

Statistics Publication Notice

Health Series

An Official Statistics Publication for Scotland

REVISED ALCOHOL CONSUMPTION ESTIMATES FROM THE 2003 SCOTTISH HEALTH SURVEY

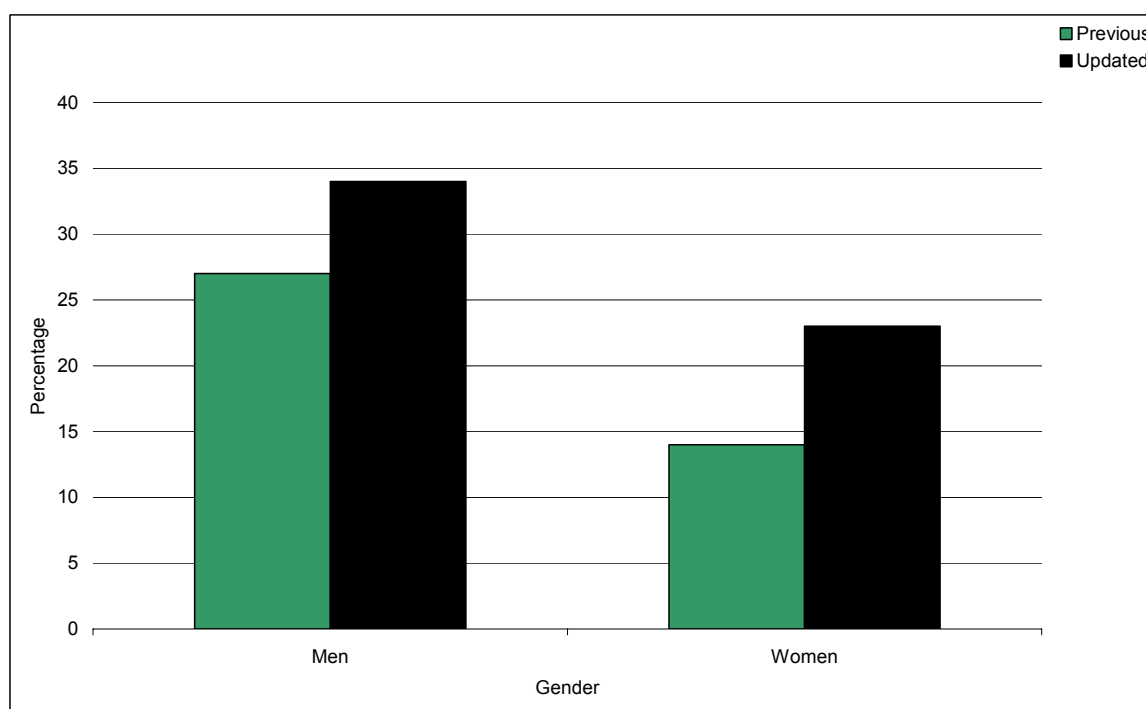
27 May 2008

Introduction

This Statistics Publication Notice contains revised estimates on alcohol consumption from the 2003 Scottish Health Survey following the development of new alcohol unit conversion factors.

This publication covers the headline results. A more detailed publication on 24 June 2008 will update all of the analyses included in the 2003 Scottish Health Survey alcohol chapter for adults (Volume 2: Chapter 1) and one table from the children's report (Volume 3: Chapter 1) published in November 2005.

Figure 1 Proportion exceeding government guidelines on weekly alcohol consumption (21 units for men / 14 units for women), by gender, previous and updated methods, 2003



Background

The average strength by volume of some alcohol products has been increasing in recent years. As a result there has been some concern that the methods used by surveys to convert the amounts of alcohol respondents report having consumed into units have been underreporting consumption levels¹.

In December 2007, the Office for National Statistics published an updated method of converting drink volumes to alcohol units² and this method is now being used to estimate alcohol consumption in GB and English surveys. To preserve comparability with GB and English estimates, and to better reflect the current position relating to alcohol consumption, we have applied this new method to the Scottish Health Survey data for 2003.

