a first base by estimating alcohol-attributable mortality for the years 1997 to 2011 in a comparative fashion, as well as providing a complete overview of the underlying methodology. The authors hope that it becomes the nucleus of a wider routine alcohol monitoring system, as alcohol continues to be one of the major risk factors for burden of disease not only in Switzerland and Europe, but also globally (for the latest publications regarding Switzerland and Europe see (Shield et al., 2012b, Rehm et al., 2012); for global estimates (Rehm et al., 2009a, World Health Organization, 2009, World Health Organization, 2011, Lim et al., 2012), but the latter GBD 2010 estimates will be corrected).

2 Methodology

2.1 Data sources

Alcohol exposure data

Alcohol exposure data were taken from the three Swiss Health Surveys conducted in 1997, 2002, and 2007, and the Continuous Rolling Survey of Addictive Behaviours and related Risks (CoRoLAR) within the Addiction Monitoring System in Switzerland (AMIS; (Gmel et al., 2012); see above). These surveys provide prevalence for abstainers and former drinkers; and average alcohol use in grams per day for different age groups by sex. They also provide data for binge drinking (i.e. drinking a large amount on single occasions). Over the years different definitions of binge drinking were used. For bingeing prevalence (5+ drinks on one occasion for men and 4+ drinks on one occasion for women) and bingeing frequency (i.e., binge occasions per year among drinkers) AMIS 2011 and SHS 2007 data were used. Because SHS 1997 and 2002 had no estimates for 5+/4+ drinks on one occasion, we used the SHS 2007 estimates among drinkers to derive estimates for the SHS 2002 and SHS 1997 as earlier work on bingeing prevalence showed remarkable temporal stability (Wicki and Gmel, 2005); see also

<http://www.bag.admin.ch/themen/drogen/00039/00600/04639/index.html?lang=de>.

Survey estimates were triangulated with *per capita* consumption data as described in detail below. Recorded *per capita* consumption estimates were taken from the Eidgenössische Alkoholverwaltung (Swiss Alcohol Board, latest overview: (Eidgenössische Alkoholverwaltung, 2012)). Adult *per capita* consumption estimates were recalculated for the 15+ years population, assuming that people below 15 do not contribute markedly to the *per capita* consumption. Unrecorded estimates were taken from the World Health Organization Global Information System on Alcohol and Health (GISAH: <http://apps.who.int/ghodata/?theme=GISAH> ; see also (World Health Organization, 2011), for the most recent estimate). Unrecorded consumption in Switzerland is relatively low, with less than 5% of the overall consumption being estimated to be unrecorded. For estimating uncertainty of *per capita* consumption, we used the method developed for CRA, which is based on estimates for *per capita* consumption from different sources (FAO, countries, industry – for general sources of *per capita* information see (Rehm et al., 2007, Rehm et al., 2003a); for combining the various sources of uncertainty into an uncertainty interval for attributable fractions see below).

Selection of alcohol-attributable disease categories

The broad categories of disease attributable to alcohol were taken from the Comparative Risk Assessment (CRA) for alcohol as part of the Global Burden of Disease and Injury (GBD) 2010 study (for a general introduction into GBD categories see (Murray et al., 2012); for the CRA see (Lim et al., 2012); for categories specifically related to alcohol see (Rehm et al., 2010a)). As Switzerland has a vital registration system with detailed causes of death, we were able to include some finer categories as the GBD (as detailed in Table 1.) This was especially true for the 100% attributable causes of death, i.e., the disease and injury categories, which would be completely missing in the absence of alcohol in a society (shaded in gray in Table 1).

Table 1 outlines the alcohol-attributable causes of death by International Classification of Disease (ICD) (revision 10) code (World Health Organization, 2007) as obtained from the overview publication of Rehm and colleagues (Rehm et al., 2010a).

Table 1: Disease and injury categories causally impacted by alcohol

Category	ICD-10 code
Infectious and parasitic diseases	
Tuberculosis	A15-A19, B90
HIV/AIDS	B20-B24
Malignant neoplasms	
Mouth, nasopharynx, other pharynx and oropharynx cancer	C00-C14
Oesophagus cancer	C15
Colon and rectal cancer	
Colon cancer	C18
Rectal cancer	C19-C21
Liver cancer	C22
Larynx cancer	C32
Breast cancer (female)	C50
Diabetes mellitus	E11-E14
Alcohol-induced pseudo-Cushing's syndrome	E24.4
Neuropsychiatric conditions	
Mental and behavioural disorders due to use of alcohol	F10
Acute intoxication	F10.0
Harmful use	F10.1
Dependence syndrome	F10.2
Withdrawal state	F10.3
Withdrawal state with delirium	F10.4
Psychotic disorder	F10.5
Amnesic syndrome	F10.6
Residual and late-onset psychotic disorder	F10.7
Other mental and behavioural disorders	F10.8
Unspecified mental and behavioural disorder	F10.9
Degeneration of nervous system due to alcohol	G31.2
Epilepsy	G40, G41
Alcoholic polyneuropathy	G62.1
Alcoholic myopathy	G72.1
Cardiovascular diseases	
Hypertensive heart disease	I11-I13
Ischaemic heart disease	I20-I25
Cardiomyopathy	
Alcoholic cardiomyopathy	I42.6
Conduction disorders and other dysrhythmias	I47-I49
Cerebrovascular disease	
Hemorrhagic and other non-ischaemic stroke	I60-I62, I69.0, I69.1, I69.2
Ischaemic stroke	I63-I67, I69.3
Digestive diseases	
Alcoholic gastritis	K29.2
Cirrhosis of the liver (we restricted ourselves to Alcoholic liver disease)	K70, K73-K74
Alcoholic liver disease	K70
Alcoholic fatty liver	K70.0
Alcoholic hepatitis	K70.1
Alcoholic fibrosis and sclerosis of liver	K70.2
Alcoholic cirrhosis of liver	K70.3
Alcoholic hepatic failure	K70.4
Alcoholic liver disease, unspecified	K70.9
Pancreatitis (we used AAF for the larger category based on RR)	K85, K86.0, 86.1
Alcohol-induced acute pancreatitis	K85.2
Alcohol-induced chronic pancreatitis	K86.0

Category	ICD-10 code
Respiratory infections	
Lower respiratory infections: pneumonia	J09–J22, J85
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	
Finding of alcohol in blood	R78.0
Injury, poisoning and certain other consequences of external causes	
Toxic effect of alcohol	T51
Ethanol	T51.0
Methanol	T51.1
Other alcohols	T51.8
Alcohol unspecified	T51.9
Unintentional injuries	
Motor-vehicle accidents	§
Poisoning	X40–X49
Accidental poisoning by and exposure to alcohol	X45
Falling	W00–W19
Fires	X00–X09
Drowning	W65–W74
Other unintentional injury	†Rest of V-series and W20–W64, W 75–W99, X10–X39, X50–X59, Y40–Y86, Y88, and Y89.1–89.9, Y15
Intentional injuries	
Self-inflicted injuries	X60–X84, Y87.0
Intentional self-poisoning by and exposure to alcohol	X65
Violence	X85–Y09, Y87.1
Other intentional injury	Y35, Y89.0

§ V021–V029, V031–V039, V041–V049, V092, V093, V123–V129, V133–V139, V143–V149, V194–V196, V203–V209, V213–V219, V223–V229, V233–V239, V243–V249, V253–V259, V263–V269, V273–V279, V283–V289, V294–V299, V304–V309, V314–V319, V324–V329, V334–V339, V344–V349, V354–V359, V364–V369, V374–V379, V384–V389, V394–V399, V404–V409, V414–V419, V424–V429, V434–V439, V444–V449, V454–V459, V464–V469, V474–V479, V484–V489, V494–V499, V504–V509, V514–V519, V524–V529, V534–V539, V544–V549, V554–V559, V564–V569, V574–V579, V584–V589, V594–V599, V604–V609, V614–V619, V624–V629, V634–V639, V644–V649, V654–V659, V664–V669, V674–V679, V684–V689, V694–V699, V704–V709, V714–V719, V724–V729, V734–V739, V744–V749, V754–V759, V764–V769, V774–V779, V784–V789, V794–V799, V803–V805, V811, V821, V830–V833, V840–V843, V850–V853, V860–V863, V870–V878, V892.

Remark: Grey-shaded categories are 100% attributable to alcohol.

Risk relation data

Risk relation specifications were also taken from the CRA for alcohol within the GBD 2010 study. By definition, all causes of death with “alcohol”, “alcoholic” or “alcohol-induced” in their name are 100% attributable to alcohol, and need no specification for risk relations (see grey shaded cells in Table 1). For all others factors, risk relations were derived from meta-analyses (in order of appearance in Table 1);

- Tuberculosis (Lönnroth et al., 2008);
- HIV/AIDS (specifically only for the impact of alcohol on mortality via its impact on medication see (Gmel et al., 2011a); see also (Rehm et al., 2009b))
- Malignant neoplasms (of course specific risk relations for each category: (Corrao et al., 2004))
- Diabetes mellitus (Baliunas et al., 2009)
- Epilepsy (Samokhvalov et al., 2010a)
- Hypertension and hypertensive heart disease (Taylor et al., 2009)

- Ischaemic heart disease (Roerecke and Rehm, 2010, Roerecke and Rehm, 2012b)
- Conduction disorders and other dysrhythmias (Samokhvalov et al., 2010b)
- Stroke (Patra et al., 2010)
- Pancreatitis (Irving et al., 2009)
- Pneumonia (Samokhvalov et al., 2010c)
- Injury (Taylor et al., 2010)

Outcomes (cause of death and years of life lost) data

The comprehensive and completely anonymized death statistic was obtained from the Swiss Federal Statistical Office for all years since 1997

(http://www.bfs.admin.ch/bfs/portal/en/index/infothek/erhebungen_quellen/blank/blank/cod/02.html),

including ICD-10 code of cause of death, sex, and age at death to calculate years of life lost. Years of life lost used life tables from the Swiss Federal Office of Statistics

(<http://www.bfs.admin.ch/bfs/portal/de/index/themen/01/06/blank/key/04/04.html>), detailing life expectancies

at age of death. No discounting was applied. The latest available death statistic obtainable from the Swiss Federal Statistical Office was for 2010, which was used as the best proxy for 2011, the year for which alcohol use data were available.

Population data

Distribution of population aged 15 years and above across age and strata was used to triangulate survey data with adult per capita consumption data. The population distribution was obtained from the Swiss Federal Statistical Office (<http://www.pxweb.bfs.admin.ch>).

2.2 Modelling the distribution of alcohol consumption

The distribution of average daily alcohol consumption was modelled using the methods of the CRA for alcohol (Lim et al., 2012), as detailed in publications of the CAMH group (Rehm et al., 2010b, Kehoe et al., 2012). There are two reasons for modelling alcohol consumption using drinking status prevalence survey estimates and *per capita* consumption (PCC) data (Rehm et al., 2007): 1) it enables comparisons of alcohol consumption and alcohol-related harms between different countries and populations (Rehm et al., 2004, Lachenmeier et al., 2009), and 2) triangulation corrects for the underestimation of alcohol consumption which is observed when comparing survey data to per capita consumption, which if left uncorrected results in an underestimation of the burden of disease attributable to alcohol.

For the purposes of modelling alcohol consumption, the total alcohol consumed by the population was set to 80% of total adult *per capita* alcohol consumption in order to account for alcohol produced and/or sold, but not consumed (Gmel and Rehm, 2004, Shield and Rehm, 2012) and to account for underestimation of alcohol consumption in observational alcohol epidemiology studies (Rehm et al., 2010a); these studies provide the underlying risk relations for the meta-analyses used in calculating the alcohol-attributable burden of disease (see above).

Basically, survey results are upshifted or downshifted to amount to 80% of adult *per capita* consumption; for Switzerland, all survey estimates were considerably lower than *the per capita* data, so they had to be upshifted. This upshifting is possible, as the population distribution of alcohol can be approximated well by a

two parameter gamma distribution, which is defined by a shape and a scale parameter, which in turn can be derived from its mean and standard deviation (Kehoe et al., 2012). The mean is obtained from a combination of adult *per capita* and survey data. The survey data is used to split the *per capita* into sex and age specific mean alcohol consumption values that can be used to derive the gamma distribution parameters. Analyzing a large number of alcohol surveys, Rehm and colleagues observed that the standard deviation (σ) of the alcohol consumption distribution of a given population can be predicted by sex from the mean (μ) as follows (Rehm et al., 2010b, Kehoe et al., 2012):

$$\sigma_{men} = 1.171 * \mu_{men}$$

$$\sigma_{women} = 1.258 * \mu_{women}$$

2.3 Calculating the number of alcohol-attributable deaths

The number of deaths for disease and injury categories that are not entirely attributable to alcohol consumption was calculated using the alcohol-attributable fraction methodology (Walter, 1976, Walter, 1980, Benichou, 2001). The alcohol-attributable fraction (AAF) is defined as the proportion of deaths that would not have occurred for a given time period if everyone were a lifetime abstainer. Details of this methodology are outlined below separate for different disease categories.

Diseases partly attributable to alcohol consumption (except ischaemic heart disease and HIV/AIDS)

Deaths from diseases and conditions that are in part attributable to alcohol consumption (except for ischaemic heart disease and HIV/AIDS) were calculated according to the average alcohol consumption risk model, where the risk of a disease or condition is estimated based on distribution of alcohol consumption, prevalence of current drinkers, former drinkers and lifetime abstainers, and the Relative Risk distribution (RR). The formula for these AAFs is given below:

$$AAF = \frac{P_{abs} + P_{former}RR_{former} + \int_{0+}^{150} P_{current}(x)RR_{current}(x)dx - 1}{P_{abs} + P_{former}RR_{former} + \int_{0+}^{150} P_{current}(x)RR_{current}(x)dx}$$

where P_{abs} represents lifetime abstainers, P_{former} is the prevalence of former drinkers, RR_{former} is the RR for former drinkers, $P_{current}$ is the prevalence of current drinkers who consume an average daily amount (x) of alcohol, and $RR_{current}$ is the RR given an average daily consumption of x .

Ischaemic heart disease attributable to alcohol consumption

The number of deaths of ischaemic heart disease that were attributable to alcohol consumption was calculated according to the methodology outlined below. The risk of ischaemic heart disease is impacted by both the average volume of alcohol consumption and the patterns of drinking (in form of heavy drinking or binge occasions), and thus data on level of average alcohol consumption and on heavy drinking occasions were used for estimating the number of ischaemic heart disease deaths attributable to alcohol consumption (Puddey et al., 1999, Rehm et al., 2003b). For modelling the number of deaths from ischaemic heart disease that were attributable to alcohol consumption, we used the age dependent relative risk function that resembles a J-shaped curve ((Roerecke and Rehm, 2012b); see also (Corrao et al., 2000) or (Ronksley et

al., 2011) for similar results) for all individuals who did not engage in episodic or chronic heavy drinking. For people with at least one heavy drinking occasion (defined as drinking occasions where men consume 5 standard drinks or more (the equivalent of consuming 60 grams of alcohol during one drinking occasion) and where women consume 4 standard drinks or more (equivalent of consuming 48 grams of alcohol during one drinking occasion)) per month, we assumed there was no cardio-protective effect (Roerecke and Rehm, 2010).

HIV/AIDs deaths attributable to alcohol consumption

The number of HIV/AIDS deaths attributable to alcohol consumption was calculated using methodology outlined by Gmel and colleagues (Gmel et al., 2011a). This method calculates the number of such deaths as a result of non-adherence to medication due to alcohol consumption by combining data on the number of deaths in the population due to HIV/AIDS, the prevalence of people who require Highly Active Anti-Retroviral Treatment (HAART) and who are also receiving this treatment (obtained from the 2006 Report on the Global AIDS Epidemic (UNAIDS, 2006)), the rate of deaths among those individuals who receive HAART and those who do not (Murphy et al., 2001), the rate of deaths for those who adhere to HAART and for those who do not (Lima et al., 2008), and the hazard of not adhering to HAART if you are a current drinker as compared to a lifetime abstainer (Hendershot et al., 2009).

Injuries attributable to alcohol consumption

Mortality from injuries attributable to alcohol consumption was estimated according to methodology outlined by Shield and colleagues (Shield et al., 2012a). This estimation method uses data on alcohol consumption during both normal drinking days and heavy (binge) drinking days. For modelling the number of deaths due to injuries attributable to alcohol consumption, we used data on the prevalence of current drinkers, the prevalence of binge drinkers, per capita consumption of alcohol, the frequency of binge drinking, the amount of alcohol consumed during binge drinking occasions, and alcohol metabolism data (Taylor et al., 2011) (metabolism data were used to calculate the period of time during a drinking occasion when a person was at risk for an injury). The risk relationship between alcohol consumption and injuries was obtained from the meta-analysis performed by Taylor and colleagues (Taylor et al., 2010).

The AAFs for intentional and unintentional injuries attributable to alcohol consumption were calculated as follows:

$$AAF = \frac{P_{abs} + P_{form} + P_{current(non-binge)}RR_{current(non-binge)} + P_{current(binge)}RR_{current(binge)} - 1}{P_{abs} + P_{form} + P_{current(non-binge)}RR_{current(non-binge)} + P_{current(binge)}RR_{current(binge)}}$$

where P_{abs} represents the prevalence of lifetime abstainers, P_{form} is the prevalence of former drinkers, and $P_{current(binge)}$ and $P_{current(non-binge)}$ are the prevalence of current drinkers who engage in binge drinking and the prevalence of current drinkers who do not engage in binge drinking, respectively. $P_{current(binge)}$ and $P_{current(non-binge)}$ were calculated as follows:

$$P_{current(non-binge)} = P_{drinkers} * (1 - P_{bingers} * BingeTimes)$$

$$P_{current(binge)} = P_{drinkers} * (P_{bingers} * BingeTimes)$$

The RRs for current drinkers who engage in binge drinking and for current drinkers who do not engage in binge drinking (as a function of their average consumption) were calculated separately as follows:

$$RR_{current(non-binge)} = P_{dayatrisk}(average) * (RR_{injury}(average) - 1) + 1$$

and

$$RR_{current(binge)} = P_{dayatrisk}(BingeAmount) * (RR_{injury}(BingeAmount) - 1) + 1$$

In the above formulae, $P_{dayatrisk}$ represents the proportion of a day at risk, and $RR_{current(non-binge)}$ and $RR_{current(binge)}$ are the relative risks for injury given an average amount of alcohol consumed when not bingeing and the relative risk for injury when bingeing respectively. $P_{bingers}$ is the proportion of bingers among the drinking population and $BingeTimes$ is the frequency (calculated as binge occasions per day) of bingeing among bingers. $P_{dayatrisk}$ is calculated based on the average rate at which alcohol is metabolized given the amount of alcohol used during a binge session (this was estimated as being 7 drinks on average for the male 5+ category and 6 drinks on average for the female 4+ category), thereby corresponding to the time during which the blood alcohol level is sufficiently elevated to increase the risk of injury.

The above-presented AAFs were determined based on RR estimates that were calculated using samples of emergency room patients and were calculated using alcohol RRs for morbidity from injury. To obtain the AAFs for injury mortality, the AAF for morbidity from non-motor vehicle accidents was multiplied by 9/4 and the AAF for morbidity from motor vehicle accidents was multiplied by 3/2. These multiplication factors were based on two studies that compared blood alcohol levels of emergency room patients, where the blood alcohol levels were obtained from coroners' reports of patients who died from an injury (Cherpitel, 1994, Cherpitel, 1996).

For women, a continuous RR function is only available for the morbidity of non-motor vehicle accidents. The morbidity AAF for motor vehicle accidents for women was calculated by multiplying the morbidity AAF for motor vehicle accidents for men by the product of the *per capita* consumption of alcohol for women divided by the *per capita* consumption of alcohol for men. This imputation method was performed since the RR function for motor vehicle accidents is considered valid for men only (Shield et al., 2012a). The mortality AAFs for both motor vehicle and non-motor vehicle accidents follow the methodology for men.

2.4 Calculating uncertainty

AAFs are complex based on many different indicators. Thus, we had to develop our own procedure for uncertainty (Gmel et al., 2011b). We followed a Monte Carlo type approach to estimate the variance by sampling the AAFs with randomly generated samples of its parameters (for a description of this method, see (Kroese et al., 2011)). The main variables of the AAF functions are the risk relations and the prevalence, each composed of their own coefficients and parameters. In order to estimate the variance of the AAFs, 100'000 sets of lowest level parameters are randomly generated according to their distributions (a lowest level parameter is the basic coefficient of parameter on which the relative risk functions and distributions depend). The AAF functions are then evaluated for each set of variables yielding 100'000 samples of each AAF. The variance of these samples reflects the true variance of the AAF as long as the sample size is large enough.

2.5 Age-standardization of rates

Rates were directly age-standardized (Rothman et al., 2008). to the age structure of the 2011 population of Switzerland. Given the relative short time interval and that the age-standardization was used to the same

population of Switzerland, this standardization method was sufficient and its results much easier to interpret than more complicated methods (Lee and Liaw, 1999).

2.6 Statistical software

All calculations to derive AAF were implemented using the statistical software package R version 2.11.1 (R. Development Core Team, 2011). The program and the program description is provided on a CD or can be obtained from the authors. The number of alcohol-attributable deaths and years of life lost were calculated using SPSS version 20.

3 Alcohol-attributable mortality in Switzerland in 2011

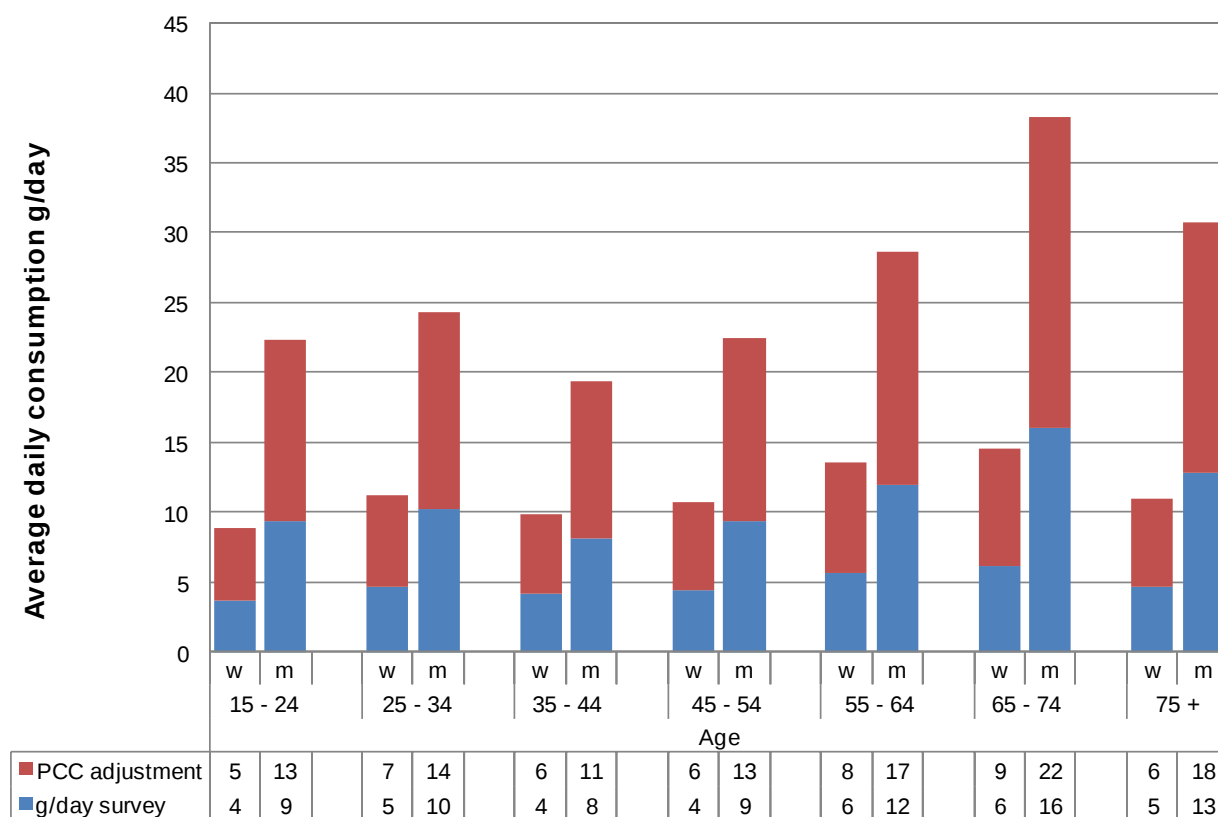
3.1 Alcohol consumption in 2011

Switzerland is part of Europe (the region of the world where the most alcohol is consumed). While there are differences within Europe, almost all European countries consume 50% (or more) more alcohol when compared to the global average (World Health Organization, 2011). In 2011 Switzerland had an adult *per capita* consumption of 10.5l of pure alcohol, of which 0.5l is estimated to be unrecorded consumption (the global average adult *per capita* consumption for 2010 is estimated to be 5.5l (Shield et al., 2013); the Swiss numbers were taken from the Swiss Alcohol Board and the GISAH – see above).

Overall, the majority of Swiss consumed alcohol during the last year, more than 90% of men, and about 85% of women (see Appendix Table A1.1).¹ The average consumption as indicated by survey data alone was about 10.6g pure alcohol per day for men 15 years and older, and 4.7g pure alcohol for women in this age group (including abstainers and former drinkers see Appendix Table A1.2 for alcohol users only). The age pattern is different from many English-speaking countries, as mean consumption peaked in the age group 65 – 74 years of age (see Appendix Table A1.2, and Figure 1). Otherwise, we see the well-known pattern that in all age groups, men consume more than women, which holds for almost any country in the world (World Health Organization, 2011).

¹ Please note that all numbers on consumption are based on the population. Thus, they do not represent the means as reported by the survey, but the means weighted by population size.

Figure 1: Average daily consumption of alcohol in g/day by sex and age including lifetime abstainers and former drinkers, adjusted for PCC – Switzerland 2011



Remark: The sum of the g/day as measured by surveys and per capita consumption (PCC) adjustment adds up to g/day adjusted for PCC. For a description of the PCC adjustment-method see section 2.2

Concerning binge drinking occasions, two measures were used. The prevalence of at least monthly binge drinking was 25.7% for men and 12.3% for women aged 15+ years, with a decreasing trend by age (for details see Appendix Table A1.3). Besides the importance of monthly binge prevalence for ischaemic heart disease, the annual frequency of bingeing has been used for estimation of AAFs for injuries. On average, male bingers had 41 bingeing days per year and women had 31 (for details see Appendix Table A1.4). Overall, frequency of bingeing was higher among men compared with women.

4 Alcohol-attributable mortality in 2011

Why did we restrict ourselves to age groups 15-74?

In Switzerland in 2011, we estimated that 3'344 people died and 661 deaths were prevented due to alcohol consumption, resulting in a net death toll of 2'683 (4.3% of the population mortality). In the following we will only report alcohol-attributable mortality for the age groups 15-74. The underlying reasons for this restriction are threefold:

- While cause of death information are inevitably biased (James et al., 1955, Shojania et al., 2003), this bias increases substantially for death certificates for people of older age (Harteloh et al., 2010), and especially for the oldest age groups (age 80 and above, see (Alpérovitch et al., 2009)).
- Second, there is not only bias, but systematic bias, with cardiovascular diseases and ischaemic heart disease being the most generally used and overused category (Alpérovitch et al., 2009, Lahti and Penttilä, 2003, James et al., 1955). Unfortunately, the beneficial effects of alcohol are concentrated in these categories, leading to a systematic overestimation of alcohol-attributable ischaemic heart disease deaths avoided but also caused (depending on drinking patterns and lifetime or former drinking rates) in older age categories.
- Third, the relative risks for alcohol-attributable causes tend to decrease with age (Klatsky and Udaltsova, 2007). As a result, the consequences of consumption, both detrimental and beneficial, tend to be exaggerated in the older age groups when age-unspecific relative risks from meta-analyses are used as is commonly the case (and none of the meta-analyses above had age-specific RR information). As indicated above, we tried to mitigate against this effect by using age-specific RR functions for ischaemic diseases.

In sum, we were only able to correct for one of three potential errors in estimating alcohol-attributable deaths of the older age groups, and thus will concentrate on age groups 15-74 as the main results. Of course, all results including the ones for the oldest age group are part of the Appendices. In addition, the exaggerating effect of cardiovascular disease in general, and particularly ischaemic heart disease, will be demonstrated in chapter comparing trends of alcohol-attributable mortality.

Alcohol-attributable mortality by sex and age

Overall, alcohol-attributable mortality in Switzerland in 2011 for 15-74 year olds amounted to 1'600 net deaths (95% C.I. 1'472 -1'728; see Appendix Table A6.1), with 1'768 deaths being detrimental and 168 death being avoided. For more details see Table 2 (for AAF, alcohol-attributable deaths and total deaths in 2011 see Appendix Tables A2.1 – A2.4).

Table 2: *Alcohol-attributable mortality in Switzerland for 2011 by sex, 15-74 year olds*

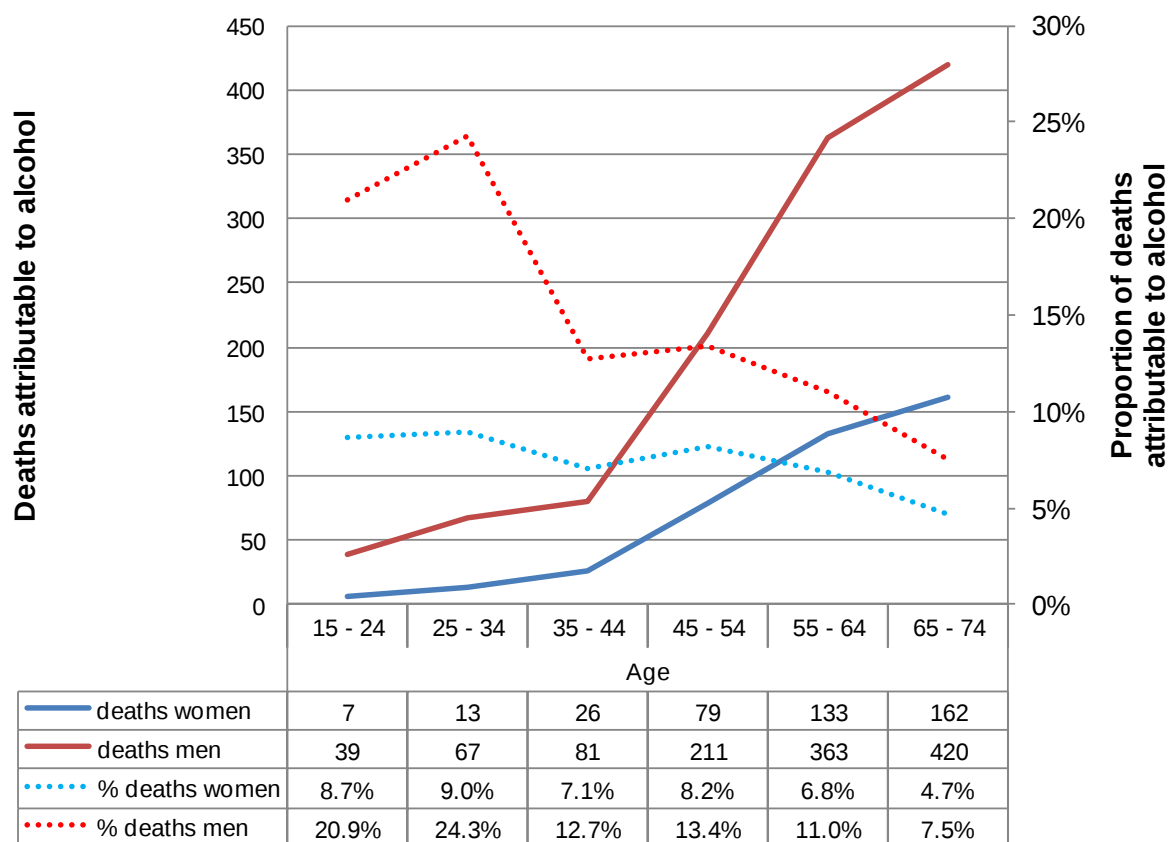
	Women	Men	Total
Alcohol-attributable beneficial effects (avoided deaths)	-42	-126	-168
Alcohol-attributable detrimental (deaths caused)	461	1'307	1'768
Alcohol-attributable net effect (deaths caused)	419	1'181	1'600
Total deaths in alcohol-attributable categories ¹	2'853	5'251	8'104
Average AAF for these categories	14.7%	22.5%	19.7%
Total deaths	6'936	11'550	18'486
Proportion of deaths attributable to alcohol	6.0%	10.2%	8.7%

Remark¹: Number of deaths fully or partly attributable to alcohol.

This means, that more than every 12th death in adults up to and including 74 years of age in Switzerland was caused by drinking alcohol, about every 10th death in men, and more than every 17th death for women. Alcohol consumption thus continues to be major risk factor for mortality in Switzerland.

Analysing these deaths further, the relative impact of alcohol on mortality is biggest in younger ages (see Figure 2), highest in the age group 25-35. Thus the absolute number of deaths and the proportion of alcohol-attributable deaths to overall deaths have trends in the opposite direction. Obviously, with age, alcohol-attributable deaths increase, which is mainly based on the fact that the death rates increase with age. However, the proportion of all deaths attributable to alcohol is highest in younger ages, again underlining the public health importance of alcohol. Alcohol-attributable deaths come earlier in life, on average at age 57.5 for men and age 59.3 for women. Thus, the average age for alcohol-attributable deaths is lower than the average age of death for the age group, which is 60.9 for men and is 61.5 years for women; i.e. more than 3 respectively 2 years higher. This average age of an alcohol-attributable death is also much younger than for most other risk factors, for instance tobacco (for the age structure of deaths attributable to different risk factors see (Lim et al., 2012)).

Figure 2: Deaths due to alcohol consumption by age group and sex for 15-74 year olds, for Switzerland 2011

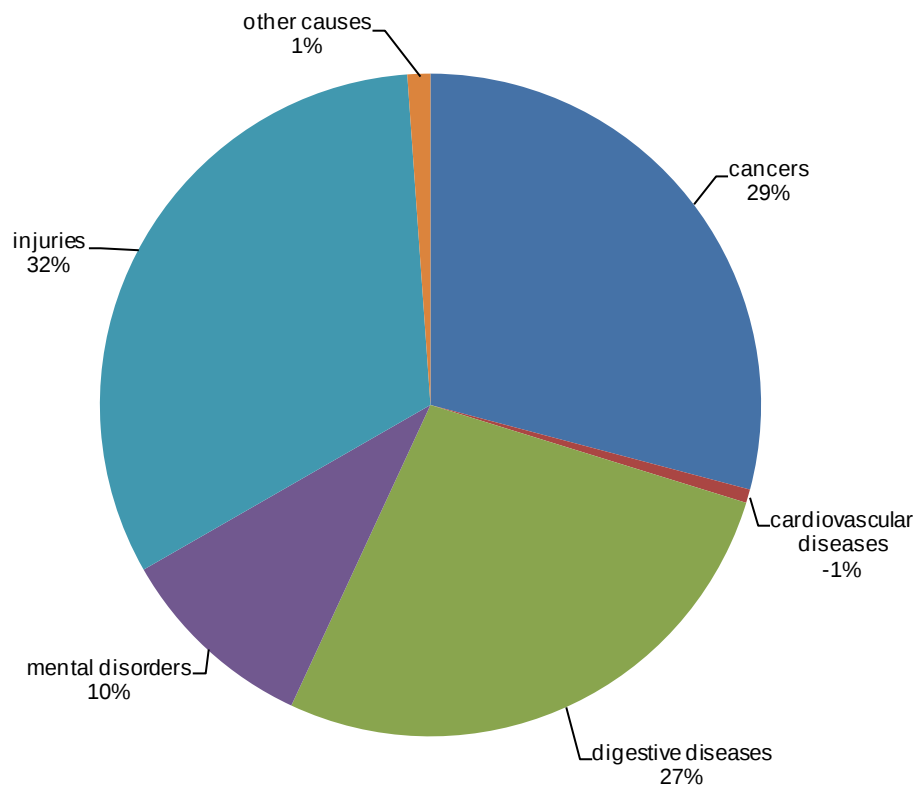


Remark: Dotted lines refer to the proportion of deaths attributable to alcohol within all deaths (for details see Appendix Tables A2.12 and A2.13)

Causes of death underlying alcohol-attributable deaths

Figure 3 gives a quick overview of the different broad causes of death (for details see Appendix Tables A2.11 and A2.17).

