INTRODUCTION

The Scottish Health Survey (SHeS) is commissioned by the Scottish Government Health Directorates to provide reliable information on the health, and factors related to health, of people living in Scotland that cannot be obtained from other sources. The series aims to:

- estimate the occurrence of particular health conditions
- estimate the prevalence of certain risk factors associated with health
- look at differences between regions and between subgroups of the population
- monitor trends in the population’s health over time
- make a major contribution to monitoring progress towards health targets

Key findings from the 2016 survey are presented here alongside some trends. Further discussion of the findings and full documentation of the survey’s methods and questionnaire can be found in the 2016 annual report available from the Scottish Health Survey website: www.gov.scot/scottishhealthsurvey. The report is accompanied by an extensive set of web tables for 2016 and updated trends for key measures.

ABOUT THE SURVEY

The sample

SHeS has been designed to provide data on the health of adults (aged 16 and over) and children (aged 0-15) living in private households in Scotland annually. In 2016, 4,323 adults and 1,561 children took part in the survey. Representative data for adults in all NHS Health Board for the 2013-2016 period are also available.

The interview

The principal focus of the survey is cardiovascular disease (CVD) and related risk factors. Some questions and topics are asked annually while others vary from year to year. In addition to the questionnaire, height and weight measurements are collected from everyone aged 2 and over. Each year a sub-sample of adults also complete a biological module which includes blood pressure and waist circumference measurements along with urine and saliva sample collection. Participants are also asked for permission to link survey responses to their administrative NHS health records. Key topics included in the 2016 survey were:

- alcohol consumption
- smoking
- physical activity
- diet
- obesity
- multiple risks
- general health and caring
- mental wellbeing
- cardiovascular conditions and diabetes
- respiratory health
The proportion of adults drinking above the recommended maximum of 14 units per week fell from 34% in 2003 to 25% in 2013 and has stayed at a similar level since (25% in 2014 and 26% in 2015 and 2016).

The percentage of adults drinking above the recommended maximum of 14 units a week than female drinkers.

The percentage of adults reporting that they do not drink alcohol increased significantly from 11% in 2003 to 16% in 2013, and has settled at that level since.

More adults reported not drinking alcohol in the most deprived areas (26%) than the least deprived areas (11%) (age-standardised).

Those in the least deprived areas drank on more days on average (2.9 days) than those in the most deprived areas (2.3 days).

Male drinkers consumed significantly more alcohol on their heaviest drinking day than female drinkers in 2015/2016 combined (8.4 units compared with 5.9 units respectively).

The average number of units of alcohol consumed by adults on their heaviest drinking day fell from 7.7 units in 2003 to 6.9 units in 2013, and has remained at a broadly similar level since then (7.3 units in 2016).

Drinkers aged 75 and over consumed less alcohol at one time, but drank with greater frequency, on average, than younger drinkers who tended to consume greater volumes of alcohol in fewer drinking sessions.
The mean number of cigarettes smoked per day in 2016 was higher for male smokers (13.7 cigarettes) than for female smokers (11.7 cigarettes).

Current smoking prevalence was highest among adults aged 25-54 (24-29%), however those in the 55-64 age group reported smoking the most cigarettes per day on average (15.1 cigarettes) of all adult age groups.

Smokers were more likely to be a normal weight (BMI 18.5-less than 25) (39%) than ex-regular smokers (29%) or those who had never smoked (33%).

The percentage of adults who had never or never regularly smoked was highest in the least deprived areas (65%; age-standardised for 2013-16 combined) and lowest in the most deprived areas (41%).

Levels of current e-cigarette usage among adults had increased significantly from 5% in 2014 to 7% in 2015, and stayed at the same level in 2016.

Current e-cigarette use was the same for men and women (7%) in 2016.

Those living in the two least deprived area quintiles were the least likely to be exposed to second-hand smoke in their home or the homes of others (5-8%) and those in the most deprived quintile were the most likely (20%), (age standardised).

Exposure of children to second-hand smoke in their home decreased from 11% in 2014 to 6% in 2015 and remained around this level in 2016 (7%).
**PHYSICAL ACTIVITY**

- Younger age groups continued to be more likely than older age groups to meet the MVPA guidelines (75-76% of those aged 16-44, compared to 30% of those aged 75 and over).

