

Fife Scottish Health Survey Results 2008-11: Physical Activity

1. Background

The Scottish Health Survey (SHeS) is designed to make a major contribution to the monitoring of health in Scotland by providing estimates of the prevalence of a range of health conditions, information on health related behaviours and data to monitor progress towards local and national health and wellbeing targets not available from other sources.¹

Since 2008 the SHeS has had a new continuous survey design with the sample being built up annually over a four year period. The core sample size and the addition of a locally funded boost provided Fife results for 2008-09 and 2010-11. It also enables us to have 2008-11 results for Fife analysed by sex, age group and Scottish Index of Multiple Deprivation (SIMD) 2009 quintiles and to present results for each CHP.

2. The Fife Sample

Data collection from the 2008-11 surveys produced results from **2,741 adults** in Fife. 57% of the sample were women and 43% were men. 37% of the sample were aged 16-44 and 26% were aged 65 and over.

3. Results

This brief topic report focuses on physical activity. The 2008-11 SHeS collected information about participation in sports and structured exercise, walking, home based activities and activity at work. It asks respondents about the amount of time they spent doing each activity, the intensity of the activity and how often it was done in the previous four week period.

This information is also used to calculate the proportion of respondents achieving 30 minutes of moderate activity on at least 5 days a week (with the ability to accumulate the 30 minutes from shorter bouts of at least 10 consecutive minutes of activity). This contributes to monitoring of the target of '50% of adults to meet recommended levels (of moderate activity) by 2022' and the indicator to 'increase physical activity' in Scotland Performs.^{2,3}

From 2012 the SHeS is collecting information to monitor the age specific UK guidelines for physical activity which were published in 2011.⁴

3.1 Type of physical activity

82% of men and 79% of women in the Fife sample reported participation in 'any' physical activity for at least 10 minutes in the previous four weeks. Similar proportions were reported within each of the CHPs for female 'any' physical activity but Glenrothes and North East Fife (GNEF) had the highest proportions of male 'any' physical activity (Table 1).

Undertaking any heavy housework (e.g. scrubbing floors, cleaning windows) was the most common physical activity for men and women with the exception of men in Glenrothes and

¹ The Scottish Health Survey (<http://www.scotland.gov.uk/Topics/Statistics/Browse/Health/scottish-health-survey>)

² Let's Make Scotland More Active: A Strategy for Physical Activity.
<http://www.scotland.gov.uk/Resource/Doc/47032/0017726.pdf>

³ The Scottish Government. National Outcomes: Healthier Lives.
<http://www.scotland.gov.uk/About/Performance/scotPerforms/outcome/healthier>

⁴ Start Active, Stay Active: A report on physical activity for health from the four home countries (July 2011) Chief Medical Officers Department of Health.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_127931

North East Fife CHP. More than half of men and 60% of women reported heavy housework in the previous four weeks.

Table 1: Types of activities undertaken in previous four weeks by sex; Fife and CHPs

	Fife		DWF		GNEF		K&L	
	M	F	M	F	M	F	M	F
	% of respondents							
Any activities	82	79	79	80	86	78	82	79
Any sports and exercise	52	43	51	43	56	47	47	39
Any heavy housework	53	63	53	63	54	60	50	67
Any brisk walking	39	28	37	26	40	31	41	26
Any heavy manual work, gardening/DIY	28	12	24	8	34	17	27	11

