

SDR 70/2008

29 May 2008

Welsh Health Survey 2007: Initial Headline Results

1. Introduction

The Welsh Health Survey (WHS) is a source of information about the health and health-related lifestyle of people living in Wales. This statistical release contains some initial headline results from the 2007 Welsh Health Survey. The main report of the survey will include more detailed information and will be published in September. More information about the WHS is in section 3.

2. Results

2.1 Illnesses and health status in adults (tables 1, 3)

- 20% of adults reported currently being treated for high blood pressure, and 9% for a heart condition (other than high blood pressure).
- 14% of adults reported currently being treated for a respiratory illness, 13% for arthritis, 9% for mental ill health, and 6% for diabetes.
- 27% of adults reported having a limiting long-term illness.

There was little change in reported levels of illnesses from previous years.

2.2 Health-related lifestyle in adults (tables 2, 4; figures 1, 2)

- 24% of adults reported that they currently smoked.
- 42% of adult non-smokers reported being regularly exposed to other people's tobacco smoke.
- 36% of adults reported drinking more than the daily guidelines on at least one day in the past week, including 20% reporting binge drinking.
- 46% of adults reported eating five or more portions of fruit and vegetables the previous day.
- 29% of adults reported meeting the guidelines for physical activity in the past week.
- 57% of adults were classified as overweight or obese, including 21% classified as obese.

There has been a gradual decline in smoking levels since the survey started in 2003/04, and rates in 2007 were slightly lower than previous years (although compared with 2005/06 the difference was not statistically significant). The percentage of adult non-smokers regularly exposed to other people's tobacco smoke fell sharply (the ban on smoking in enclosed public places was introduced in April 2007 in Wales, part way through the survey year). Compared with guidelines, there was little change in alcohol consumption or physical activity, but an increase in consumption of fruit and vegetables. Levels of overweight and obesity showed a continuing slight increase and were higher in 2007 than previous years (although compared with 2005/06 the difference was not statistically significant).

Contact: Tel: 029 2082 5033 **E-mail:** stats.healthinfo@wales.gsi.gov.uk

Next Update: September 2008 (provisional)

Fig. 1: Adult smokers

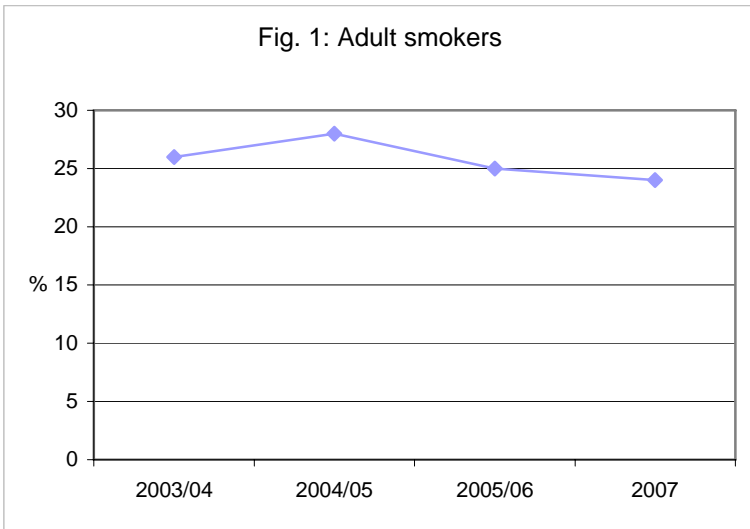
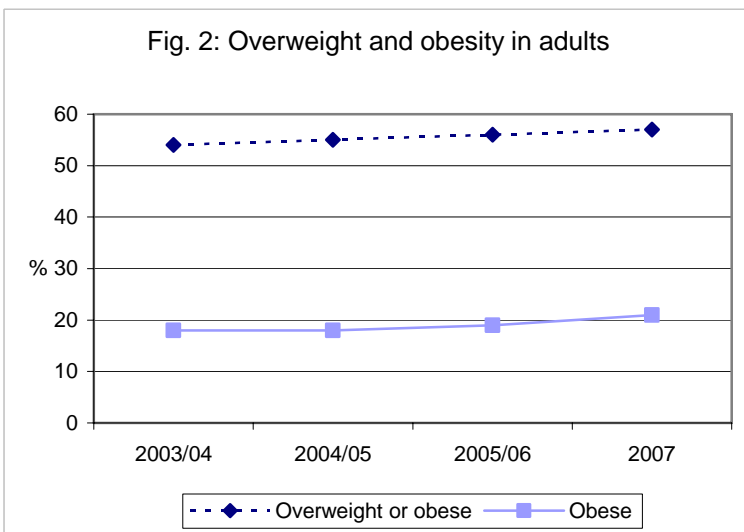