Key Results (based on the revised estimates)

Weekly Consumption (Table 1.1)

- 34% of men usually consume more than the recommended limit of 21 units per week;
- 23% of women usually consume more than the recommended limit of 14 units per week;
- On average, men drink 20.3 units of alcohol per week. This consists mainly of normal strength beer (9 units), spirits (4 units) and wine (5 units);
- On average, women drink 9.1 units of alcohol per week. This consists mainly of spirits (2 units) and wine (5 units).

Consumption on Heaviest Drinking Day in Past Week (Table 1.8)

- 63% of men who drank in the previous week drank more than the daily benchmark of 4 units on their heaviest drinking day;
- 64% of women who drank in the previous week drank more than the daily benchmark of 3 units on their heaviest drinking day;
- Heavy drinking (drinking twice the recommended maximum daily amount in one sitting) is generally used as a proxy for 'binge' drinking. 40% of men and 33% of women who drank in the previous week drank more than 8 or 6 units respectively on their heaviest drinking day.

Impact of Revisions

Table A lists the previous and revised unit conversion factors for each type of drink and volume. For more detail on the reasons behind these changes, please refer to the ONS report http://www.statistics.gov.uk/downloads/theme_compendia/drinkingmethodologyfinal.pdf

Weekly Consumption (Table 1.1A)

By applying the revised unit conversion factors:

- The percentage of men drinking more than 21 units has increased from 27% to 34%;
- The percentage of women drinking more than 14 units has increased from 14% to 23%;
- Men's mean weekly consumption has increased from 17.2 units to 20.3 units;
- Women's mean weekly consumption has increased from 6.5 units to 9.1 units;
- The effect of the revisions is greater for women than men, mainly due to the fact that women are more likely to be wine drinkers and the change in unit conversion factors has had a greater impact on wine than on other types of drink.

¹ Catto S, Gibbs D. How much are Scots really drinking? A review of data from Scotland's routine national surveys. Glasgow: NHS Health Scotland; 2008 <http://www.healthscotland.com/documents/2612.aspx>

² Goddard, E., Estimating alcohol consumption from survey data: updated method of converting volumes to units. National Statistics Methodological Series No. 37. Office for National Statistics 2007. http://www.statistics.gov.uk/downloads/theme_compendia/drinkingmethodologyfinal.pdf

Consumption on Heaviest Drinking Day in Past Week (Table 1.8A)

Two changes to the way these estimates have been calculated need to be highlighted. The methods for calculating daily unit consumption have been updated using the same conversion factors used for the weekly drinking estimates. However, the thresholds for reporting daily unit consumption have also changed. The previously published figures used thresholds of 3 or more units for women and 4 or more units for men to report daily drinking above recommended maximum daily amount³. Heavy drinking, used as a proxy for 'binge' drinking was defined as consuming 6 or more units for women and 8 or more units for men. These thresholds have now been adjusted to use the following thresholds to enable comparability with the Health Survey for England and the General Household Survey:

- Drinking above 'safe' daily drinking limits – women: more than 3 units; men: more than 4 units;
- 'binge' drinking – women: more than 6 units; men: more than 8 units.

The impact of changing the thresholds has generally been to reduce consumption levels whilst the use of the updated conversion factors has increased consumption levels. In some cases, the combined effect of the two changes has led to a negligible change from the previously published estimate.

- The percentage of men drinking more than 4 units increased from 54% (using the old conversion factors) to 63%. The previously published figure (based on the old thresholds of 4 or more and using old conversion factors) was 63%;
- The percentage of women drinking more than 3 units increased from 44% (using the old conversion factors) to 64%. The previously published figure (based on the old thresholds of 3 or more and using old conversion factors) was 57%;
- The percentage of men drinking more than 8 units increased from 30% (using the old conversion factors) to 40%. The previously published figure (based on the old thresholds of 8 or more and using old conversion factors) was 37%;
- The percentage of women drinking more than 6 units increased from 19% (using the old thresholds) to 33%. The previously published figure (based on the old thresholds of 6 or more and using old conversion factors) was 28%.