Source: Fife SHeS 08-11

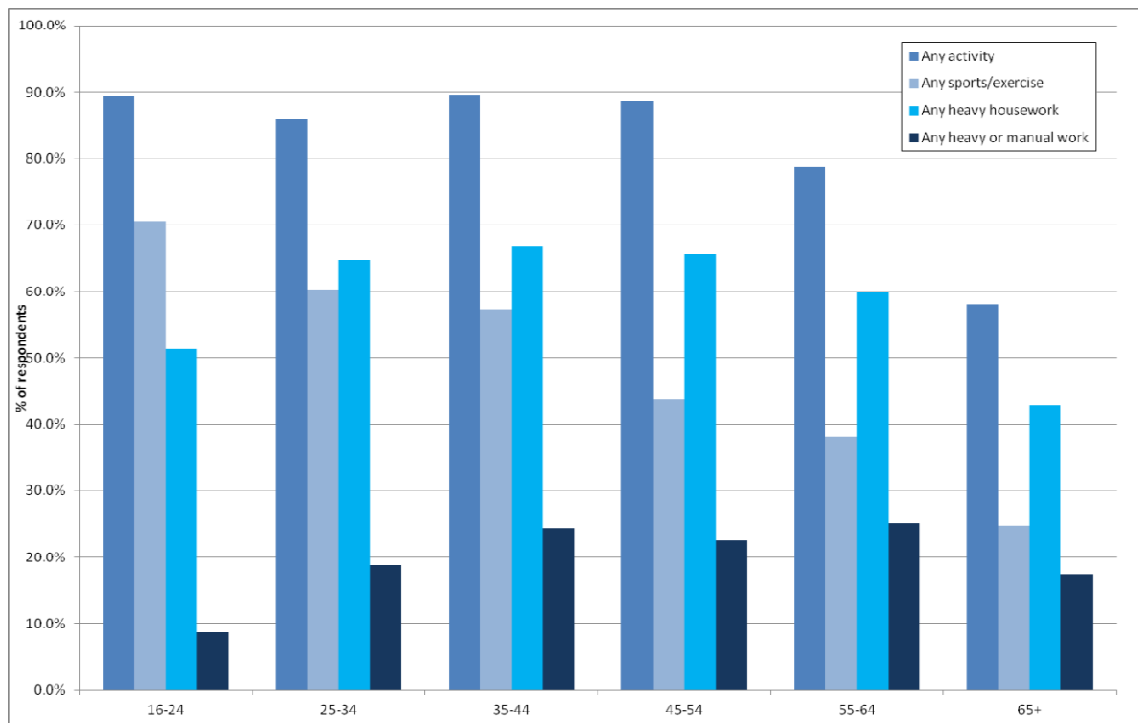
Sports and exercise was the second most common type of physical activity with 52% of men and 43% of women in Fife participating in at least 10 minutes in the previous four weeks. Participation in sports and exercise was lowest in Kirkcaldy and Levenmouth CHP and highest in Glenrothes and North East Fife CHP for both men and women (Table 1).

Walking was the third most common type of physical activity for both men and women but reported by more men than women. 39% of men and 28% of women reported having taken a brisk walk that lasted more than 10 continuous minutes in the previous four weeks. Brisk walking was reported most often by men in Kirkcaldy and Levenmouth CHP (41%) and women in Glenrothes and North East Fife CHP (31%).

Participation in heavy manual work, gardening or DIY (e.g. digging, chopping wood, building in stone) was reported by the lowest proportion of respondents and more than double the proportion of men to women (Table 1).

Participation in 'any' physical activity was lowest amongst Fife respondents aged 65 and over (58%) and highest among those aged 16-24 (89%) and 35-44 (90%) (Chart1). Participation in sport decreased linearly with increasing age as did participation in brisk walking beyond the age of 44. Reports of heavy housework were lowest in those aged 65 and over followed by those aged 16-24. As shown in Chart 1 heavy manual work in the previous four weeks was reported by 9% of those aged 16-24 which was almost half the proportion reporting aged 65 and over (17%).

Chart 1: Participation in physical activities by age group; Fife



Source: Fife SHeS 2008-11

The figures for ‘any’ physical activity were lower among respondents living in the most deprived quintile (77%) and highest in the least deprived (85%).^a Heavy housework was the most frequently reported activity with similar proportions being reported across all of the SIMD quintiles (Table 2). Sports and exercise was the second most frequently reported activity but proportions participating in sports and exercise increased with decreasing deprivation. Brisk walking was highest amongst the least deprived (41%) and lowest amongst the most deprived (28%).