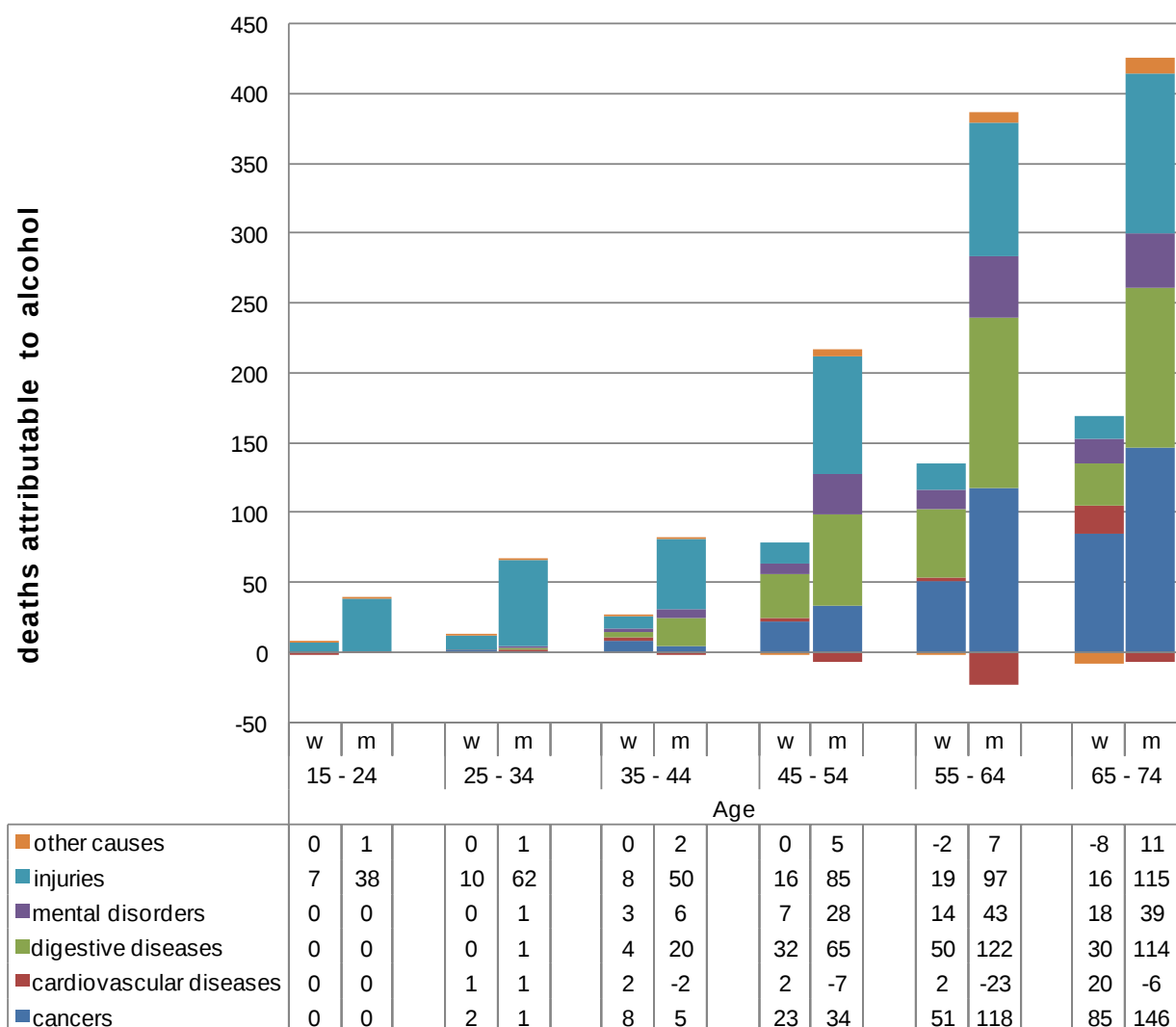
Figure 3 Alcohol-attributable deaths in 2011 by broad causes – 15-74-year-olds



Overall, in the age group of 15-74 year olds, injuries, cancers and digestive diseases make up around 90% of all deaths.

Figure 4 shows, that alcohol-attributable causes of death vary markedly by age groups.

Figure 4: Broad causes of alcohol-attributable causes of death by age and sex, 15-74 year olds for Switzerland, 2011



The Figure 4 displays net deaths, and thus masks the substantial impact of alcohol consumption on cardiovascular mortality in ages 45 to 74. The numbers for cardiovascular deaths in Figure 4 in the age categories 15-54, 55-64 and 65-74 are 3, -21 and 14, respectively, composed of 22, 28 and 81 deaths caused by alcohol consumption, and 25, 49 and 67 deaths avoided by alcohol, respectively. However, even these numbers underestimate both deaths caused and avoided, as they are calculated based on net deaths by disease category, and within several disease categories, there are detrimental and beneficial deaths cancelling out.

As indicated above, the impact of alcohol consumption on cardiovascular event is complex (for overviews see (Puddey et al., 1999, Roerecke and Rehm, 2012a)), and in Switzerland the detrimental effects on hypertension, haemorrhagic stroke, alcoholic cardiomyopathy, conduction disorders, other dysrhythmias, and partly ischaemic stroke cancel out the beneficial effects of regular and light to moderate drinking on ischaemic disease.

Another important aspect of Figure 4 is the change of composition in alcohol-attributable deaths. In the age groups 15-34, alcohol-attributable deaths are almost entirely composed of injury, the majority of which are

self-inflicted (see Appendix Table A2.4). Then the picture gradually shifts to include more digestive diseases (mainly liver cirrhosis) and later in lifetime cancers.

Looking at more fine-grained "single" top 3 causes across age, self-inflicted injuries, motor vehicle accidents (only among men) and other unintentional injuries are the main causes of death among the younger age groups (see Table 3). Breast cancers among women, liver disease (alcoholic liver cirrhosis), and oral cavity and pharynx cancers (among men) become more prominent among the older population segments.

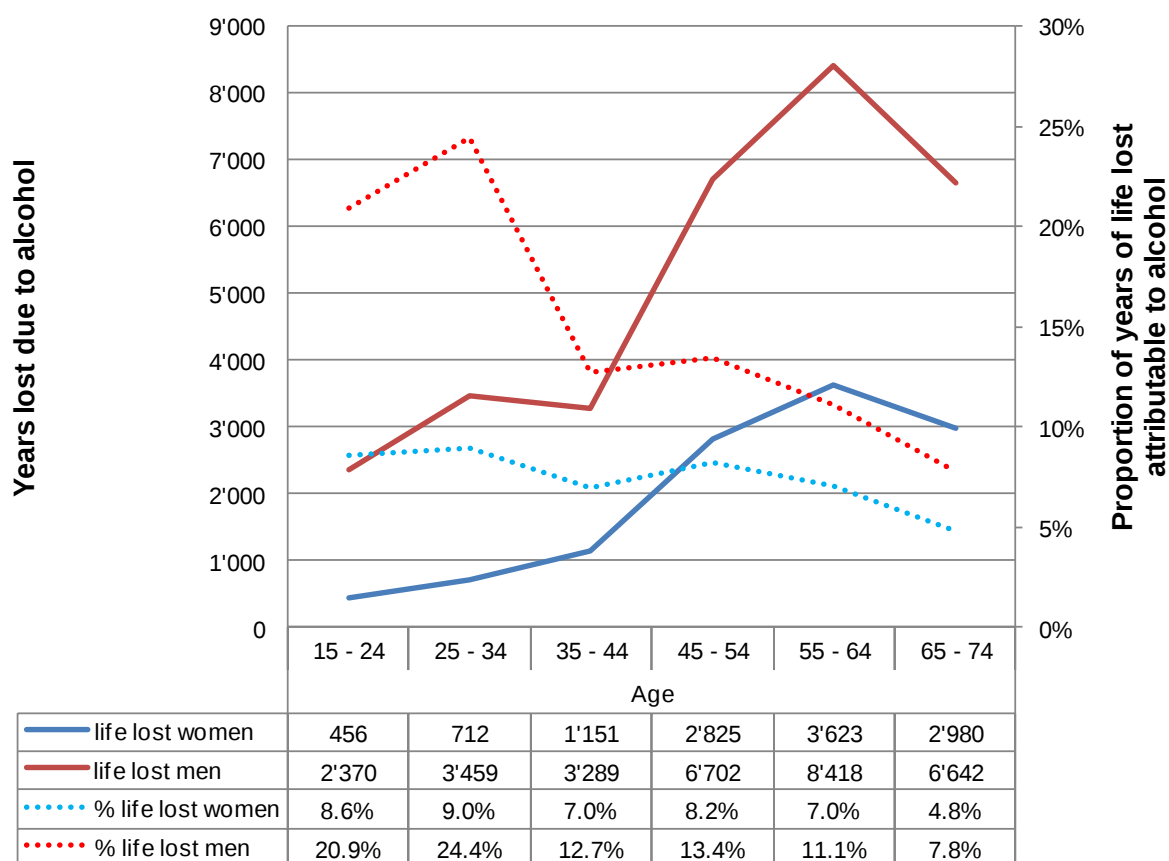
Table 3: Single most important causes of death by sex and age in Switzerland, 2011

Age	Women		Men	
	Condition	N	Condition	N
15-24	self inflicted injuries	2	self inflicted injuries	13
	other unintentional injuries	1	other unintentional injuries	12
	other 100% alcohol attributable	1	motor vehicle accidents	11
25-34	self inflicted injuries	5	self inflicted injuries	27
	other unintentional injuries	2	other unintentional injuries	18
	breast cancer	1	motor vehicle accidents	8
35-44	breast cancer	7	self inflicted injuries	23
	liver disease	4	liver disease	20
	self inflicted injuries	4	other unintentional injuries	12
45-54	liver disease	32	liver disease	64
	breast cancer	16	self inflicted injuries	39
	self inflicted injuries	8	mental disorder due to use of alcohol	28
55-64	liver disease	50	liver disease	120
	breast cancer	33	oral cavity and pharynx cancer	56
	mental disorder due to use of alcohol	14	self inflicted injuries	45
65-74	breast cancer	50	liver disease	110
	liver disease	29	self inflicted injuries	46
	mental disorder due to use of alcohol	18	oral cavity and pharynx cancer	43
total	liver disease	115	liver disease	315
	breast cancer	107	self inflicted injuries	193
	mental disorder due to use of alcohol	42	mental disorder due to use of alcohol	117

Alcohol-attributable years of life lost in 2011

Years of life lost (YLL) due to premature mortality are a time-based measure more relevant for public health than pure death counts (for summary measures of health see (Murray et al., 2000, Gmel and Rehm, 2006)), as most societies make special efforts to prevent premature deaths. Figure 5 shows number and proportion among all YLLs attributable to alcohol (for details see Appendix Table A2.5) .

Figure 5: *Alcohol-attributable years of life lost by age group and sex for 15-74 year olds, for Switzerland 2011*

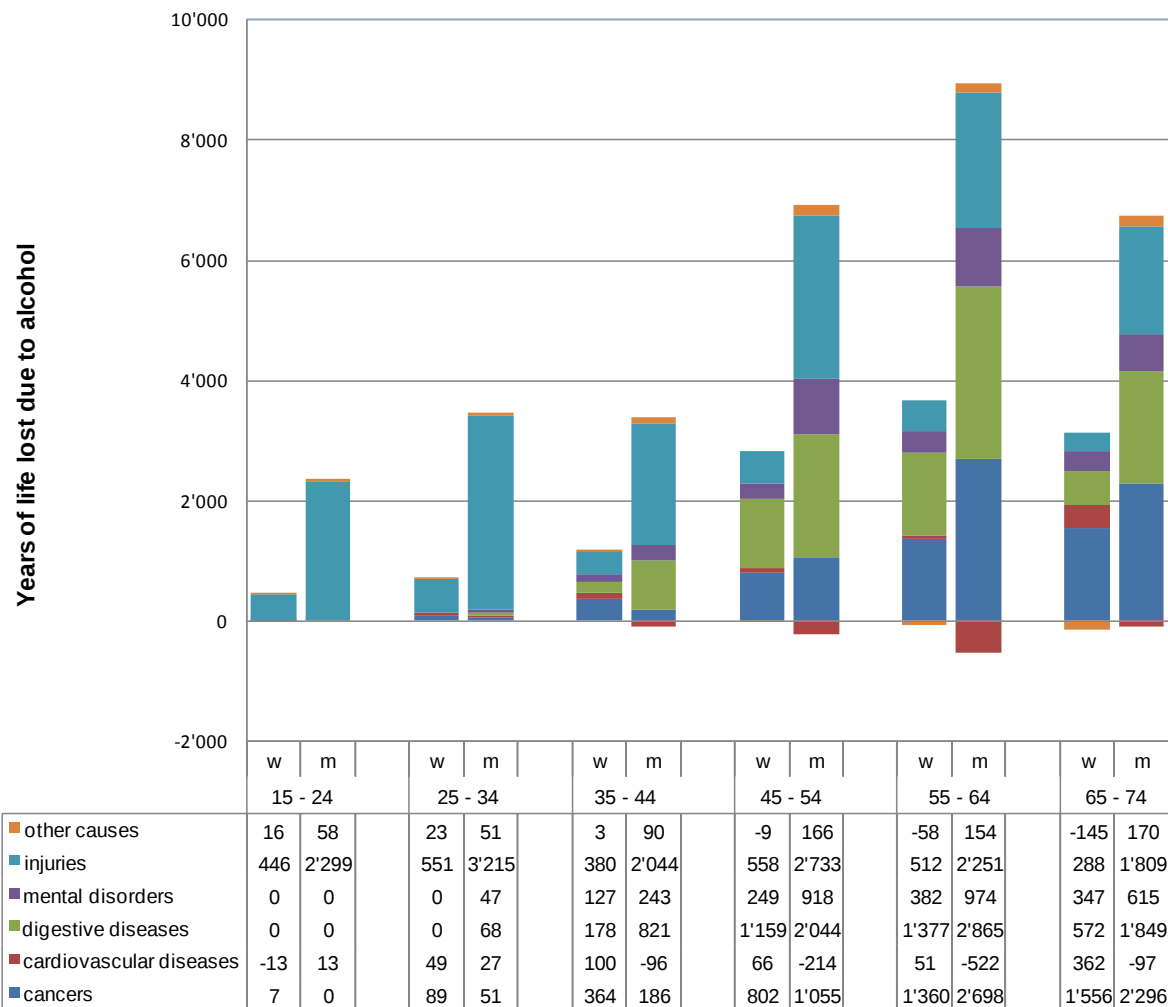


Remark: Dotted lines refer to the proportion YLL attributable to alcohol within all YLL (see Appendix Table A2.6 and A2.15/A2.16)

Similarly to mortality, the YLLs increase in total number for older age categories but their proportional weight, compared to all YLLs in a given age group decreases. The absolute number of YLLs decreases in the oldest age group for the obvious reason that the amount of years left to live in this category is inherently smaller than in the other ones.

The broad causes for alcohol-attributable YLLs are summarized in Figure 6 (for details see Appendix Tables A2.14 and A2.18)

Figure 6: Broad causes for YLLs by sex and age, 15-75 years old, for Switzerland 2011

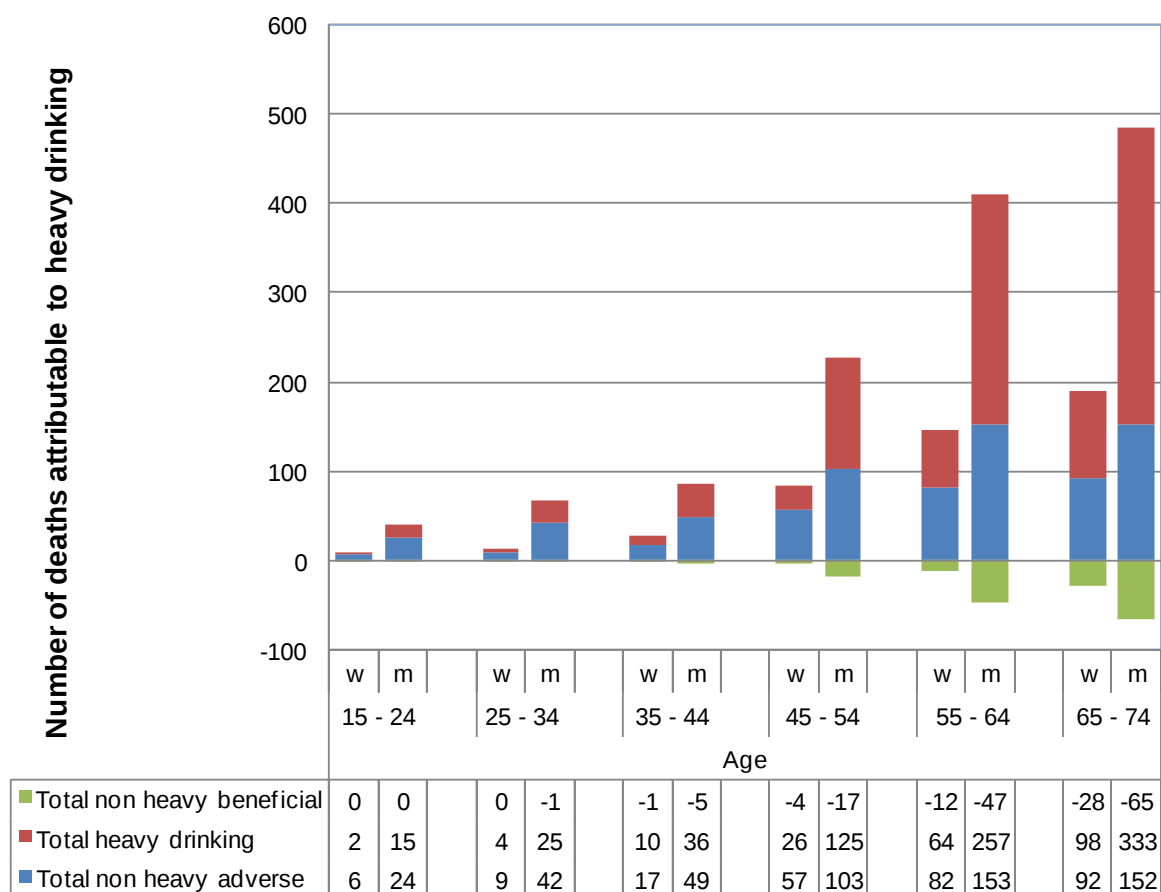


Not surprisingly, as both measures are related, a similar distribution over the lifespan as for deaths appears with injuries dominating early adulthood, and then liver cirrhosis (in digestive diseases) and finally cancers. Overall, 42,627 years (men: 30'880; women: 11'747) of life are lost by premature death until 74 years of age. Compared with number of alcohol-attributable deaths (Figure 4), differences in YLL across age groups are less pronounced logically, as in younger age groups each death accounts for more YLL than a death in older age groups.

4.1 The role of heavy drinking

Overall, 62% of the net deaths are attributable to heavy drinking as defined by 40 g/day or more for women and 60 g/day or more for men or 56% of all the detrimental deaths. The proportion was larger for men (67% respectively 60%) than for women (48% respectively 44%). In other words, the majority of alcohol-attributable deaths among 15-74 year olds in Switzerland had been caused by heavy drinking (see Figure 7, for details see Appendix Tables A2.7 to A2.10).

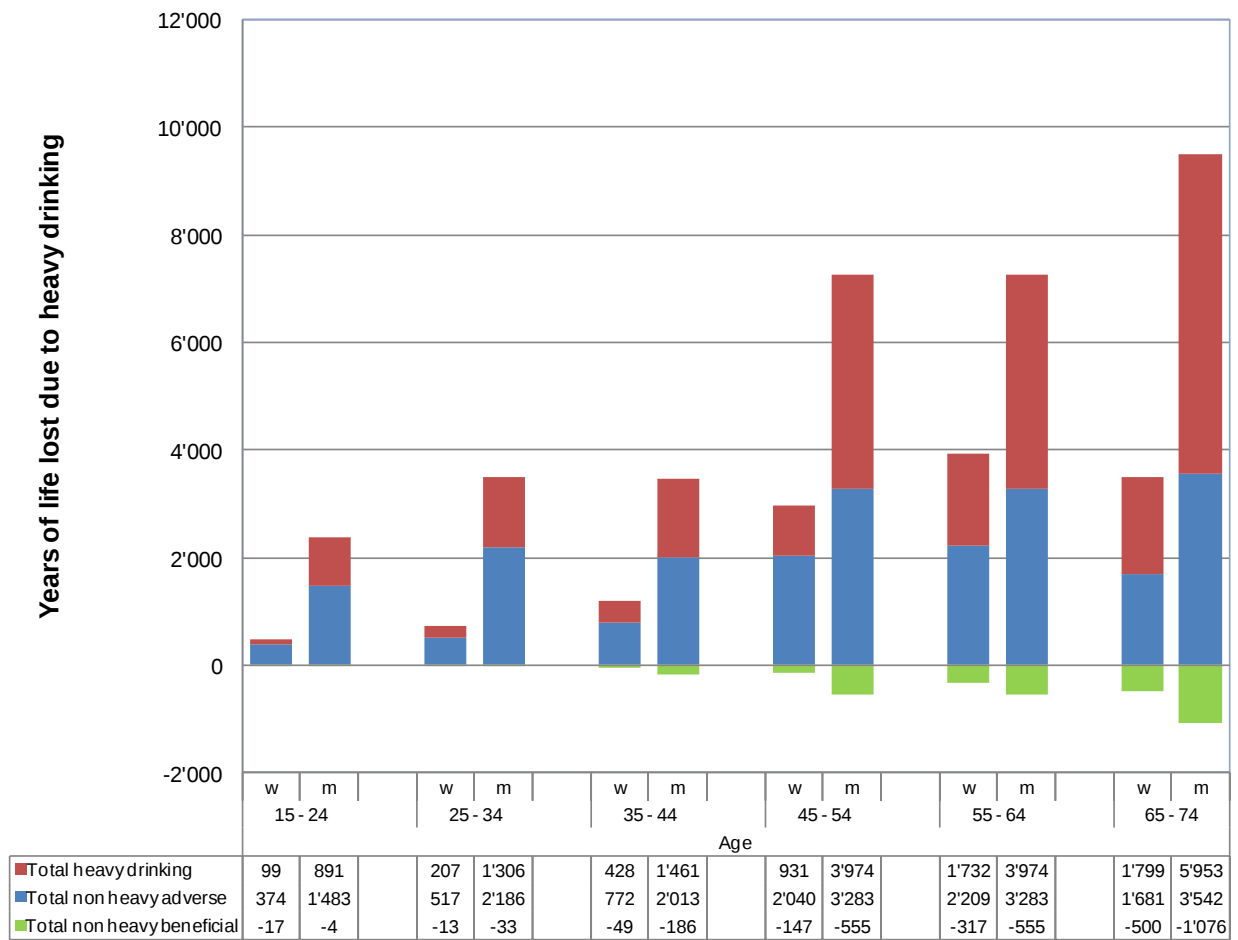
Figure 7: Deaths by heavy drinking



Remark: All beneficial effects had been caused by non-heavy drinking

This result is similar to the results from other European countries (Shield et al., 2013, Rehm et al., 2012). Looking at the YLL, we see even slightly lower proportions (see Figure 8), mainly due to two facts: a) the beneficial effects attributable to alcohol are relevant only in older ages, and thus related to less YLL, b) in younger ages, where each death provides more YLL, the impact of heavy drinking is less pronounced, as young drinkers are more often binge drinkers than chronic heavy drinkers.

Figure 8: Years of life lost by heavy drinking

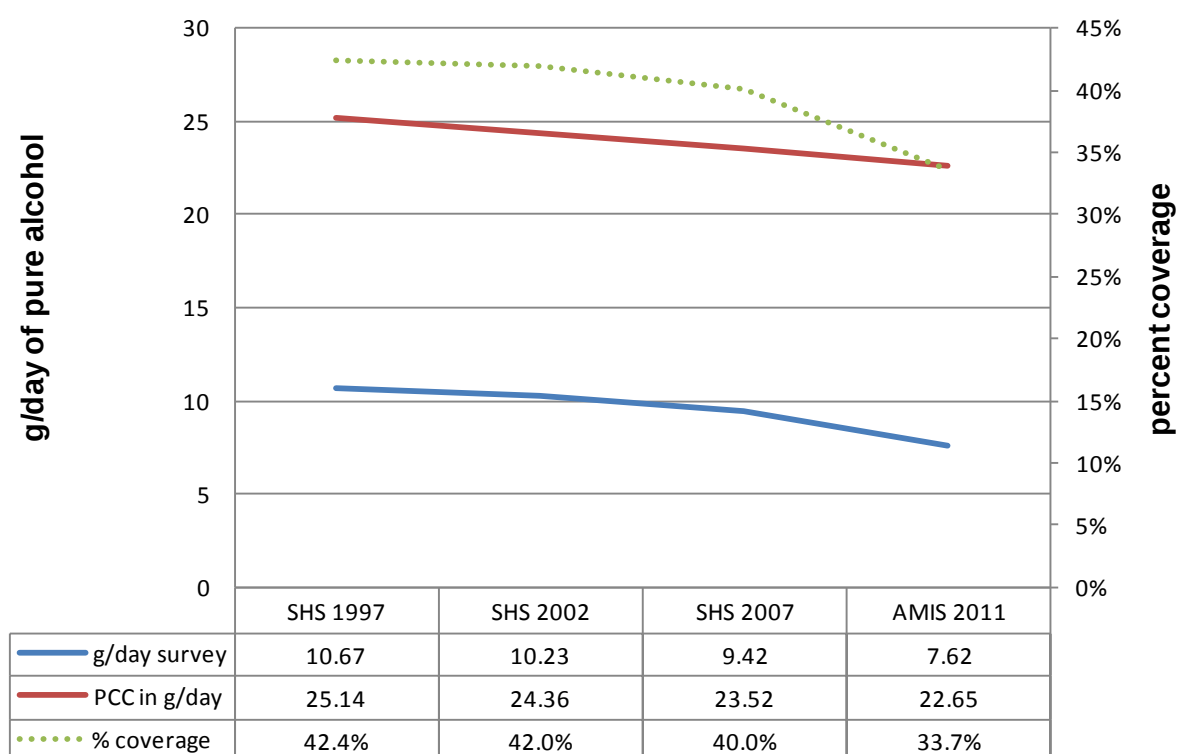


Remark: All beneficial effects had been caused by non-heavy drinking

5 Changes in drinking between 1997 and 2011

Alcohol consumption declined in the time period studied, both based on survey data and on sales data. Figure 9 gives an overview.

Figure 9: Average level of alcohol consumption in Switzerland as measured by survey and sales data



Interestingly, survey-based alcohol consumption went down by almost 30%, whereas *per capita* consumption went down by about 10% (see Figure 9). As a consequence, the coverage, defined as the proportion of *per capita* consumption which would be covered by aggregating the survey responses, went down as well. This seems to be a common phenomenon in high-income countries, where the coverage rates no longer seem to reach the averages as described some decades ago (Midanik, 1988, Midanik, 1982b). While this indicates that alcohol research may have to rethink their monitoring, it would lead too far to discuss this phenomenon further in this report. Interestingly, this does not necessarily mean that the people with highest consumption disproportionately underreport their consumption. There is even evidence of overreporting of consumption in people with alcohol use disorders (Midanik, 1989, Midanik, 1982a), so the overall lack of coverage may be more linked to failure to include populations with heavy drinking into the sampling (see also the discussion of (Rehm et al., 2007, Rehm et al., 2010b, Shield and Rehm, 2012)). Finally, it should be noted that we do not expect that 100% of the sold beverages will be consumed, as some alcohol is spilled or left in containers (this is estimated to be less than 10%, however).

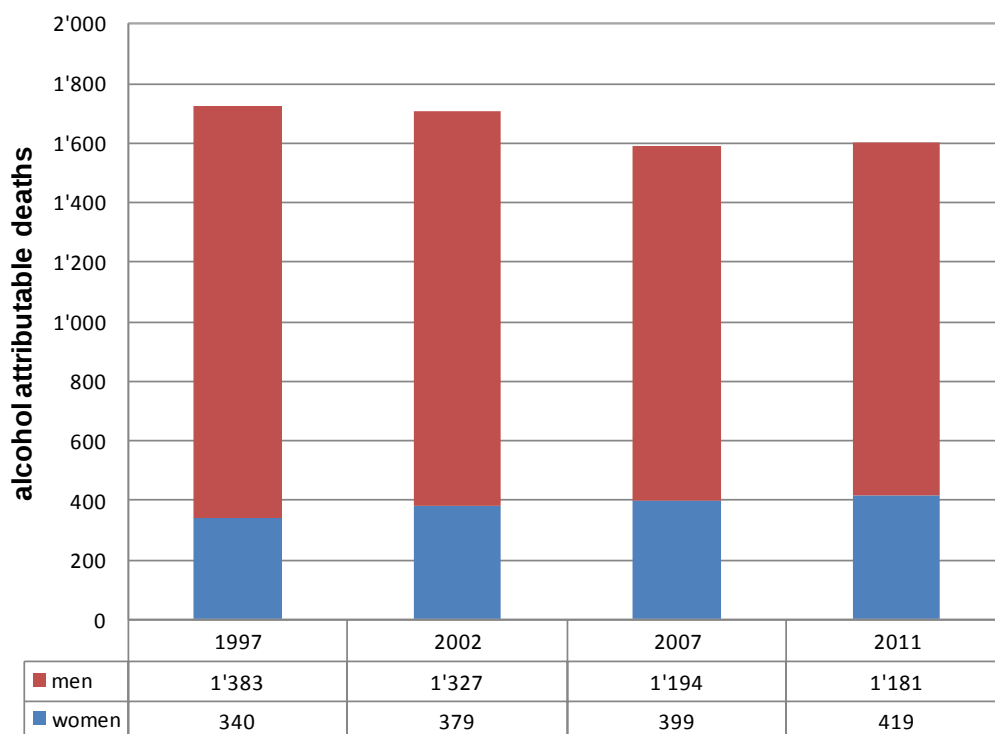
6 Trends in alcohol-attributable mortality 1997-2011

6.1 Overall trend for alcohol-attributable mortality

Overall, alcohol-attributable mortality is high in Switzerland with every 10th death in men and every 17th in adult women under age 75 being attributable to consumption of this substance (for European comparison see (Shield et al., 2013) and (Rehm et al., 2012); for global comparisons see (World Health Organization, 2009, Rehm et al., 2009a).

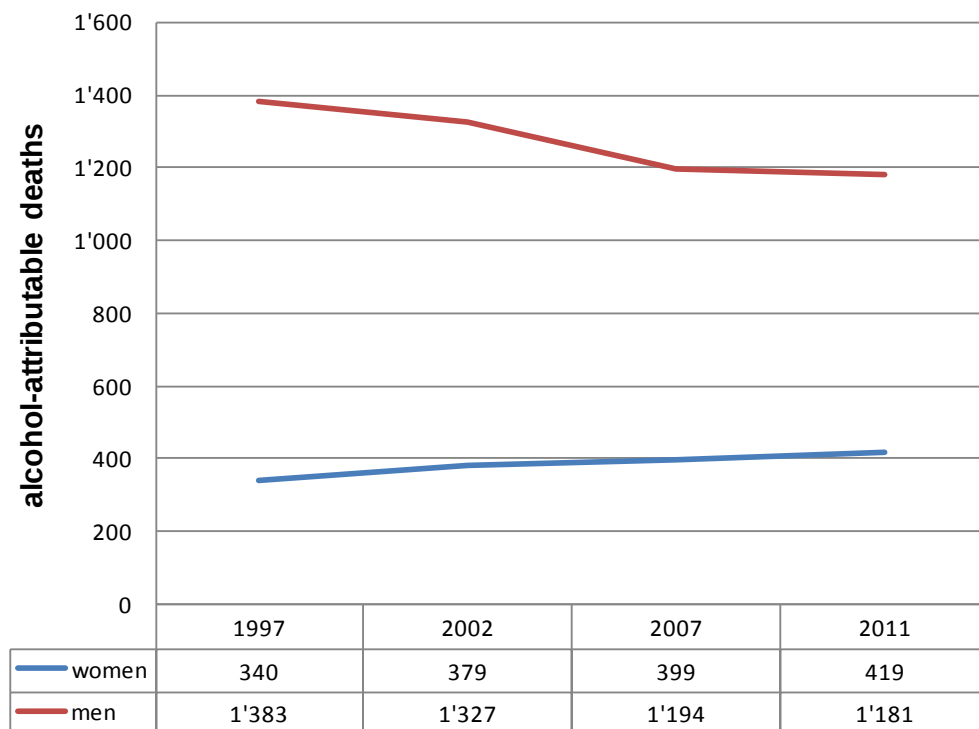
However, did alcohol-attributable mortality go up or down in the last 15 years? Monitoring should be able to answer such questions, and given the unique comparable set of exposure and mortality measures actually make the detection of such trend possible. A first look at the net numbers of alcohol-attributable mortality for the years examined indicates few changes (Figure 10, see details for 2007 Appendix Tables A3.1 to A3.11; for 2002 Appendix Tables A4.1 to A4.11; for 1997 Appendix Tables A5.1 to A5.11).

Figure 10: Absolute numbers of alcohol-attributable deaths by sex, 1997-2011, 15-74 years old



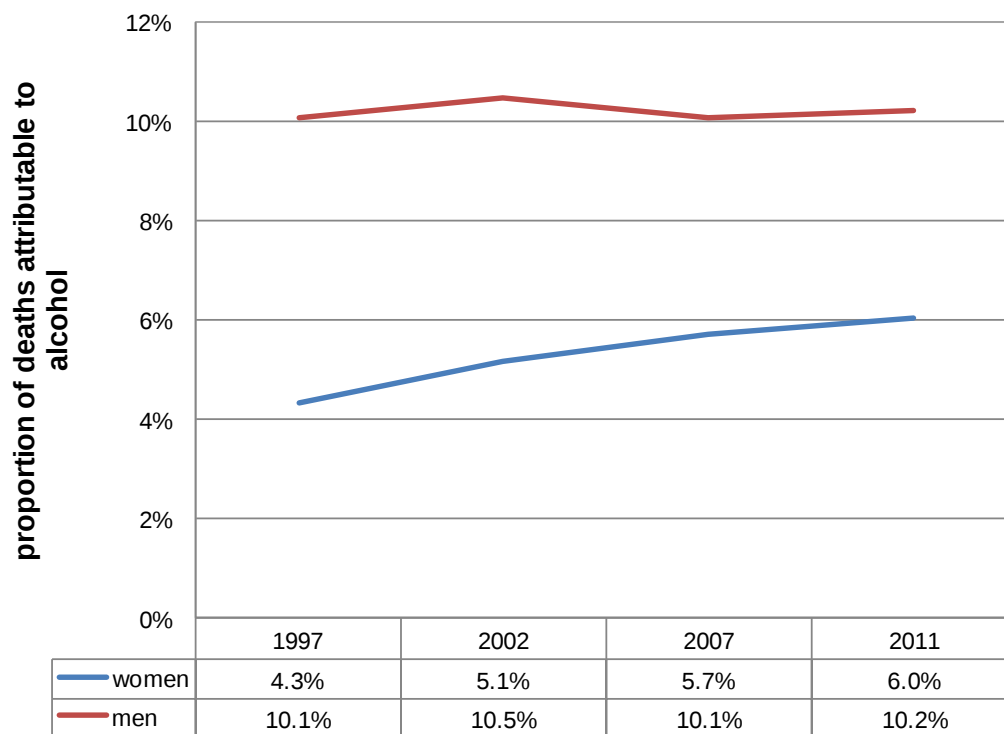
However, if the same data are displayed differently, there seems to be an indication that alcohol-attributable deaths in women go up and men go down, with men dominating the total picture (Figure 11). Both the total reduction in death (Chi-square=8.54, df=3, p=0.037) and the gender-specific differences (Chi-square=23.61, df=3, p < 0.001) are significant. Note there are similarly decreasing trends in life years lost (see Appendix Tables A2.5, A3.5, A4.5, A5.5).