Fig. 2: Overweight and obesity in adults



2.3 Long-standing illness and overweight / obesity in children (table 5)

- 20% of children were reported as having a long-standing illness, including 7% with a limiting long-standing illness.
- 36% of children were estimated to be overweight or obese¹, including 20% obese.

¹ Although Body Mass Index (BMI) is widely used as an indicator of obesity in children, the establishment of a specific classification system for children and young people has proved difficult because of constant changes in body composition during growth. Several methods can be used, including a variety of national and international Body Mass Index (BMI) curves and cut-off points. To some extent, the choice is arbitrary. The estimates in this release have been produced using the 85th and 95th percentiles of the age and sex-specific 1990 UK BMI reference curves as cut-offs for overweight and obesity respectively. The estimates should not be compared with those produced on a different basis (for instance, estimates derived using international cut-offs are likely to be lower as the cut-off points tend to be higher) or with adult estimates.

Table 1: Adults who reported key illnesses or health status, by sex, 2007*Per cent*

	Men	Women	All
All aged 16+:			
High blood pressure (a)	19	20	20
Any heart condition excluding high blood pressure (a)	11	8	9
Any respiratory illness including asthma (a)	13	15	14
Any mental illness (a)	7	12	9
Arthritis (a)	9	16	13
Diabetes (a)	6	6	6
Limiting long-term illness (b)	26	28	27
SF-36 Physical component summary score (c)	49.5	48.1	48.8
SF-36 Mental component summary score (c)	51.1	48.9	50.0
Unweighted bases (d)			
All aged 16+	6,418	7,499	13,917

Source: Welsh Health Survey 2007.

- (a) Currently being treated for illness.
 (b) Has long-term illness, health problem or disability which limits daily activities or work.
 (c) Mean scores (not percentages). Higher scores indicate better health and well-being. SF-36 is a measure of health status, see main report for full details.
 (d) Bases vary: those shown are for the whole sample.

Table 2: Adults who reported key health-related lifestyles, by sex, 2007*Per cent*

	Men	Women	All
All aged 16+:			
Smoker	25	23	24
Non-smoking adults regularly exposed to passive smoke	44	40	42
Consumption of alcohol: above guidelines (a)	46	27	36
Consumption of alcohol: binge (b)	28	12	20
Consumption of fruit and vegetables: meets guidelines (c)	44	47	46
Exercise or physical activity done: meets guidelines (d)	36	23	29
Overweight or obese (e) (g)	62	51	57
Obese (f) (g)	20	21	21
Unweighted bases (h)			
All aged 16+	6,418	7,499	13,917

Source: Welsh Health Survey 2007.

- (a) Drank more than 4 units (men) or 3 units (women) on heaviest drinking day in the past week. Based on all adults (drinkers and non-drinkers).
 (b) Drank more than 8 units (men) or 6 units (women) on heaviest drinking day in the past week. Based on all adults (drinkers and non-drinkers).
 (c) Ate at least 5 portions of fruit & vegetables the previous day.
 (d) Did at least 30 minutes of at least moderate intensity physical activity on 5 or more days the previous week.
 (e) Body Mass Index (BMI) of 25+.
 (f) Body Mass Index (BMI) of 30+.
 (g) Excludes pregnant women.
 (h) Bases vary: those shown are for the whole sample.