List of Tables

Note: table numbers are in line with those used in the 2003 Scottish Health Survey Report (Vol 2: Chapter 1) to ease comparison with previously published figures.

A	Original and revised factors for converting alcohol volumes to units
1.1	Estimated usual weekly alcohol consumption level, by age and sex*
1.1A	Comparison of original and revised estimates of usual weekly alcohol consumption level, by age and sex*
1.8	Estimated alcohol consumption level on heaviest drinking day in past week, by age and sex [†]
1.8A	Comparison of original and revised estimates of alcohol consumption level on heaviest drinking day in past week, by age and sex [†]

* These tables have been updated with new unit calculations

[†] These tables have been updated with new unit calculations and use revised thresholds for reporting consumption levels

³ Government recommendations say these amounts should not be regularly exceeded. The survey data on consumption on the heaviest drinking day in the previous week can only be used as a proxy for those exceeding recommended maximum daily amounts as they do not measure whether these recommendations are **regularly** exceeded.

Table A Original and revised factors for converting alcohol volume to units

Type of drink and volume	Original units	Revised units			
		Usual vol (ml)	Average ABV	Actual Units	New conversion factor (units)
Normal strength beer, lager, cider					
half pint	1.0	284	4.0%	1.1	1.0
small can/bottle	1.0	330	4.5%	1.5	1.5
large can/bottle	2.0	440	4.5%	2.0	2.0
very large can	-	500	4.5%	2.3	2.5
Strong beer, lager, cider (ABV >= 6%)					
half pint	1.5	284	6.5%	1.8	2.0
small can/bottle	1.5	330	6.5%	2.1	2.0
large can/bottle	3.0	440	6.5%	2.9	3.0
very large can	-	500	6.5%	3.3	3.5
Table wine					
glass - 125 ml	-	125	12.5%	1.6	1.5
glass - 175 ml	-	175	12.5%	2.2	2.0
glass - 250 ml (small can)	-	250	12.5%	3.1	3.0
glass - size unspecified	1.0	170	12.5%	2.1	2.0
bottle	6.0	750	12.5%	9.4	9.0
Fortified wine					
small glass	1.0	50	17.0%	0.9	1.0
bottle	-	750	17.0%	12.8	13.0
litre	-	1000	17.0%	17.0	17.0
Spirits					
single	1.0	25	40.0%	1.0	1.0
bottle	-	750	40.0%	30.0	30.0
litre	-	1000	40.0%	40.0	40.0
Alcopops/coolers					
bottle	1.0	275	5.0%	1.4	1.5

Table 1.1 Estimated usual weekly alcohol consumption level, by age and sex

Aged 16 and over

2003

Alcohol units per week	Age							Total
	16-24	25-34	35-44	45-54	55-64	65-74	75+	
	%	%	%	%	%	%	%	%
Men								
Never drunk alcohol	8	4	4	1	4	3	10	4
Ex-drinker	2	3	3	4	3	7	10	4
Under 1	5	4	6	5	7	12	14	7
Over 1-10	26	27	29	29	29	30	28	28
Over 10-21	24	24	22	23	22	22	16	23
Over 21-35	17	21	16	20	16	13	12	17
Over 35-50	9	9	10	8	8	7	5	8
Over 50	10	7	9	10	11	6	4	9
<i>Subtotal: over 21 units</i>	<i>36</i>	<i>37</i>	<i>35</i>	<i>38</i>	<i>35</i>	<i>27</i>	<i>21</i>	<i>34</i>
Mean	19.6	20.0	23.0	23.1	21.1	15.7	12.5	20.3
Standard error of mean	1.29	1.26	1.76	1.64	1.21	0.86	1.10	0.62
Women								
Never drunk alcohol	8	5	4	3	8	13	25	9
Ex-drinker	1	3	4	4	7	8	6	5
Under 1	9	10	12	13	20	23	32	16
Over 1-7	34	33	31	30	29	32	24	31
Over 7-14	15	20	20	18	16	12	8	16
Over 14-21	13	11	13	10	9	7	3	10
Over 21-35	12	12	10	13	9	4	2	9
Over 35	8	5	5	7	3	1	0	4
<i>Subtotal: over 14 units</i>	<i>32</i>	<i>28</i>	<i>27</i>	<i>30</i>	<i>21</i>	<i>13</i>	<i>5</i>	<i>23</i>
Mean	12.2	11.9	10.3	11.2	7.9	5.2	2.7	9.1
Standard error of mean	1.05	1.11	0.54	0.56	0.43	0.42	0.27	0.31
Bases (weighted):								
Men	536	596	755	665	567	404	258	3780
Women	505	655	805	685	599	491	467	4209
Bases (unweighted):								
Men	309	446	726	610	631	507	323	3552
Women	366	598	879	788	774	579	492	4476