Table 2: Types of activities undertaken in previous four weeks by SIMD Quintiles; Fife

	Most Deprived (1)	Quintile 2	Quintile 3	Quintile 4	Least Deprived (5)
	% of respondents				
Any activities	76.9	79.4	78.7	83.3	85.2
Any sports and exercise	38.6	42.5	47.2	54.2	54.8
Any heavy housework	56.9	58.5	58.5	57.8	58.2
Any brisk walking	28.2	30.6	28.8	38.1	41.4
Any heavy manual work, gardening/DIY	15.7	16.0	19.4	27.1	20.9

Source: Fife SHeS 08-11

3.2 Types of sports and exercise

52% of men and 43% of women in Fife reported participating in at least 10 minutes of sports and exercise in the previous four weeks. Each of these respondents was asked to name the

^a The Scottish Index of Multiple Deprivation (SIMD) 2009 ranks each of the 6505 datazones in Scotland from most to least deprived. The ranked 453 datazones in Fife have been grouped into quintiles each of which contains 20% of the population of Fife living in the most to least deprived areas.

sports and exercise they had done within the previous four weeks. Cycling, 'work out at gym/exercise bike/weight training' and 'doing exercises' (e.g. press-ups, sit ups) were all reported by 29% of men. These were closely followed by running/jogging (28%) and football/rugby (27%). By comparison among women 'aerobics/keep fit/gymnastics/dance for fitness' was reported by almost a third of all women (32%) followed by swimming (29%) and 'doing exercises' (28%).

Table 3: Types of sports and exercise by sex; Fife

	Swim	Cycle	Run	Workout	Exercises	Aerobics	FBall/ Rugby
	% of respondents						
Males	24.5	28.6	27.6	28.7	28.6	9.1	26.7
Females	33.1	12.9	16.5	25.3	27.7	32.4	2.1
Total	28.8	20.7	22.0	27.0	28.2	20.9	14.3

Source: Fife SHeS 2008-11

3.3 Time spent being physically active

On average men in Fife reported being active on more days in the previous four weeks than women (15.6 days compared to 13.1) and had a higher number of hours of physical activity each week, 8.5 hours compared to 5.9 hours (Table 4).

Although heavy housework was the most commonly reported activity for women and almost all men, women reported spending a greater number of days in the previous four weeks and reported a greater weekly average than men. Women in Fife spent on average 4.2 days doing heavy housework in the previous 4 weeks and 2 hours per week which was greater than the 2.8 days and 1 hour per week reported by men. Time spent each week on heavy housework was similar among men across all three CHPs but higher among women in Kirkcaldy and Levenmouth CHP (2.6 hours).

Table 4: Mean number of hours per week per activity by sex; Fife and CHPS

	Fife		DWF		GNEF		K&L	
	M	F	M	F	M	F	M	F
Any activities	8.5	5.9	7.8	5.7	9.2	5.6	8.7	6.7
Any sports and exercise	2.2	1.1	2.4	1.2	2.0	1.1	1.9	1.1
Any heavy housework	1.0	2.0	.9	1.9	1.0	1.6	1.0	2.6
Any brisk walking	2.4	1.8	2.0	1.4	2.8	1.6	2.6	2.4
Any heavy manual work, gardening/DIY	1.4	.3	.9	.2	2.0	.4	1.1	.2

Source: Fife SHeS 2008-11

The converse was true for participation in sports and exercise, men in Fife participated in sports and exercise on an average of 6.4 days in the previous 4 weeks and 2.2 hours per week compared to 4.8 days and 1.1 hours. Men and women in Dunfermline and West Fife CHP had the highest values for the mean number of hours spent each week doing sports and exercise

Brisk walking was reported on 6.6 days in previous four weeks by men and on 5.2 days by women in Fife. Men walked an average of 2.4 hours per week compared to women who walked 1.8 hours. Time spent walking each week was lowest among men and women in Dunfermline and West Fife CHP and highest among men in Glenrothes and North East Fife and women in Kirkcaldy and Levenmouth (Table 4).

Least time was spent by men and women doing heavy manual work with an average of 1.5 days in last four weeks among men and 0.4 days among women in Fife. On average 1.4 hours per week were spent doing heavy manual work by men and just 0.3 hours by women. Of the CHPs the greatest mean number of hours per week was reported by men and women in Glenrothes and North East Fife CHP (Table 4).

The average time each week spent participating in 'any' physical activity was lowest amongst Fife respondents aged 65 and over (3.4 hours) and highest among those aged 16-24 (8.8 hours). Table 5 shows that there was least difference between the age groups in terms of time spent each week doing heavy housework. Average weekly hours for participation in heavy manual work were higher among the older age groups.

Time spent walking was similar among the age groups from 16-64 with a marked decrease among those 65 and over. Sports and exercise was undertaken on an average of 3.2 hours a week by those aged 16-24 which was almost or more than double that of any other age group (Table 5).