Figure 11: Trends in absolute numbers of alcohol-attributable deaths by sex, 1997-2011



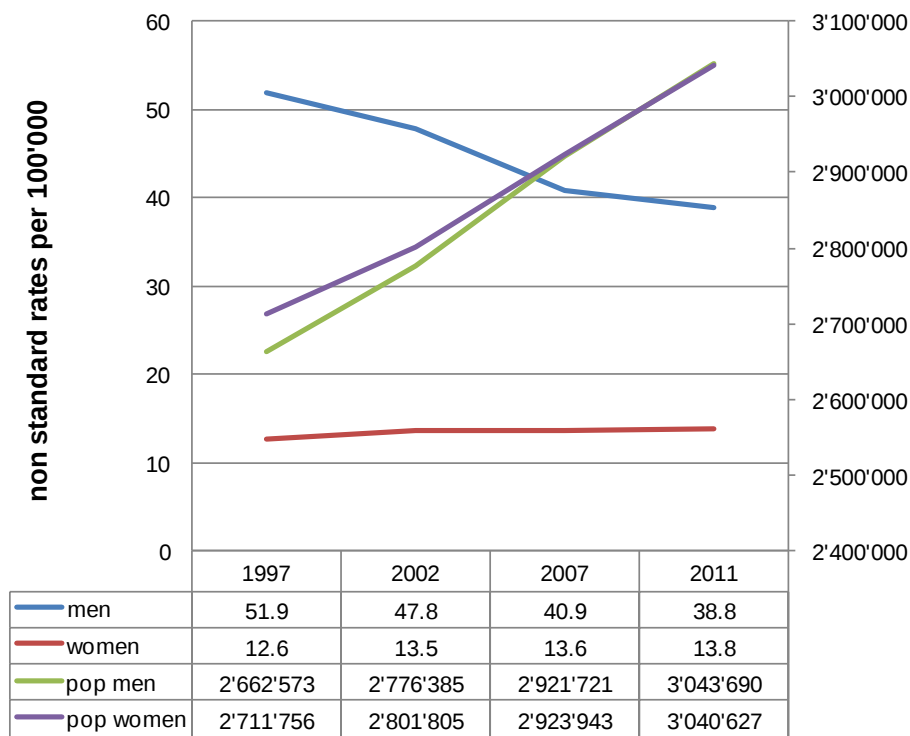
What does this mean? Absolute numbers of alcohol-attributable deaths depend on a variety of potential influences, such as the overall number of deaths in Switzerland and exposure of alcohol. The former can only meaningfully be interpreted, when we know the trends in mortality and the population size, plus the distribution of deaths over different age categories. As the next step, we look into the proportion of all deaths which is attributable to alcohol (see Figure 12), which controls for trends in overall mortality.

Figure 12: Trends in proportion of alcohol-attributable deaths among all deaths by sex, 1997-2011



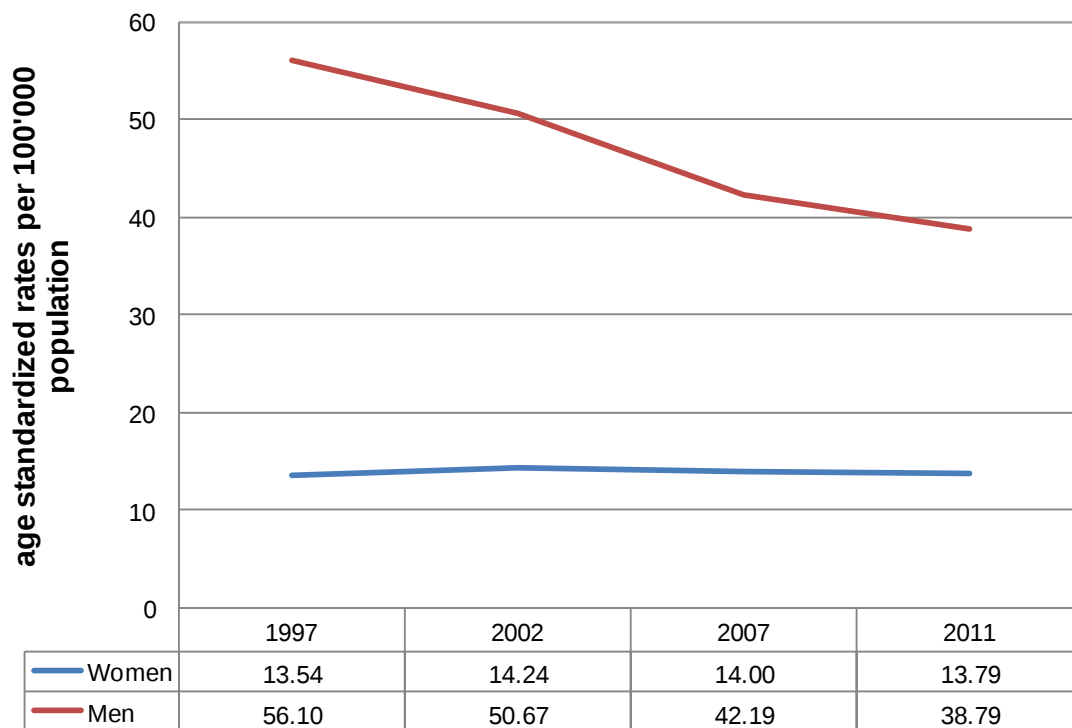
The proportion of all deaths is stable for men, but increases for women. However, this statistic still does not give us a clear view of the potential impact of trends in population size and death rates per population size. The effect can be seen in Figure 13. Clearly, there is a decrease in male alcohol-attributable mortality over time, whereas in women the rates seem to be more or less stable, maybe going up a little.

Figure 13: Trends in crude rates of alcohol-attributable deaths per 100'000 population by sex, 1997-2011



The final effect, which has to be controlled for are trends in population composition over time, i.e. taking into account the effect, that the Swiss population becomes older over time. This can be accounted for in age-standardized rates. To ease interpretation, we standardized all ages to the population distribution of 2011, i.e., we statistically adjusted the data as if alcohol-attributable deaths as well as overall deaths happened in populations with an age distribution of 2011. Figure 14 shows the result: comparable age-standardized rates of alcohol-attributable deaths in Switzerland for the population between 15 and 74 years of age.

Figure 14: Trends in age-standardized rates of alcohol-attributable deaths per 100'000 population by sex, 1997-2011



While we again see a clear trend, that alcohol-attributable death rates decline between 1997 and 2011 in men, the rates for women remain stable. In other words, the results from the crude rates are confirmed in general, but it becomes evident, that the slight upward trend for women using the crude standardization is only due to shifting age composition over the years.

How can these trends be interpreted? For men, the proportion of alcohol-attributable deaths among all deaths was pretty stable (see Figure 12 above), so the decline in rates over the past 15 years just reflect the overall decline in mortality rates and the associated increase in life expectancy. The trend for alcohol-attributable deaths did not behave any different than the trend for all deaths.

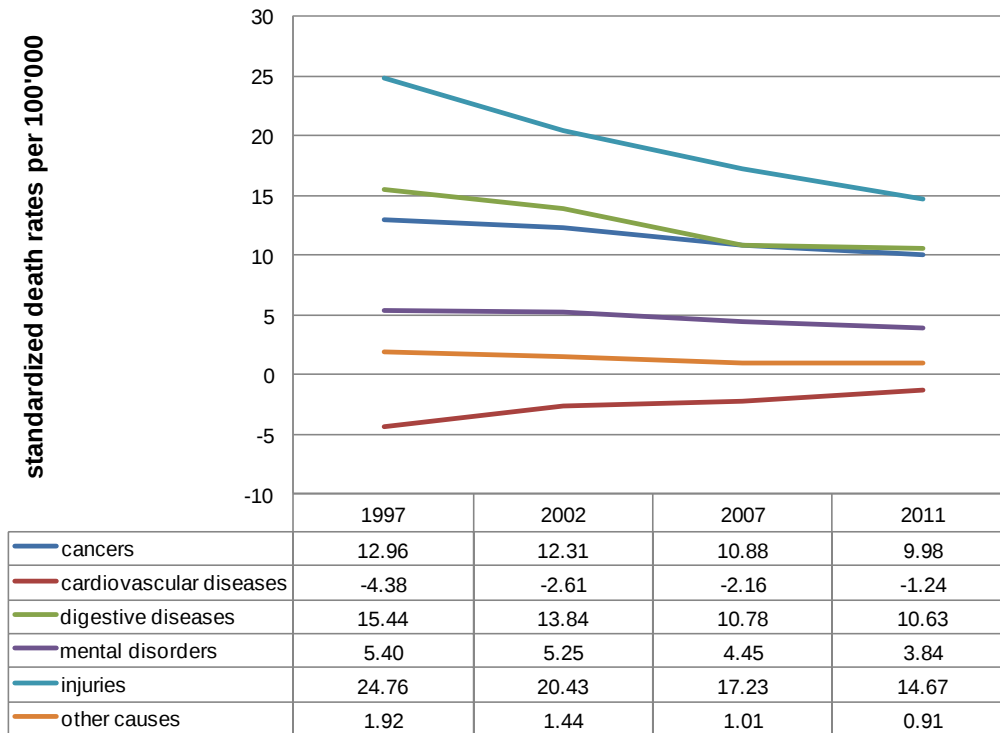
For women, however, while overall mortality rates decreased, the proportions of alcohol-attributable deaths increased, with the net result, that the population rates of alcohol-attributable deaths remained stable. In other words, the relative impact of alcohol on female mortality has grown in the past 15 years, and alcohol is slowing down the general trend of an increase in life expectancy in Swiss women.

6.2 Underlying changes in causes of death

In the following, we will examine trends in causes of death underlying the above-described declining trend in alcohol-attributable mortality. Figure 15 and 16 show the cause-specific development over time. Clearly, injuries contributed the most to the decrease in alcohol-attributable death rates among men with a 41% decline (the underlying absolute numbers also went down from 639 alcohol-attributable injury deaths in 1997 to 446 in 2011), more than digestive disease categories (-31%) or mental disorders (-29%). Cancers stayed relatively more stable (-23%), meaning that its rates basically developed very similar to the general decline of death rates in Switzerland. The one disease category, which developed counter to the general trend were

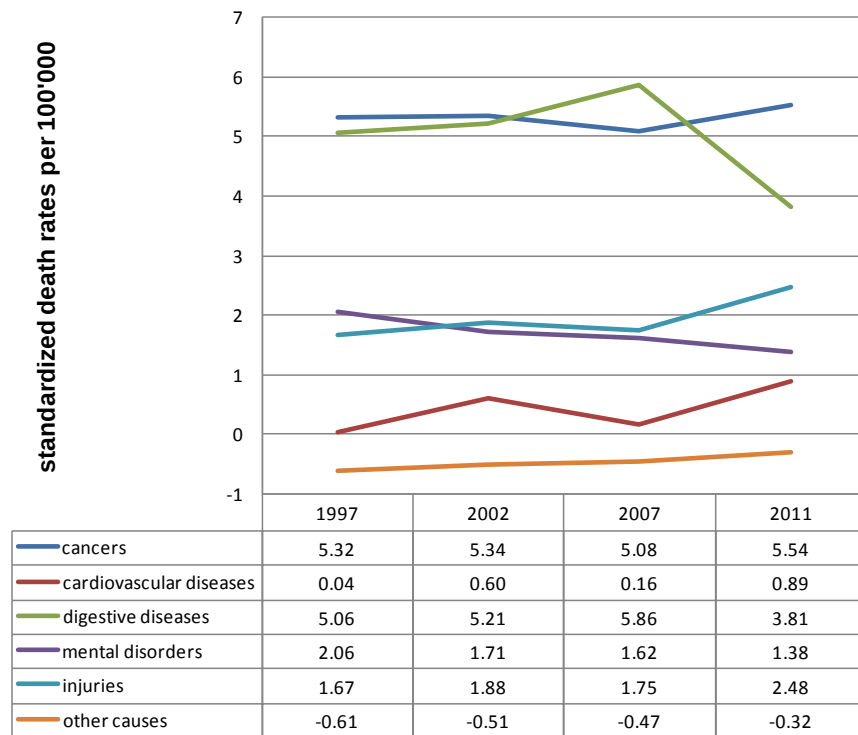
cardiovascular diseases. Over time, the overall protective effect by alcohol consumption on these disease categories diminished more and more.

Figure 15: Trends in alcohol-attributable death rates per 100'000 1997-2011, men 15-74



Among women alcohol-attributable mortality rates stayed more stable than among men. There were some changes between 2007 and 2011 (e.g. decrease in digestive disease mortality and increase in cardiovascular disease and injuries), but they canceled each other out and were based on much smaller absolute numbers of deaths.

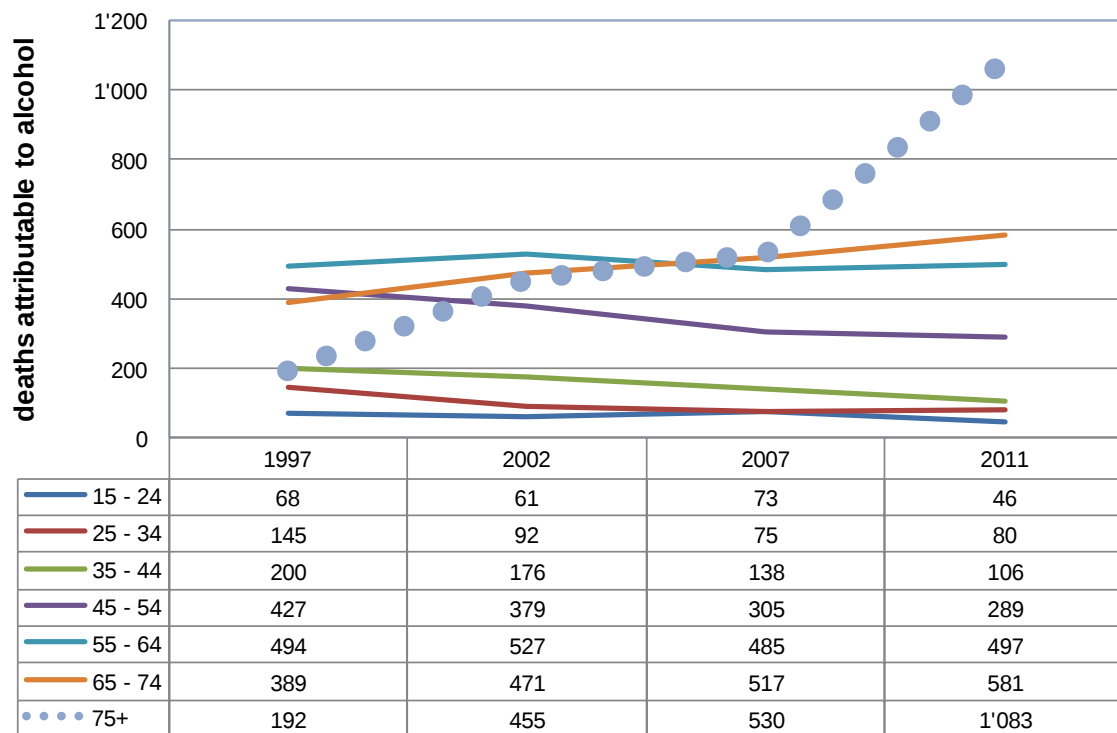
Figure 16: Trends in alcohol-attributable death rates per 100'000 1997-2011 women 15-74 years old



6.3 Excursion: What happens in the oldest age group?

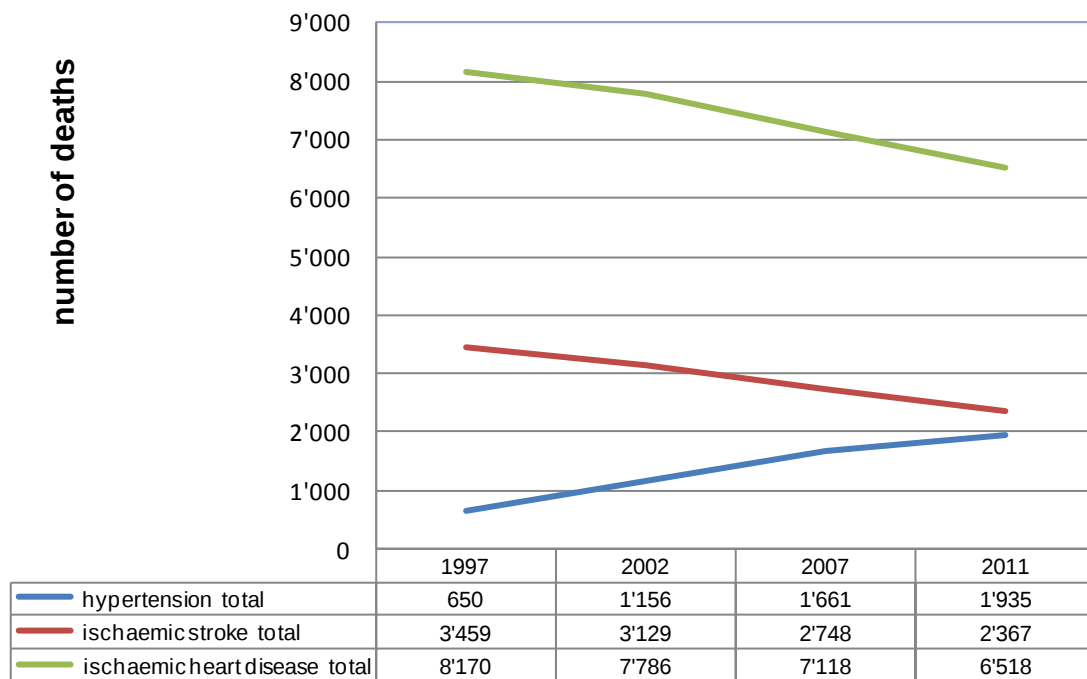
There is an anomaly in the data for the older age groups. Whereas all other age groups display relatively stable numbers of death over the time period examined, for ages 65+, and especially for the oldest age group, there is a trend to increase death (see Figure 17). This trend among the oldest would overshadow trends in the population of 15-74 year olds. There are around 900 more alcohol-attributable deaths between 1997 and 2011 stemming from this age group alone.

Figure 17: Trends in absolute numbers of alcohol-attributable deaths by age category 1997-2011



Behind this sudden increase in alcohol-attributable deaths in the oldest age groups seems to be mainly a shift in the distribution of the cardiovascular causes of death: hypertension had been increasing whereas ischaemic heart disease went down over the past 15 years in Switzerland (see Figure 18). Given that alcohol has almost exclusively detrimental effects on hypertension (Taylor et al., 2009), whereas the impact on ischaemic heart disease is mainly beneficial except for current binge drinkers and former drinkers ((Roerecke and Rehm, 2012b); for the detrimental impact of bingeing see (Roerecke and Rehm, 2010); for former drinkers see (Roerecke and Rehm, 2011), and for ischaemic stroke mixed (Patra et al., 2010)), this means on the one hand a reduction of the beneficial effect and on the other hand an increase of the detrimental effects of alcohol.

Figure 18: Trend in selected cardiovascular cause of death diagnoses in Switzerland for 75+ year olds, 1997-2011



At this point, we do not know, if we are facing a shift in cause of death attribution practices, or if this change is real, i.e., that hypertensive deaths have been de facto increasing whereas ischaemic causes of death have been decreasing in the older age categories. And if the latter is the case, whether the high alcohol consumption played a role here. Certainly, given the number of deaths affected, this would deserve more research using more sophisticated methods of determining the cause of death such as autopsies.

7 Discussion

Overall, we see a decline in alcohol-attributable mortality rates in men (15-74 years old) of about 30% and basically no change in women (the same age category of 15-74 years). In the following, both trends will be examined in detail.

7.1 Changes in alcohol-attributable mortality rates in men

As we have seen above, for men the absolute number of alcohol-attributable deaths decreased by about 15% to a much smaller degree (see Figure 11 above), and the proportion of alcohol-attributable death to all deaths remained constant (see Figure 12). How can this be explained?

The first element is the alcohol-consumption, which has decreased by 10% overall, and based on surveys more in men than in women. But this change cannot be the sole reason of the much more marked decline in the death rates. More importantly is the overall decrease in mortality rates in Switzerland, where the number of male deaths went down by 16% between 1997 and 2011, the population increased, resulting in a decrease of 34% in age-standardized rates of of total mortality. There may be two reasons here:

- Swiss men live healthier lives, i.e., they have reduced unhealthy behaviours and increased healthy lifestyles.
- Immigration leads to more comparatively healthy people coming in (healthy immigrants effect; for examples see (McDonald and Kennedy, 2004, Gushulak et al., 2011)); comparatively to the people of same age and sex of the non-immigrant population. As Switzerland has had relatively high rates of immigration in the time period under examination with about 1/5 of the Swiss resident population now being immigrants (De Coulon et al., 2011), the healthy immigrant effect is relevant. This is especially true, as immigrants to Switzerland have relatively high level of education and are well integrated into the labor market (De Coulon et al., 2011); for the importance of these factors and economic status in general see (Malmusi et al., 2010)). Finally, the effect would be even stronger, if a large portion of people migrated out again after a few years, which is only partly the case in Switzerland.

Contrary to the above factors, the medical system does not contribute that noticeably to decreasing the mortality rates and increasing life expectancy (for Europe see (Zatonski et al., 2008, Zatonski et al., 2011)).

At this point, we do not have enough information to further quantify the various impacts of the above factors on alcohol-attributable mortality rates in Swiss men, but we suspect, a smaller effect of consumption reduction got amplified by other factors not related to alcohol consumption.

7.2 Changes in alcohol-attributable mortality rates in women

For women, the situation is completely different. Clearly, alcohol-attributable mortality increased as proportion of total mortality (see Figure 12). Even after taking into consideration that the overall mortality rates for women decreased by 26% between 1997 and 2011 in Switzerland for women 15-74 years of age, the age adjusted rate of alcohol-attributable mortality for women remained stable. In other words, alcohol contributed to the markedly slower increase of female life expectancy over the past 14 years. And this effect of alcohol of course could be seen despite the same environmental conditions with respect to immigration or overall lifestyle changes.

7.3 Conclusions for prevention

The improvement in alcohol-attributable mortality in men over the past one and a half decade should not obscure the fact, that alcohol consumption in Switzerland still is a major risk factor for mortality. After all, one in 10 deaths in the age group 15-74 in men and one in 17 deaths in women between ages 15 and 74 are due to alcohol. As the proportion of alcohol-attributable deaths in women increase, specific prevention efforts may be required for this group. In addition, the overall toll of alcohol-attributable mortality requires preventive efforts (World Health Organization, 2010, Anderson et al., 2009, Babor et al., 2010).

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9 Appendix A

Table A1.1: *Prevalence rates of drinkers, former drinkers and lifetime abstainers by age, sex and survey year*

		Age							Total %
		15-24 %	25-34 %	35-44 %	45-54 %	55-64 %	65-74 %	75+ %	
AMIS 2011	Women								
	current drinker (past 12 months)	84.9	84.6	86.2	87.9	86.6	83.4	76.7	85.1
	former drinker	4.6	10.3	5.7	5.8	6.2	9.2	12.9	7.3
	lifetime abstainer	10.5	5.2	8.1	6.3	7.2	7.4	10.4	7.6
	Men								
	current drinker (past 12 months)	89.6	90.8	95.1	91.9	94.0	91.6	89.8	92.1
	former drinker	3.2	4.2	3.1	3.9	4.3	5.0	7.9	4.1
	lifetime abstainer	7.2	5.0	1.8	4.2	1.8	3.4	2.3	3.8
	Total								
	current drinker (past 12 months)	87.5	87.7	90.5	89.8	89.9	87.8	82.8	88.5
	former drinker	3.8	7.3	4.5	4.9	5.3	6.9	10.6	5.7
	lifetime abstainer	8.7	5.1	5.1	5.3	4.8	5.2	6.7	5.8
SHS 2007	Women								
	current drinker (past 12 months)	77.4	78.6	80.8	83.5	81.7	79.5	70.0	79.4
	former drinker	7.0	6.4	6.0	4.9	5.0	6.5	7.6	6.1
	lifetime abstainer	15.5	15.0	13.3	11.6	13.3	14.0	22.4	14.5
	Men								
	current drinker (past 12 months)	83.5	90.7	91.8	90.5	92.6	92.2	91.7	90.2
	former drinker	4.5	3.6	3.6	5.6	4.7	4.5	4.6	4.4
	lifetime abstainer	12.0	5.8	4.6	3.9	2.7	3.3	3.8	5.4
	Total								
	current drinker (past 12 months)	80.6	84.5	86.3	87.0	87.0	85.4	78.3	84.7
	former drinker	5.7	5.0	4.8	5.2	4.8	5.6	6.4	5.3
	lifetime abstainer	13.7	10.5	8.9	7.7	8.2	9.0	15.3	10.1
SHS 2002	Women								
	current drinker (past 12 months)	70.2	68.7	73.3	77.8	75.0	66.1	58.5	70.8
	former drinker	3.4	5.7	3.5	3.4	4.0	6.4	5.5	4.4
	lifetime abstainer	26.4	25.6	23.2	18.8	20.9	27.6	36.0	24.7
	Men								
	current drinker (past 12 months)	78.7	88.0	88.8	86.9	88.5	87.0	86.8	86.5
	former drinker	2.9	3.6	3.0	4.4	5.3	3.9	6.0	3.9
	lifetime abstainer	18.4	8.3	8.2	8.7	6.2	9.1	7.2	9.6
	Total								
	current drinker (past 12 months)	74.5	78.1	81.1	82.4	81.4	74.7	68.5	78.3
	former drinker	3.2	4.7	3.3	3.9	4.6	5.3	5.7	4.2
	lifetime abstainer	22.3	17.2	15.7	13.8	13.9	20.0	25.8	17.5
SHS 1997	Women								
	current drinker (past 12 months)	70.8	77.9	80.8	80.8	75.7	66.6	62.9	75.0
	former drinker	3.1	5.4	3.7	4.7	6.5	6.9	6.8	5.1
	lifetime abstainer	26.0	16.8	15.5	14.6	17.8	26.5	30.3	19.9
	Men								
	current drinker (past 12 months)	78.5	91.9	91.4	92.6	91.6	89.4	89.3	89.6
	former drinker	3.1	2.2	4.5	4.3	3.6	4.6	4.4	3.7
	lifetime abstainer	18.4	5.9	4.0	3.1	4.8	6.1	6.4	6.7
	Total								
	current drinker (past 12 months)	74.7	84.8	86.2	86.6	83.5	76.2	72.2	82.0
	former drinker	3.1	3.8	4.1	4.5	5.0	5.9	5.9	4.4
	lifetime	22.2	11.4	9.7	8.9	11.4	17.9	21.9	13.6

Table A1.2: Grams of pure alcohol per day among drinkers

	Age	g of pure alcohol per day			
		AMIS 2011	SHS 2007	SHS 2002	SHS 1997
Women	15-24	4.3400	7.2127	6.4749	5.6824
	25-34	5.5379	6.1651	6.4183	6.3739
	35-44	4.7544	6.0838	7.1891	7.5126
	45-54	5.0711	6.6450	8.0128	7.6814
	55-64	6.5478	7.2088	10.4015	8.0653
	65-74	7.3194	7.7566	9.2587	8.0272
	75+	5.9848	6.9104	9.2072	8.6749
	total	5.5089	6.7664	7.9759	7.3048
Men	15-24	10.4012	15.8049	14.7980	14.4041
	25-34	11.2087	13.7356	14.4707	16.6001
	35-44	8.4901	13.0494	17.1386	18.0187
	45-54	10.2046	14.4241	19.6543	20.6915
	55-64	12.7578	17.6666	19.9150	20.1202
	65-74	17.4802	18.4759	20.8796	20.0585
	75+	14.2911	15.6597	19.7753	17.7837
	total	11.5851	15.1971	17.6814	18.2074
Total	15-24	7.7449	11.7821	10.9279	10.2975
	25-34	8.4476	10.1623	10.8471	11.8635
	35-44	6.6396	9.7920	12.6506	13.1448
	45-54	7.5635	10.6695	14.1271	14.5821
	55-64	9.4525	12.5747	15.3130	14.5523
	65-74	12.9897	13.1475	14.8403	13.9715
	75+	10.1400	10.8180	13.9793	12.6502
	total	8.6166	11.1245	13.0707	13.0169

Table A1.3: Prevalence rates for binge drinking (5+ for men and 4+ for women)

		Age							Total %
		15-24 %	25-34 %	35-44 %	45-54 %	55-64 %	65-74 %	75+ %	
AMIS 2011	Women								
	abstinent	15.1	15.4	13.8	12.1	13.4	16.6	23.3	14.9
	non-binger	25.3	36.4	43.3	54.1	58.4	64.3	66.8	48.4
	less than once a month	36.1	31.5	30.8	22.5	18.2	13.1	8.0	24.4
	at least monthly	23.5	16.7	12.0	11.3	10.0	6.0	2.0	12.3
	Men								
	abstinent	10.4	9.2	4.9	8.1	6.0	8.4	10.2	7.9
	non-binger	21.1	20.2	30.3	42.5	46.1	53.8	63.2	36.8
	less than once a month	28.2	35.0	41.7	26.7	24.6	23.4	16.4	29.6
	at least monthly	40.3	35.6	23.2	22.8	23.3	14.5	10.2	25.7
SHS 2007	Women								
	abstinent	22.8	21.5	19.3	16.5	18.4	20.7	30.0	20.7
	non-binger	50.4	50.0	58.7	57.5	65.9	71.3	65.9	59.0
	less than once a month	14.9	18.5	16.1	19.1	12.1	6.1	3.1	13.9
	at least monthly	9.3	7.7	4.4	5.7	2.8	1.5	0.6	4.9
	Men								
	abstinent	16.5	9.3	8.2	9.5	7.4	7.9	8.3	9.8
	non-binger	35.3	38.4	47.9	50.8	54.6	66.4	80.8	49.7
	less than once a month	18.6	29.2	31.4	28.4	24.3	17.8	7.6	24.7
	at least monthly	29.6	23.1	12.4	11.3	13.7	8.0	3.3	15.9
SHS 2002	Women								
	abstinent	30.1	31.6	26.8	22.3	25.0	34.1	41.8	29.3
	non-binger	45.7	43.6	53.2	53.5	60.5	59.3	54.8	56.3
	less than once a month	13.5	16.2	14.6	17.7	11.1	5.1	2.5	9.9
	at least monthly	10.8	8.7	5.4	6.5	3.4	1.5	0.8	4.5
	Men								
	abstinent	21.4	12.1	11.3	13.3	11.6	13.2	13.7	13.7
	non-binger	33.2	37.2	46.3	48.7	52.1	62.6	76.1	51.3
	less than once a month	17.5	28.3	30.4	27.2	23.2	16.7	7.2	21.3
	at least monthly	27.9	22.4	12.0	10.8	13.1	7.5	3.1	13.7
SHS 1997	Women								
	abstinent	29.2	22.1	19.2	19.3	24.3	33.4	38.1	25.1
	non-binger	46.3	49.6	58.8	55.6	61.1	59.9	58.4	59.7
	less than once a month	13.6	18.4	16.1	18.4	11.2	5.2	2.7	10.4
	at least monthly	11.0	9.9	5.9	6.7	3.4	1.6	0.9	4.8
	Men								
	abstinent	21.5	8.1	8.6	7.4	8.4	10.7	10.9	10.5
	non-binger	33.2	38.9	47.7	52.0	54.1	64.4	78.5	53.3
	less than once a month	17.5	29.6	31.3	29.1	24.0	17.2	7.4	22.1
	at least monthly	27.8	23.4	12.4	11.6	13.5	7.7	3.2	14.2

Remark: for 2002 and 1997 bingeing prevalence were adapted from 2007 bingeing prevalence rates as only those for 8+ drinks or 5+ drinks were available for these years, which underestimates the frequency of binge drinking with 5+ or 4+ drinks.

Table A1.4: Days of binge drinking (5+ for men and 4+ for women) per year among annual bingers (at least once a year)

Age	2007		2011	
	Women	Men	Women	Men
15-24	29.79	51.04	29.72	42.64
25-34	24.65	30.04	29.70	42.73
35-44	24.93	19.72	23.73	25.40
45-54	19.53	25.75	30.06	40.90
55-64	20.40	34.21	44.55	47.83
65-74	18.55	32.82	47.01	62.26
75+	32.74	38.11	42.49	57.77
total	23.94	31.93	31.35	41.35

Remark: for 2002 and 1997 frequencies of 2007 among binge drinkers were used as only those for 8+ drinks or 5+ drinks were available for these years, which underestimates the frequency of binge drinking with 5+ or 4+ drinks.