Table 1.1A Comparison of original and revised estimates of usual weekly alcohol consumption level, by age and sex

Aged 16 and over

2003

Age	Alcohol units per week			% who drank over 21 units			% who drank over 50 units			Mean units consumed			Bases (unweighted):	
	Original	Revised Unit Conversion	% change	Original	Revised Unit Conversion	% change	Original	Revised Unit Conversion	% change	Original	Revised Unit Conversion	% change	(weighted):	Bases (unweighted):
Men														
16-24	31	36	16.1	8	10	25.0	17.2	19.6	14.0	536	309			
25-34	30	37	23.3	6	7	16.7	17.4	20.0	14.9	596	446			
35-44	28	35	25.0	6	9	50.0	19.6	23.0	17.3	755	726			
45-54	29	38	31.0	7	10	42.9	18.9	23.1	22.2	665	610			
55-64	29	35	20.7	7	11	57.1	17.5	21.1	20.6	567	631			
65-74	22	27	22.7	4	6	50.0	13.3	15.7	18.0	404	507			
75+	15	21	40.0	3	4	33.3	10.2	12.5	22.5	258	323			
Total	27	34	25.9	6	9	50.0	17.2	20.3	18.0	3780	3552			
Women														
16-24	23	32	39.1	4	8	100.0	9.5	12.2	28.4	505	366			
25-34	17	28	64.7	2	5	150.0	8.7	11.9	36.8	655	598			
35-44	15	27	80.0	2	5	150.0	7.2	10.3	44.4	805	879			
45-54	18	30	66.7	2	7	250.0	7.5	11.2	49.3	685	788			
55-64	11	21	90.9	1	3	200.0	5.4	7.9	46.3	599	774			
65-74	8	13	62.5	0	1		3.9	5.2	33.3	491	579			
75+	3	5	66.7	0	0		2.1	2.7	28.6	467	492			
Total	14	23	64.3	2	4	100.0	6.5	9.1	40.0	4209	4476			

Table 1.8 Estimated alcohol consumption level on heaviest drinking day in past week, by age and sex