Table 3: Adults who reported key illnesses or health status, 2003/04 - 2007

Per cent

	2003/04	2004/05	2005/06	2007 (a)
All aged 16+:				
High blood pressure (b)	18	19	20	20
Any heart condition excluding high blood pressure (b)	10	9	9	9
Any respiratory illness including asthma (b)	13	14	14	14
Any mental illness (b)	9	9	9	9
Arthritis (b)	14	14	13	13
Diabetes (b)	5	5	6	6
Limiting long-term illness (c)	28	27	27	27
SF-36 Physical component summary score (d)	48.8	48.6	48.9	48.8
SF-36 Mental component summary score (d)	49.8	49.6	49.8	50.0
Unweighted bases (e)				
All aged 16+	16,298	16,035	14,305	13,917

Source: Welsh Health Survey.

- (a) From 2007 the fieldwork runs on a calendar year basis.
 (b) Currently being treated for illness.
 (c) Has long-term illness, health problem or disability which limits daily activities or work.
 (d) Mean scores (not percentages). Higher scores indicate better health and well-being. SF-36 is a measure of health status, see main report for full details.
 (e) Bases vary: those shown are for the whole sample.

Table 4: Adults who reported key health-related lifestyles, 2003/04 - 2007

Per cent

	2003/04	2004/05	2005/06	2007 (a)
All aged 16+:				
Smoker	26	28	25	24
Non-smoking adults regularly exposed to passive smoke	71	70	66	42
Consumption of alcohol: above guidelines (b)	37	35	35	36
Consumption of alcohol: binge (c)	20	19	19	20
Consumption of fruit and vegetables: meets guidelines (d)	39	41	42	46
Exercise or physical activity done: meets guidelines (e)	29	29	31	29
Overweight or obese (f) (h)	54	55	56	57
Obese (g) (h)	18	18	19	21
Unweighted bases (i)				
All aged 16+	16,298	16,035	14,305	13,917

Source: Welsh Health Survey.

- (a) From 2007 the fieldwork runs on a calendar year basis.
 (b) Drank more than 4 units (men) or 3 units (women) on heaviest drinking day in the past week. Based on all adults (drinkers and non-drinkers).
 (c) Drank more than 8 units (men) or 6 units (women) on heaviest drinking day in the past week. Based on all adults (drinkers and non-drinkers).
 (d) Ate at least 5 portions of fruit & vegetables the previous day.
 (e) Did at least 30 minutes of at least moderate intensity physical activity on 5 or more days the previous week.
 (f) Body Mass Index (BMI) of 25+.
 (g) Body Mass Index (BMI) of 30+.
 (h) Excludes pregnant women in 2007, includes them prior to this.
 (i) Bases vary: those shown are for the whole sample.

Table 5: Long-standing illness and overweight / obesity in children, by sex, 2007*Per cent*

	boys	girls	children
All aged under 16:			
Long-standing illness (a)	21	18	20
Limiting long-standing illness (b)	7	6	7
All aged 2-15:			
Overweight or obese (c)	35	37	36
Obese (c)	21	19	20
Unweighted bases (d)			
<i>All aged under 16</i>	1,352	1,316	2,668
<i>All aged 2-15</i>	1,190	1,143	2,333

Source: Welsh Health Survey 2007.

- (a) Has long-standing illness, disability or health problem.
- (b) Has long-standing illness, disability or health problem which limits daily activities.
- (c) Estimates of overweight and obesity are based on Body Mass Index (BMI). The cut-off points above which children are classed as overweight or obese vary by age and sex, and are based on the 85th (overweight) and 95th (obese) percentiles of the 1990 UK BMI reference curves. Fuller details will be given in the main report.
- (d) Bases vary: those shown are for the whole sample.

3. Notes and definitions

3.1 Overview of the survey

The Welsh Health Survey was based on a representative sample of adults aged 16 and over living in private households in Wales, plus information for up to two children in those households. A random sample of addresses from the Postcode Address File (PAF) was selected. The small proportion of people not covered by the PAF, including those living in institutions, was not covered by the survey. It should be noted that people in institutions are likely to be, on average, in poorer health than those in private households – this should be kept in mind when considering the results from the survey.