Table A1.5: *Values of the continuous Relative Risk functions at 20/40/60/80 g/day*

	Women				Men			
	20g/day	40g/day	60g/day	80g/day	20g/day	40g/day	60g/day	80g/day
oral cavity and pharynx cancer	1.66	2.56	3.71	5.04	1.66	2.56	3.71	5.04
oesophagus cancer	1.30	1.69	2.19	2.82	1.30	1.69	2.19	2.82
colon cancer	1.04	1.08	1.12	1.16	1.04	1.08	1.12	1.16
rectal cancer	1.07	1.15	1.23	1.32	1.07	1.15	1.23	1.32
liver cancer	1.15	1.31	1.48	1.65	1.15	1.31	1.48	1.65
larynx cancer	1.33	1.76	2.31	3.00	1.33	1.76	2.31	3.00
breast cancer	1.19	1.42	1.69	2.02	1.00	1.00	1.00	1.00
epilepsy	1.29	1.64	2.10	2.69	1.29	1.64	2.10	2.69
lower respiratory infections	1.10	1.21	1.33	1.46	1.10	1.21	1.33	1.46
hemorrhagic stroke	1.34	1.80	2.41	3.23	1.15	1.32	1.51	1.74
tuberculosis	1.00	2.96	2.96	2.96	1.00	2.96	2.96	2.96
diabetes mellitus	0.60	0.74	1.18	1.18	0.87	0.91	1.00	1.16
hypertension	1.20	2.12	3.59	5.85	1.20	1.44	1.72	2.07
liver disease	4.31	7.85	12.46	18.39	1.76	3.07	5.37	9.39
conduction disorders and other dysrhythmias	1.12	1.26	1.41	1.58	1.12	1.26	1.41	1.58
pancreatitis	1.06	1.27	1.72	2.62	1.06	1.27	1.72	2.62
ischaemic stroke 15-34	0.66	0.90	1.39	2.28	0.90	1.03	1.19	1.37
ischaemic stroke 35-64	0.68	0.91	1.36	2.16	0.90	1.03	1.18	1.34
ischaemic stroke 65+	0.76	0.93	1.25	1.75	0.93	1.02	1.13	1.24
ischaemic heart disease 15-34	0.87	1.00	1.00	1.00	0.80	0.79	0.95	1.00
ischaemic heart disease 35-64	0.88	1.00	1.00	1.00	0.81	0.81	0.96	1.00
ischaemic heart disease 65+	0.91	1.00	1.00	1.00	0.86	0.85	0.97	1.00

Remark:

- 1) ischaemic heart disease and stroke RR's were calculated for 3 different age groups
- 2) for ischaemic heart disease, RR is set to 1 if g/day is >60 g/day for men or >48 g/day for women or bingeing frequency is once a month or more
- 3) RR for injuries are not shown because AAF's for Mortality are derived from the Morbidity AAF and because the calculation also accounts for bingeing
- 4) RR for HIV are not shown because the calculation does not use a dose dependent relative risk function

Table A2.1: Alcohol-attributable fractions, women 2011

Disease	Age													
	15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		75+	
	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD
oral cavity and pharynx cancer	23.57%	0.0248	30.11%	0.0281	26.01%	0.0264	27.85%	0.0278	33.78%	0.0311	36.40%	0.0312	30.64%	0.0278
oesophagus cancer	13.20%	0.0140	18.10%	0.0175	14.84%	0.0153	15.97%	0.0165	19.85%	0.0201	22.10%	0.0210	18.85%	0.0178
colon cancer	3.51%	0.0075	6.18%	0.0112	4.14%	0.0085	4.33%	0.0090	4.97%	0.0107	6.32%	0.0122	7.15%	0.0124
rectal cancer	4.83%	0.0065	7.78%	0.0100	5.59%	0.0074	5.91%	0.0078	6.97%	0.0091	8.42%	0.0105	8.70%	0.0113
liver cancer	7.78%	0.0129	11.28%	0.0163	8.81%	0.0142	9.38%	0.0152	11.22%	0.0183	12.83%	0.0194	12.07%	0.0167
larynx cancer	14.08%	0.0157	19.17%	0.0196	15.80%	0.0173	17.01%	0.0187	21.14%	0.0227	23.45%	0.0236	19.90%	0.0198
breast cancer	9.32%	0.0115	13.31%	0.0150	10.55%	0.0128	11.31%	0.0137	13.89%	0.0169	15.76%	0.0181	14.10%	0.0155
epilepsy	12.88%	0.0183	17.60%	0.0230	14.44%	0.0201	15.51%	0.0219	19.18%	0.0274	21.37%	0.0290	18.33%	0.0232
lower respiratory infections	5.89%	0.0173	9.08%	0.0221	6.77%	0.0193	7.19%	0.0208	8.60%	0.0261	10.14%	0.0281	9.96%	0.0221
hemorrhagic stroke	13.62%	0.0387	17.97%	0.0523	15.24%	0.0432	16.54%	0.0469	21.08%	0.0594	23.12%	0.0654	18.27%	0.0550
tuberculosis	7.38%	0.0195	13.38%	0.0261	9.28%	0.0226	10.57%	0.0248	15.31%	0.0319	18.20%	0.0340	14.84%	0.0264
diabetes mellitus	-23.13%	0.0382	-22.09%	0.0455	-23.54%	0.0413	-24.22%	0.0445	-23.27%	0.0528	-21.08%	0.0551	-18.83%	0.0429
hypertension	1.11%	0.0876	10.58%	0.1011	4.44%	0.0942	7.15%	0.0999	18.65%	0.1108	23.64%	0.1118	12.97%	0.0982
liver cirrhosis	64.38%	0.0413	71.74%	0.0427	67.09%	0.0412	68.72%	0.0404	73.29%	0.0380	75.70%	0.0377	72.61%	0.0453
ischaemic stroke	-25.71%	0.0677	-20.94%	0.0755	-23.28%	0.0655	-23.06%	0.0670	-17.35%	0.0649	-10.42%	0.0526	-11.42%	0.0595
pancreatitis	5.69%	0.0123	10.63%	0.0217	7.08%	0.0154	8.00%	0.0183	12.51%	0.0314	15.86%	0.0370	12.18%	0.0239
ischaemic heart diseases	-4.04%	0.0628	-1.46%	0.0738	-4.26%	0.0594	-4.46%	0.0630	-4.12%	0.0683	-0.49%	0.0692	1.59%	0.0646
conduction disorders and other dysrhythmias	6.73%	0.0110	10.11%	0.0146	7.69%	0.0122	8.19%	0.0131	9.88%	0.0162	11.49%	0.0175	10.96%	0.0152
motor vehicle accidents	13.91%	0.0184	14.72%	0.0181	8.83%	0.0106	10.64%	0.0097	12.22%	0.0107	14.53%	0.0187	9.97%	0.0098
non-motor vehicle accidents	16.13%	0.0311	16.14%	0.0326	11.69%	0.0219	12.24%	0.0219	15.76%	0.0296	14.49%	0.0382	8.81%	0.0202
HIV	5.67%	0.0139	5.65%	0.0139	5.73%	0.0141	5.82%	0.0143	5.75%	0.0141	5.59%	0.0138	5.25%	0.0130

Table A2.2: Alcohol-attributable fractions, men 2011

Disease	Age													
	15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		75+	
	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD
oral cavity and pharynx cancer	48.23%	0.0304	50.50%	0.0296	44.25%	0.0320	48.41%	0.0307	54.39%	0.0279	59.97%	0.0233	55.85%	0.0263
oesophagus cancer	30.30%	0.0246	32.36%	0.0247	26.88%	0.0242	30.46%	0.0248	35.98%	0.0246	41.76%	0.0220	37.64%	0.0235
colon cancer	4.82%	0.0161	5.33%	0.0172	4.33%	0.0144	4.99%	0.0162	5.96%	0.0195	7.10%	0.0229	6.81%	0.0202
rectal cancer	8.37%	0.0121	9.13%	0.0127	7.47%	0.0109	8.56%	0.0121	10.28%	0.0141	12.23%	0.0159	11.24%	0.0145
liver cancer	15.22%	0.0274	16.34%	0.0286	13.75%	0.0252	15.44%	0.0275	18.20%	0.0312	21.14%	0.0346	19.24%	0.0316
larynx cancer	32.20%	0.0283	34.32%	0.0283	28.65%	0.0276	32.37%	0.0283	38.05%	0.0285	43.91%	0.0265	39.71%	0.0276
breast cancer	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000
epilepsy	29.15%	0.0401	31.18%	0.0416	25.84%	0.0367	29.32%	0.0400	34.74%	0.0440	40.48%	0.0464	36.40%	0.0443
lower respiratory infections	11.23%	0.0445	12.19%	0.0474	10.00%	0.0396	11.42%	0.0446	13.73%	0.0531	16.32%	0.0620	14.78%	0.0543
hemorrhagic stroke	16.37%	0.0297	17.72%	0.0315	14.55%	0.0269	16.62%	0.0300	19.89%	0.0345	23.52%	0.0388	21.37%	0.0364
tuberculosis	27.15%	0.0460	29.26%	0.0469	23.10%	0.0440	27.26%	0.0461	32.89%	0.0487	38.27%	0.0495	34.52%	0.0481
diabetes mellitus	-5.35%	0.0670	-4.95%	0.0716	-6.42%	0.0614	-5.44%	0.0680	-4.62%	0.0810	-2.98%	0.0929	-3.20%	0.0819
hypertension	20.75%	0.0286	22.23%	0.0299	18.31%	0.0262	20.84%	0.2084	25.04%	0.0320	29.59%	0.0348	26.06%	0.0327
liver cirrhosis	65.24%	0.0537	68.13%	0.0514	58.73%	0.0566	65.15%	0.0537	72.74%	0.0469	79.26%	0.0381	74.84%	0.0439
ischaemic stroke	-2.07%	0.0327	-0.74%	0.0335	-4.75%	0.0325	-2.04%	0.0317	0.94%	0.0324	3.77%	0.0248	2.89%	0.0285
pancreatitis	28.21%	0.0627	31.69%	0.0661	21.12%	0.0529	28.00%	0.0626	37.79%	0.0711	48.73%	0.0737	41.43%	0.0719
ischaemic heart diseases	-6.90%	0.0482	-7.68%	0.0555	-9.78%	0.0408	-9.34%	0.0402	-9.73%	0.0426	-7.57%	0.0696	-6.93%	0.0697
conduction disorders and other dysrhythmias	13.49%	0.0255	14.59%	0.0269	11.99%	0.0228	13.68%	0.0255	16.43%	0.0299	19.50%	0.0339	17.57%	0.0305
motor vehicle accidents	34.13%	0.0624	36.11%	0.0612	21.65%	0.0359	26.10%	0.0327	29.97%	0.0364	35.64%	0.0634	24.46%	0.0331
non-motor vehicle accidents	28.50%	0.0331	36.50%	0.0749	20.09%	0.0408	25.49%	0.0505	34.53%	0.0685	51.01%	0.1038	36.76%	0.0766
HIV	5.90%	0.0145	5.96%	0.0146	6.16%	0.0150	6.01%	0.0147	6.11%	0.0149	6.00%	0.0147	5.91%	0.0145

Table A2.3: Alcohol-attributable deaths 2011

	Women by age								Men by age								Total by age							
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total
oral cavity and pharynx cancer	0.00	0.30	0.26	2.51	7.77	10.56	11.34	32.73	0.00	0.00	1.77	15.98	56.02	43.18	44.68	161.63	0.00	0.30	2.03	18.48	63.79	53.74	56.02	194.36
oesophagus cancer	0.00	0.00	0.15	0.96	3.37	5.08	10.36	19.93	0.00	0.32	1.08	7.92	28.07	40.09	48.56	126.03	0.00	0.32	1.22	8.88	31.44	45.17	58.92	145.96
colon cancer	0.04	0.06	0.37	0.87	2.74	7.58	22.18	33.83	0.00	0.21	0.26	1.65	5.72	13.13	22.95	43.92	0.04	0.27	0.63	2.51	8.46	20.71	45.13	77.76
rectal cancer	0.00	0.08	0.11	1.00	1.46	3.96	11.31	17.93	0.00	0.18	0.37	1.37	5.65	11.87	17.42	36.86	0.00	0.26	0.49	2.37	7.12	15.83	28.73	54.79
liver cancer	0.08	0.11	0.09	1.41	2.58	5.39	12.31	21.96	0.00	0.33	0.96	4.94	16.56	29.38	28.47	80.64	0.08	0.44	1.05	6.35	19.15	34.77	40.78	102.60
larynx cancer	0.00	0.00	0.16	0.00	0.42	2.11	0.40	3.09	0.00	0.00	0.29	1.94	5.71	8.78	10.72	27.44	0.00	0.00	0.44	1.94	6.13	10.89	11.12	30.53
breast cancer	0.00	1.06	6.97	15.83	32.78	50.28	90.55	197.48	-	-	-	-	-	-	-	-	0.00	1.06	6.97	15.83	32.78	50.28	90.55	197.48
epilepsy	0.26	0.18	0.29	0.62	0.96	1.71	4.58	8.59	0.87	0.94	0.26	2.05	1.74	3.24	5.46	14.56	1.13	1.11	0.55	2.67	2.70	4.95	10.04	23.15
lower respiratory infections	0.00	0.09	0.07	0.57	0.77	3.35	58.19	63.04	0.11	0.00	0.30	1.37	3.84	8.97	63.87	78.47	0.11	0.09	0.37	1.95	4.62	12.32	122.06	141.51
tuberculosis	0.00	0.00	0.00	0.00	0.31	0.36	1.34	2.01	0.00	0.00	0.46	0.55	0.00	0.38	3.11	4.50	0.00	0.00	0.46	0.55	0.31	0.75	4.44	6.50
HIV	0.00	0.17	0.17	0.06	0.06	0.11	0.00	0.57	0.00	0.12	0.37	0.78	0.37	0.12	0.18	1.93	0.00	0.29	0.54	0.84	0.42	0.23	0.18	2.50
diabetes mellitus	0.00	0.00	-0.47	-1.45	-4.42	-15.39	-107.35	-129.08	0.00	0.00	-0.19	-0.60	-2.12	-3.22	-11.89	-18.02	0.00	0.00	-0.66	-2.05	-6.55	-18.60	-119.24	-147.10
pancreatitis	0.00	0.00	0.00	0.00	0.00	0.95	3.65	4.60	0.00	0.32	0.21	1.40	2.27	4.39	6.63	15.21	0.00	0.32	0.21	1.40	2.27	5.34	10.28	19.81
liver disease	0.00	0.00	4.00	32.00	50.00	29.00	38.00	153.00	0.00	1.00	20.00	64.00	120.00	110.00	77.00	392.00	0.00	1.00	24.00	96.00	170.00	139.00	115.00	545.00
hypertension	0.00	0.00	0.00	0.21	0.75	10.17	177.44	188.57	0.00	0.00	0.00	0.83	4.51	13.61	147.74	166.69	0.00	0.00	0.00	1.05	5.25	23.77	325.18	355.26
hemorrhagic stroke	0.00	0.90	0.76	3.80	7.17	16.41	53.71	82.76	0.00	0.89	0.58	3.82	7.16	16.70	48.52	77.66	0.00	1.78	1.34	7.63	14.33	33.11	102.22	160.42
ischaemic stroke	-0.26	-0.21	-0.23	-0.92	-3.47	-8.64	-169.84	-183.57	0.00	-0.01	0.00	-0.31	0.35	4.68	25.40	30.11	-0.26	-0.22	-0.23	-1.23	-3.12	-3.97	-144.44	-153.46
ischaemic heart disease	0.00	0.00	-0.38	-1.52	-3.38	-1.29	56.97	50.39	-0.07	-0.61	-4.40	-15.97	-42.14	-56.64	-204.01	-323.84	-0.07	-0.61	-4.79	-17.48	-45.52	-57.93	-147.04	-273.45
conduction disorders and other dysrhythmias	0.07	0.20	0.23	0.25	0.69	2.76	43.20	47.40	0.27	0.29	0.48	2.05	2.96	9.17	41.46	56.68	0.34	0.49	0.71	2.30	3.65	11.92	84.66	104.07
motor vehicle accidents	0.83	0.88	0.44	0.96	1.59	1.60	1.60	7.90	10.58	8.31	7.79	7.05	8.09	7.13	8.07	57.01	11.41	9.19	8.23	8.00	9.68	8.73	9.67	64.91
falls	0.81	0.65	0.23	0.61	1.89	5.21	69.28	78.68	1.99	3.65	2.21	6.37	20.38	37.24	172.75	244.59	2.80	4.30	2.44	6.99	22.27	42.45	242.03	323.28
other unintentional injuries	1.29	2.10	2.10	3.06	4.41	3.77	7.49	24.22	11.68	18.25	12.26	22.69	19.34	22.96	38.96	146.13	12.98	20.35	14.36	25.75	23.75	26.72	46.45	170.36
self inflicted injuries	2.42	5.17	4.09	8.32	9.30	5.36	3.17	37.83	13.39	27.01	22.70	39.26	44.90	45.91	41.90	235.07	15.81	32.17	26.80	47.58	54.19	51.27	45.07	272.90
assault	0.48	0.16	0.35	0.61	0.47	0.29	0.18	2.55	0.28	1.09	0.80	1.53	1.04	0.51	0.00	5.26	0.77	1.26	1.15	2.14	1.51	0.80	0.18	7.81
other intentional	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mental disorder due to use of alcohol	0.00	0.00	3.00	7.00	14.00	18.00	8.00	50.00	0.00	1.00	6.00	28.00	43.00	39.00	29.00	146.00	0.00	1.00	9.00	35.00	57.00	57.00	37.00	196.00
other 100% alcohol attributable	1.00	1.00	3.00	2.00	1.00	3.00	2.00	13.00	0.00	4.00	6.00	12.00	10.00	9.00	6.00	47.00	1.00	5.00	9.00	14.00	11.00	12.00	8.00	60.00
total beneficial	-0.26	-0.21	-1.09	-3.89	-11.27	-25.33	-277.19	-319.23	-0.07	-0.62	-4.59	-16.87	-44.27	-59.85	-215.90	-342.17	-0.33	-0.83	-5.68	-20.76	-55.54	-85.18	-493.08	-661.40
total adverse	7.27	13.11	26.85	82.66	144.49	187.01	687.24	1'148.64	39.19	67.91	85.16	227.55	407.66	479.42	888.84	2'195.73	46.47	81.01	112.00	310.21	552.15	666.44	1'576.09	3'344.36
total net	7.02	12.90	25.76	78.77	133.22	161.69	410.06	829.41	39.13	67.28	80.56	210.67	363.39	419.57	672.95	1'853.55	46.14	80.18	106.32	289.44	496.61	581.26	1'083.01	2'682.96

Table A2.4: Number of all deaths in 2011, for alcohol related categories and total deaths across all categories

	Women by age								Men by age								Total by age								Total
	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	
oral cavity and pharynx cancer	0	1	1	9	23	29	37	100	0	0	4	33	103	72	80	292	0	1	5	42	126	101	117		392
oesophagus cancer	0	0	1	6	17	23	55	102	0	1	4	26	78	96	129	334	0	1	5	32	95	119	184		436
colon cancer	1	1	9	20	55	120	310	516	0	4	6	33	96	185	337	661	1	5	15	53	151	305	647		1'177
rectal cancer	0	1	2	17	21	47	130	218	0	2	5	16	55	97	155	330	0	3	7	33	76	144	285		548
liver cancer	1	1	1	15	23	42	102	185	0	2	7	32	91	139	148	419	1	3	8	47	114	181	250		604
larynx cancer	0	0	1	0	2	9	2	14	0	0	1	6	15	20	27	69	0	0	2	6	17	29	29		83
breast cancer	0	8	66	140	236	319	642	1'411	0	0	1	1	0	2	6	10	0	8	67	141	236	321	648		1'421
epilepsy	2	1	2	4	5	8	25	47	3	3	1	7	5	8	15	42	5	4	3	11	10	16	40		89
lower respiratory infections	0	1	1	8	9	33	584	636	1	0	3	12	28	55	432	531	1	1	4	20	37	88	1'016		1'167
tuberculosis	0	0	0	0	2	2	9	13	0	0	2	2	0	1	9	14	0	0	2	2	2	3	18		27
HIV	0	3	3	1	1	2	0	10	0	2	6	13	6	2	3	32	0	5	9	14	7	4	3		42
diabetes mellitus	0	0	2	6	19	73	570	670	0	0	3	11	46	108	372	540	0	0	5	17	65	181	942		1'210
pancreatitis	0	0	0	0	0	6	30	36	0	1	1	5	6	9	16	38	0	1	1	5	6	15	46		74
liver disease	0	0	4	32	50	29	38	153	0	1	20	64	120	110	77	392	0	1	24	96	170	139	115		545
hypertension	0	0	0	3	4	43	1'368	1'418	0	0	0	4	18	46	567	635	0	0	0	7	22	89	1'935		2'053
hemorrhagic stroke	0	5	5	23	34	71	294	432	0	5	4	23	36	71	227	366	0	10	9	46	70	142	521		798
ischaemic stroke	1	1	1	4	20	83	1'487	1'597	0	1	0	15	37	124	880	1'057	1	2	1	19	57	207	2'367		2'654
ischaemic heart disease	0	0	9	34	82	265	3'573	3'963	1	8	45	171	433	748	2'945	4'351	1	8	54	205	515	1'013	6'518		8'314
conduction disorders and other dysrhythmias	1	2	3	3	7	24	394	434	2	2	4	15	18	47	236	324	3	4	7	18	25	71	630		758
motor vehicle accidents	6	6	5	9	13	11	16	66	31	23	36	27	27	20	33	197	37	29	41	36	40	31	49		263
falls	5	4	2	5	12	36	786	850	7	10	11	25	59	73	470	655	12	14	13	30	71	109	1'256		1'505
other unintentional injuries	8	13	18	25	28	26	85	203	41	50	61	89	56	45	106	448	49	63	79	114	84	71	191		651
self inflicted injuries	15	32	35	68	59	37	36	282	47	74	113	154	130	90	114	722	62	106	148	222	189	127	150		1'004
assault	3	1	3	5	3	2	2	19	1	3	4	6	3	1	0	18	4	4	7	11	6	3	2		37
other intentional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
mental disorder due to use of alcohol	0	0	3	7	14	18	8	50	0	1	6	28	43	39	29	146	0	1	9	35	57	57	37		196
other 100% alcohol attributable	1	1	3	2	1	3	2	13	0	4	6	12	10	9	6	47	1	5	9	14	11	12	8		60
total in alcohol related categories	44	82	180	446	740	1'361	10'585	13'438	134	197	354	830	1'519	2'217	7'419	12'670	178	279	534	1'276	2'259	3'578	18'004		26'108
overall total	81	144	365	963	1'948	3'435	25'231	32'167	187	277	635	1'570	3'298	5'583	18'528	30'078	268	421	1'000	2'533	5'246	9'018	43'759		62'245

Table A2.5: Alcohol-attributable years of life lost in 2011

	Women by age								Men by age								Total by age							
	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
oral cavity and pharynx cancer	0	17	13	88	211	197	89	614	0	0	69	501	1'303	706	343	2'921	0	17	81	589	1'513	903	432	3'535
oesophagus cancer	0	0	7	34	86	95	86	307	0	15	44	244	625	623	383	1'934	0	15	51	278	711	718	469	2'241
colon cancer	2	4	17	30	72	135	178	438	0	11	10	52	131	202	171	578	2	15	27	83	203	337	349	1'016
rectal cancer	0	4	5	37	40	70	93	248	0	9	15	44	129	182	131	510	0	13	20	81	169	252	224	758
liver cancer	5	6	4	51	67	98	113	344	0	16	38	154	379	444	236	1'268	5	23	41	206	446	542	350	1'612
larynx cancer	0	0	7	0	11	39	4	61	0	0	11	59	132	139	78	418	0	0	17	59	143	177	82	479
breast cancer	0	58	312	563	873	923	752	3'481	-	-	-	-	-	-	-	-	0	58	312	563	873	923	752	3'481
epilepsy	16	9	13	22	25	29	34	148	52	45	10	67	39	48	35	295	68	54	22	89	64	77	69	443
lower respiratory infections	0	5	3	19	21	61	334	443	7	0	12	44	89	133	369	654	7	5	15	63	109	194	703	1'096
tuberculosis	0	0	0	0	9	6	11	26	0	0	18	18	0	6	17	59	0	0	18	18	9	12	28	85
HIV	0	9	8	2	2	2	0	22	0	6	15	25	9	2	1	58	0	15	23	27	10	4	1	80
diabetes mellitus	0	0	-21	-52	-114	-277	-710	-1'174	0	0	-8	-20	-50	-50	-82	-209	0	0	-28	-72	-164	-327	-793	-1'384
pancreatitis	0	0	0	0	0	17	28	45	0	17	8	44	51	69	57	247	0	17	8	44	51	87	84	292
liver disease	0	0	178	1'159	1'377	555	390	3'658	0	51	813	2'000	2'814	1'779	656	8'112	0	51	990	3'159	4'190	2'334	1'046	11'770
hypertension	0	0	0	7	19	174	1'032	1'232	0	0	0	26	103	206	851	1'185	0	0	0	33	122	379	1'883	2'417
hemorrhagic stroke	0	49	34	137	190	294	437	1'142	0	43	23	122	162	252	361	963	0	92	57	259	353	547	797	2'105
ischaemic stroke	-17	-11	-11	-35	-90	-148	-1'050	-1'363	0	0	0	-10	8	69	160	226	-17	-12	-11	-45	-82	-79	-890	-1'137
ischaemic heart disease	0	0	-17	-53	-87	-23	351	171	-4	-31	-177	-506	-967	-856	-1'315	-3'856	-4	-31	-194	-560	-1'054	-878	-964	-3'685
conduction disorders and other dysrhythmias	4	11	10	9	19	45	265	364	17	15	19	67	68	139	255	581	22	26	29	76	87	185	520	945
motor vehicle accidents	56	49	20	35	43	28	12	243	647	428	325	228	185	113	56	1'981	702	476	345	264	228	141	68	2'224
falls	53	36	11	22	51	91	436	700	120	194	91	198	459	594	1'031	2'687	173	229	101	221	510	685	1'467	3'387
other unintentional injuries	83	117	100	111	122	64	55	652	710	941	503	745	453	357	282	3'991	793	1'058	603	856	575	420	337	4'643
self inflicted injuries	157	287	187	295	251	99	29	1'305	803	1'394	930	1'260	1'059	724	321	6'492	961	1'682	1'116	1'555	1'310	824	350	7'798
assault	32	9	17	22	14	5	1	100	18	58	33	49	24	7	0	189	50	67	49	71	38	13	1	288
other intentional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mental disorder due to use of alcohol	0	0	127	249	382	347	71	1'177	0	47	243	918	974	615	240	3'037	0	47	370	1'167	1'356	962	311	4'214
other 100% alcohol attributable	65	53	128	73	31	53	18	422	0	201	247	372	241	138	45	1'243	65	254	375	445	272	190	63	1'665
total beneficial	-17	-11	-49	-141	-292	-448	-1'760	-2'717	-4	-31	-185	-536	-1'017	-905	-1'397	-4'075	-22	-42	-233	-676	-1'308	-1'353	-3'158	-6'792
total adverse	473	723	1'199	2'965	3'915	3'428	4'818	17'521	2'374	3'490	3'474	7'238	9'435	7'547	6'082	39'640	2'848	4'213	4'673	10'203	13'350	10'975	10'899	57'161
total net	456	712	1'151	2'825	3'623	2'980	3'057	14'804	2'370	3'459	3'289	6'702	8'418	6'642	4'685	35'564	2'826	4'171	4'440	9'526	12'042	9'622	7'742	50'369

Table A2.6: Total years of life lost in 2011 for alcohol related categories and total years of life lost across all categories

	Women by age								Men by age								Total by age							
	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
oral cavity and pharynx cancer	0	56	48	315	624	542	290	1'874	0	0	155	1'035	2'395	1'176	615	5'377	0	56	204	1'349	3'019	1'718	904	7'250
oesophagus cancer	0	0	48	210	432	428	456	1'574	0	47	162	801	1'736	1'492	1'018	5'256	0	47	210	1'011	2'169	1'920	1'474	6'830
colon cancer	64	60	402	700	1'450	2'140	2'489	7'305	0	203	241	1'047	2'196	2'847	2'517	9'050	64	263	642	1'747	3'647	4'987	5'005	16'355
rectal cancer	0	51	88	619	576	826	1'066	3'226	0	98	203	519	1'253	1'489	1'166	4'728	0	149	291	1'138	1'829	2'315	2'231	7'954
liver cancer	64	56	43	545	597	764	938	3'007	0	101	273	1'001	2'081	2'103	1'228	6'787	64	157	317	1'546	2'677	2'866	2'167	9'794
larynx cancer	0	0	42	0	54	166	20	281	0	0	37	181	347	315	197	1'078	0	0	79	181	401	481	217	1'359
breast cancer	0	438	2'959	4'978	6'283	5'856	5'329	25'842	0	0	40	28	0	28	43	139	0	438	3'000	5'006	6'283	5'883	5'372	25'981
epilepsy	123	52	87	142	129	137	188	859	177	145	38	228	113	118	95	913	300	197	125	370	242	255	283	1'773
lower respiratory infections	0	55	46	267	239	600	3'351	4'559	60	0	122	384	646	815	2'498	4'525	60	55	168	651	886	1'414	5'849	9'083
tuberculosis	0	0	0	0	60	33	74	168	0	0	76	66	0	16	50	208	0	0	76	66	60	49	124	376
HIV	0	162	131	32	27	34	0	386	0	96	247	416	144	32	23	958	0	258	378	448	171	67	23	1'343
diabetes mellitus	0	0	88	216	490	1'314	3'771	5'880	0	0	119	361	1'085	1'673	2'575	5'813	0	0	207	578	1'575	2'987	6'346	11'692
pancreatitis	0	0	0	0	0	109	227	336	0	53	39	158	136	143	137	666	0	53	39	158	136	252	364	1'002
liver disease	0	0	178	1'159	1'377	555	390	3'658	0	51	813	2'000	2'814	1'779	656	8'112	0	51	990	3'159	4'190	2'334	1'046	11'770
hypertension	0	0	0	100	101	736	7'958	8'894	0	0	0	124	410	695	3'267	4'496	0	0	0	223	511	1'430	11'225	13'389
hemorrhagic stroke	0	271	225	830	904	1'273	2'390	5'893	0	243	159	734	815	1'072	1'688	4'712	0	514	384	1'565	1'718	2'345	4'079	10'605
ischaemic stroke	67	53	47	153	520	1'422	9'195	11'457	0	53	0	476	839	1'821	5'533	8'721	67	106	47	628	1'359	3'243	14'728	20'178
ischaemic heart disease	0	0	395	1'191	2'117	4'613	22'000	30'317	63	402	1'809	5'423	9'932	11'301	18'980	47'909	63	402	2'204	6'614	12'049	15'914	40'980	78'226
conduction disorders and other dysrhythmias	66	108	132	114	192	395	2'413	3'420	127	103	158	490	417	715	1'453	3'463	193	211	290	604	608	1'110	3'866	6'883
motor vehicle accidents	401	332	228	333	349	195	120	1'957	1'895	1'184	1'499	874	619	318	227	6'616	2'296	1'516	1'727	1'207	967	512	348	8'574
falls	327	221	93	183	323	631	4'945	6'721	423	531	451	778	1'328	1'164	2'806	7'481	750	751	544	960	1'651	1'795	7'750	14'202
other unintentional injuries	516	725	854	909	774	441	625	4'843	2'492	2'577	2'504	2'922	1'312	699	768	13'274	3'007	3'302	3'358	3'832	2'086	1'140	1'393	18'117
self inflicted injuries	975	1'781	1'599	2'407	1'594	684	326	9'366	2'819	3'820	4'626	4'943	3'067	1'420	874	21'570	3'793	5'601	6'226	7'350	4'661	2'104	1'201	30'936
assault	197	54	143	179	89	37	16	715	64	159	163	192	68	14	0	660	261	213	306	371	157	51	16	1'375
other intentional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mental disorder due to use of alcohol	0	0	127	249	382	347	71	1'177	0	47	243	918	974	615	240	3'037	0	47	370	1'167	1'356	962	311	4'214
other 100% alcohol attributable	65	53	128	73	31	53	18	422	0	201	247	372	241	138	45	1'243	65	254	375	445	272	190	63	1'665
total in alcohol related categories	2'865	4'529	8'132	15'904	19'713	24'328	68'665	144'136	8'118	10'112	14'425	26'470	34'967	33'997	48'700	176'789	10'983	14'641	22'557	42'374	54'679	58'325	117'365	320'924
overall total	5'290	7'938	16'420	34'317	51'631	61'538	166'896	344'031	11'346	14'175	25'811	49'902	75'645	85'470	122'101	384'450	16'636	22'113	42'231	84'219	127'276	147'008	288'997	728'481

Table A2.7: Alcohol-attributable fractions for heavy drinking, women 2011

Disease	Age													
	15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		75+	
	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD
oral cavity and pharynx cancer	5.37%	0.0223	10.05%	0.0316	7.00%	0.0260	8.41%	0.0291	14.60%	0.0377	17.45%	0.0396	11.14%	0.0325
oesophagus cancer	2.74%	0.0122	5.42%	0.0187	3.65%	0.0147	4.44%	0.0168	8.11%	0.0236	9.94%	0.0257	6.07%	0.0195
colon cancer	0.37%	0.0022	0.86%	0.0040	0.51%	0.0028	0.62%	0.0033	1.14%	0.0053	1.52%	0.0063	1.04%	0.0044
rectal cancer	0.65%	0.0030	1.39%	0.0051	0.87%	0.0037	1.07%	0.0043	1.96%	0.0064	2.50%	0.0073	1.62%	0.0055
liver cancer	1.22%	0.0060	2.45%	0.0096	1.62%	0.0073	1.97%	0.0084	3.56%	0.0125	4.41%	0.0141	2.77%	0.0102
larynx cancer	2.98%	0.0133	5.86%	0.0203	3.96%	0.0160	4.81%	0.0183	8.76%	0.0257	10.70%	0.0279	6.55%	0.0212
breast cancer	1.70%	0.0079	3.43%	0.0126	2.27%	0.0096	2.77%	0.0111	5.10%	0.0162	6.31%	0.0180	3.86%	0.0131
epilepsy	2.57%	0.0124	5.10%	0.0197	3.42%	0.0151	4.17%	0.0175	7.66%	0.0257	9.41%	0.0286	5.72%	0.0208
lower respiratory infections	0.88%	0.0062	1.83%	0.0107	1.18%	0.0078	1.44%	0.0091	2.65%	0.0148	3.34%	0.0175	2.10%	0.0114
hemorrhagic stroke	3.20%	0.0202	6.34%	0.0340	4.26%	0.0250	5.20%	0.0294	9.56%	0.0458	11.73%	0.0528	7.10%	0.0366
tuberculosis	5.33%	0.0231	9.38%	0.0317	6.81%	0.0268	8.08%	0.0297	13.18%	0.0380	15.23%	0.0397	10.04%	0.0320
diabetes mellitus	0.08%	0.0102	0.38%	0.0184	0.16%	0.0132	0.23%	0.0159	0.64%	0.0264	0.91%	0.0304	0.49%	0.0191
hypertension	6.64%	0.0366	13.18%	0.0565	8.88%	0.0445	10.86%	0.0503	19.68%	0.0698	23.81%	0.0755	14.64%	0.0597
liver cirrhosis	11.00%	0.0429	18.34%	0.0560	13.77%	0.0483	16.14%	0.0526	26.36%	0.0640	30.32%	0.0663	20.16%	0.0584
ischaemic stroke	0.37%	0.0128	2.76%	0.0271	0.84%	0.0152	1.51%	0.0191	4.16%	0.0363	2.77%	0.0246	0.53%	0.0147
pancreatitis	2.01%	0.0131	4.76%	0.0256	2.86%	0.0174	3.66%	0.0213	8.04%	0.0379	10.59%	0.0448	5.61%	0.0284
conduction disorders and other	1.07%	0.0054	2.20%	0.0089	1.43%	0.0067	1.75%	0.0077	3.21%	0.0118	4.02%	0.0133	2.51%	0.0095
motor vehicle accidents	5.19%	0.0082	5.79%	0.0085	2.55%	0.0040	3.88%	0.0044	7.99%	0.0060	5.51%	0.0121	4.88%	0.0059
non-motor vehicle accidents	3.04%	0.0102	4.47%	0.0134	2.64%	0.0087	3.11%	0.0096	5.83%	0.0166	6.11%	0.0228	2.90%	0.0105
HIV	0.33%	0.0017	0.60%	0.0026	0.42%	0.0020	0.50%	0.0022	0.87%	0.0033	1.03%	0.0038	0.66%	0.0029

Remark: heavy drinking by women was defined at 40 grams/day or more of pure ethanol