Table 5: Average number of hours per week per activity by age group; Fife

	16-24	25-34	35-44	45-54	55-64	65+	All ages
Any activities	8.8	7.8	8.5	8.1	7.6	3.4	7.2
Any sports and exercise	3.2	1.8	1.6	1.4	1.3	.8	1.6
Any heavy housework	1.1	1.5	1.8	1.9	1.8	.9	1.5
Any brisk walking	2.6	2.2	2.5	2.2	2.3	.9	2.6
Any heavy manual work, gardening/DIY	.5	.5	.9	.9	1.2	.7	0.8

Source: Fife SHeS 2008-11

The average time spent each week being physically active did not show a clear pattern by deprivation quintile with the greatest average number of hours reported among the second least deprived quintile (quintile 4) and the lowest among the most deprived followed by the least deprived (Table 6). For sports and exercise the average number of hours was lowest in the most deprived quintile and highest in quintiles 4 and 5. Brisk walking was also lowest among the most deprived quintile but similar in the other quintiles (Table 6).

Table 6: Average number of hours per week per activity by SIMD quintile; Fife

	Most Deprived (1)	Quintile 2	Quintile 3	Quintile 4	Least Deprived (5)
Any activities	6.5	7.3	7.3	7.8	6.8
Any sports and exercise	1.3	1.7	1.5	1.8	1.8
Any heavy housework	1.7	1.7	1.6	1.4	0.9
Any brisk walking	1.7	2.2	2.0	2.2	2.2
Any heavy manual work, gardening/DIY	0.4	0.7	0.9	1.2	0.8

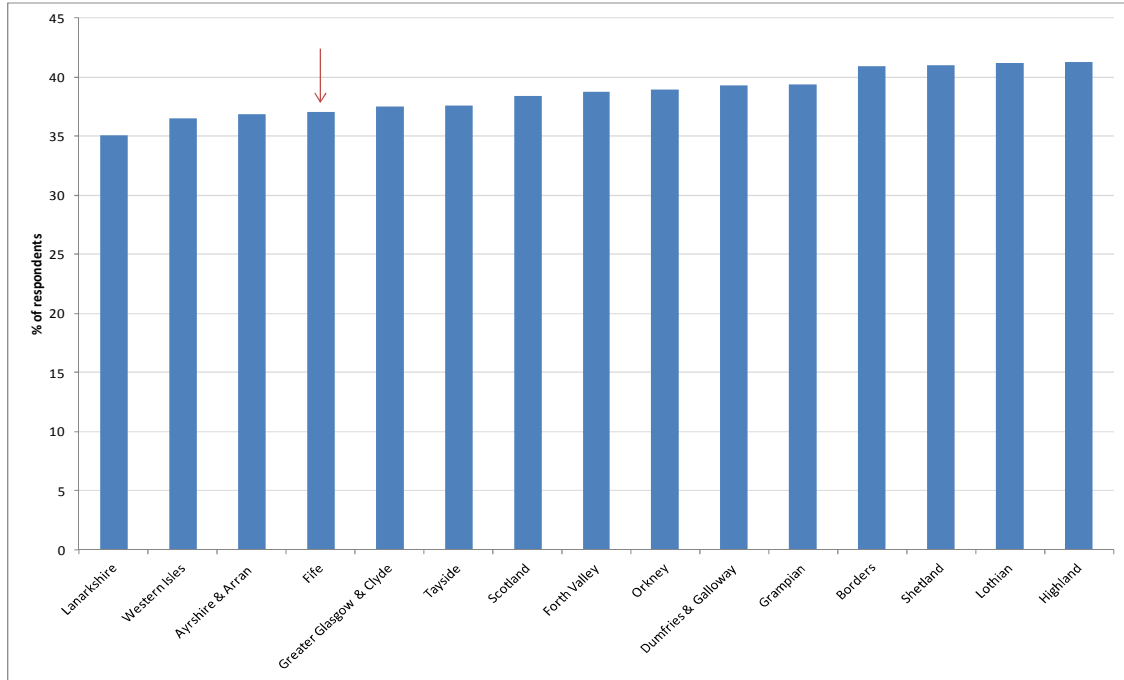
Source: Fife SHeS 2008-11

3.4 Levels of physical activity

Daily levels of physical activity can be summarised to allow progress towards physical activity targets to be monitored. The Fife figure of 37% was just lower than the 38% for Scotland and the joint second lowest of all NHS boards (Chart 2). Four NHS Boards

reported a proportion higher than 40% but none of the proportions reported below across Scotland are as yet close to the 50% target set by the Scottish Government to be achieved by 2022.⁵