Aged 16 and over who drank alcohol in past seven days

2003

Alcohol units per day	Age							Total
	16-24	25-34	35-44	45-54	55-64	65-74	75+	
	%	%	%	%	%	%	%	%
Men								
Up to and including 2	9	18	15	17	25	32	44	20
Over 2 and up to (& including) 3	4	3	5	6	4	9	7	5
Over 3 and up to (& including) 4	7	8	11	14	14	16	19	12
Over 4 and up to (& including) 5	1	2	4	3	3	6	5	3
Over 5 and up to (& including) 6	8	6	13	10	11	9	9	10
Over 6 and up to (& including) 8	10	10	8	11	10	11	6	10
Over 8+	60	53	45	38	32	17	9	40
<i>Consumed over 4 units</i>	<i>80</i>	<i>71</i>	<i>69</i>	<i>62</i>	<i>56</i>	<i>43</i>	<i>30</i>	<i>63</i>
<i>Consumed over 8 units</i>	<i>60</i>	<i>53</i>	<i>45</i>	<i>38</i>	<i>32</i>	<i>17</i>	<i>9</i>	<i>40</i>
Mean units	12.7	10.8	10.2	8.3	7.2	5.2	4.0	9.0
Standard error of the mean	0.71	0.51	0.47	0.35	0.31	0.25	0.27	0.21
Women								
Up to and including 2	17	16	23	27	35	53	74	30
Over 2 and up to (& including) 3	4	5	5	7	8	8	8	6
Over 3 and up to (& including) 4	5	13	16	19	20	14	9	15
Over 4 and up to (& including) 5	5	5	4	4	3	4	2	4
Over 5 and up to (& including) 6	9	13	15	13	14	13	5	13
Over 6 and up to (& including) 8	15	13	11	12	7	4	1	10
Over 8+	45	35	25	19	12	3	1	23
<i>Consumed over 3 units</i>	<i>79</i>	<i>79</i>	<i>72</i>	<i>66</i>	<i>56</i>	<i>38</i>	<i>17</i>	<i>64</i>
<i>Consumed over 6 units</i>	<i>60</i>	<i>48</i>	<i>36</i>	<i>31</i>	<i>19</i>	<i>7</i>	<i>1</i>	<i>33</i>
Mean units	9.7	8.0	6.5	5.6	4.6	3.3	2.2	6.2
Standard error of the mean	0.60	0.32	0.22	0.18	0.18	0.14	0.13	0.13
Bases (weighted):								
Men	363	457	564	528	432	276	143	2762
Women	333	418	513	480	340	237	153	2473
Bases (unweighted):								
Men	212	339	545	485	479	350	180	2590
Women	236	372	572	549	439	280	162	2610

SCOTTISH GOVERNMENT STATISTICIAN GROUP

OUR AIM

To provide relevant and reliable information, analysis and advice that meet the needs of government, business and the people of Scotland.

OBJECTIVES

1. To produce statistics and analysis relevant to user needs by
 - Developing our understanding of customer requirements to ensure statistics are kept relevant and analysis is well targeted;
 - Developing the range of statistics and analysis we produce;
 - Where practicable improving timeliness;
 - Providing more statistics disaggregated by age, gender and ethnicity;
 - Developing more data for small areas through the Neighbourhood Statistics project;
 - Contributing to production of comparable statistics across the UK and internationally.
2. To ensure effective use of our statistics by
 - Contributing more directly to policy processes inside and where possible outside government;
 - Improving access to and presentation of data and analysis;
 - Improving the advice provided on statistics.
3. To work effectively with users and providers by
 - Maintaining arrangements to consult and involve users and providers;
 - Involving users and providers in planning developments in outputs and processes;
 - Minimising the burden on data providers through dropping or streamlining collections as appropriate, to ensure the benefits of the information justify the costs of collection.
4. To develop the quality of statistics by
 - Assuring and improving quality as an integral part of data collection and analysis and through regular reviews in line with National Statistics quality strategy;
 - Developing statistical methods, systems and classifications;
 - Working with the rest of the Government Statistical Service to develop joint approaches/solutions where appropriate.
5. To assure the integrity of statistics by
 - Maintaining and promoting integrity through implementation of the National Statistics Code of Practice and related protocols;
 - Safeguarding the confidentiality of data subjects.
6. To ensure the efficient and effective delivery of statistics products and services by
 - Making best use of all sources including administrative sources;
 - Working with other analysts to maximise the contribution of our own and other analysts' work;
 - Ensuring value for money;
 - Making best use of Information and Communications Technology;
 - Ensuring effective communication within the Statistician Group.
7. To develop our workforce and competences
 - Ensuring recruitment of staff with the necessary skills and potential;
 - Ensuring development of expertise amongst existing staff;
 - Promoting and upholding the standards of the statistics profession.

This is an Official Statistics publication

"This is an Official Statistics publication. It has been produced to high professional standards set out in the National Statistics Code of Practice Protocol - see www.statistics.gov.uk/about_ns/cop/default.asp

These statistics undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference."