Table A2.8: Alcohol-attributable fractions for heavy drinking, men 2011

Disease	Age													
	15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		75+	
	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD
oral cavity and pharynx cancer	22.01%	0.0283	16.14%	0.0214	16.15%	0.0263	21.67%	0.0285	29.14%	0.0289	37.88%	0.0256	31.94%	0.0278
oesophagus cancer	14.18%	0.0205	16.14%	0.0214	10.00%	0.0181	13.96%	0.0206	19.80%	0.0225	27.09%	0.0214	22.01%	0.0221
colon cancer	1.68%	0.0066	1.97%	0.0075	1.16%	0.0047	1.67%	0.0065	2.51%	0.0094	3.67%	0.0133	2.92%	0.0105
rectal cancer	3.16%	0.0064	3.67%	0.0070	2.18%	0.0050	3.13%	0.0063	4.66%	0.0083	6.75%	0.0104	5.32%	0.0089
liver cancer	5.65%	0.0130	6.51%	0.0143	3.96%	0.0101	5.59%	0.0129	8.14%	0.0169	11.52%	0.0214	9.15%	0.0182
larynx cancer	15.11%	0.0226	17.16%	0.0236	10.71%	0.0197	14.88%	0.0226	20.97%	0.0250	28.50%	0.0245	23.27%	0.0248
breast cancer	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000
epilepsy	13.60%	0.0273	15.52%	0.0296	9.55%	0.0219	13.39%	0.0271	19.11%	0.0331	26.31%	0.0382	21.29%	0.0348
lower respiratory infections	4.41%	0.0202	5.11%	0.0229	3.05%	0.0145	4.36%	0.0199	6.46%	0.0283	9.29%	0.0390	7.32%	0.0312
hemorrhagic stroke	6.71%	0.0160	7.74%	0.0177	4.65%	0.0123	6.62%	0.0158	9.72%	0.0209	13.83%	0.0266	10.96%	0.0225
tuberculosis	13.60%	0.0253	15.20%	0.0267	10.22%	0.0218	13.47%	0.0252	18.12%	0.0291	23.51%	0.0322	19.69%	0.0299
diabetes mellitus	1.17%	0.0240	1.39%	0.0276	0.80%	0.0172	1.17%	0.0239	1.78%	0.0347	2.61%	0.0482	2.10%	0.0380
hypertension	9.25%	0.0180	10.63%	0.0196	6.45%	0.0144	9.12%	0.0179	13.25%	0.0222	18.61%	0.0264	14.83%	0.0235
liver cirrhosis	42.54%	0.0602	46.53%	0.0599	32.20%	0.0581	41.87%	0.0604	53.10%	0.0572	64.20%	0.0487	9.15%	0.0182
ischaemic stroke	2.90%	0.0105	4.02%	0.0117	2.50%	0.0073	3.18%	0.0096	5.73%	0.0131	5.74%	0.0125	4.50%	0.0102
pancreatitis	22.40%	0.0552	25.81%	0.0597	15.01%	0.0432	21.98%	0.0549	32.05%	0.0664	43.81%	0.0725	35.76%	0.0689
conduction disorders and other dysrhythmias	5.44%	0.0133	6.29%	0.0148	3.77%	0.0101	5.37%	0.0131	7.93%	0.0177	11.34%	0.0228	8.95%	0.0191
motor vehicle accidents	12.73%	0.0277	14.21%	0.0288	6.25%	0.0135	9.53%	0.0149	13.51%	0.0204	19.60%	0.0410	11.98%	0.0201
non-motor vehicle accidents	10.63%	0.0268	12.69%	0.0308	5.80%	0.0150	9.31%	0.0227	15.57%	0.0364	28.06%	0.0634	18.00%	0.0431
HIV	1.04%	0.0030	1.19%	0.0033	0.73%	0.0021	1.02%	0.0029	1.47%	0.0039	2.06%	0.0052	1.64%	0.0044

Remark: heavy drinking of men was defined at 60 grams/day or more of pure ethanol

Table A2.9: Deaths attributable to heavy drinking (men 60+g/day, women 40+ g/day) in 2011

	Women by age								Men by age								Total by age							
	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
oral cavity and pharynx cancer	0.00	0.10	0.07	0.76	3.36	5.06	4.12	13.47	0.00	0.00	0.65	7.15	30.02	27.27	25.55	90.64	0.00	0.10	0.72	7.91	33.38	32.33	29.68	104.11
oesophagus cancer	0.00	0.00	0.04	0.27	1.38	2.29	3.34	7.31	0.00	0.16	0.40	3.63	15.45	26.01	28.40	74.04	0.00	0.16	0.44	3.90	16.83	28.29	31.74	81.35
colon cancer	0.00	0.01	0.05	0.12	0.63	1.82	3.22	5.85	0.00	0.08	0.07	0.55	2.41	6.79	9.85	19.75	0.00	0.09	0.12	0.68	3.03	8.61	13.07	25.60
rectal cancer	0.00	0.01	0.02	0.18	0.41	1.18	2.10	3.90	0.00	0.07	0.11	0.50	2.56	6.54	8.24	18.03	0.00	0.09	0.13	0.68	2.97	7.72	10.34	21.93
liver cancer	0.01	0.02	0.02	0.30	0.82	1.85	2.83	5.85	0.00	0.13	0.28	1.79	7.41	16.01	13.55	39.16	0.01	0.15	0.29	2.08	8.23	17.86	16.38	45.01
larynx cancer	0.00	0.00	0.04	0.00	0.18	0.96	0.13	1.31	0.00	0.00	0.11	0.89	3.15	5.70	6.28	16.13	0.00	0.00	0.15	0.89	3.32	6.66	6.41	17.44
breast cancer	0.00	0.27	1.50	3.88	12.04	20.12	24.80	62.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	1.50	3.88	12.04	20.12	24.80	62.61
epilepsy	0.05	0.05	0.07	0.17	0.38	0.75	1.43	2.90	0.41	0.47	0.10	0.94	0.96	2.10	3.19	8.16	0.46	0.52	0.16	1.10	1.34	2.86	4.62	11.06
lower respiratory infections	0.00	0.02	0.01	0.12	0.24	1.10	12.29	13.77	0.04	0.00	0.09	0.52	1.81	5.11	31.62	39.19	0.04	0.02	0.10	0.64	2.05	6.21	43.90	52.97
tuberculosis	0.00	0.00	0.00	0.00	0.26	0.30	0.90	1.47	0.00	0.00	0.20	0.27	0.00	0.24	1.77	2.48	0.00	0.00	0.20	0.27	0.26	0.54	2.68	3.95
hiv	0.00	0.02	0.01	0.01	0.01	0.02	0.00	0.07	0.00	0.02	0.04	0.13	0.09	0.04	0.05	0.38	0.00	0.04	0.06	0.14	0.10	0.06	0.05	0.44
diabetes mellitus	0.00	0.00	0.00	0.01	0.12	0.67	2.81	3.61	0.00	0.00	0.02	0.13	0.82	2.82	7.81	11.59	0.00	0.00	0.03	0.14	0.94	3.49	10.61	15.21
pancreatitis	0.00	0.00	0.00	0.00	0.00	0.64	1.68	2.32	0.00	0.26	0.15	1.10	1.92	3.94	5.72	13.09	0.00	0.26	0.15	1.10	1.92	4.58	7.40	15.41
liver disease	0.00	0.00	0.82	7.52	17.98	11.61	10.55	48.49	0.00	0.68	10.97	41.13	87.61	89.10	58.65	288.13	0.00	0.68	11.79	48.65	105.59	100.71	69.20	336.62
hypertension	0.00	0.00	0.00	0.33	0.79	10.24	200.21	211.56	0.00	0.00	0.00	0.36	2.38	8.56	84.08	95.39	0.00	0.00	0.00	0.69	3.17	18.80	284.29	306.95
hemorrhagic stroke	0.00	0.32	0.21	1.20	3.25	8.33	20.88	34.18	0.00	0.39	0.19	1.52	3.50	9.82	24.88	40.29	0.00	0.70	0.40	2.72	6.75	18.14	45.76	74.47
ischaemic stroke	0.00	0.03	0.01	0.06	0.83	2.30	7.87	11.10	0.00	0.04	0.00	0.48	2.12	7.11	39.62	49.37	0.00	0.07	0.01	0.54	2.95	9.41	47.49	60.47
ischaemic heart disease	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
conduction disorders and other dysrhythmias	0.01	0.04	0.04	0.05	0.22	0.96	9.87	11.21	0.11	0.13	0.15	0.81	1.43	5.33	21.12	29.07	0.12	0.17	0.19	0.86	1.65	6.30	31.00	40.28
motor vehicle accidents	0.31	0.35	0.13	0.35	0.72	0.88	0.78	3.51	3.94	3.27	2.25	2.57	3.65	3.92	3.95	23.56	4.26	3.62	2.38	2.92	4.36	4.80	4.73	27.07
falls	0.15	0.18	0.05	0.16	0.70	2.20	22.80	26.24	0.74	1.27	0.64	2.33	9.19	20.48	84.61	119.25	0.90	1.45	0.69	2.48	9.89	22.68	107.41	145.49
other unintentional injuries	0.24	0.58	0.48	0.78	1.63	1.59	2.47	7.76	4.36	6.35	3.54	8.28	8.72	12.63	19.08	62.95	4.60	6.93	4.01	9.06	10.35	14.21	21.55	70.71
self inflicted injuries	0.46	1.43	0.92	2.11	3.44	2.26	1.04	11.67	4.99	9.39	6.56	14.33	20.24	25.25	20.52	101.29	5.45	10.82	7.48	16.45	23.68	27.51	21.57	112.95
assault	0.09	0.04	0.08	0.16	0.17	0.12	0.06	0.73	0.11	0.38	0.23	0.56	0.47	0.28	0.00	2.03	0.20	0.43	0.31	0.71	0.64	0.40	0.06	2.75
other intentional	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mental disorder due to use of alcohol	0.00	0.00	3.00	7.00	14.00	18.00	8.00	50.00	0.00	1.00	6.00	28.00	43.00	39.00	29.00	146.00	0.00	1.00	9.00	35.00	57.00	57.00	37.00	196.00
other 100% alcohol attributable	0.19	0.28	2.23	0.51	0.37	3.00	2.00	8.57	0.00	1.39	3.15	6.92	8.35	8.55	6.00	34.37	0.19	1.67	5.38	7.43	8.72	11.55	8.00	42.94
total heavy drinking	1.52	3.76	9.79	26.02	63.93	98.25	346.18	549.46	14.71	25.48	35.89	124.90	257.23	332.59	533.55	1'324.34	16.23	29.23	45.68	150.92	321.16	430.84	879.73	1'873.80

Table A2.10: Deaths attributable to non-heavy drinking 2011

	Women by age								Men by age								Total by age							
	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
oral cavity and pharynx cancer	0.00	0.20	0.19	1.75	4.41	5.50	7.21	19.26	0.00	0.00	1.12	8.83	26.00	15.91	19.13	70.99	0.00	0.20	1.31	10.58	30.41	21.41	26.34	90.25
oesophagus cancer	0.00	0.00	0.11	0.69	1.99	2.80	7.03	12.62	0.00	0.16	0.68	4.29	12.62	14.08	20.16	51.99	0.00	0.16	0.79	4.98	14.61	16.88	27.19	64.61
colon cancer	0.03	0.05	0.33	0.74	2.11	5.76	18.96	27.99	0.00	0.13	0.19	1.09	3.31	6.34	13.10	24.17	0.03	0.19	0.52	1.83	5.42	12.11	32.06	52.16
rectal cancer	0.00	0.06	0.09	0.82	1.05	2.78	9.21	14.03	0.00	0.11	0.26	0.87	3.09	5.32	9.18	18.83	0.00	0.17	0.36	1.69	4.14	8.11	18.39	32.86
liver cancer	0.07	0.09	0.07	1.11	1.76	3.53	9.48	16.11	0.00	0.20	0.69	3.15	9.16	13.37	14.92	41.48	0.07	0.28	0.76	4.26	10.92	16.91	24.40	57.59
larynx cancer	0.00	0.00	0.12	0.00	0.25	1.15	0.27	1.78	0.00	0.00	0.18	1.05	2.56	3.08	4.44	11.31	0.00	0.00	0.30	1.05	2.81	4.23	4.71	13.09
breast cancer	0.00	0.79	5.46	11.95	20.74	30.16	65.76	134.87	-	-	-	-	-	-	-	-	0.00	0.79	5.46	11.95	20.74	30.16	65.76	134.87
epilepsy	0.21	0.13	0.22	0.45	0.58	0.96	3.15	5.69	0.47	0.47	0.16	1.12	0.78	1.13	2.27	6.40	0.67	0.59	0.38	1.57	1.36	2.09	5.42	12.09
lower respiratory infections	0.00	0.07	0.06	0.46	0.54	2.24	45.90	49.27	0.07	0.00	0.21	0.85	2.04	3.86	32.25	39.28	0.07	0.07	0.26	1.31	2.57	6.11	78.16	88.55
tuberculosis	0.00	0.00	0.00	0.00	0.04	0.06	0.43	0.53	0.00	0.00	0.26	0.28	0.00	0.15	1.34	2.02	0.00	0.00	0.26	0.28	0.04	0.21	1.77	2.55
hiv	0.00	0.15	0.16	0.05	0.05	0.09	0.00	0.50	0.00	0.10	0.33	0.65	0.28	0.08	0.13	1.55	0.00	0.25	0.49	0.70	0.33	0.17	0.13	2.06
diabetes mellitus	0.00	0.00	-0.47	-1.47	-4.54	-16.05	-110.16	-132.70	0.00	0.00	-0.22	-0.73	-2.94	-6.03	-19.70	-29.61	0.00	0.00	-0.69	-2.19	-7.48	-22.09	-129.85	-162.31
pancreatitis	0.00	0.00	0.00	0.00	0.00	0.32	1.97	2.28	0.00	0.06	0.06	0.30	0.34	0.44	0.91	2.12	0.00	0.06	0.06	0.30	0.34	0.76	2.88	4.40
liver disease	0.00	0.00	3.18	24.48	32.02	17.39	27.45	104.51	0.00	0.32	9.03	22.87	32.39	20.90	18.35	103.87	0.00	0.32	12.21	47.35	64.41	38.29	45.80	208.38
hypertension	0.00	0.00	0.00	-0.11	-0.04	-0.07	-22.77	-22.99	0.00	0.00	0.00	0.47	2.12	5.05	63.66	71.30	0.00	0.00	0.00	0.36	2.08	4.98	40.89	48.31
hemorrhagic stroke	0.00	0.58	0.55	2.61	3.92	8.09	32.83	48.57	0.00	0.50	0.40	2.30	3.66	6.88	23.64	37.37	0.00	1.08	0.94	4.91	7.58	14.97	56.47	85.95
ischaemic stroke	-0.26	-0.24	-0.24	-0.98	-4.30	-10.94	-177.71	-194.67	0.00	-0.05	0.00	-0.78	-1.77	-2.43	-14.22	-19.25	-0.26	-0.28	-0.24	-1.77	-6.07	-13.38	-191.93	-213.93
ischaemic heart disease	0.00	0.00	-0.38	-1.52	-3.38	-1.29	56.97	50.39	-0.07	-0.61	-4.40	-15.97	-42.14	-56.64	-204.01	-323.84	-0.07	-0.61	-4.79	-17.48	-45.52	-57.93	-147.04	-273.45
conduction disorders and other dysrhythmias	0.06	0.16	0.19	0.19	0.47	1.79	33.33	36.19	0.16	0.17	0.33	1.25	1.53	3.83	20.34	27.60	0.22	0.32	0.52	1.44	2.00	5.63	53.66	63.79
motor vehicle accidents	0.52	0.54	0.31	0.61	0.87	0.72	0.81	4.39	6.63	5.04	5.54	4.47	4.44	3.21	4.12	33.46	7.16	5.57	5.86	5.08	5.32	3.93	4.93	37.84
falls	0.65	0.47	0.18	0.46	1.19	3.02	46.48	52.44	1.25	2.38	1.57	4.05	11.19	16.76	88.14	125.34	1.91	2.85	1.75	4.50	12.38	19.77	134.62	177.78
other unintentional injuries	1.05	1.52	1.63	2.28	2.78	2.18	5.03	16.46	7.33	11.90	8.72	14.41	10.62	10.33	19.88	83.18	8.37	13.42	10.35	16.69	13.40	12.51	24.90	99.64
self inflicted injuries	1.96	3.73	3.17	6.21	5.86	3.10	2.13	26.16	8.40	17.62	16.15	24.93	24.66	20.66	21.38	133.79	10.36	21.35	19.32	31.14	30.51	23.76	23.51	159.95
assault	0.39	0.12	0.27	0.46	0.30	0.17	0.12	1.82	0.18	0.71	0.57	0.97	0.57	0.23	0.00	3.23	0.57	0.83	0.84	1.43	0.87	0.40	0.12	5.06
other intentional	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mental disorder due to use of alcohol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
other 100% alcohol attributable	0.81	0.72	0.77	1.49	0.63	0.00	0.00	4.43	0.00	2.61	2.85	5.08	1.65	0.45	0.00	12.63	0.81	3.33	3.62	6.57	2.28	0.45	0.00	17.06
total heavy drinking	1.52	3.76	9.79	26.02	63.93	98.25	346.18	549.46	14.71	25.48	35.89	124.90	257.23	332.59	533.55	1'324.34	16.23	29.23	45.68	150.92	321.16	430.84	879.73	1'873.80
total non-heavy beneficial	-0.26	-0.24	-1.10	-4.08	-12.27	-28.36	-310.63	-356.93	-0.07	-0.66	-4.62	-17.48	-46.85	-65.10	-237.92	-372.71	-0.33	-0.90	-5.72	-21.56	-59.12	-93.47	-548.55	-729.64
total non-heavy adverse	5.75	9.38	17.07	56.82	81.56	91.80	374.51	636.88	24.49	42.47	49.29	103.25	153.02	152.08	377.32	901.92	30.24	51.85	66.36	160.08	234.57	243.88	751.83	1'538.80
total non-heavy net	5.49	9.14	15.97	52.75	69.29	63.44	63.87	279.95	24.42	41.81	44.67	85.78	106.16	86.97	139.40	529.21	29.91	50.95	60.64	138.52	175.45	150.41	203.27	809.16
total all alcohol- attributable deaths	7.02	12.90	25.76	78.77	133.22	161.69	410.06	829.41	39.13	67.28	80.56	210.67	363.39	419.57	672.95	1'853.55	46.14	80.18	106.32	289.44	496.61	581.26	1'083.01	2'682.96

Table A2.11: Alcohol-attributable deaths by broad causes 2011

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	0.11	1.62	8.10	22.58	51.13	84.96	158.45	326.95
cardiovascular diseases	-0.19	0.89	2.38	1.83	1.76	20.40	162.48	189.54
digestive diseases	0.00	0.00	4.00	32.00	50.00	29.95	41.65	157.60
mental disorders	0.00	0.00	3.00	7.00	14.00	18.00	8.00	50.00
injuries	6.84	9.95	8.22	15.56	18.66	16.23	81.72	157.18
other causes	0.26	0.44	0.06	-0.20	-2.33	-7.86	-42.24	-51.87
total beneficial	-0.26	-0.21	-1.09	-3.89	-11.27	-25.33	-277.19	-319.23
total adverse	7.27	13.11	26.85	82.66	144.49	187.01	687.24	1'148.64
total net	7.02	12.90	25.76	78.77	133.22	161.69	410.06	829.41
Men								
cancers	0.00	1.05	4.73	33.79	117.73	146.43	172.80	476.53
cardiovascular diseases	0.20	0.56	-2.34	-6.57	-23.17	-6.49	64.11	26.30
digestive diseases	0.00	1.32	20.21	65.40	122.27	114.39	83.63	407.21
mental disorders	0.00	1.00	6.00	28.00	43.00	39.00	29.00	146.00
injuries	37.94	62.31	49.77	84.90	96.74	114.74	261.68	708.07
other causes	0.99	1.05	2.20	5.15	6.82	11.50	61.72	89.44
total beneficial	-0.07	-0.62	-4.59	-16.87	-44.27	-59.85	-215.90	-342.17
total adverse	39.19	67.91	85.16	227.55	407.66	479.42	888.84	2'195.73
total net	39.13	67.28	80.56	210.67	363.39	419.57	672.95	1'853.55
Total								
cancers	0.11	2.66	12.83	56.37	168.86	231.39	331.25	803.48
cardiovascular diseases	0.01	1.45	0.04	-4.74	-21.41	13.91	226.59	215.85
digestive diseases	0.00	1.32	24.21	97.40	172.27	144.34	125.28	564.81
mental disorders	0.00	1.00	9.00	35.00	57.00	57.00	37.00	196.00
injuries	44.77	72.26	57.99	100.46	115.40	130.97	343.40	865.25
other causes	1.24	1.49	2.26	4.95	4.50	3.64	19.48	37.56
total beneficial	-0.33	-0.83	-5.68	-20.76	-55.54	-85.18	-493.08	-661.40
total adverse	46.47	81.01	112.00	310.21	552.15	666.44	1'576.09	3'344.36
total net	46.14	80.18	106.32	289.44	496.61	581.26	1'083.01	2'682.96

Table A2.12: *Total number of deaths in 2011 by broad causes*

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	9	36	179	521	1'119	1'617	3'732	7'213
cardiovascular diseases	4	12	37	110	237	718	10'913	12'031
digestive diseases	1	0	9	48	92	134	1'007	1'291
mental disorders	6	7	15	15	43	104	2'660	2'850
injuries	39	57	68	117	118	114	933	1'446
other causes	22	32	57	152	339	748	5'986	7'336
total	81	144	365	963	1'948	3'435	25'231	32'167
Men								
cancers	14	32	137	517	1'456	2'399	4'487	9'042
cardiovascular diseases	9	30	93	316	790	1'524	7'159	9'921
digestive diseases	0	3	30	94	184	230	641	1'182
mental disorders	1	3	20	58	70	136	1'139	1'427
injuries	130	166	235	318	280	235	728	2'092
other causes	33	43	120	267	518	1'059	4'374	6'414
total	187	277	635	1'570	3'298	5'583	18'528	30'078
Total								
cancers	23	68	316	1'038	2'575	4'016	8'219	16'255
cardiovascular diseases	13	42	130	426	1'027	2'242	18'072	21'952
digestive diseases	1	3	39	142	276	364	1'648	2'473
mental disorders	7	10	35	73	113	240	3'799	4'277
injuries	169	223	303	435	398	349	1'661	3'538
other causes	55	75	177	419	857	1'807	10'360	13'750
total	268	421	1'000	2'533	5'246	9'018	43'759	62'245

Table A2.13: Proportion of all deaths attributable to alcohol, 2011

	Age							Total
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	
	%	%	%	%	%	%	%	%
Women								
cancers	1.26	4.49	4.53	4.33	4.57	5.25	4.25	4.53
cardiovascular diseases	-4.74	7.43	6.42	1.66	0.74	2.84	1.49	1.58
digestive diseases	0.00	0.00	44.44	66.67	54.35	22.35	4.14	12.21
mental disorders	0.00	0.00	20.00	46.67	32.56	17.31	0.30	1.75
injuries	17.53	17.46	12.09	13.30	15.81	14.24	8.76	10.87
other causes	1.17	1.36	0.10	-0.13	-0.69	-1.05	-0.71	-0.71
total	8.66	8.96	7.06	8.18	6.84	4.71	1.63	2.58
Men								
cancers	0.00	3.27	3.45	6.54	8.09	6.10	3.85	5.27
cardiovascular diseases	2.23	1.86	-2.52	-2.08	-2.93	-0.43	0.90	0.27
digestive diseases	0.00	43.90	67.37	69.57	66.45	49.73	13.05	34.45
mental disorders	0.00	33.33	30.00	48.28	61.43	28.68	2.55	10.23
injuries	29.18	37.54	21.18	26.70	34.55	48.83	35.95	33.85
other causes	2.99	2.45	1.83	1.93	1.32	1.09	1.41	1.39
total	20.92	24.29	12.69	13.42	11.02	7.52	3.63	6.16
Total								
cancers	0.49	3.92	4.06	5.43	6.56	5.76	4.03	4.94
cardiovascular diseases	0.08	3.45	0.03	-1.11	-2.09	0.62	1.25	0.98
digestive diseases	0.00	43.90	62.08	68.59	62.42	39.65	7.60	22.84
mental disorders	0.00	10.00	25.71	47.95	50.44	23.75	0.97	4.58
injuries	26.49	32.41	19.14	23.09	28.99	37.53	20.67	24.46
other causes	2.26	1.99	1.27	1.18	0.52	0.20	0.19	0.27
total	17.22	19.05	10.63	11.43	9.47	6.45	2.47	4.31

Table A2.14: Years of life lost attributable to alcohol by broad causes, 2011

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	7	89	364	802	1'360	1'556	1'314	5'493
cardiovascular diseases	-13	49	100	66	51	362	1'039	1'652
digestive diseases	0	0	178	1'159	1'377	572	417	3'703
mental disorders	0	0	127	249	382	347	71	1'177
injuries	446	551	380	558	512	288	533	3'267
other causes	16	23	3	-9	-58	-145	-317	-487
total beneficial	-17	-11	-49	-141	-292	-448	-1'760	-2'717
total adverse	473	723	1'199	2'965	3'915	3'428	4'818	17'521
total net	456	712	1'151	2'825	3'623	2'980	3'057	14'804
Men								
cancers		51	186	1'055	2'698	2'296	1'344	7'629
cardiovascular diseases	13	27	-96	-214	-522	-97	346	-543
digestive diseases	0	68	821	2'044	2'865	1'849	713	8'359
mental disorders	0	47	243	918	974	615	240	3'037
injuries	2'299	3'215	2'044	2'733	2'251	1'809	1'691	16'042
other causes	58	51	90	166	154	170	351	1'040
total beneficial	-4	-31	-185	-536	-1'017	-905	-1'397	-4'075
total adverse	2'374	3'490	3'474	7'238	9'435	7'547	6'082	39'640
total net	2'370	3'459	3'289	6'702	8'418	6'642	4'685	35'564
Total								
cancers	7	141	550	1'857	4'058	3'852	2'658	13'122
cardiovascular diseases	0	75	4	-148	-472	265	1'385	1'109
digestive diseases	0	68	998	3'203	4'242	2'421	1'130	12'062
mental disorders	0	47	370	1'167	1'356	962	311	4'214
injuries	2'745	3'766	2'424	3'291	2'762	2'097	2'224	19'309
other causes	74	74	93	157	96	25	34	553
total beneficial	-22	-42	-233	-676	-1'308	-1'353	-3'158	-6'792
total adverse	2'848	4'213	4'673	10'203	13'350	10'975	10'899	57'161
total net	2'826	4'171	4'440	9'526	12'042	9'622	7'742	50'369

Table A2.15: Total years of life lost in 2011 by broad causes

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	587	1'979	7'991	18'492	29'742	29'308	31'432	119'530
cardiovascular diseases	256	646	1'636	3'941	6'158	12'520	67'056	92'214
digestive diseases	66	0	405	1'726	2'490	2'428	7'007	14'121
mental disorders	390	381	673	542	1'156	1'877	15'654	20'674
injuries	2'545	3'166	3'147	4'194	3'214	2'027	6'093	24'385
other causes	1'446	1'765	2'570	5'423	8'871	13'379	39'654	73'107
total	5'290	7'938	16'420	34'317	51'631	61'538	166'896	344'031
Men								
cancers	851	1'615	5'483	16'245	33'235	36'935	33'168	127'532
cardiovascular diseases	560	1'514	3'734	10'008	18'103	23'040	45'013	101'971
digestive diseases	0	151	1'221	2'969	4'262	3'630	4'419	16'652
mental disorders	58	155	827	1'890	1'611	2'029	6'559	13'128
injuries	7'869	8'574	9'644	10'238	6'510	3'701	4'726	51'261
other causes	2'009	2'166	4'902	8'552	11'924	16'135	28'217	73'907
total	11'346	14'175	25'811	49'902	75'645	85'470	122'101	384'450
Total								
cancers	1'437	3'595	13'473	34'737	62'977	66'243	64'600	247'062
cardiovascular diseases	816	2'161	5'370	13'948	24'262	35'559	112'069	194'185
digestive diseases	66	151	1'626	4'695	6'751	6'058	11'426	30'773
mental disorders	448	536	1'500	2'432	2'768	3'905	22'213	33'802
injuries	10'414	11'740	12'791	14'432	9'724	5'728	10'819	75'646
other causes	3'455	3'932	7'471	13'975	20'795	29'514	67'871	147'013
total	16'636	22'113	42'231	84'219	127'276	147'008	288'997	728'481

Table A2.16: Proportion of all years of life lost attributable to alcohol, 2011

	Age							
	15 - 24 %	25 - 34 %	35 - 44 %	45 - 54 %	55 - 64 %	65 - 74 %	75+ %	Total %
Women								
cancers	1.23	4.51	4.55	4.34	4.57	5.31	4.18	4.60
cardiovascular diseases	-4.99	7.50	6.09	1.66	0.82	2.89	1.55	1.79
digestive diseases	0.00	0.00	43.91	67.13	55.30	23.57	5.96	26.22
mental disorders	0.00	0.00	18.94	45.98	33.06	18.48	0.45	5.69
injuries	17.52	17.40	12.07	13.31	15.91	14.20	8.75	13.40
other causes	1.10	1.32	0.10	-0.17	-0.65	-1.08	-0.80	-0.67
total	8.62	8.97	7.01	8.23	7.02	4.84	1.83	4.30
Men								
cancers	0.00	3.18	3.40	6.49	8.12	6.22	4.05	5.98
cardiovascular diseases	2.29	1.77	-2.56	-2.14	-2.89	-0.42	0.77	-0.53
digestive diseases	0.00	44.87	67.21	68.85	67.22	50.92	16.13	50.20
mental disorders	0.00	30.38	29.34	48.56	60.43	30.33	3.66	23.13
injuries	29.21	37.50	21.20	26.70	34.58	48.88	35.78	31.29
other causes	2.90	2.35	1.84	1.94	1.29	1.05	1.24	1.41
total	20.89	24.40	12.74	13.43	11.13	7.77	3.84	9.25
Total								
cancers	0.50	3.91	4.08	5.35	6.44	5.81	4.11	5.31
cardiovascular diseases	0.01	3.49	0.08	-1.06	-1.94	0.74	1.24	0.57
digestive diseases	0.00	44.87	61.41	68.22	62.82	39.96	9.89	39.20
mental disorders	0.00	8.77	24.67	47.99	48.99	24.64	1.40	12.47
injuries	26.36	32.08	18.95	22.81	28.41	36.61	20.56	25.53
other causes	2.15	1.89	1.24	1.12	0.46	0.09	0.05	0.38
total	16.99	18.86	10.51	11.31	9.46	6.55	2.68	6.91

Table A2.17: Alcohol-attributable deaths for 100% attributable conditions, partly attributable chronic conditions and injuries, 2011

	Age							
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total
Women								
chronic conditions (<100% AAF)	0.18	2.95	8.54	24.20	50.56	95.46	280.34	462.23
injuries (<100% AAF)	5.84	8.95	7.22	13.56	17.66	16.23	81.72	151.18
100% alcohol attributable	1.00	1.00	10.00	41.00	65.00	50.00	48.00	216.00
total	7.02	12.90	25.76	78.77	133.22	161.69	410.06	829.41
Men								
chronic conditions (<100% AAF)	1.19	2.97	2.80	29.78	96.65	147.83	299.27	580.48
injuries (<100% AAF)	37.94	58.31	45.77	76.90	93.74	113.74	261.68	688.07
100% alcohol attributable		6.00	32.00	104.00	173.00	158.00	112.00	585.00
total	39.13	67.28	80.56	210.67	363.39	419.57	672.95	1'853.55
Total								
chronic conditions (<100% AAF)	1.37	5.92	11.33	53.98	147.21	243.29	579.61	1'042.71
injuries (<100% AAF)	43.77	67.26	52.99	90.46	111.40	129.97	343.40	839.25
100% alcohol attributable	1.00	7.00	42.00	145.00	238.00	208.00	160.00	801.00
total	46.14	80.18	106.32	289.44	496.61	581.26	1'083.01	2'682.96

Remark: 100% alcohol-attributable conditions includes alcoholic liver disease (as estimate for all liver diseases attributable to alcohol)

Table A2.18: *Alcohol-attributable years of life lost for 100% attributable conditions, partly attributable chronic conditions, and injuries 2011*

	Age							
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total
Women								
chronic conditions (<100% AAF)	10	161	383	858	1'353	1'738	2'045	6'548
injuries (<100% AAF)	381	498	334	486	480	288	533	3'000
100% alcohol attributable	65	53	433	1'481	1'790	955	479	5'256
total	456	712	1'151	2'825	3'623	2'980	3'057	14'804
Men								
chronic conditions (<100% AAF)	71	146	107	932	2'210	2'314	2'053	7'833
injuries (<100% AAF)	2'299	3'014	1'880	2'480	2'180	1'795	1'691	15'340
100% alcohol attributable	0	299	1'302	3'290	4'028	2'532	941	12'392
total	2'370	3'459	3'289	6'702	8'418	6'642	4'685	35'564
Total								
chronic conditions (<100% AAF)	82	307	490	1'790	3'563	4'052	4'098	14'381
injuries (<100% AAF)	2'679	3'512	2'215	2'966	2'661	2'083	2'224	18'340
100% alcohol attributable	65	352	1'735	4'770	5'819	3'487	1'420	17'648
total	2'826	4'171	4'440	9'526	12'042	9'622	7'742	50'369

Table A3.1: Alcohol-attributable fractions, women 2007

Disease	Age													
	15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		75+	
	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD
oral cavity and pharynx cancer	28.79%	0.0309	25.42%	0.0284	25.53%	0.0286	27.86%	0.0310	29.36%	0.0320	30.91%	0.0325	26.14%	0.0287
oesophagus cancer	16.75%	0.0188	14.59%	0.0166	14.59%	0.0167	15.81%	0.0185	16.77%	0.0196	18.01%	0.0204	15.22%	0.0171
colon cancer	4.83%	0.0096	4.33%	0.0086	4.19%	0.0085	3.96%	0.0087	4.11%	0.0092	4.83%	0.0100	4.82%	0.0092
rectal cancer	6.42%	0.0086	5.70%	0.0078	5.59%	0.0076	5.56%	0.0077	5.81%	0.0080	6.58%	0.0088	6.19%	0.0084
liver cancer	9.87%	0.0159	8.76%	0.0141	8.70%	0.0143	9.06%	0.0156	9.49%	0.0164	10.36%	0.0171	9.22%	0.0144
larynx cancer	17.82%	0.0210	15.52%	0.0185	15.53%	0.0187	16.87%	0.0207	17.90%	0.0220	19.18%	0.0228	16.17%	0.0191
breast cancer	11.93%	0.0152	10.45%	0.0133	10.40%	0.0134	11.05%	0.0147	11.68%	0.0156	12.69%	0.0164	10.99%	0.0137
epilepsy	16.23%	0.0240	14.19%	0.0208	14.19%	0.0208	15.33%	0.0236	16.22%	0.0250	17.42%	0.0261	14.78%	0.0215
lower respiratory infections	7.71%	0.0214	6.82%	0.0188	6.73%	0.0190	6.85%	0.0211	7.19%	0.0224	8.01%	0.0236	7.31%	0.0190
hemorrhagic stroke	17.23%	0.0512	14.81%	0.0440	14.90%	0.0438	16.63%	0.0486	17.76%	0.0520	18.86%	0.0556	15.30%	0.0466
tuberculosis	12.41%	0.0276	9.59%	0.0236	9.42%	0.0238	10.79%	0.0271	12.18%	0.0291	13.56%	0.0304	11.08%	0.0246
diabetes mellitus	-20.29%	0.0412	-20.84%	0.0375	-21.65%	0.0385	-22.88%	0.0430	-22.15%	0.0441	-20.93%	0.0451	-17.80%	0.0351
hypertension	11.68%	0.0997	5.52%	0.0911	5.20%	0.0930	8.92%	0.1005	12.22%	0.1037	15.18%	0.1054	9.02%	0.0897
liver cirrhosis	69.53%	0.0432	66.53%	0.0445	66.56%	0.0436	68.24%	0.0418	69.45%	0.0415	71.08%	0.0416	67.29%	0.0465
ischaemic stroke	-18.48%	0.0630	-21.56%	0.0633	-21.07%	0.0609	-21.06%	0.0618	-19.07%	0.0601	-12.69%	0.0465	-11.75%	0.0439
pancreatitis	9.66%	0.0242	7.38%	0.0172	7.21%	0.0170	8.09%	0.0215	9.26%	0.0253	10.94%	0.0287	8.68%	0.0204
ischaemic heart diseases	-3.01%	0.0546	-3.78%	0.0519	-4.18%	0.0467	-4.98%	0.0468	-5.04%	0.0559	-2.04%	0.0619	-0.85%	0.0554
conduction disorders and other dysrhythmias	8.73%	0.0140	7.71%	0.0123	7.62%	0.0123	7.87%	0.0134	8.28%	0.0143	9.14%	0.0150	8.20%	0.0127
motor vehicle accidents	10.75%	0.0105	7.92%	0.0091	4.93%	0.0064	5.82%	0.0071	7.88%	0.0115	6.74%	0.0124	3.91%	0.0074
non-motor vehicle accidents	11.05%	0.0238	9.73%	0.0209	8.39%	0.0196	8.90%	0.0216	8.21%	0.0208	7.61%	0.0212	5.79%	0.0160
HIV	5.28%	0.0130	5.34%	0.0132	5.46%	0.0134	5.60%	0.0138	5.50%	0.0136	5.39%	0.0133	4.89%	0.0122