Chart 2: Proportions meeting recommended physical activity levels by NHS Board; 2008-11

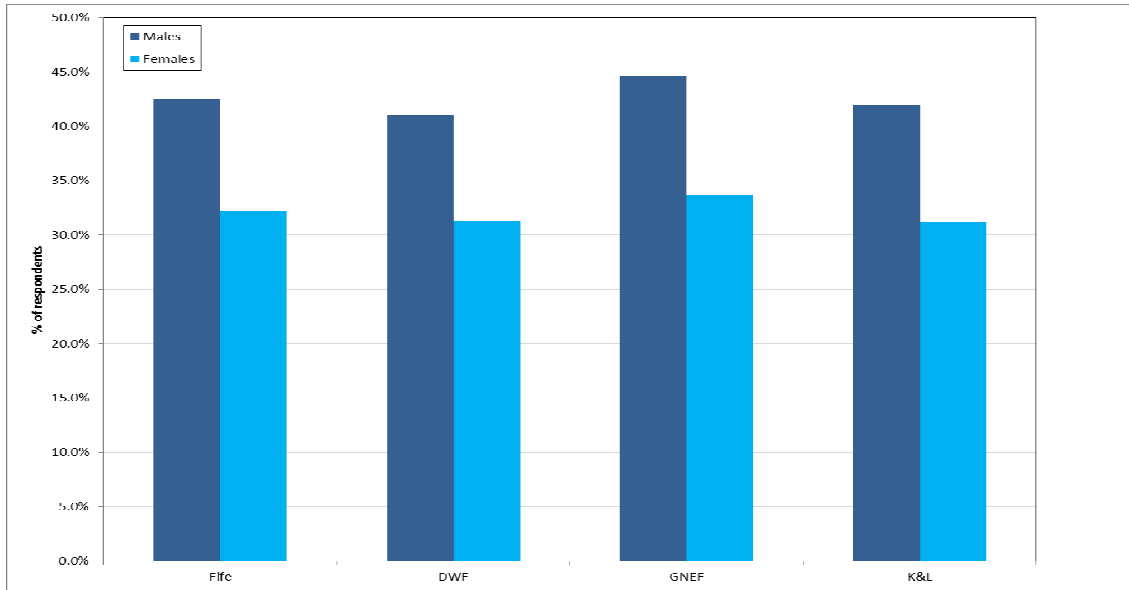


Source: SHeS NHS Board Results

Chart 3 shows the proportion of male and female respondents who reported 30 or more minutes of moderate physical activity on 5 or more days a week in Fife and each of the CHPs. 43% of males and 32% of females in Fife met the recommended levels of weekly physical activity. Proportions were highest among males (45%) and females (34%) in Glenrothes and North East Fife CHP (Chart 3 and Table 7).

⁵ Scottish Health Survey 2008-11 NHS Board Results
<http://www.scotland.gov.uk/Topics/Statistics/Browse/Health/scottish-health-survey/Publications/healthboard2011>

Chart 3: Proportion achieving recommended physical activity level by sex; Fife and CHPs



Source: Fife SHes 08-11

Summary physical activity levels can be further categorised into the three categories shown in Table 7 below. ‘Low’ activity is defined as participating in fewer than 30 minutes of moderate activity a week (including no activity) with 29% of men and 34% of women in the Fife sample categorised at this level. Dunfermline and West Fife CHP had the highest proportion of women who reported ‘low’ activity and Kirkcaldy and Levenmouth the highest proportion of men.