Details of pre-release access will be provided in the Scottish Government Statistics Website under 'Forthcoming Releases'

Correspondence and enquiries

Enquiries on **Revised Alcohol Consumption Estimates from the 2003 Scottish Health Survey**

should be addressed to:

Emma Stevens
Public Health and Sport Team
Health Analytical Services Division
B-R St Andrew's House
Edinburgh, EH1 3DG
Telephone: 0131 244 2589; Fax: 0131 244 2371
e-mail: scottishhealthsurvey@scotland.gsi.gov.uk

General enquiries on Scottish Government statistics can be addressed to:

Ryan Stewart
Office of the Chief Statistician
Scottish Government
3 Floor West Rear, St Andrews House
EDINBURGH EH1 3DG
Telephone: (0131) 244 0442; Fax: (0131) 244 2223
e-mail: statistics.enquiries@scotland.gsi.gov.uk

Advice on specific areas of Scottish Government statistical work can be obtained from staff at the telephone numbers given below:

Scottish Government Statistics contacts

Agricultural census and labour force	(0131) 244 6150
Business	(0141) 242 5446
Community Care	(0131) 244 3777
Courts and law	(0131) 244 2227
Environment	(0131) 244 0445
Equality	(0131) 244 0324
Fisheries	(0131) 244 6441
Further and Higher Education	(0141) 242 0273
Health	(0131) 244 3432
Housing	(0131) 244 7236
Income, Tax and Benefits	(0131) 244 2583
Labour market	(0141) 242 5446
Local government finance	(0131) 244 7033
Planning	(0131) 244 0439
Prisons	(0131) 244 2147
Recorded crime	(0131) 244 2635
Schools – pupils and teachers	(0131) 244 1689
Schools – qualifications	(0131) 244 0315
Scottish Government personnel	(0131) 244 3926
Scottish Neighbourhood Statistics	(0131) 244 0442
The Economy	(0131) 244 2234
Transport	(0131) 244 7255

Other contacts for Scottish statistics

Forestry Commission	(0131) 314 6337
General Register Office for Scotland - Vital statistics and publications	(0131) 314 4243
- Population statistics, census statistics or digital boundary products	(0131) 314 4254
The Scottish Funding Councils for Higher and Further Education	(0131) 313 6575

For **general enquiries about National Statistics** in the United Kingdom Government contact the National Statistics Public Enquiry Service on

020 7533 5888

minicom: 01633 812399
Email: info@statistics.gov.uk
Fax: 01633 652747
Letters: room DG/18, 1 Drummond Gate,
LONDON SW1V 2QQ

You can also find National Statistics on the internet - go to www.statistics.gov.uk

If you would like to be consulted about new or existing statistical collections or receive notification of forthcoming statistical publications, please register your interest on the Scottish Government ScotStat website at www.scotland.gov.uk/Topics/Statistics/scotstat

Current contact points, e-mail addresses and the publications listed below as well as a range of other statistical publications can be found on the Scottish Government Web site at www.scotland.gov.uk/stats

Further information on the General Register Office for Scotland is available on the website www.gro-scotland.gov.uk

Most recent Statistical Publications relating to the Health theme

Ref no.	Title	Last published	Price

Additional copies of these publications may be purchased from **Scottish Government Publication Sales, Blackwell's Bookshop, 53 South Bridge, Edinburgh, EH1 1YS**, Telephone: 0131 622 8283 or 0131 622 8258, Fax: 0131 557 8149. Cheques should be made payable to 'Blackwell's Bookshop'.

Complaints and suggestions

If you are not satisfied with our service, please write to the Chief Statistician, Mr Rob Wishart, 3R.01, St Andrews House, Edinburgh, EH1 3DG, Telephone: (0131) 244 0302, e-mail rob.wishart@scotland.gsi.gov.uk. We also welcome any comments or suggestions that would help us to improve our standards of service.

ISSN 0264 1178 ISBN 978 0 7559 7123 7

Crown Copyright

Brief extracts from the Crown Copyright material in this publication may be reproduced provided the source is fully acknowledged.