Information was collected at two levels. First, a short interview with a responsible adult in the household was conducted to enumerate the household and to record brief demographic and socio-economic information. Next, self-completion questionnaires were left for completion by each adult aged 16 years and over in the household, for later collection by the interviewer. In households with children, a maximum of two children were randomly selected for inclusion in the survey. For selected children, questionnaires were left for completion (with older children completing their own questionnaires) and height and weight measurements were taken by the interviewer. Around 14,000 adults and 3,000 children took part in the 2007 WHS.

The survey results were weighted to take account of unequal selection probabilities, and for differential non-response, i.e. to ensure that the age and sex distribution of the responding sample matched that of the population of Wales.

Further details of the Welsh Health Survey methodology, definitions and questions are given in annual reports and technical reports, available on the Statistics for Wales website².

3.2 Publication of more detailed data

This release includes initial headline results from the 2007 Welsh Health Survey. More detailed results from the survey will be published later this year in an annual report - this will include results for adults by age and sex, socio-economic group, area deprivation score, and selected results for children. An associated statistical publication released alongside the main report will include key results by local authority area based on data from the last two years combined. All reports will be available from the Statistics for Wales website.

3.3 Key quality information

- a) The results in this release should be regarded as provisional, and may be subject to revision if more detailed work to prepare the main report reveals any data issues.
- b) Interpretation of the results should take account of the questionnaire design, as the mode of collection (self-reporting on paper) and the questions themselves affect the information collected.
- c) The survey relies on a self-completion questionnaire. The results, therefore, reflect people's own understanding of their health rather than a clinical assessment of their medical condition and their own interpretation of the health services they have used.
- d) Survey results are weighted to take account of unequal selection probabilities, and for differential non-response, i.e. to ensure that the age and sex distribution of the responding sample matches that of the Welsh population.

² <http://new.wales.gov.uk/topics/statistics/theme/health/health-survey/?lang=en> or www.wales.gov.uk/statistics

e) During the period covered by this release (January – December 2007), a household interview was obtained with 74% of eligible households in the sample. Self-completion questionnaires were obtained for 82% of adults and 77% of selected children in participating households, and height and weight measurements were obtained for 65% of eligible children in those households. During the year, around 14,000 adults and 3,000 children participated fully in the survey.

f) Base numbers of respondents replying to individual questions vary slightly between different survey questions – the tables provide an indication of the overall base numbers (sample sizes). It should be noted that the design of the survey means that the effective sample sizes will be somewhat smaller than the actual sample sizes, so these should be interpreted as a guide to precision only.

g) Missing answers occur for several reasons, including refusal or inability to answer a particular question, and cases where the question is not applicable to the informant. Missing answers have been omitted from all tables and analyses.

h) This release provides results from the most recent WHS (2007), and some trends are also shown for adults. From 2007, the survey collects more detailed data for children than previously and so consistent child trend information is not yet available. From 2007, fieldwork runs on a calendar year basis (January – December). Prior to that, fieldwork covered the twelve month periods October 2003 - September 2004 (2003/04), October 2004 - September 2005 (2004/05) and November 2005 – October 2006 (2005/06).

i) Tables A1 and A2 in Appendix A contain approximate 95% confidence intervals for a selection of key measures for the four years of the adult survey to date, and table A3 shows some information for the most recent year of the child survey. Confidence intervals were calculated using the statistical package Stata. These provide an indication of the precision of the estimates. A confidence interval can be calculated around a survey estimate and gives a range within which the true value is likely to fall. There is a 95% chance that the 95% confidence intervals include the true value. In general, the smaller the sample size the wider the confidence interval. As a rough guide to interpretation, when comparing two years, if the confidence intervals around the estimates overlap, it can be assumed that the estimates are not statistically significantly different – this approach is not as rigorous as doing a formal statistical test, but is straightforward, widely used and reasonably robust.