Table A3.2: Alcohol-attributable fractions, men 2007

Disease	Age													
	15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		75+	
	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD
oral cavity and pharynx cancer	52.44%	0.0264	51.21%	0.0281	50.26%	0.0287	52.42%	0.0274	57.30%	0.0247	58.04%	0.0241	54.53%	0.0265
oesophagus cancer	34.28%	0.0224	32.98%	0.0235	32.10%	0.0236	34.21%	0.0233	38.93%	0.0224	39.69%	0.0221	36.17%	0.0232
colon cancer	5.61%	0.0181	5.31%	0.0176	5.19%	0.0172	5.86%	0.0182	6.53%	0.0212	6.64%	0.0216	6.02%	0.0195
rectal cancer	9.62%	0.0130	9.22%	0.0128	8.99%	0.0125	9.87%	0.0131	11.26%	0.0149	11.48%	0.0151	10.34%	0.0139
liver cancer	17.04%	0.0293	16.56%	0.0289	16.19%	0.0284	17.36%	0.0295	19.68%	0.0328	20.04%	0.0333	18.25%	0.0310
larynx cancer	36.29%	0.0265	34.97%	0.0274	34.06%	0.0273	36.21%	0.0272	41.04%	0.0267	41.82%	0.0265	38.23%	0.0273
breast cancer	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000
epilepsy	33.07%	0.0423	31.78%	0.0415	30.92%	0.0407	33.00%	0.0419	37.66%	0.0450	38.42%	0.0452	34.93%	0.0435
lower respiratory infections	12.86%	0.0500	12.36%	0.0484	12.03%	0.0472	13.10%	0.0498	15.02%	0.0576	15.33%	0.0587	13.80%	0.0530
hemorrhagic stroke	18.74%	0.0327	17.97%	0.0317	17.50%	0.0311	19.01%	0.0330	21.71%	0.0365	22.15%	0.0370	20.01%	0.0343
tuberculosis	31.28%	0.0465	29.89%	0.0467	28.99%	0.0464	31.15%	0.0468	35.70%	0.0488	36.40%	0.0489	33.08%	0.0479
diabetes mellitus	-3.79%	0.0727	-4.95%	0.0732	-5.21%	0.0718	-4.35%	0.0754	-3.79%	0.0869	-3.60%	0.0881	-4.28%	0.0802
hypertension	23.58%	0.0304	22.74%	0.0298	22.09%	0.0293	23.54%	0.2354	27.32%	0.0330	27.94%	0.0335	25.14%	0.0317
liver cirrhosis	71.56%	0.0467	69.11%	0.0495	67.71%	0.0504	70.63%	0.0478	76.29%	0.0416	77.15%	0.0405	73.16%	0.0454
ischaemic stroke	1.71%	0.0310	-0.51%	0.0327	-1.18%	0.0312	0.77%	0.0322	3.09%	0.0319	2.62%	0.0243	1.13%	0.0244
pancreatitis	36.80%	0.0686	32.92%	0.0661	31.06%	0.0648	35.08%	0.0676	43.46%	0.0723	44.95%	0.0726	38.58%	0.0702
ischaemic heart diseases	-7.51%	0.0339	-10.08%	0.0368	-11.23%	0.0264	-10.73%	0.0285	-11.17%	0.0319	-8.52%	0.0580	-8.90%	0.0714
conduction disorders and other dysrhythmias	15.42%	0.0279	14.82%	0.0272	14.43%	0.0265	15.63%	0.0279	17.97%	0.0319	18.35%	0.0323	16.52%	0.0297
motor vehicle accidents	31.36%	0.0458	23.10%	0.0399	14.37%	0.0280	16.98%	0.0311	23.00%	0.0503	19.68%	0.0543	11.42%	0.0324
non-motor vehicle accidents	34.11%	0.0746	31.51%	0.0726	23.89%	0.0584	27.99%	0.0670	39.27%	0.0919	40.89%	0.0972	30.34%	0.0753
HIV	5.60%	0.0138	5.95%	0.0146	6.00%	0.0146	5.94%	0.0146	6.04%	0.0147	6.02%	0.0147	6.00%	0.0147

Table A3.3: Alcohol-attributable deaths 2007

	Women by age								Men by age								Total by age							
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total
oral cavity and pharynx cancer	0.00	0.00	0.26	3.90	6.17	7.42	10.98	28.72	0.00	0.51	0.50	19.40	57.30	38.30	37.08	153.10	0.00	0.51	0.76	23.30	63.47	45.72	48.06	181.81
oesophagus cancer	0.00	0.15	0.00	0.79	4.36	6.12	6.85	18.27	0.00	0.00	1.28	10.26	31.53	39.29	41.23	123.61	0.00	0.15	1.28	11.05	35.89	45.42	48.08	141.88
colon cancer	0.00	0.13	0.34	1.19	2.22	5.50	17.69	27.07	0.11	0.16	0.52	1.52	5.94	9.76	21.56	39.57	0.11	0.29	0.85	2.71	8.17	15.26	39.25	66.65
rectal cancer	0.00	0.00	0.17	0.89	2.85	3.29	7.49	14.69	0.00	0.18	0.54	1.18	6.30	9.30	13.45	30.96	0.00	0.18	0.71	2.07	9.15	12.59	20.94	45.64
liver cancer	0.00	0.09	0.26	1.09	2.75	6.11	8.94	19.24	0.00	0.17	1.13	5.90	17.71	28.85	30.84	84.61	0.00	0.25	1.39	6.99	20.46	34.97	39.78	103.85
larynx cancer	0.00	0.00	0.16	0.00	0.54	0.38	0.49	1.56	0.00	0.00	0.34	0.36	3.28	11.71	9.18	24.87	0.00	0.00	0.50	0.36	3.82	12.09	9.66	26.43
breast cancer	0.00	0.63	4.99	14.70	28.02	38.19	59.34	145.88	-	-	-	-	-	-	-	-	0.00	0.63	4.99	14.70	28.02	38.19	59.34	145.88
epilepsy	0.32	0.00	0.14	0.15	0.65	0.87	2.81	4.95	0.33	0.32	1.24	1.32	3.77	3.46	5.59	16.02	0.66	0.32	1.38	1.47	4.41	4.33	8.40	20.96
lower respiratory infections	0.08	0.14	0.54	0.48	1.15	2.56	51.64	56.58	0.00	0.00	1.20	1.31	4.51	9.05	73.17	89.23	0.08	0.14	1.74	1.79	5.66	11.61	124.80	145.81
tuberculosis	0.12	0.00	0.00	0.00	0.12	0.14	0.89	1.27	0.00	0.00	0.29	0.31	0.00	1.09	3.97	5.66	0.12	0.00	0.29	0.31	0.12	1.23	4.86	6.93
HIV	0.00	0.11	0.44	0.17	0.17	0.00	0.05	0.93	0.00	0.18	0.78	0.77	0.54	0.24	0.06	2.58	0.00	0.29	1.22	0.94	0.71	0.24	0.11	3.50
diabetes mellitus	0.00	-0.21	-0.22	-0.92	-5.54	-15.49	-118.35	-140.72	0.00	0.00	-0.31	-0.78	-1.67	-4.57	-17.53	-24.86	0.00	-0.21	-0.53	-1.70	-7.20	-20.06	-135.88	-165.58
pancreatitis	0.00	0.00	0.07	0.40	0.28	0.22	2.00	2.97	0.00	0.00	0.62	2.10	2.61	3.60	10.42	19.35	0.00	0.00	0.69	2.51	2.89	3.81	12.41	22.32
liver disease	0.00	2.00	15.00	39.00	57.00	52.00	29.00	194.00	0.00	3.00	20.00	77.00	109.00	85.00	58.00	352.00	0.00	5.00	35.00	116.00	166.00	137.00	87.00	546.00
hypertension	0.00	0.00	0.00	0.00	0.61	5.46	105.92	112.00	0.00	0.00	0.22	0.94	4.64	16.20	122.42	144.43	0.00	0.00	0.22	0.94	5.26	21.67	228.34	256.43
hemorrhagic stroke	0.17	0.30	1.19	3.49	6.21	12.26	48.34	71.97	0.94	0.54	1.40	4.94	8.03	12.85	40.42	69.12	1.11	0.84	2.59	8.43	14.25	25.11	88.76	141.09
ischaemic stroke	-0.18	-0.43	-0.63	-0.42	-4.77	-11.29	-210.73	-228.46	0.00	0.00	-0.05	0.05	1.17	3.35	10.78	15.31	-0.18	-0.43	-0.68	-0.37	-3.59	-7.94	-199.95	-213.15
ischaemic heart disease	-0.03	-0.04	-0.25	-1.44	-4.49	-5.87	-33.99	-46.12	-0.15	-0.30	-4.49	-20.49	-55.41	-65.72	-279.05	-425.61	-0.18	-0.34	-4.74	-21.94	-59.89	-71.59	-313.04	-471.72
conduction disorders and other dysrhythmias	0.09	0.23	0.30	0.24	0.66	1.01	26.90	29.43	0.15	0.15	0.43	1.88	3.59	7.71	30.73	44.64	0.24	0.38	0.74	2.11	4.26	8.71	57.63	74.07
motor vehicle accidents	1.18	0.71	0.20	0.41	0.47	0.34	1.17	4.48	18.50	7.39	3.59	4.08	9.20	5.51	4.57	52.84	19.69	8.10	3.79	4.48	9.67	5.85	5.74	57.32
falls	0.11	0.19	0.34	0.98	1.40	2.74	36.73	42.49	5.46	3.78	5.49	9.52	17.67	32.30	118.62	192.84	5.57	3.98	5.83	10.49	19.07	35.04	155.35	235.33
other unintentional injuries	1.22	2.33	1.60	2.31	1.40	1.29	5.39	15.54	13.65	19.22	24.84	11.19	26.70	20.03	20.33	135.97	14.86	21.56	26.44	13.51	28.10	21.33	25.71	151.51
self inflicted injuries	3.98	3.11	4.11	5.52	6.16	4.87	7.18	34.94	25.24	25.21	31.05	47.02	58.51	51.52	59.16	297.71	29.22	28.32	35.17	52.53	64.67	56.39	66.34	332.65
assault	0.44	0.29	0.50	0.36	0.08	0.00	0.12	1.79	0.68	1.26	1.19	0.84	1.18	1.23	0.30	6.68	1.12	1.55	1.70	1.20	1.26	1.23	0.42	8.48
other intentional	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mental disorder due to use of alcohol	0.00	1.00	4.00	12.00	14.00	15.00	8.00	54.00	0.00	0.00	12.00	27.00	39.00	47.00	30.00	155.00	0.00	1.00	16.00	39.00	53.00	62.00	38.00	209.00
other 100% alcohol attributable	0.00	0.00	0.00	2.00	3.00	1.00	0.00	6.00	1.00	2.00	1.00	10.00	4.00	16.00	10.00	44.00	1.00	2.00	1.00	12.00	7.00	17.00	10.00	50.00
total beneficial	-0.21	-0.68	-1.10	-2.78	-14.79	-32.65	-363.08	-415.29	-0.15	-0.30	-4.85	-21.28	-57.07	-70.29	-296.58	-450.52	-0.37	-0.98	-5.95	-24.06	-71.86	-102.94	-659.66	-865.81
total adverse	7.71	11.41	34.60	90.06	140.26	166.79	437.92	888.75	66.07	64.07	109.68	238.89	416.21	453.35	751.86	2'100.13	73.78	75.48	144.28	328.95	556.47	620.14	1'189.78	2'988.88
total net	7.50	10.73	33.50	87.28	125.47	134.14	74.84	473.46	65.92	63.77	104.83	217.62	359.13	383.06	455.28	1'649.61	73.42	74.50	138.33	304.89	484.60	517.20	530.12	2'123.07

Table A3.4: Number of all deaths in 2007, for alcohol related categories and total deaths across all categories

	Women by age								Men by age								Total by age							
	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
oral cavity and pharynx cancer	0	0	1	14	21	24	42	102	0	1	1	37	100	66	68	273	0	1	2	51	121	90	110	375
oesophagus cancer	0	1	0	5	26	34	45	111	0	0	4	30	81	99	114	328	0	1	4	35	107	133	159	439
colon cancer	0	3	8	30	54	114	367	576	2	3	10	26	91	147	358	637	2	6	18	56	145	261	725	1'213
rectal cancer	0	0	3	16	49	50	121	239	0	2	6	12	56	81	130	287	0	2	9	28	105	131	251	526
liver cancer	0	1	3	12	29	59	97	201	0	1	7	34	90	144	169	445	0	2	10	46	119	203	266	646
larynx cancer	0	0	1	0	3	2	3	9	0	0	1	1	8	28	24	62	0	0	2	1	11	30	27	71
breast cancer	0	6	48	133	240	301	540	1'268	0	0	0	1	3	1	3	8	0	6	48	134	243	302	543	1'276
epilepsy	2	0	1	1	4	5	19	32	1	1	4	4	10	9	16	45	3	1	5	5	14	14	35	77
lower respiratory infections	1	2	8	7	16	32	706	772	0	0	10	10	30	59	530	639	1	2	18	17	46	91	1'236	1'411
tuberculosis	1	0	0	0	1	1	8	11	0	0	1	1	0	3	12	17	1	0	1	1	1	4	20	28
HIV	0	2	8	3	3	0	1	17	0	3	13	13	9	4	1	43	0	5	21	16	12	4	2	60
diabetes mellitus	0	1	1	4	25	74	665	770	0	0	6	18	44	127	410	605	0	1	7	22	69	201	1'075	1'375
pancreatitis	0	0	1	5	3	2	23	34	0	0	2	6	6	8	27	49	0	0	3	11	9	10	50	83
liver disease	0	2	15	39	57	52	29	194	0	3	20	77	109	85	58	352	0	5	35	116	166	137	87	546
hypertension	0	0	0	0	5	36	1'174	1'215	0	0	1	4	17	58	487	567	0	0	1	4	22	94	1'661	1'782
hemorrhagic stroke	1	2	8	21	35	65	316	448	5	3	8	26	37	58	202	339	6	5	16	47	72	123	518	787
ischaemic stroke	1	2	3	2	25	89	1'793	1'915	0	0	4	6	38	128	955	1'131	1	2	7	8	63	217	2'748	3'046
ischaemic heart disease	1	1	6	29	89	288	3'984	4'398	2	3	40	191	496	771	3'134	4'637	3	4	46	220	585	1'059	7'118	9'035
conduction disorders and other dysrhythmias	1	3	4	3	8	11	328	358	1	1	3	12	20	42	186	265	2	4	7	15	28	53	514	623
motor vehicle accidents	11	9	4	7	6	5	30	72	59	32	25	24	40	28	40	248	70	41	29	31	46	33	70	320
falls	1	2	4	11	17	36	634	705	16	12	23	34	45	79	391	600	17	14	27	45	62	115	1'025	1'305
other unintentional injuries	11	24	19	26	17	17	93	207	40	61	104	40	68	49	67	429	51	85	123	66	85	66	160	636
self inflicted injuries	36	32	49	62	75	64	124	442	74	80	130	168	149	126	195	922	110	112	179	230	224	190	319	1'364
assault	4	3	6	4	1	0	2	20	2	4	5	3	3	3	1	21	6	7	11	7	4	3	3	41
other intentional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mental disorder due to use of alcohol	0	1	4	12	14	15	8	54	0	0	12	27	39	47	30	155	0	1	16	39	53	62	38	209
other 100% alcohol attributable	0	0	0	2	3	1	0	6	1	2	1	10	4	16	10	44	1	2	1	12	7	17	10	50
total in alcohol related categories	71	97	205	448	826	1'377	11'152	14'176	203	212	441	815	1'593	2'266	7'618	13'148	274	309	646	1'263	2'419	3'643	18'770	27'324
overall total	104	154	395	911	1'991	3'447	24'343	31'345	269	313	695	1'546	3'499	5'527	17'478	29'327	373	467	1'090	2'457	5'490	8'974	41'821	60'672

Table A3.5: Alcohol-attributable years of life lost in 2007

	Women by age								Men by age								Total by age							
	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
oral cavity and pharynx cancer	0	0	10	132	165	134	91	532	0	25	18	600	1'323	590	303	2'860	0	25	29	732	1'488	724	394	3'392
oesophagus cancer	0	8	0	29	115	107	56	315	0	0	49	310	708	594	324	1'984	0	8	49	338	822	701	381	2'299
colon cancer	0	7	15	42	59	96	144	363	7	8	21	47	130	147	154	514	7	15	36	90	189	243	298	877
rectal cancer	0	0	8	31	77	59	57	231	0	9	22	36	141	135	97	440	0	9	29	67	218	193	154	671
liver cancer	0	5	11	37	74	105	75	306	0	8	45	182	399	429	251	1'314	0	13	56	219	473	534	326	1'620
larynx cancer	0	0	7	0	15	8	5	35	0	0	13	13	73	180	69	348	0	0	20	13	88	188	74	383
breast cancer	0	33	221	519	735	685	483	2'675	0	0	0	0	0	0	0	0	0	33	221	519	735	685	483	2'675
epilepsy	22	0	6	6	16	16	20	86	19	15	51	38	92	50	35	300	41	15	58	44	108	66	55	387
lower respiratory infections	5	7	24	16	31	43	294	421	0	0	48	41	99	126	421	735	5	7	72	58	130	169	715	1'156
tuberculosis	9	0	0	0	4	3	6	21	0	0	11	10	0	18	21	60	9	0	11	10	4	21	26	81
HIV	0	6	20	6	5	0	1	37	0	9	30	25	13	4	1	81	0	15	50	31	17	4	1	118
diabetes mellitus	0	-12	-10	-33	-146	-261	-810	-1'272	0	0	-12	-24	-38	-66	-116	-256	0	-12	-23	-57	-184	-327	-926	-1'528
pancreatitis	0	0	3	14	7	4	14	43	0	0	25	63	61	52	76	277	0	0	29	77	69	55	90	320
liver disease	0	105	655	1'359	1'525	960	272	4'875	0	145	785	2'430	2'483	1'322	476	7'640	0	250	1'440	3'789	4'007	2'281	747	12'515
hypertension	0	0	0	0	16	93	604	713	0	0	9	30	99	233	705	1'076	0	0	9	30	115	326	1'309	1'789
hemorrhagic stroke	11	17	54	121	165	211	392	970	56	28	56	154	179	192	285	950	67	45	109	275	344	403	678	1'921
ischaemic stroke	-12	-22	-27	-15	-125	-188	-1'318	-1'708	0	0	-2	2	26	48	66	139	-12	-22	-29	-14	-99	-140	-1'252	-1'568
ischaemic heart disease	-2	-2	-11	-51	-117	-100	-209	-492	-9	-15	-180	-634	-1'239	-967	-1'776	-4'819	-11	-17	-191	-685	-1'356	-1'068	-1'984	-5'311
conduction disorders and other dysrhythmias	6	13	14	8	16	18	164	238	10	7	17	59	81	111	183	468	15	20	31	67	97	129	347	706
motor vehicle accidents	76	40	9	14	13	6	10	168	1'103	383	149	128	219	83	31	2'096	1'178	424	158	142	232	89	41	2'264
falls	7	11	16	34	36	47	224	376	325	192	222	296	397	479	680	2'592	332	203	237	331	433	527	904	2'967
other unintentional injuries	78	128	72	84	36	22	39	460	814	970	1'025	362	620	299	141	4'230	893	1'098	1'097	445	656	321	180	4'690
self inflicted injuries	257	173	183	198	168	88	61	1'128	1'502	1'292	1'258	1'496	1'353	796	419	8'116	1'759	1'465	1'441	1'694	1'521	885	480	9'244
assault	29	17	23	13	2	0	1	85	42	66	49	26	28	17	2	229	71	83	72	39	30	17	3	314
other intentional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mental disorder due to use of alcohol	0	51	173	422	373	270	63	1'353	0	0	483	824	869	713	230	3'120	0	51	656	1'247	1'243	983	293	4'472
other 100% alcohol attributable	0	0	0	78	90	19	0	187	56	100	38	317	85	245	81	922	56	100	38	395	175	264	81	1'108
total beneficial	-14	-37	-48	-99	-388	-549	-2'336	-3'471	-9	-15	-194	-658	-1'277	-1'033	-1'892	-5'078	-23	-51	-242	-757	-1'665	-1'582	-4'228	-8'549
total adverse	500	618	1'523	3'166	3'741	2'993	3'076	15'617	3'932	3'260	4'423	7'488	9'478	6'862	5'050	40'493	4'432	3'878	5'947	10'654	13'219	9'855	8'126	56'110
total net	485	581	1'475	3'067	3'354	2'444	740	12'146	3'923	3'245	4'229	6'830	8'201	5'829	3'158	35'416	4'409	3'827	5'705	9'897	11'554	8'273	3'897	47'561

Table A3.6: *Alcohol-attributable deaths by broad causes 2007*

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	0.00	0.99	6.17	22.55	46.91	67.03	111.78	255.43
cardiovascular diseases	0.04	0.06	0.61	1.86	-0.77	2.57	-63.56	-59.18
digestive diseases	0.00	2.00	15.07	40.40	57.28	52.22	31.00	197.97
mental disorders	0.00	1.00	4.00	12.00	14.00	15.00	8.00	54.00
injuries	6.93	6.65	6.74	10.57	10.51	9.24	50.60	101.24
other causes	0.53	0.03	0.90	-0.11	-2.45	-11.92	-62.97	-76.00
total beneficial	-0.21	-0.68	-1.10	-2.78	-14.79	-32.65	-363.08	-415.29
total adverse	7.71	11.41	34.60	90.06	140.26	166.79	437.92	888.75
total net	7.50	10.73	33.50	87.28	125.47	134.14	74.84	473.46
Men								
cancers	0.11	1.02	4.32	38.63	122.07	137.22	153.34	456.71
cardiovascular diseases	0.94	0.38	-2.49	-10.69	-33.96	-15.61	-66.70	-128.11
digestive diseases	0.00	4.00	20.62	79.10	111.61	88.60	68.42	372.35
mental disorders	0.00	0.00	12.00	27.00	39.00	47.00	30.00	155.00
injuries	64.53	57.87	67.18	80.64	113.26	111.59	202.97	698.04
other causes	0.33	0.50	3.20	2.93	7.15	14.27	67.25	95.63
total beneficial	-0.15	-0.30	-4.85	-21.28	-57.07	-70.29	-296.58	-450.52
total adverse	66.07	64.07	109.68	238.89	416.21	453.35	751.86	2'100.13
total net	65.92	63.77	104.83	217.62	359.13	383.06	455.28	1'649.61
Total								
cancers	0.11	2.01	10.49	61.18	168.98	204.24	265.12	712.14
cardiovascular diseases	0.99	0.44	-1.87	-8.83	-34.73	-13.04	-130.26	-187.29
digestive diseases	0.00	6.00	35.69	119.51	168.89	140.81	99.41	570.32
mental disorders	0.00	1.00	16.00	39.00	53.00	62.00	38.00	209.00
injuries	71.46	64.52	73.92	91.21	123.77	120.83	253.57	799.28
other causes	0.86	0.53	4.10	2.82	4.70	2.35	4.28	19.63
total beneficial	-0.37	-0.98	-5.95	-24.06	-71.86	-102.94	-659.66	-865.81
total adverse	73.78	75.48	144.28	328.95	556.47	620.14	1'189.78	2'988.88
total net	73.42	74.50	138.33	304.89	484.60	517.20	530.12	2'123.07

Table A3.7: Total number of deaths in 2007 by broad causes

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	14	32	158	491	1'157	1'698	3'613	7'163
cardiovascular diseases	7	16	39	94	269	738	11'338	12'501
digestive diseases	0	2	22	59	106	165	1'031	1'385
mental disorders	1	3	14	17	31	80	1'926	2'072
injuries	63	70	83	111	122	124	891	1'464
other causes	19	31	79	139	306	642	5'544	6'760
total	104	154	395	911	1'991	3'447	24'343	31'345
Men								
cancers	20	42	123	541	1'568	2'342	4'186	8'822
cardiovascular diseases	16	17	90	351	844	1'600	7'188	10'106
digestive diseases	2	7	33	103	179	211	593	1'128
mental disorders	3	7	27	42	56	96	814	1'045
injuries	195	193	296	288	310	298	702	2'282
other causes	33	47	126	221	542	980	3'995	5'944
total	269	313	695	1'546	3'499	5'527	17'478	29'327
Total								
cancers	34	74	281	1'032	2'725	4'040	7'799	15'985
cardiovascular diseases	23	33	129	445	1'113	2'338	18'526	22'607
digestive diseases	2	9	55	162	285	376	1'624	2'513
mental disorders	4	10	41	59	87	176	2'740	3'117
injuries	258	263	379	399	432	422	1'593	3'746
other causes	52	78	205	360	848	1'622	9'539	12'704
total	373	467	1'090	2'457	5'490	8'974	41'821	60'672

Table A3.8: Years of life lost attributable to alcohol by broad causes, 2007

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	0	52	272	790	1'238	1'194	910	4'458
cardiovascular diseases	3	5	29	63	-16	51	-366	-231
digestive diseases	0	105	658	1'413	1'532	964	286	4'957
mental disorders	0	51	173	422	373	270	63	1'353
injuries	447	368	303	383	285	164	336	2'286
other causes	35	1	39	-4	-60	-199	-489	-676
total beneficial	-14	-37	-48	-99	-388	-549	-2'336	-3'471
total adverse	500	618	1'523	3'166	3'741	2'993	3'076	15'617
total net	485	581	1'475	3'067	3'354	2'444	740	12'146
Men								
cancers	7	51	168	1'187	2'775	2'074	1'199	7'460
cardiovascular diseases	57	21	-100	-321	-769	-234	-473	-1'819
digestive diseases	0	193	810	2'493	2'544	1'373	551	7'964
mental disorders	0	0	483	824	869	713	230	3'120
injuries	3'841	2'957	2'740	2'555	2'617	1'693	1'272	17'675
other causes	19	24	128	91	165	210	379	1'016
total beneficial	-9	-15	-194	-658	-1'277	-1'033	-1'892	-5'078
total adverse	3'932	3'260	4'423	7'488	9'478	6'862	5'050	40'493
total net	3'923	3'245	4'229	6'830	8'201	5'829	3'158	35'416
Total								
cancers	7	103	440	1'978	4'013	3'268	2'109	11'918
cardiovascular diseases	60	26	-71	-257	-785	-183	-840	-2'050
digestive diseases	0	297	1'469	3'905	4'076	2'337	837	12'922
mental disorders	0	51	656	1'247	1'243	983	293	4'472
injuries	4'288	3'325	3'043	2'938	2'902	1'857	1'608	19'961
other causes	54	25	167	87	106	11	-111	340
total beneficial	-23	-51	-242	-757	-1'665	-1'582	-4'228	-8'549
total adverse	4'432	3'878	5'947	10'654	13'219	9'855	8'126	56'110
total net	4'409	3'827	5'705	9'897	11'554	8'273	3'897	47'561

Table A3.9: *Total years of life lost in 2007 by broad causes*

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	911	1'733	7'012	17'230	30'527	30'135	29'994	117'542
cardiovascular diseases	452	880	1'735	3'279	7'047	12'663	68'924	94'980
digestive diseases	0	105	964	2'061	2'765	2'927	6'999	15'821
mental disorders	66	166	610	608	816	1'350	10'773	14'388
injuries	4'067	3'879	3'723	3'985	3'280	2'200	5'945	27'078
other causes	1'251	1'695	3'560	4'900	7'979	11'105	36'606	67'096
total	6'746	8'458	17'603	32'063	52'413	60'380	159'241	336'904
Men								
cancers	1'198	2'123	4'903	16'629	35'039	35'067	30'486	125'444
cardiovascular diseases	957	864	3'592	10'918	18'831	23'471	44'501	103'135
digestive diseases	116	341	1'299	3'224	4'063	3'132	3'958	16'132
mental disorders	176	356	1'108	1'314	1'257	1'390	4'667	10'269
injuries	11'616	9'864	12'091	9'122	7'169	4'498	4'426	58'785
other causes	1'995	2'389	5'029	6'929	12'098	14'340	25'317	68'096
total	16'057	15'937	28'021	48'137	78'457	81'897	113'354	381'860
Total								
cancers	2'109	3'857	11'914	33'860	65'566	65'202	60'480	242'986
cardiovascular diseases	1'408	1'744	5'327	14'198	25'878	36'134	113'426	198'115
digestive diseases	116	445	2'263	5'285	6'828	6'059	10'957	31'953
mental disorders	242	523	1'718	1'922	2'073	2'740	15'440	24'657
injuries	15'682	13'742	15'813	13'107	10'449	6'698	10'371	85'863
other causes	3'246	4'084	8'588	11'829	20'077	25'445	61'922	135'191
total	22'802	24'395	45'624	80'200	130'871	142'278	272'596	718'764

Table A3.10: *Alcohol-attributable death for 100% attributable conditions, partly attributable chronic conditions and injuries, 2007*

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
chronic conditions (<100% AAF)	0.57	1.08	7.75	24.70	41.96	56.89	-12.75	120.22
injuries (<100% AAF)	6.93	6.65	6.74	9.57	9.51	9.24	50.60	99.24
100% alcohol attributable	0.00	3.00	19.00	53.00	74.00	68.00	37.00	254.00
total	7.50	10.73	33.50	87.28	125.47	134.14	74.84	473.46
Men								
chronic conditions (<100% AAF)	1.38	1.90	5.65	30.98	93.87	124.47	154.31	412.57
injuries (<100% AAF)	63.53	56.87	66.18	72.64	113.26	110.59	202.97	686.04
100% alcohol attributable	1.00	5.00	33.00	114.00	152.00	148.00	98.00	551.00
total	65.92	63.77	104.83	217.62	359.13	383.06	455.28	1'649.61
Total								
chronic conditions (<100% AAF)	1.95	2.99	13.41	55.68	135.83	181.37	141.56	532.79
injuries (<100% AAF)	70.46	63.52	72.92	82.21	122.77	119.83	253.57	785.28
100% alcohol attributable	1.00	8.00	52.00	167.00	226.00	216.00	135.00	805.00
total	73.42	74.50	138.33	304.89	484.60	517.20	530.12	2'123.07

Table A3.11: *Alcohol-attributable years of life lost for 100% attributable conditions, partly attributable chronic conditions, and injuries 2007*

	Age							
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total
Women								
chronic conditions (<100% AAF)	38	58	344	864	1'110	1'032	69	3'515
injuries (<100% AAF)	447	368	303	343	255	164	336	2'217
100% alcohol attributable	0	156	828	1'860	1'988	1'248	335	6'414
total	485	581	1'475	3'067	3'354	2'444	740	12'146
Men								
chronic conditions (<100% AAF)	83	96	221	951	2'147	1'875	1'098	6'472
injuries (<100% AAF)	3'784	2'905	2'702	2'308	2'617	1'674	1'272	17'263
100% alcohol attributable	56	245	1'306	3'571	3'437	2'280	787	11'681
total	3'923	3'245	4'229	6'830	8'201	5'829	3'158	35'416
Total								
chronic conditions (<100% AAF)	121	153	566	1'815	3'257	2'907	1'168	9'986
injuries (<100% AAF)	4'232	3'273	3'005	2'651	2'872	1'838	1'608	19'480
100% alcohol attributable	56	400	2'134	5'431	5'425	3'528	1'122	18'095
total	4'409	3'827	5'705	9'897	11'554	8'273	3'897	47'561

Table A4.1: Alcohol-attributable fractions, women 2002

Disease	Age													
	15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		75+	
	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD
oral cavity and pharynx cancer	21.31%	0.0279	21.01%	0.0265	25.09%	0.0315	30.12%	0.0356	35.11%	0.0373	27.18%	0.0323	22.21%	0.0281
oesophagus cancer	11.66%	0.0154	11.91%	0.0148	13.88%	0.0184	16.99%	0.0222	20.48%	0.0252	15.64%	0.0195	12.54%	0.0160
colon cancer	2.85%	0.0066	3.70%	0.0074	3.18%	0.0076	3.53%	0.0090	4.21%	0.0107	4.41%	0.0089	3.69%	0.0075
rectal cancer	4.03%	0.0060	4.80%	0.0069	4.60%	0.0068	5.32%	0.0080	6.35%	0.0093	5.87%	0.0082	4.84%	0.0069
liver cancer	6.67%	0.0123	7.27%	0.0120	7.74%	0.0143	9.16%	0.0173	10.80%	0.0199	9.06%	0.0151	7.40%	0.0124
larynx cancer	12.47%	0.0172	12.67%	0.0165	14.85%	0.0205	18.18%	0.0247	21.87%	0.0280	16.66%	0.0217	13.36%	0.0178
breast cancer	8.09%	0.0118	8.58%	0.0116	9.54%	0.0140	11.55%	0.0172	13.90%	0.0200	11.04%	0.0151	8.90%	0.0122
epilepsy	11.34%	0.0187	11.62%	0.0178	13.44%	0.0224	16.38%	0.0279	19.70%	0.0326	15.13%	0.0240	12.16%	0.0195
lower respiratory infections	4.99%	0.0158	5.69%	0.0153	5.76%	0.0192	6.77%	0.0237	8.10%	0.0282	7.07%	0.0203	5.79%	0.0161
hemorrhagic stroke	12.21%	0.0373	11.87%	0.0369	14.79%	0.0449	18.48%	0.0559	22.51%	0.0673	16.19%	0.0506	12.74%	0.0406
tuberculosis	6.79%	0.0209	7.15%	0.0195	9.30%	0.0261	12.56%	0.0325	16.94%	0.0381	11.74%	0.0278	8.84%	0.0221
diabetes mellitus	-18.57%	0.0306	-17.59%	0.0296	-19.67%	0.0357	-20.98%	0.0446	-19.03%	0.0512	-16.63%	0.0353	-14.59%	0.0274
hypertension	2.63%	0.0799	1.68%	0.0762	7.87%	0.0930	15.50%	0.1069	25.43%	0.1139	12.70%	0.0944	7.02%	0.0781
liver cirrhosis	60.78%	0.0458	61.60%	0.0488	64.79%	0.0448	69.40%	0.0434	73.46%	0.0417	67.56%	0.0466	62.18%	0.0498
ischaemic stroke	-20.01%	0.0512	-19.22%	0.0531	-18.18%	0.0512	-16.56%	0.0567	-9.82%	0.0611	-10.21%	0.0393	-9.89%	0.0338
pancreatitis	5.08%	0.0139	5.64%	0.0130	6.86%	0.0206	9.91%	0.0316	15.13%	0.0455	9.50%	0.0262	6.82%	0.0180
ischaemic heart diseases	-4.47%	0.0475	-3.25%	0.0553	-4.87%	0.0505	-5.27%	0.0608	-4.77%	0.0666	-1.18%	0.0551	-1.17%	0.0479
conduction disorders and other dysrhythmias	5.74%	0.0104	6.39%	0.0104	6.68%	0.0124	7.93%	0.0151	9.49%	0.0179	8.03%	0.0134	6.54%	0.0109
motor vehicle accidents	8.62%	0.0288	7.02%	0.0236	5.16%	0.0192	6.35%	0.0193	7.39%	0.0171	6.42%	0.0158	4.64%	0.0206
non-motor vehicle accidents	8.73%	0.0211	8.59%	0.0177	8.18%	0.0194	9.71%	0.0236	10.97%	0.0391	6.31%	0.0177	4.74%	0.0128
HIV	4.90%	0.0122	4.81%	0.0120	5.06%	0.0126	5.30%	0.0131	5.16%	0.0128	4.67%	0.0117	4.23%	0.0107