Table 7: Summary activity levels by sex; Fife and CHPs

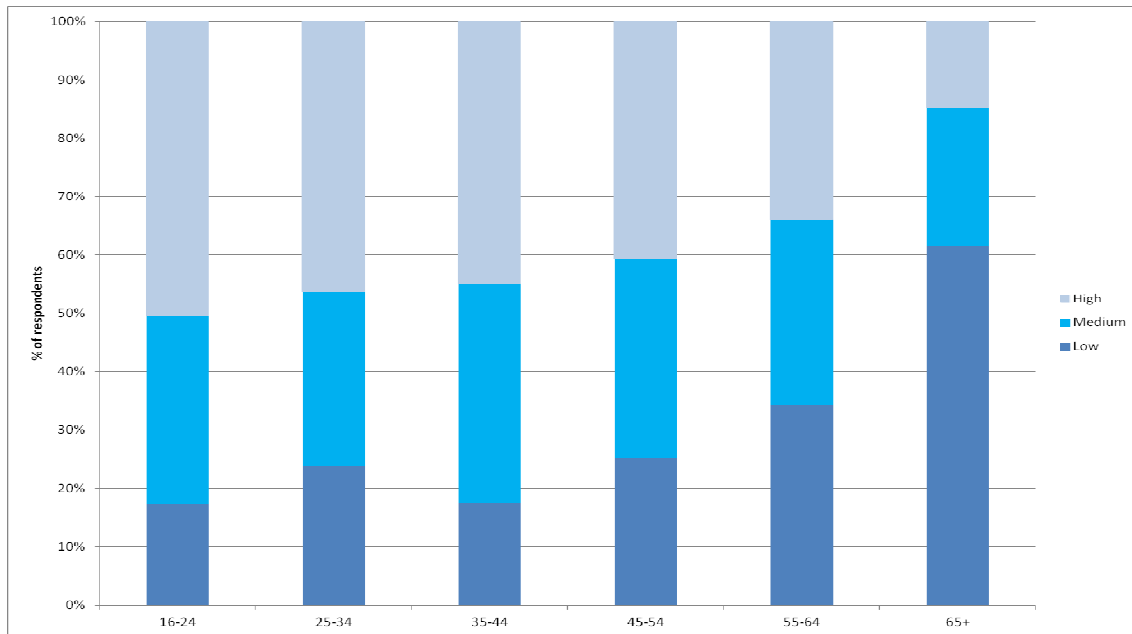
	Fife		DWF		GNEF		K&L	
	M	F	M	F	M	F	M	F
	% of respondents							
Low activity	29	34	30	36	26	33	31	32
Some activity	29	34	29	33	29	33	27	36
Meets recommendations	43	32	41	32	45	34	42	31

Source: SHes 08-11

29% of men and 34% of women in Fife participated in ‘some’ activity, taking at least 30 minutes of moderate activity on 1 to 4 days a week. Participation in ‘some’ activity was lowest among men in Kirkcaldy and Levenmouth CHP and women in Dunfermline and West Fife CHP and Glenrothes and North East Fife CHP.

Chart 4 shows that the proportions meeting recommended level (high levels) decreased with increasing age from 50.5% among those 16-24 to 14.9% of those aged 65 and over. Conversely ‘low activity’ increased with increasing age from 35 to a high of 62% of those aged 65 and over (Chart 4).

Chart 4: Summary physical activity levels by age group; Fife



Source: SHeS 08-11

Quintile 4 had the highest proportion of respondents who met weekly physical activity targets (43.2%) and the least deprived quintile the lowest (33.9%). Proportions of 'low activity' were highest amongst the most deprived and lowest amongst the least deprived quintile (Table 8).

Table 8: Summary activity levels by SIMD quintile; Fife

	Most Deprived	Quintile 2	Quintile 3	Quintile 4	Least Deprived
	% of respondents				
Low activity	35.2	30.9	33.0	30.5	28.2
Some activity	28.6	33.4	30.8	26.3	37.9
Meets recommendations	36.2	35.7	36.3	43.2	33.9

Source: SHeS 08-11

4. Additional and future results

The figures included within this report and some additional analyses are available separately in an excel workbook (Fife SHeS Results 08-11 Phys Act) which can be downloaded from the Public Health pages of www.nhsfife.org (search A-Z for public health). Within this page you can also find the full reports of the SHeS 08-11 results for Fife and CHPs. The Fife 2010-11 data will be available at the end of March and will be used to compare progress against the 2008-09 Fife figures. The possibility of producing sub Fife figures using rolling four year periods (10-13) will be explored after the publication of the 2012-13 data.

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