Appendix A – selected confidence intervals

Table A1: Approximate 95% confidence intervals for adults who reported key illnesses or health status, 2003/04 - 2007

Per cent

	2003/04	2004/05	2005/06	2007 (a)
All aged 16+:				
High blood pressure (b)	(17, 19)	(18, 20)	(19, 21)	(19, 21)
Any heart condition excluding high blood pressure (b)	(9, 11)	(9, 10)	(9, 10)	(9, 10)
Any respiratory illness including asthma (b)	(13, 14)	(13, 15)	(13, 15)	(13, 14)
Any mental illness (b)	(9, 10)	(9, 10)	(9, 10)	(9, 10)
Arthritis (b)	(13, 15)	(13, 15)	(12, 14)	(12, 14)
Diabetes (b)	(5, 6)	(5, 6)	(5, 6)	(6, 6)
Limiting long-term illness (c)	(27, 29)	(26, 28)	(26, 28)	(26, 28)
SF-36 Physical component summary score (d)	(48.5, 49.1)	(48.3, 48.9)	(48.7, 49.2)	(48.5, 49.1)
SF-36 Mental component summary score (d)	(49.5, 50.0)	(49.4, 49.9)	(49.5, 50.1)	(49.8, 50.3)
Unweighted bases (e)				
All aged 16+	16,298	16,035	14,305	13,917

Source: Welsh Health Survey.

- (a) From 2007 the fieldwork runs on a calendar year basis.
 (b) Currently being treated for illness.
 (c) Has long-term illness, health problem or disability which limits daily activities or work.
 (d) Mean scores (not percentages). Higher scores indicate better health and well-being. SF-36 is a measure of health status, see main report for full details.
 (e) Bases vary: those shown are for the whole sample.

Table A2: Approximate 95% confidence intervals for adults who reported key health-related lifestyles, 2003/04 – 2007

Per cent

	2003/04	2004/05	2005/06	2007 (a)
All aged 16+:				
Smoker	(25, 28)	(26, 29)	(24, 27)	(23, 25)
Non-smoking adults regularly exposed to passive smoke	(70, 73)	(69, 71)	(65, 68)	(40, 44)
Consumption of alcohol: above guidelines (b)	(36, 38)	(34, 36)	(34, 36)	(35, 38)
Consumption of alcohol: binge (c)	(19, 21)	(18, 20)	(18, 20)	(18, 21)
Consumption of fruit and vegetables: meets guidelines (d)	(38, 40)	(40, 42)	(41, 43)	(44, 47)
Exercise or physical activity done: meets guidelines (e)	(28, 29)	(28, 30)	(30, 32)	(29, 30)
Overweight or obese (f) (h)	(53, 55)	(54, 56)	(55, 57)	(55, 58)
Obese (g) (h)	(17, 18)	(17, 19)	(19, 20)	(20, 21)
Unweighted bases (i)				
All aged 16+	16,298	16,035	14,305	13,917

Source: Welsh Health Survey.

- (a) From 2007 the fieldwork runs on a calendar year basis.
 (b) Drank more than 4 units (men) or 3 units (women) on heaviest drinking day in the past week. Based on all adults (drinkers and non-drinkers).
 (c) Drank more than 8 units (men) or 6 units (women) on heaviest drinking day in the past week. Based on all adults (drinkers and non-drinkers).
 (d) Ate at least 5 portions of fruit & vegetables the previous day.
 (e) Did at least 30 minutes of at least moderate intensity physical activity on 5 or more days the previous week.
 (f) Body Mass Index (BMI) of 25+.
 (g) Body Mass Index (BMI) of 30+.
 (h) Excludes pregnant women in 2007, includes them prior to this.
 (i) Bases vary: those shown are for the whole sample.

Table A3: Approximate 95% confidence intervals for long-standing illness and overweight / obesity in children, 2007

Per cent

	2007
All aged under 16:	
Long-standing illness (a)	(18, 21)
Limiting long-standing illness (b)	(5, 8)
All aged 2-15:	
Overweight or obese (c)	(33, 38)
Obese (c)	(18, 22)
Unweighted bases (d)	
All aged under 16	2,668
All aged 2-15	2,333

Source: Welsh Health Survey 2007.

- (a) Has long-standing illness, disability or health problem.
- (b) Has long-standing illness, disability or health problem which limits daily activities.
- (c) Estimates of overweight and obesity are based on Body Mass Index (BMI). The cut-off points above which children are classed as overweight or obese vary by age and sex, and are based on the 85th (overweight) and 95th (obese) percentiles of the 1990 UK BMI reference curves. Fuller details will be given in the main report.
- (d) Bases vary: those shown are for the whole sample.