Table A4.2: Alcohol-attributable fractions, men 2002

Disease	Age													
	15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		75+	
	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD
oral cavity and pharynx cancer	46.15%	0.0279	51.13%	0.0270	55.28%	0.0249	57.07%	0.0234	58.12%	0.0229	58.17%	0.0227	57.16%	0.0234
oesophagus cancer	28.60%	0.0216	32.94%	0.0225	36.88%	0.0218	38.78%	0.0210	39.86%	0.0208	39.90%	0.0206	38.94%	0.0209
colon cancer	4.41%	0.0148	5.29%	0.0174	5.84%	0.0199	6.39%	0.0208	6.75%	0.0216	6.51%	0.0216	6.69%	0.0209
rectal cancer	7.70%	0.0109	9.18%	0.0126	10.30%	0.0139	11.07%	0.0144	11.57%	0.0149	11.37%	0.0149	11.34%	0.0145
liver cancer	14.07%	0.0254	16.47%	0.0286	18.35%	0.0314	19.37%	0.0322	20.06%	0.0330	19.89%	0.0331	19.60%	0.0322
larynx cancer	30.44%	0.0253	34.93%	0.0265	38.97%	0.0261	40.89%	0.0255	41.99%	0.0255	42.03%	0.0253	41.04%	0.0256
breast cancer	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000
epilepsy	27.49%	0.0378	31.75%	0.0411	35.63%	0.0436	37.52%	0.0444	38.60%	0.0451	38.63%	0.0451	37.68%	0.0445
lower respiratory infections	10.38%	0.0416	12.30%	0.0482	13.86%	0.0548	14.81%	0.0573	15.42%	0.0588	15.25%	0.0590	15.07%	0.0568
hemorrhagic stroke	15.21%	0.0276	17.91%	0.0314	20.13%	0.0346	21.47%	0.0361	22.30%	0.0371	22.09%	0.0369	21.81%	0.0364
tuberculosis	25.67%	0.0429	29.90%	0.0460	33.74%	0.0478	35.50%	0.0480	36.52%	0.0483	36.50%	0.0484	35.66%	0.0478
diabetes mellitus	-4.51%	0.0599	-4.65%	0.0721	-4.11%	0.0814	-3.26%	0.0844	-3.04%	0.0871	-3.11%	0.0865	-2.93%	0.0839
hypertension	19.39%	0.0264	22.68%	0.0294	25.76%	0.0317	27.15%	0.2715	27.98%	0.0330	28.08%	0.0332	27.17%	0.0327
liver cirrhosis	63.88%	0.0523	69.34%	0.0485	74.41%	0.0432	76.63%	0.0405	77.59%	0.0394	77.83%	0.0391	76.70%	0.0405
ischaemic stroke	-1.25%	0.0282	-0.07%	0.0316	1.93%	0.0294	3.74%	0.0296	4.42%	0.0309	3.08%	0.0225	3.25%	0.0249
pancreatitis	27.43%	0.0594	33.41%	0.0656	40.61%	0.0709	44.37%	0.0718	45.94%	0.0721	46.42%	0.0723	44.57%	0.0715
ischaemic heart diseases	-7.28%	0.0335	-9.73%	0.0496	-11.26%	0.0374	-10.82%	0.0384	-10.46%	0.0487	-8.17%	0.0740	-8.04%	0.0743
conduction disorders and other dysrhythmias	12.49%	0.0235	14.77%	0.0270	16.66%	0.0301	17.75%	0.0313	18.44%	0.0323	18.29%	0.0323	17.99%	0.0314
motor vehicle accidents	28.75%	0.1438	23.40%	0.1181	17.20%	0.0962	21.17%	0.0967	24.63%	0.0854	21.42%	0.0789	15.47%	0.1029
non-motor vehicle accidents	25.98%	0.0589	34.00%	0.0790	34.46%	0.0827	40.87%	0.0957	43.95%	0.1009	44.61%	0.1038	39.94%	0.0962
HIV	5.35%	0.0132	5.82%	0.0143	5.86%	0.0143	5.77%	0.0142	5.85%	0.0143	5.77%	0.0142	5.76%	0.0142

Table A4.3: Alcohol-attributable deaths 2002

	Women by age								Men by age								Total by age							
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total
oral cavity and pharynx cancer	0.21	0.00	0.50	4.22	7.02	6.79	9.55	28.30	0.00	1.53	4.42	31.39	55.21	28.51	26.86	147.93	0.21	1.53	4.92	35.61	62.23	35.30	36.41	176.22
oesophagus cancer	0.00	0.00	0.14	1.36	3.48	2.97	6.90	14.85	0.00	0.00	2.95	13.96	33.88	29.93	36.60	117.32	0.00	0.00	3.09	15.32	37.37	32.90	43.50	132.17
colon cancer	0.00	0.15	0.19	0.92	2.69	5.24	13.32	22.52	0.00	0.00	0.53	1.60	6.14	10.15	18.66	37.09	0.00	0.15	0.72	2.51	8.84	15.40	31.99	59.60
rectal cancer	0.00	0.10	0.09	1.01	1.33	2.82	5.76	11.11	0.00	0.00	0.10	1.88	6.02	9.09	10.55	27.64	0.00	0.10	0.19	2.89	7.35	11.91	16.31	38.76
liver cancer	0.00	0.00	0.08	0.73	1.73	3.53	6.59	12.66	0.28	0.00	0.73	5.81	15.05	27.25	25.08	74.21	0.28	0.00	0.81	6.54	16.78	30.79	31.67	86.87
larynx cancer	0.00	0.00	0.15	0.00	0.44	0.50	0.53	1.62	0.00	0.35	0.78	4.91	9.66	11.35	7.39	34.43	0.00	0.35	0.93	4.91	10.09	11.85	7.92	36.05
breast cancer	0.00	0.94	5.34	18.14	35.58	33.02	49.94	142.97	-	-	-	-	-	-	-	-	0.00	0.94	5.34	18.14	35.58	33.02	49.94	142.97
epilepsy	0.11	0.35	0.54	0.66	0.59	1.21	3.53	6.98	0.00	1.59	3.21	3.00	3.47	4.64	5.65	21.56	0.11	1.94	3.74	3.66	4.06	5.85	9.18	28.54
lower respiratory infections	0.05	0.00	0.46	0.20	1.05	2.40	52.48	56.65	0.21	0.25	0.83	2.07	3.70	12.05	91.75	110.86	0.26	0.25	1.29	2.28	4.75	14.45	144.23	167.51
tuberculosis	0.00	0.00	0.09	0.00	0.17	0.23	0.97	1.47	0.00	0.30	0.34	0.71	0.37	1.09	3.57	6.37	0.00	0.30	0.43	0.71	0.53	1.33	4.54	7.84
HIV	0.10	0.29	0.81	0.16	0.05	0.05	0.04	1.50	0.05	0.41	2.11	0.92	0.41	0.17	0.06	4.13	0.15	0.70	2.92	1.08	0.46	0.22	0.10	5.63
diabetes mellitus	0.00	-0.18	-0.39	-0.84	-5.52	-16.97	-110.29	-134.18	0.00	-0.05	-0.21	-0.82	-1.28	-4.57	-12.94	-19.85	0.00	-0.22	-0.60	-1.65	-6.80	-21.53	-123.22	-154.03
pancreatitis	0.00	0.00	0.14	0.10	0.30	0.66	1.64	2.84	0.00	0.67	0.41	2.66	3.68	5.57	8.47	21.45	0.00	0.67	0.54	2.76	3.98	6.23	10.10	24.29
liver disease	0.00	2.00	11.00	37.00	44.00	43.00	24.00	161.00	0.00	1.00	23.00	79.00	129.00	110.00	80.00	422.00	0.00	3.00	34.00	116.00	173.00	153.00	104.00	583.00
hypertension	0.00	0.00	0.08	0.31	2.54	6.86	57.44	67.23	0.00	0.23	0.26	1.90	3.08	14.60	91.83	111.90	0.00	0.23	0.34	2.21	5.62	21.46	149.27	179.13
hemorrhagic stroke	0.12	0.47	1.33	4.62	8.33	12.46	28.03	55.37	0.46	0.90	3.22	4.94	9.14	17.67	41.23	77.55	0.58	1.37	4.55	9.56	17.47	30.14	69.26	132.93
ischaemic stroke	0.00	-0.19	-0.36	-0.99	-1.87	-11.85	-202.58	-217.85	-0.01	0.00	0.14	0.41	1.81	5.70	35.17	43.21	-0.01	-0.19	-0.23	-0.58	-0.05	-6.15	-167.42	-174.64
ischaemic heart disease	0.00	-0.13	-0.44	-2.16	-5.48	-4.38	-53.61	-66.20	0.00	-1.07	-6.65	-21.75	-50.33	-79.22	-258.54	-417.55	0.00	-1.20	-7.08	-23.91	-55.81	-83.60	-312.15	-483.75
conduction disorders and other dysrhythmias	0.00	0.00	0.20	0.24	0.28	2.01	11.11	13.84	0.37	0.44	0.83	1.06	2.58	5.67	19.79	30.76	0.37	0.44	1.03	1.30	2.87	7.68	30.90	44.60
motor vehicle accidents	1.90	0.98	0.93	0.76	0.52	0.64	1.07	6.80	21.85	11.00	9.29	8.89	8.13	6.86	3.87	69.88	23.74	11.98	10.22	9.65	8.65	7.50	4.94	76.67
falls	0.09	0.17	0.57	0.29	1.21	1.51	27.48	31.32	2.08	3.06	6.20	10.22	18.02	25.43	117.83	182.83	2.17	3.23	6.78	10.51	19.22	26.94	145.30	214.15
other unintentional injuries	0.70	0.77	1.15	1.46	1.32	1.39	3.55	10.33	8.83	12.58	14.13	20.02	19.78	22.30	34.75	132.39	9.53	13.35	15.28	21.48	21.09	23.69	38.30	142.72
self inflicted injuries	2.44	2.66	5.89	7.67	10.09	3.53	5.26	37.55	20.00	47.60	58.24	66.61	66.80	51.74	65.50	376.50	22.45	50.26	64.13	74.28	76.89	55.28	70.76	414.05
assault	0.61	0.52	0.82	0.58	0.22	0.25	0.28	3.28	0.26	2.04	2.76	2.45	0.44	0.45	2.00	10.39	0.87	2.56	3.58	3.03	0.66	0.70	2.28	13.67
other intentional	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mental disorder due to use of alcohol	0.00	0.00	2.00	13.00	19.00	11.00	14.00	59.00	0.00	0.00	14.00	42.00	38.00	41.00	31.00	166.00	0.00	0.00	16.00	55.00	57.00	52.00	45.00	225.00
other 100% alcohol attributable	0.00	0.00	0.00	1.00	3.00	1.00	4.00	9.00	0.00	0.00	3.00	5.00	12.00	4.00	8.00	32.00	0.00	0.00	3.00	6.00	15.00	5.00	12.00	41.00
total beneficial	0.00	-0.50	-1.20	-3.99	-12.87	-33.19	-366.48	-418.23	-0.01	-1.12	-6.85	-22.56	-51.60	-83.79	-271.48	-437.41	-0.01	-1.61	-8.05	-26.56	-64.48	-116.98	-637.95	-855.64
total adverse	6.33	9.41	32.50	94.42	144.96	143.11	327.48	758.20	54.39	83.94	151.47	311.43	446.36	445.22	765.60	2'258.40	60.73	93.34	183.97	405.84	591.32	588.33	1'093.07	3'016.60
total net	6.33	8.91	31.30	90.43	132.09	109.92	-39.00	339.97	54.38	82.82	144.62	288.86	394.76	361.43	494.12	1'820.99	60.72	91.73	175.92	379.29	526.84	471.35	455.12	2'160.97

Table A4.4: Number of all deaths in 2002, for alcohol related categories and total deaths across all categories

	Women by age								Men by age								Total by age							
	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
oral cavity and pharynx cancer	1	0	2	14	20	25	43	105	0	3	8	55	95	49	47	257	1	3	10	69	115	74	90	362
oesophagus cancer	0	0	1	8	17	19	55	100	0	0	8	36	85	75	94	298	0	0	9	44	102	94	149	398
colon cancer	0	4	6	26	64	119	361	580	0	0	9	25	91	156	279	560	0	4	15	51	155	275	640	1'140
rectal cancer	0	2	2	19	21	48	119	211	0	0	1	17	52	80	93	243	0	2	3	36	73	128	212	454
liver cancer	0	0	1	8	16	39	89	153	2	0	4	30	75	137	128	376	2	0	5	38	91	176	217	529
larynx cancer	0	0	1	0	2	3	4	10	0	1	2	12	23	27	18	83	0	1	3	12	25	30	22	93
breast cancer	0	11	56	157	256	299	561	1'340	0	0	0	0	1	3	5	9	0	11	56	157	257	302	566	1'349
epilepsy	1	3	4	4	3	8	29	52	0	5	9	8	9	12	15	58	1	8	13	12	12	20	44	110
lower respiratory infections	1	0	8	3	13	34	907	966	2	2	6	14	24	79	609	736	3	2	14	17	37	113	1'516	1'702
tuberculosis	0	0	1	0	1	2	11	15	0	1	1	2	1	3	10	18	0	1	2	2	2	5	21	33
HIV	2	6	16	3	1	1	1	30	1	7	36	16	7	3	1	71	3	13	52	19	8	4	2	101
diabetes mellitus	0	1	2	4	29	102	756	894	0	1	5	25	42	147	442	662	0	2	7	29	71	249	1'198	1'556
pancreatitis	0	0	2	1	2	7	24	36	0	2	1	6	8	12	19	48	0	2	3	7	10	19	43	84
liver disease	0	2	11	37	44	43	24	161	0	1	23	79	129	110	80	422	0	3	34	116	173	153	104	583
hypertension	0	0	1	2	10	54	818	885	0	1	1	7	11	52	338	410	0	1	2	9	21	106	1'156	1'295
hemorrhagic stroke	1	4	9	25	37	77	220	373	3	5	16	23	41	80	189	357	4	9	25	48	78	157	409	730
ischaemic stroke	0	1	2	6	19	116	2'048	2'192	1	0	7	11	41	185	1'081	1'326	1	1	9	17	60	301	3'129	3'518
ischaemic heart disease	0	4	9	41	115	372	4'569	5'110	0	11	59	201	481	970	3'217	4'939	0	15	68	242	596	1'342	7'786	10'049
conduction disorders and other dysrhythmias	0	0	3	3	3	25	170	204	3	3	5	6	14	31	110	172	3	3	8	9	17	56	280	376
motor vehicle accidents	22	14	18	12	7	10	23	106	76	47	54	42	33	32	25	309	98	61	72	54	40	42	48	415
falls	1	2	7	3	11	24	580	628	8	9	18	25	41	57	295	453	9	11	25	28	52	81	875	1'081
other unintentional injuries	8	9	14	15	12	22	75	155	34	37	41	49	45	50	87	343	42	46	55	64	57	72	162	498
self inflicted injuries	28	31	72	79	92	56	111	469	77	140	169	163	152	116	164	981	105	171	241	242	244	172	275	1'450
assault	7	6	10	6	2	4	6	41	1	6	8	6	1	1	5	28	8	12	18	12	3	5	11	69
other intentional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mental disorder due to use of alcohol	0	0	2	13	19	11	14	59	0	0	14	42	38	41	31	166	0	0	16	55	57	52	45	225
other 100% alcohol attributable	0	0	0	1	3	1	4	9	0	0	3	5	12	4	8	32	0	0	3	6	15	5	12	41
total in alcohol related categories	72	100	260	490	819	1'521	11'622	14'884	208	282	508	905	1'552	2'512	7'390	13'357	280	382	768	1'395	2'371	4'033	19'012	28'241
overall total	128	188	470	1'024	1'882	3'670	24'467	31'829	290	465	850	1'699	3'395	5'965	16'785	29'449	418	653	1'320	2'723	5'277	9'635	41'252	61'278

Table A4.5: Alcohol-attributable years of life lost in 2002

	Women by age								Men by age								Total by age							
	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
oral cavity and pharynx cancer	15	0	24	148	181	114	79	561	0	74	164	938	1'236	403	201	3'017	15	74	188	1'086	1'417	517	280	3'577
oesophagus cancer	0	0	6	46	92	49	52	245	0	0	114	407	736	441	271	1'967	0	0	119	453	827	490	323	2'212
colon cancer	0	8	8	32	69	88	101	306	0	0	21	48	135	139	130	473	0	8	30	80	204	227	231	779
rectal cancer	0	5	4	35	34	49	40	167	0	0	4	55	131	126	71	388	0	5	8	90	165	175	112	555
liver cancer	0	0	3	26	44	60	58	191	17	0	30	172	320	382	191	1'112	17	0	33	198	364	442	249	1'303
larynx cancer	0	0	7	0	11	8	6	31	0	19	31	139	207	157	51	604	0	19	37	139	218	166	57	636
breast cancer	0	48	234	628	920	573	391	2'794	-	-	-	-	-	-	-	-	0	48	234	628	920	573	391	2'794
epilepsy	7	19	24	23	14	20	27	135	0	76	134	89	78	67	41	485	7	94	158	112	92	87	69	619
lower respiratory infections	3	0	20	7	27	39	288	385	13	12	32	63	80	162	491	852	16	12	53	70	107	201	779	1'237
tuberculosis	0	0	4	0	5	4	7	19	0	14	15	21	9	15	25	99	0	14	18	21	13	19	32	118
HIV	6	15	36	6	1	1	0	65	3	19	83	28	9	3	1	147	9	35	119	34	11	3	1	212
diabetes mellitus	0	-9	-17	-29	-135	-282	-729	-1'200	0	-2	-8	-24	-27	-63	-84	-209	0	-11	-25	-53	-162	-345	-813	-1'409
pancreatitis	0	0	6	4	9	11	10	40	0	31	16	81	81	81	54	345	0	31	23	85	90	92	64	385
liver disease	0	101	475	1'278	1'141	781	238	4'013	0	46	904	2'344	2'764	1'572	612	8'241	0	147	1'379	3'622	3'905	2'352	850	12'254
hypertension	0	0	3	10	64	112	329	519	0	11	9	54	67	199	496	837	0	11	13	64	131	311	826	1'356
hemorrhagic stroke	7	26	56	159	218	203	221	892	26	42	126	147	199	249	286	1'076	34	68	182	307	417	453	507	1'968
ischaemic stroke	0	-10	-16	-34	-47	-192	-1'208	-1'507	-1	0	6	12	38	76	208	339	-1	-10	-10	-22	-8	-116	-1'001	-1'168
ischaemic heart disease	0	-7	-19	-73	-138	-71	-320	-629	0	-51	-258	-648	-1'084	-1'089	-1'589	-4'718	0	-58	-276	-721	-1'222	-1'160	-1'909	-5'347
conduction disorders and other dysrhythmias	0	0	9	8	7	33	67	124	22	22	32	32	54	77	115	354	22	22	41	41	60	110	182	478
motor vehicle accidents	121	53	40	26	13	10	9	272	1'282	543	371	271	180	97	28	2'772	1'403	595	412	297	193	108	37	3'045
falls	5	9	25	11	30	24	158	263	120	154	244	306	394	354	641	2'214	126	164	270	316	424	377	799	2'477
other unintentional injuries	46	41	51	51	34	25	27	274	513	615	555	612	441	308	226	3'270	559	656	606	663	475	332	252	3'544
self inflicted injuries	154	144	262	267	261	62	42	1'192	1'153	2'358	2'310	2'036	1'518	742	440	10'558	1'307	2'502	2'572	2'303	1'779	804	482	11'749
assault	39	29	35	20	5	5	2	136	14	99	108	77	9	8	14	329	53	127	143	98	15	13	17	465
other intentional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mental disorder due to use of alcohol	0	0	91	431	486	187	137	1'331	0	0	529	1'263	848	585	233	3'458	0	0	620	1'694	1'334	772	370	4'789
other 100% alcohol attributable	0	0	0	37	77	16	31	162	0	0	111	155	268	58	64	656	0	0	111	193	346	74	95	818
total beneficial	0	-26	-51	-136	-320	-545	-2'258	-3'336	-1	-54	-265	-672	-1'111	-1'152	-1'673	-4'928	-1	-79	-317	-808	-1'431	-1'698	-3'931	-8'264
total adverse	403	497	1'425	3'254	3'742	2'474	2'322	14'117	3'165	4'135	5'948	9'352	9'803	6'301	4'889	43'594	3'568	4'632	7'374	12'606	13'545	8'775	7'211	57'711
total net	403	472	1'374	3'117	3'423	1'928	64	10'781	3'165	4'081	5'683	8'680	8'692	5'149	3'217	38'666	3'567	4'553	7'057	11'798	12'115	7'077	3'281	49'447

Table A4.6: Alcohol-attributable deaths by broad causes 2002

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	0.21	1.19	6.49	26.37	52.28	54.89	92.60	234.03
cardiovascular diseases	0.12	0.15	0.81	3.02	5.81	6.10	-157.61	-141.60
digestive diseases	0.00	2.00	11.14	37.10	44.30	43.66	25.64	163.84
mental disorders	0.00	0.00	2.00	13.00	19.00	11.00	14.00	59.00
injuries	5.74	5.10	9.36	10.76	13.35	7.33	37.64	89.28
other causes	0.26	0.46	1.51	0.18	-2.65	-13.07	-51.27	-64.58
total beneficial	0.00	-0.50	-1.20	-3.99	-12.87	-33.19	-366.48	-418.23
total adverse	6.33	9.41	32.50	94.42	144.96	143.11	327.48	758.20
total net	6.33	8.91	31.30	90.43	132.09	109.92	-39.00	339.97
Men								
cancers	0.28	1.88	9.51	59.55	125.96	116.28	125.15	438.61
cardiovascular diseases	0.82	0.50	-0.20	-9.43	-25.71	-31.58	-66.53	-132.13
digestive diseases	0.00	1.67	23.41	81.66	132.68	115.57	88.47	443.45
mental disorders	0.00	0.00	14.00	42.00	38.00	41.00	31.00	166.00
injuries	53.02	76.28	91.62	109.20	114.16	106.77	224.94	775.99
other causes	0.26	2.49	6.28	5.89	9.67	13.38	91.09	129.07
total beneficial	-0.01	-1.12	-6.85	-22.56	-51.60	-83.79	-271.48	-437.41
total adverse	54.39	83.94	151.47	311.43	446.36	445.22	765.60	2'258.40
total net	54.38	82.82	144.62	288.86	394.76	361.43	494.12	1'820.99
Total								
cancers	0.49	3.07	16.01	85.92	178.24	171.17	217.74	672.64
cardiovascular diseases	0.94	0.65	0.61	-6.42	-19.91	-25.47	-224.13	-273.73
digestive diseases	0.00	3.67	34.54	118.76	176.98	159.23	114.10	607.29
mental disorders	0.00	0.00	16.00	55.00	57.00	52.00	45.00	225.00
injuries	58.76	81.38	100.98	119.95	127.51	114.10	262.58	865.27
other causes	0.52	2.95	7.79	6.07	7.02	0.32	39.82	64.49
total beneficial	-0.01	-1.61	-8.05	-26.56	-64.48	-116.98	-637.95	-855.64
total adverse	60.73	93.34	183.97	405.84	591.32	588.33	1'093.07	3'016.60
total net	60.72	91.73	175.92	379.29	526.84	471.35	455.12	2'160.97

Table A4.7: Total number of deaths in 2002 by broad causes

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	18	44	168	554	1'032	1'589	3'442	6'847
cardiovascular diseases	5	15	43	118	290	973	11'862	13'306
digestive diseases	1	2	18	56	80	157	845	1'159
mental disorders	7	22	19	23	35	72	1'535	1'713
injuries	67	63	124	118	131	116	802	1'421
other causes	30	42	98	155	314	763	5'981	7'383
total	128	188	470	1'024	1'882	3'670	24'467	31'829
Men								
cancers	12	39	130	557	1'438	2'369	3'796	8'341
cardiovascular diseases	14	37	135	355	854	1'856	7'168	10'419
digestive diseases	0	6	37	119	198	262	566	1'188
mental disorders	20	64	57	67	60	117	654	1'039
injuries	200	246	300	298	286	266	587	2'183
other causes	44	73	191	303	559	1'095	4'014	6'279
total	290	465	850	1'699	3'395	5'965	16'785	29'449
Total								
cancers	30	83	298	1'111	2'470	3'958	7'238	15'188
cardiovascular diseases	19	52	178	473	1'144	2'829	19'030	23'725
digestive diseases	1	8	55	175	278	419	1'411	2'347
mental disorders	27	86	76	90	95	189	2'189	2'752
injuries	267	309	424	416	417	382	1'389	3'604
other causes	74	115	289	458	873	1'858	9'995	13'662
total	418	653	1'320	2'723	5'277	9'635	41'252	61'278

Table A4.8: *Years of life lost attributable to alcohol by broad causes, 2002*

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	15	61	286	915	1'351	941	727	4'295
cardiovascular diseases	7	9	35	107	154	101	-895	-482
digestive diseases	0	101	481	1'282	1'149	792	248	4'053
mental disorders	0	0	91	431	486	187	137	1'331
injuries	365	276	414	375	344	125	238	2'136
other causes	16	25	67	8	-61	-218	-391	-553
total beneficial	0	-26	-51	-136	-320	-545	-2'258	-3'336
total adverse	403	497	1'425	3'254	3'742	2'474	2'322	14'117
total net	403	472	1'374	3'117	3'423	1'928	64	10'781
Men								
cancers	17	93	363	1'759	2'765	1'648	916	7'561
cardiovascular diseases	48	24	-11	-275	-545	-429	-452	-1'641
digestive diseases	0	77	920	2'425	2'846	1'653	666	8'586
mental disorders	0	0	529	1'263	848	585	233	3'458
injuries	3'084	3'769	3'626	3'331	2'563	1'509	1'357	19'239
other causes	16	119	256	177	215	183	497	1'463
total beneficial	-1	-54	-265	-672	-1'111	-1'152	-1'673	-4'928
total adverse	3'165	4'135	5'948	9'352	9'803	6'301	4'889	43'594
total net	3'165	4'081	5'683	8'680	8'692	5'149	3'217	38'666
Total								
cancers	32	154	649	2'674	4'116	2'590	1'642	11'857
cardiovascular diseases	55	33	23	-168	-391	-329	-1'347	-2'123
digestive diseases	0	178	1'401	3'706	3'995	2'445	914	12'639
mental disorders	0	0	620	1'694	1'334	772	370	4'789
injuries	3'448	4'045	4'040	3'706	2'907	1'634	1'596	21'375
other causes	32	143	324	185	154	-35	106	910
total beneficial	-1	-79	-317	-808	-1'431	-1'698	-3'931	-8'264
total adverse	3'568	4'632	7'374	12'606	13'545	8'775	7'211	57'711
total net	3'567	4'553	7'057	11'798	12'115	7'077	3'281	49'447

Table A4.9: Total years of life lost in 2002 by broad causes

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	1'145	2'334	7'273	19'110	26'631	27'038	27'174	110'704
cardiovascular diseases	306	807	1'853	4'018	7'342	15'907	69'527	99'759
digestive diseases	63	101	783	1'919	2'053	2'682	5'505	13'106
mental disorders	446	1'185	861	786	890	1'175	8'585	13'926
injuries	4'255	3'406	5'480	4'107	3'375	1'986	5'099	27'707
other causes	1'910	2'238	4'345	5'376	7'947	12'685	37'444	71'945
total	8'124	10'069	20'594	35'317	48'238	61'473	153'333	337'148
Men								
cancers	717	1'922	5'115	16'610	31'141	33'140	26'655	115'302
cardiovascular diseases	817	1'802	5'259	10'587	18'397	25'505	42'901	105'269
digestive diseases	0.00	283	1'442	3'540	4'258	3'670	3'594	16'787
mental disorders	1'146	3'143	2'302	2'047	1'312	1'603	3'600	15'153
injuries	11'625	12'146	11'892	9'086	6'419	3'772	3'557	58'496
other causes	2'574	3'546	7'554	9'111	12'035	14'962	24'662	74'443
total	16'878	22'843	33'564	50'980	73'562	82'652	104'970	385'450
Total								
cancers	1'862	4'256	12'389	35'721	57'772	60'178	53'829	226'006
cardiovascular diseases	1'122	2'609	7'112	14'605	25'739	41'412	112'428	205'028
digestive diseases	63	384	2'225	5'459	6'311	6'352	9'100	29'893
mental disorders	1'591	4'328	3'162	2'833	2'202	2'777	12'185	29'079
injuries	15'880	15'552	17'371	13'192	9'794	5'758	8'655	86'203
other causes	4'484	5'784	11'899	14'487	19'982	27'647	62'106	146'388
total	25'002	32'912	54'158	86'297	121'801	144'125	258'303	722'597

Table A3.10: *Alcohol-attributable deaths for 100% attributable conditions, partly attributable chronic conditions and injuries, 2002*

	Age							
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total
Women								
chronic conditions (<100% AAF)	0.60	1.80	8.95	28.67	52.73	47.59	-118.64	21.69
injuries (<100% AAF)	5.74	5.10	9.36	10.76	13.35	7.33	37.64	89.28
100% alcohol attributable	0.00	2.00	13.00	51.00	66.00	55.00	42.00	229.00
total	6.33	8.91	31.30	90.43	132.09	109.92	-39.00	339.97
Men								
chronic conditions (<100% AAF)	1.36	5.54	14.00	54.67	102.60	99.66	151.18	429.00
injuries (<100% AAF)	53.02	76.28	90.62	108.20	113.16	106.77	223.94	771.99
100% alcohol attributable	0.00	1.00	40.00	126.00	179.00	155.00	119.00	620.00
total	54.38	82.82	144.62	288.86	394.76	361.43	494.12	1'820.99
Total								
chronic conditions (<100% AAF)	1.96	7.34	22.95	83.33	155.33	147.25	32.54	450.70
injuries (<100% AAF)	58.76	81.38	99.98	118.95	126.51	114.10	261.58	861.27
100% alcohol attributable	0.00	3.00	53.00	177.00	245.00	210.00	161.00	849.00
total	60.72	91.73	175.92	379.29	526.84	471.35	455.12	2'160.97

Table A3.11: *Alcohol-attributable years of life lost for 100% attributable conditions, partly attributable chronic conditions, and injuries 2002*

	Age							
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total
Women								
chronic conditions (<100% AAF)	38	95	394	997	1'375	820	-580	3'139
injuries (<100% AAF)	365	276	414	375	344	125	238	2'136
100% alcohol attributable	0	101	566	1'746	1'704	983	406	5'506
total	403	472	1'374	3'117	3'423	1'928	64	10'781
Men								
chronic conditions (<100% AAF)	81	266	551	1'615	2'270	1'425	959	7'167
injuries (<100% AAF)	3'084	3'769	3'589	3'303	2'542	1'509	1'349	19'143
100% alcohol attributable	0	46	1'543	3'763	3'880	2'215	909	12'356
total	3'165	4'081	5'683	8'680	8'692	5'149	3'217	38'666
Total								
chronic conditions (<100% AAF)	119	361	945	2'611	3'645	2'244	379	10'306
injuries (<100% AAF)	3'448	4'045	4'002	3'677	2'885	1'634	1'587	21'280
100% alcohol attributable	0	147	2'109	5'509	5'584	3'199	1'315	17'862
total	3'567	4'553	7'057	11'798	12'115	7'077	3'281	49'447

Table A5.1: Alcohol-attributable fractions, women 1997

Disease	Age													
	15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		75+	
	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD
oral cavity and pharynx cancer	18.35%	0.0254	24.39%	0.0312	29.20%	0.0361	29.93%	0.0364	28.70%	0.0348	23.69%	0.0301	23.04%	0.0295
oesophagus cancer	9.96%	0.0136	13.80%	0.0180	16.45%	0.0223	17.08%	0.0226	16.59%	0.0213	13.66%	0.0174	13.25%	0.0170
colon cancer	2.53%	0.0058	3.86%	0.0081	3.59%	0.0089	4.03%	0.0093	4.60%	0.0095	4.37%	0.0085	4.26%	0.0083
rectal cancer	3.53%	0.0054	5.19%	0.0075	5.31%	0.0080	5.77%	0.0084	6.19%	0.0087	5.60%	0.0079	5.44%	0.0077
liver cancer	5.82%	0.0108	8.17%	0.0141	9.04%	0.0171	9.54%	0.0173	9.66%	0.0164	8.32%	0.0136	8.06%	0.0132
larynx cancer	10.65%	0.0152	14.71%	0.0200	17.59%	0.0247	18.23%	0.0251	17.67%	0.0237	14.51%	0.0193	14.09%	0.0188
breast cancer	6.96%	0.0103	9.79%	0.0138	11.27%	0.0170	11.82%	0.0174	11.74%	0.0164	9.87%	0.0134	9.57%	0.0130
epilepsy	9.75%	0.0162	13.43%	0.0215	15.89%	0.0271	16.50%	0.0277	16.07%	0.0258	13.28%	0.0207	12.88%	0.0203
lower respiratory infections	4.35%	0.0136	6.28%	0.0183	6.71%	0.0231	7.19%	0.0233	7.49%	0.0217	6.60%	0.0174	6.40%	0.0168
hemorrhagic stroke	10.30%	0.0314	14.15%	0.0432	17.73%	0.0535	18.22%	0.0551	17.21%	0.0526	13.62%	0.0433	13.20%	0.0422
tuberculosis	4.74%	0.0163	8.70%	0.0247	11.91%	0.0320	12.67%	0.0325	12.39%	0.0303	9.43%	0.0238	9.27%	0.0232
diabetes mellitus	-18.41%	0.0284	-20.78%	0.0364	-22.09%	0.0441	-21.83%	0.0451	-19.80%	0.0406	-16.85%	0.0313	-15.71%	0.0295
hypertension	-1.95%	0.0709	4.41%	0.0916	12.74%	0.1079	13.70%	0.1084	12.28%	0.1028	6.18%	0.0846	6.39%	0.0818
liver cirrhosis	57.32%	0.0463	65.16%	0.0461	68.84%	0.0438	69.77%	0.0437	69.20%	0.0451	64.70%	0.0497	63.85%	0.0507
ischaemic stroke	-21.24%	0.0513	-21.90%	0.0615	-18.81%	0.0594	-18.15%	0.0606	-16.69%	0.0583	-11.64%	0.0409	-10.78%	0.0387
pancreatitis	3.82%	0.0097	6.63%	0.0176	8.96%	0.0287	9.70%	0.0300	9.64%	0.0274	7.36%	0.0184	7.24%	0.0183
ischaemic heart diseases	-4.70%	0.0544	-4.31%	0.0741	-5.48%	0.0626	-4.80%	0.0662	-3.57%	0.0634	-0.94%	0.0547	-0.80%	0.0516
conduction disorders and other dysrhythmias	4.99%	0.0091	7.14%	0.0122	7.82%	0.0149	8.31%	0.0152	8.52%	0.0145	7.39%	0.0119	7.17%	0.0116
motor vehicle accidents	7.99%	0.0259	7.37%	0.0237	5.14%	0.0206	6.89%	0.0209	7.08%	0.0210	5.57%	0.0155	3.49%	0.0072
non-motor vehicle accidents	8.12%	0.0128	9.36%	0.0171	9.77%	0.0215	9.58%	0.0213	7.80%	0.0193	5.04%	0.0131	4.87%	0.0131
HIV	4.93%	0.0122	5.31%	0.0131	5.46%	0.0135	5.46%	0.0135	5.19%	0.0129	4.70%	0.0118	4.49%	0.0113

Table A5.2: Alcohol-attributable fractions, men 1997

Disease	Age													
	15 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		75+	
	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD	AAF	SD
oral cavity and pharynx cancer	44.06%	0.0279	55.10%	0.0250	56.65%	0.0239	59.75%	0.0220	58.79%	0.0226	57.71%	0.0230	55.28%	0.0246
oesophagus cancer	26.86%	0.0209	36.62%	0.0219	38.28%	0.0213	41.48%	0.0203	40.45%	0.0206	39.41%	0.0208	36.94%	0.0215
colon cancer	4.20%	0.0139	5.69%	0.0199	6.38%	0.0208	6.94%	0.0228	6.61%	0.0222	6.56%	0.0213	6.09%	0.0199
rectal cancer	7.27%	0.0103	10.15%	0.0139	11.01%	0.0143	12.06%	0.0155	11.59%	0.0152	11.34%	0.0148	10.51%	0.0139
liver cancer	13.30%	0.0240	18.25%	0.0314	19.29%	0.0321	20.96%	0.0342	20.32%	0.0337	19.79%	0.0328	18.53%	0.0312
larynx cancer	28.64%	0.0245	38.71%	0.0263	40.39%	0.0257	43.64%	0.0251	42.60%	0.0254	41.53%	0.0254	39.02%	0.0260
breast cancer	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000	0.00%	0.0000
epilepsy	25.81%	0.0359	35.37%	0.0436	37.02%	0.0439	40.20%	0.0455	39.17%	0.0454	38.14%	0.0446	35.69%	0.0435
lower respiratory infections	9.76%	0.0388	13.71%	0.0546	14.70%	0.0566	16.13%	0.0620	15.55%	0.0604	15.16%	0.0581	14.06%	0.0541
hemorrhagic stroke	14.31%	0.0261	19.90%	0.0343	21.27%	0.0358	23.26%	0.0382	22.47%	0.0374	21.93%	0.0365	20.39%	0.0346
tuberculosis	23.86%	0.0413	33.49%	0.0479	35.09%	0.0481	38.03%	0.0490	37.07%	0.0488	36.10%	0.0483	33.81%	0.0475
diabetes mellitus	-4.70%	0.0564	-4.64%	0.0823	-3.82%	0.0851	-3.27%	0.0932	-3.53%	0.0904	-3.35%	0.0862	-3.90%	0.0810
hypertension	18.12%	0.0250	25.65%	0.0315	26.80%	0.0323	29.41%	0.2941	28.60%	0.0333	27.67%	0.0329	25.72%	0.0316
liver cirrhosis	60.87%	0.0532	73.88%	0.0438	75.68%	0.0414	78.96%	0.0373	78.05%	0.0387	77.08%	0.0398	74.33%	0.0431
ischaemic stroke	-2.12%	0.0282	1.26%	0.0321	2.82%	0.0310	4.67%	0.0310	3.93%	0.0305	2.79%	0.0236	1.66%	0.0234
pancreatitis	24.30%	0.0546	39.56%	0.0698	42.53%	0.0711	48.10%	0.0722	46.51%	0.0722	45.00%	0.0716	40.52%	0.0701
ischaemic heart diseases	-7.12%	0.0290	-10.84%	0.0543	-11.21%	0.0380	-11.77%	0.0418	-11.45%	0.0489	-8.21%	0.0754	-8.73%	0.0778
conduction disorders and other dysrhythmias	11.73%	0.0221	16.51%	0.0301	17.59%	0.0309	19.30%	0.0335	18.65%	0.0330	18.14%	0.0318	16.84%	0.0301
motor vehicle accidents	28.42%	0.1380	26.21%	0.1266	18.26%	0.1101	24.49%	0.1112	25.19%	0.1121	19.81%	0.0827	12.41%	0.0385
non-motor vehicle accidents	23.72%	0.0516	41.24%	0.0947	36.98%	0.0881	47.46%	0.1078	44.83%	0.1020	41.32%	0.0958	33.12%	0.0791
HIV	5.34%	0.0132	6.01%	0.0147	5.99%	0.0146	6.04%	0.0148	6.00%	0.0146	5.89%	0.0144	5.88%	0.0145

Table A5.3: Alcohol-attributable deaths 1997

	Women by age								Men by age								Total by age							
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total
oral cavity and pharynx cancer	0.00	0.00	0.00	5.09	2.58	4.03	7.60	19.30	0.00	0.00	5.67	36.45	45.86	43.29	25.98	157.24	0.00	0.00	5.67	41.54	48.44	47.31	33.59	176.54
oesophagus cancer	0.00	0.14	0.49	1.54	1.83	2.46	6.49	12.95	0.00	0.00	2.30	13.69	27.91	26.80	31.76	102.46	0.00	0.14	2.79	15.23	29.74	29.25	38.26	115.41
colon cancer	0.00	0.12	0.29	1.33	2.72	5.25	15.28	24.98	0.00	0.06	0.26	2.71	7.20	10.96	18.02	39.20	0.00	0.17	0.54	4.04	9.92	16.20	33.30	64.18
rectal cancer	0.00	0.10	0.11	0.69	1.24	2.85	6.52	11.52	0.00	0.10	0.22	1.93	4.52	7.60	10.41	24.78	0.00	0.21	0.33	2.62	5.76	10.45	16.93	36.30
liver cancer	0.00	0.08	0.54	0.76	2.22	2.83	6.53	12.97	0.00	0.00	0.58	6.08	11.99	23.75	22.97	65.37	0.00	0.08	1.12	6.84	14.21	26.58	29.50	78.34
larynx cancer	0.00	0.00	0.00	0.00	0.35	0.58	0.99	1.92	0.00	0.00	0.40	5.67	9.37	6.23	8.97	30.65	0.00	0.00	0.40	5.67	9.72	6.81	9.96	32.57
breast cancer	0.00	0.98	6.65	20.69	33.81	30.80	56.67	149.59	-	-	-	-	-	-	-	-	0.00	0.98	6.65	20.69	33.81	30.80	56.67	149.59
epilepsy	0.20	0.27	0.79	0.99	0.32	0.93	2.32	5.82	1.29	1.77	1.85	4.42	2.74	3.81	4.28	20.17	1.49	2.04	2.65	5.41	3.06	4.74	6.60	25.99
lower respiratory infections	0.04	0.13	0.54	0.79	0.75	3.03	68.56	73.84	0.10	0.27	0.88	1.29	3.11	11.21	93.06	109.93	0.14	0.40	1.42	2.08	3.86	14.25	161.63	183.77
tuberculosis	0.00	0.00	0.00	0.13	0.37	0.47	1.76	2.73	0.00	0.00	0.70	0.38	1.48	3.61	5.41	11.59	0.00	0.00	0.70	0.51	1.85	4.08	7.17	14.32
HIV	0.05	1.70	2.51	0.33	0.21	0.09	0.00	4.89	0.21	2.89	4.13	1.81	0.60	0.53	0.00	10.17	0.26	4.58	6.64	2.14	0.81	0.62	0.00	15.06
diabetes mellitus	0.00	0.00	-0.22	-1.53	-5.74	-22.92	-118.63	-149.04	0.00	0.00	0.00	-0.46	-2.26	-4.29	-13.61	-20.62	0.00	0.00	-0.22	-1.99	-8.00	-27.21	-132.24	-169.66
pancreatitis	0.00	0.00	0.18	0.29	0.67	0.66	1.59	3.40	0.00	0.00	0.43	4.33	1.86	4.50	8.51	19.62	0.00	0.00	0.60	4.62	2.54	5.16	10.10	23.02
liver disease	0.00	1.00	11.00	26.00	55.00	31.00	22.00	146.00	1.00	3.00	31.00	84.00	132.00	103.00	53.00	407.00	1.00	4.00	42.00	110.00	187.00	134.00	75.00	553.00
hypertension	0.00	0.00	0.00	0.14	0.98	1.98	29.01	32.11	0.00	0.00	0.00	0.29	3.72	9.96	50.41	64.39	0.00	0.00	0.00	0.43	4.70	11.94	79.43	96.50
hemorrhagic stroke	0.10	0.42	1.77	5.83	6.02	13.07	35.91	63.14	0.43	1.00	2.98	9.53	11.46	22.37	31.40	79.16	0.53	1.42	4.75	15.36	17.48	35.44	67.31	142.30
ischaemic stroke	0.00	-0.22	-0.56	-2.54	-3.67	-19.44	-246.10	-272.54	-0.02	0.03	0.20	0.98	2.36	7.15	19.50	30.20	-0.02	-0.19	-0.37	-1.56	-1.31	-12.29	-226.60	-242.34
ischaemic heart disease	0.00	-0.13	-0.66	-2.88	-4.57	-5.12	-37.36	-50.72	-0.14	-1.08	-9.76	-34.03	-62.27	-105.03	-305.55	-517.86	-0.14	-1.21	-10.41	-36.91	-66.84	-110.15	-342.91	-568.58
conduction disorders and other dysrhythmias	0.00	0.00	0.16	0.17	0.68	1.33	12.97	15.31	0.12	0.00	0.18	1.93	3.17	5.26	14.31	24.97	0.12	0.00	0.33	2.10	3.85	6.59	27.29	40.28
motor vehicle accidents	1.92	1.25	0.51	0.62	0.92	0.50	1.01	6.74	22.16	19.66	7.31	7.35	8.31	5.35	4.96	75.10	24.08	20.91	7.82	7.97	9.23	5.85	5.97	81.84
falls	0.41	0.28	0.39	0.38	0.78	1.92	23.84	27.99	1.42	8.25	5.18	15.66	18.83	25.20	90.09	164.63	1.83	8.53	5.57	16.04	19.61	27.12	113.93	192.62
other unintentional injuries	0.41	1.50	1.27	1.53	1.33	1.11	3.95	11.09	10.67	28.86	21.08	33.70	26.90	20.25	22.85	164.31	11.08	30.36	22.35	35.23	28.22	21.36	26.80	175.40
self inflicted injuries	1.87	4.03	5.57	5.75	4.37	2.32	4.48	28.38	23.01	60.62	62.12	88.27	55.59	43.39	44.38	377.37	24.88	64.64	67.69	94.02	59.96	45.71	48.87	405.75
assault	0.41	0.66	0.68	0.86	0.62	0.30	0.05	3.58	2.37	3.71	3.33	3.80	4.93	2.07	0.00	20.20	2.78	4.37	4.01	4.66	5.56	2.37	0.05	23.79
other intentional	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
mental disorder due to use of alcohol	0.00	1.00	4.00	15.00	23.00	8.00	7.00	58.00	0.00	3.00	17.00	39.00	39.00	32.00	25.00	155.00	0.00	4.00	21.00	54.00	62.00	40.00	32.00	213.00
other 100% alcohol attributable	0.00	0.00	1.00	3.00	1.00	4.00	1.00	10.00	0.00	0.00	5.00	13.00	8.00	8.00	12.00	46.00	0.00	0.00	6.00	16.00	9.00	12.00	13.00	56.00
total beneficial	0.00	-0.35	-1.44	-6.95	-13.98	-47.48	-402.10	-472.30	-0.16	-1.08	-9.76	-34.48	-64.53	-109.32	-319.17	-538.50	-0.16	-1.43	-11.20	-41.43	-78.52	-156.80	-721.26	-1'010.80
total adverse	5.40	13.65	38.45	91.90	141.78	119.51	315.56	726.25	62.79	133.21	172.77	376.27	430.91	426.28	597.31	2'199.53	68.18	146.85	211.22	468.17	572.69	545.79	912.87	2'925.78
total net	5.40	13.30	37.01	84.95	127.79	72.04	-86.54	253.95	62.62	132.12	163.01	341.79	366.38	316.96	278.15	1'661.03	68.02	145.42	200.02	426.74	494.17	389.00	191.61	1'914.98

Table A5.4: Number of all deaths in 1997, for alcohol related categories and total deaths across all categories

	Women by age								Men by age								Total by age							
	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
oral cavity and pharynx cancer	0	0	0	17	9	17	33	76	0	0	10	61	78	75	47	271	0	0	10	78	87	92	80	347
oesophagus cancer	0	1	3	9	11	18	49	91	0	0	6	33	69	68	86	262	0	1	9	42	80	86	135	353
colon cancer	0	3	8	33	59	120	359	582	0	1	4	39	109	167	296	616	0	4	12	72	168	287	655	1'198
rectal cancer	0	2	2	12	20	51	120	207	0	1	2	16	39	67	99	224	0	3	4	28	59	118	219	431
liver cancer	0	1	6	8	23	34	81	153	0	0	3	29	59	120	124	335	0	1	9	37	82	154	205	488
larynx cancer	0	0	0	0	2	4	7	13	0	0	1	13	22	15	23	74	0	0	1	13	24	19	30	87
breast cancer	0	10	59	175	288	312	592	1'436	0	0	0	2	3	3	2	10	0	10	59	177	291	315	594	1'446
epilepsy	2	2	5	6	2	7	18	42	5	5	5	11	7	10	12	55	7	7	10	17	9	17	30	97
lower respiratory infections	1	2	8	11	10	46	1'071	1'149	1	2	6	8	20	74	662	773	2	4	14	19	30	120	1'733	1'922
tuberculosis	0	0	0	1	3	5	19	28	0	0	2	1	4	10	16	33	0	0	2	2	7	15	35	61
HIV	1	32	46	6	4	2	0	91	4	48	69	30	10	9	0	170	5	80	115	36	14	11	0	261
diabetes mellitus	0	0	1	7	29	136	755	928	0	0	0	14	64	128	349	555	0	0	1	21	93	264	1'104	1'483
pancreatitis	0	0	2	3	7	9	22	43	0	0	1	9	4	10	21	45	0	0	3	12	11	19	43	88
liver disease	0	1	11	26	55	31	22	146	1	3	31	84	132	103	53	407	1	4	42	110	187	134	75	553
hypertension	0	0	0	1	8	32	454	495	0	0	0	1	13	36	196	246	0	0	0	2	21	68	650	741
hemorrhagic stroke	1	3	10	32	35	96	272	449	3	5	14	41	51	102	154	370	4	8	24	73	86	198	426	819
ischaemic stroke	0	1	3	14	22	167	2'284	2'491	1	2	7	21	60	256	1'175	1'522	1	3	10	35	82	423	3'459	4'013
ischaemic heart disease	0	3	12	60	128	542	4'670	5'415	2	10	87	289	544	1'280	3'500	5'712	2	13	99	349	672	1'822	8'170	11'127
conduction disorders and other dysrhythmias	0	0	2	2	8	18	181	211	1	0	1	10	17	29	85	143	1	0	3	12	25	47	266	354
motor vehicle accidents	24	17	10	9	13	9	29	111	78	75	40	30	33	27	40	323	102	92	50	39	46	36	69	434
falls	5	3	4	4	10	38	489	553	6	20	14	33	42	61	272	448	11	23	18	37	52	99	761	1'001
other unintentional injuries	5	16	13	16	17	22	81	170	45	70	57	71	60	49	69	421	50	86	70	87	77	71	150	591
self inflicted injuries	23	43	57	60	56	46	92	377	97	147	168	186	124	105	134	961	120	190	225	246	180	151	226	1'338
assault	5	7	7	9	8	6	1	43	10	9	9	8	11	5	0	52	15	16	16	17	19	11	1	95
other intentional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mental disorder due to use of alcohol	0	1	4	15	23	8	7	58	0	3	17	39	39	32	25	155	0	4	21	54	62	40	32	213
other 100% alcohol attributable	0	0	1	3	1	4	1	10	0	0	5	13	8	8	12	46	0	0	6	16	9	12	13	56
total in alcohol related categories	67	148	274	539	851	1'780	11'709	15'368	254	401	559	1'092	1'622	2'849	7'452	14'229	321	549	833	1'631	2'473	4'629	19'161	29'597
overall total	129	248	486	1'089	1'814	4'106	24'031	31'903	384	627	900	1'928	3'373	6'509	16'610	30'331	513	875	1'386	3'017	5'187	10'615	40'641	62'234

Table A5.5: Alcohol-attributable years of life lost in 1997

	Women by age								Men by age								Total by age							
	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total	15-24	25-34	35-44	45-54	55-64	65-74	75+	Total
oral cavity and pharynx cancer	0	0	0	164	63	66	53	346	0	0	201	1'037	962	601	170	2'972	0	0	201	1'200	1'026	667	224	3'318
oesophagus cancer	0	7	22	51	45	38	49	211	0	0	85	396	582	362	226	1'651	0	7	107	447	627	400	275	1'862
colon cancer	0	6	12	44	67	85	103	318	0	2	10	77	148	142	115	494	0	9	22	122	215	227	218	811
rectal cancer	0	5	5	23	31	46	46	156	0	5	8	55	94	101	67	329	0	10	12	78	124	147	113	485
liver cancer	0	4	24	26	54	48	45	201	0	0	23	174	237	311	159	903	0	4	47	200	291	359	204	1'105
larynx cancer	0	0	0	0	9	9	9	27	0	0	17	158	201	84	54	515	0	0	17	158	210	93	63	542
breast cancer	0	49	286	698	843	501	417	2'794	0	0	0	0	0	0	0	0	0	49	286	698	843	501	417	2'794
epilepsy	12	14	34	34	9	15	17	136	72	82	74	132	58	50	27	496	85	96	108	166	67	65	45	632
lower respiratory infections	3	7	23	27	19	47	357	481	5	12	34	38	62	142	470	763	8	19	57	65	81	189	826	1'244
tuberculosis	0	0	0	4	10	8	12	33	0	0	29	10	34	44	35	153	0	0	29	14	44	52	48	186
HIV	3	89	112	11	5	2	0	222	11	132	162	54	13	8	0	380	14	221	274	65	18	9	0	602
diabetes mellitus	0	0	-10	-49	-138	-369	-754	-1'320	0	0	0	-13	-46	-56	-85	-200	0	0	-10	-63	-184	-425	-839	-1'520
pancreatitis	0	0	8	10	16	11	11	56	0	0	17	126	40	57	60	299	0	0	25	136	56	67	71	355
liver disease	0	50	460	900	1'371	528	202	3'510	54	131	1'162	2'451	2'763	1'387	411	8'359	54	181	1'621	3'350	4'134	1'915	613	11'869
hypertension	0	0	0	5	23	30	164	222	0	0	0	9	75	122	275	481	0	0	0	14	99	152	439	703
hemorrhagic stroke	6	22	77	199	154	212	275	945	25	47	110	279	235	293	202	1'193	31	70	187	478	389	505	477	2'137
ischaemic stroke	0	-11	-24	-84	-88	-299	-1'477	-1'984	-1	1	7	27	47	91	107	280	-1	-10	-17	-57	-41	-208	-1'369	-1'704
ischaemic heart disease	0	-7	-28	-97	-110	-81	-225	-547	-8	-50	-366	-975	-1'274	-1'366	-1'817	-5'855	-8	-56	-394	-1'072	-1'383	-1'447	-2'042	-6'402
conduction disorders and other dysrhythmias	0	0	6	5	17	20	72	120	7	0	7	58	61	65	82	281	7	0	13	64	78	85	154	401
motor vehicle accidents	122	68	23	21	23	8	8	272	1'259	939	287	218	176	70	33	2'982	1'381	1'007	309	239	199	78	40	3'254
falls	27	15	16	14	20	29	131	251	80	392	204	450	387	341	472	2'327	106	407	221	463	407	370	603	2'578
other unintentional injuries	26	80	55	53	33	18	27	292	609	1'369	809	988	552	274	142	4'743	635	1'449	864	1'041	585	292	169	5'035
self inflicted injuries	116	213	247	194	112	38	35	956	1'301	2'903	2'377	2'604	1'171	585	292	11'234	1'417	3'116	2'624	2'799	1'283	624	327	12'190
assault	25	34	30	29	15	5	0	139	132	181	126	113	105	31	0	687	157	216	155	142	120	36	0	827
other intentional	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mental disorder due to use of alcohol	0	50	175	493	576	133	56	1'483	0	149	631	1'133	823	431	161	3'328	0	199	805	1'626	1'399	564	217	4'810
other 100% alcohol attributable	0	0	44	97	27	66	12	245	0	0	174	359	154	102	75	863	0	0	218	456	181	167	86	1'108
total beneficial	0	-18	-62	-231	-336	-749	-2'455	-3'851	-9	-50	-366	-988	-1'320	-1'421	-1'902	-6'056	-9	-68	-428	-1'219	-1'656	-2'171	-4'357	-9'907
total adverse	340	715	1'659	3'101	3'539	1'962	2'100	13'416	3'556	6'347	6'552	10'945	8'980	5'695	3'637	45'712	3'896	7'061	8'211	14'046	12'520	7'657	5'737	59'128
total net	340	697	1'597	2'870	3'203	1'213	-355	9'565	3'547	6'297	6'186	9'957	7'660	4'273	1'735	39'656	3'887	6'994	7'783	12'827	10'864	5'486	1'380	49'221

Table A5.6: *Alcohol-attributable deaths by broad causes 1997*

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	0.00	1.42	8.08	30.10	44.74	48.79	100.10	233.23
cardiovascular diseases	0.10	0.08	1.71	3.71	0.45	-5.18	-204.57	-203.71
digestive diseases	0.00	1.00	11.18	26.29	55.67	31.66	23.59	149.40
mental disorders	0.00	1.00	4.00	15.00	23.00	8.00	7.00	58.00
injuries	5.00	7.71	8.42	9.15	8.02	6.15	33.33	77.79
other causes	0.29	2.09	3.62	0.71	-4.09	-17.39	-45.99	-60.76
total beneficial	0.00	-0.35	-1.44	-6.95	-13.98	-47.48	-402.10	-472.30
total adverse	5.40	13.65	38.45	91.90	141.78	119.51	315.56	726.25
total net	5.40	13.30	37.01	84.95	127.79	72.04	-86.54	253.95
Men								
cancers	0.00	0.16	9.42	66.52	106.85	118.61	118.13	419.69
cardiovascular diseases	0.38	-0.06	-4.40	-8.29	-35.56	-53.28	-185.92	-287.14
digestive diseases	1.00	3.00	31.43	88.33	133.86	107.50	61.51	426.62
mental disorders	0.00	3.00	17.00	39.00	39.00	32.00	25.00	155.00
injuries	59.64	121.10	99.01	148.77	114.56	96.25	162.29	801.61
other causes	1.60	4.93	10.57	7.45	7.67	15.88	97.14	145.24
total beneficial	-0.16	-1.08	-9.76	-34.48	-64.53	-109.32	-319.17	-538.50
total adverse	62.79	133.21	172.77	376.27	430.91	426.28	597.31	2'199.53
total net	62.62	132.12	163.01	341.79	366.38	316.96	278.15	1'661.03
Total								
cancers	0.00	1.58	17.50	96.62	151.59	167.41	218.22	652.92
cardiovascular diseases	0.49	0.01	-2.70	-4.58	-35.12	-58.46	-390.49	-490.84
digestive diseases	1.00	4.00	42.60	114.62	189.54	139.16	85.10	576.02
mental disorders	0.00	4.00	21.00	54.00	62.00	40.00	32.00	213.00
injuries	64.64	128.81	107.43	157.92	122.58	102.40	195.62	879.40
other causes	1.89	7.02	14.19	8.15	3.58	-1.51	51.16	84.48
total beneficial	-0.16	-1.43	-11.20	-41.43	-78.52	-156.80	-721.26	-1'010.80
total adverse	68.18	146.85	211.22	468.17	572.69	545.79	912.87	2'925.78
total net	68.02	145.42	200.02	426.74	494.17	389.00	191.61	1'914.98

Table A5.7: *Total number of deaths in 1997 by broad causes*

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	11	44	189	577	964	1'614	3'437	6'836
cardiovascular diseases	6	22	52	169	331	1'264	12'422	14'266
digestive diseases	4	3	17	41	98	156	878	1'197
mental disorders	14	29	14	23	34	62	1'274	1'450
injuries	64	86	92	103	105	121	695	1'266
other causes	30	64	122	176	282	889	5'325	6'888
total	129	248	486	1'089	1'814	4'106	24'031	31'903
Men								
cancers	22	41	155	640	1'433	2'371	3'627	8'289
cardiovascular diseases	17	34	163	515	942	2'395	7'647	11'713
digestive diseases	2	3	40	119	191	229	509	1'093
mental disorders	37	103	73	53	60	89	506	921
injuries	241	326	293	332	272	252	518	2'234
other causes	65	120	176	269	475	1'173	3'803	6'081
total	384	627	900	1'928	3'373	6'509	16'610	30'331
Total								
cancers	33	85	344	1'217	2'397	3'985	7'064	15'125
cardiovascular diseases	23	56	215	684	1'273	3'659	20'069	25'979
digestive diseases	6	6	57	160	289	385	1'387	2'290
mental disorders	51	132	87	76	94	151	1'780	2'371
injuries	305	412	385	435	377	373	1'213	3'500
other causes	95	184	298	445	757	2'062	9'128	12'969
total	513	875	1'386	3'017	5'187	10'615	40'641	62'234

Table A5.8: *Years of life lost due to alcohol by broad causes, 1997*

	15 - 24	25 - 34	35 - 44	Age 45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	0	72	349	1'005	1'111	792	723	4'053
cardiovascular diseases	6	4	75	124	23	-66	-1'180	-1'012
digestive diseases	0	50	468	910	1'387	538	213	3'566
mental disorders	0	50	175	493	576	133	56	1'483
injuries	316	410	371	311	203	99	201	1'911
other causes	18	110	160	26	-96	-284	-368	-435
total beneficial	0	-18	-62	-231	-336	-749	-2'455	-3'851
total adverse	340	715	1'659	3'101	3'539	1'962	2'100	13'416
total net	340	697	1'597	2'870	3'203	1'213	-355	9'565
Men								
cancers	0	7	343	1'897	2'224	1'601	791	6'864
cardiovascular diseases	23	-1	-173	-243	-737	-706	-1'121	-2'958
digestive diseases	54	131	1'179	2'576	2'802	1'444	471	8'658
mental disorders	0	149	631	1'133	823	431	161	3'328
injuries	3'381	5'784	3'802	4'373	2'391	1'302	939	21'973
other causes	89	227	404	220	158	201	494	1'792
total beneficial	-9	-50	-366	-988	-1'320	-1'421	-1'902	-6'056
total adverse	3'556	6'347	6'552	10'945	8'980	5'695	3'637	45'712
total net	3'547	6'297	6'186	9'957	7'660	4'273	1'735	39'656
Total								
cancers	0	80	692	2'903	3'335	2'394	1'513	10'917
cardiovascular diseases	29	3	-97	-118	-715	-771	-2'301	-3'970
digestive diseases	54	181	1'646	3'486	4'190	1'982	684	12'224
mental disorders	0	199	805	1'626	1'399	564	217	4'810
injuries	3'697	6'195	4'173	4'684	2'594	1'401	1'141	23'883
other causes	107	336	564	247	61	-83	126	1'357
total beneficial	-9	-68	-428	-1'219	-1'656	-2'171	-4'357	-9'907
total adverse	3'896	7'061	8'211	14'046	12'520	7'657	5'737	59'128
total net	3'887	6'994	7'783	12'827	10'864	5'486	1'380	49'221

Table A5.9: *Total years of life lost in 1997 by broad causes*

	Age							
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total
Women								
cancers	687	2'284	8'094	19'364	23'903	26'420	25'412	106'164
cardiovascular diseases	380	1'170	2'239	5'697	8'040	19'956	72'338	109'821
digestive diseases	257	154	724	1'401	2'427	2'529	5'359	12'851
mental disorders	877	1'557	612	782	856	968	6'694	12'346
injuries	4'032	4'579	4'045	3'512	2'656	1'947	4'222	24'993
other causes	1'891	3'365	5'321	5'882	6'978	14'122	32'019	69'576
total	8'123	13'109	21'035	36'638	44'860	65'942	146'045	335'752
Men								
cancers	1'246	1'942	5'808	18'267	29'395	31'069	23'444	111'172
cardiovascular diseases	963	1'586	6'125	14'800	19'187	30'898	43'493	117'052
digestive diseases	108	131	1'502	3'442	3'975	3'000	3'082	15'240
mental disorders	2'055	4'958	2'842	1'554	1'264	1'143	2'626	16'441
injuries	13'661	15'569	11'266	9'752	5'688	3'399	3'017	62'351
other causes	3'675	5'624	6'813	7'777	9'591	15'182	21'900	70'561
total	21'708	29'810	34'357	55'591	69'099	84'690	97'561	392'816
Total								
cancers	1'933	4'226	13'903	37'631	53'299	57'489	48'856	217'336
cardiovascular diseases	1'343	2'756	8'365	20'497	27'227	50'854	115'831	226'873
digestive diseases	365	285	2'226	4'843	6'402	5'529	8'441	28'092
mental disorders	2'932	6'514	3'454	2'336	2'120	2'112	9'320	28'787
injuries	17'693	20'148	15'312	13'264	8'344	5'346	7'239	87'344
other causes	5'565	8'989	12'134	13'659	16'568	29'303	53'918	140'137
total	29'831	42'919	55'392	92'230	113'959	150'632	243'606	728'568

Table A5.10: *Alcohol-attributable deaths for 100% attributable conditions, partly attributable chronic conditions and injuries, 1997*

	Age							Total
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	
Women								
chronic conditions (<100% AAF)	0.39	3.59	12.59	31.81	40.77	22.89	-149.87	-37.84
injuries (<100% AAF)	5.00	7.71	8.42	9.15	8.02	6.15	33.33	77.79
100% alcohol attributable	0.00	2.00	16.00	44.00	79.00	43.00	30.00	214.00
total	5.40	13.30	37.01	84.95	127.79	72.04	-86.54	253.95
Men								
chronic conditions (<100% AAF)	1.98	5.02	11.01	57.01	72.82	77.71	25.86	251.41
injuries (<100% AAF)	59.64	121.10	99.01	148.77	114.56	96.25	162.29	801.61
100% alcohol attributable	1.00	6.00	53.00	136.00	179.00	143.00	90.00	608.00
total	62.62	132.12	163.01	341.79	366.38	316.96	278.15	1'661.03
Total								
chronic conditions (<100% AAF)	2.38	8.61	23.59	88.82	113.59	100.59	-124.01	213.58
injuries (<100% AAF)	64.64	128.81	107.43	157.92	122.58	102.40	195.62	879.40
100% alcohol attributable	1.00	8.00	69.00	180.00	258.00	186.00	120.00	822.00
total	68.02	145.42	200.02	426.74	494.17	389.00	191.61	1'914.98

Table A5.11: *Alcohol-attributable years of life lost for 100% attributable conditions, partly attributable 1997*

	Age							
	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75+	Total
Women								
chronic conditions (<100% AAF)	24	186	548	1'070	1'027	387	-825	2'417
injuries (<100% AAF)	316	410	371	311	203	99	201	1'911
100% alcohol attributable	0	100	679	1'490	1'973	727	269	5'238
total	340	697	1'597	2'870	3'203	1'213	-355	9'565
Men								
chronic conditions (<100% AAF)	112	233	418	1'642	1'530	1'052	149	5'135
injuries (<100% AAF)	3'381	5'784	3'802	4'373	2'391	1'302	939	21'973
100% alcohol attributable	54	280	1'966	3'942	3'740	1'920	647	12'549
total	3'547	6'297	6'186	9'957	7'660	4'273	1'735	39'656
Total								
chronic conditions (<100% AAF)	136	419	965	2'711	2'557	1'439	-677	7'551
injuries (<100% AAF)	3'697	6'195	4'173	4'684	2'594	1'401	1'141	23'883
100% alcohol attributable	54	380	2'645	5'432	5'713	2'646	916	17'786
total	3'887	6'994	7'783	12'827	10'864	5'486	1'380	49'221

Table A6.1: *Alcohol-attributable deaths with 95% Confidence Intervals (point, lower and upper estimates)*

		Women			Men			Total		
		point estimate	lower estimate	upper estimate	point estimate	lower estimate	upper estimate	point estimate	lower estimate	upper estimate
1997	cancers	133	119	147	302	287	316	435	414	455
	cardiovascular diseases	1	-62	64	-101	-300	97	-100	-309	108
	digestive diseases	126	125	126	365	363	367	491	489	493
	mental disorders	51	51	51	130	130	130	181	181	181
	injuries	44	39	50	639	562	717	684	606	761
	other causes	-15	-24	-6	48	22	74	33	6	61
	total	340	275	406	1'383	1'168	1'598	1'723	1'499	1'948
2002	cancers	141	126	156	313	298	329	455	434	476
	cardiovascular diseases	16	-30	62	-66	-215	84	-50	-206	107
	digestive diseases	138	138	139	355	353	357	493	491	495
	mental disorders	45	45	45	135	135	135	180	180	180
	injuries	52	43	61	551	481	621	603	532	674
	other causes	-13	-21	-5	38	10	66	25	-4	54
	total	379	329	429	1'327	1'159	1'495	1'706	1'530	1'881
2007	cancers	144	130	157	303	287	320	447	426	468
	cardiovascular diseases	4	-35	43	-61	-155	33	-57	-159	45
	digestive diseases	167	167	167	304	302	306	471	469	473
	mental disorders	46	46	46	125	125	125	171	171	171
	injuries	51	45	57	495	441	549	546	491	600
	other causes	-13	-20	-6	28	4	53	15	-10	41
	total	399	356	441	1'194	1'082	1'307	1'593	1'473	1'713
2011	cancers	169	153	184	304	286	321	472	449	495
	cardiovascular diseases	27	-14	68	-38	-147	72	-11	-128	106
	digestive diseases	116	116	116	324	322	325	440	438	441
	mental disorders	42	42	42	117	117	117	159	159	159
	injuries	75	69	82	446	407	486	522	482	562
	other causes	-10	-18	-1	28	5	50	18	-6	42
	total	419	374	465	1'181	1'061	1'301	1'600	1'472	1'728