- Adults in the two most deprived areas were less likely to adhere to MVPA guidelines than those in the least deprived area.

- Younger children were more likely than older children to meet the physical activity guidelines, (82% of 5-7 year-olds doing so, compared with 61% of those aged 13-15, school-based activity included).

- In 2016, 68% of children had participated in sport and exercise in the week prior to the interview, this has been relatively stable since 2010 but fluctuated in previous survey years with the highest level seen in 2009 (73%).

Two thirds of adults (64%) met the guidelines for Moderate or Vigorous Physical Activity in 2016, a similar level to that seen since 2012 (62-64%).

- Men continue to be more likely than women to meet the MVPA guidelines.

- Younger children were more likely than older children to meet the physical activity guidelines, (82% of 5-7 year-olds doing so, compared with 61% of those aged 13-15, school-based activity included).

- In 2016, 68% of children had participated in sport and exercise in the week prior to the interview, this has been relatively stable since 2010 but fluctuated in previous survey years with the highest level seen in 2009 (73%).
**DIET**

- Average daily consumption of fruit and vegetables for adults reduced from 3.3 portions in 2008 to 3.0 portions in 2016.
- In 2016 adults mean consumption of fruit and vegetables was lowest for those aged 16-24 (2.5 portions) and highest among those aged 55-64 (3.3 portions).
- In 2016 more women (22%) ate the recommended 5-a-day portions of fruit and vegetables than men (17%).

- In 2016, 13% of children aged 2-15 met the 5-a-day fruit and vegetables recommendations on the previous day, the proportion remaining relatively stable since 2008.
- In 2015/2016 the proportion of girls meeting the 5-a-day guideline at 15% was higher than boys at 11%.
- Consumption of non-diet soft drinks at least once a day amongst adults fell from 27% in 2014 to 20% in 2016.
- Biscuit consumption at least once a day for adults also decreased from 34% in 2008 to 28% in 2016.
- Around a third (32%) of adults ate oily fish in 2016, a significant increase from 25% in 2008 and 2014.
- The level of consumption of all foods and drinks high in fat and/or sugar tended to be higher among men.

---

**Overall, children tended to consume foods and drinks high in fat and/or sugar more often than adults.**

<table>
<thead>
<tr>
<th></th>
<th>Children</th>
<th>Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion eating sweets/chocolate at least once a day</td>
<td>28%</td>
<td>51%</td>
</tr>
<tr>
<td>Proportion eating crisps/savoury snacks at least once a day</td>
<td>17%</td>
<td>33%</td>
</tr>
<tr>
<td>Proportion drinking non-diet soft drinks at least once a day</td>
<td>20%</td>
<td>35%</td>
</tr>
<tr>
<td>Proportion eating chips at least twice a week</td>
<td>31%</td>
<td>42%</td>
</tr>
<tr>
<td>Proportion eating processed meat at least twice a week</td>
<td>32%</td>
<td>42%</td>
</tr>
<tr>
<td>Proportion eating ice-cream once a week or more</td>
<td>27%</td>
<td>48%</td>
</tr>
</tbody>
</table>
Two thirds (65%) of adults were overweight, including 29% who were obese, in 2016. These figures are largely unchanged since 2008.

- Men were significantly more likely than women to be overweight including obese in 2016 (68% compared with 61%) as in all survey years since 2003.
- Obesity prevalence was highest among those aged 65-74 (36%) and lowest among those aged 16-24 (14%).

70% of children (aged 2-15) were of healthy weight in 2016, which is in line with figures since 1998 (between 65% and 72%).

At 29%, the proportion of children at risk of being overweight (including obesity) in 2016 was similar to previous years.

There has been a significant decline in the prevalence of the risk of obesity in children between 2014 (17%) and 2016 (14%), representing a return to the lowest recorded rate of 14% in 1998.

The mean BMI has increased from 27.1 to 27.7 since 2003.
MULTIPLE RISKS

- In 2016, 40% of adults had one risk factor and 31% had multiple risk factors (two or more) with just 1% of these exhibiting all four risk factors measured (smoking, harmful drinking, low physical activity and obesity).

- The number of adults with multiple risks (two or more) increased with age from those aged 16-24 (20%) to those aged 55-64 (39%) before declining to 33% of those aged 75 or over.

- The mean number of risks for all adults was 1.10 risks with higher mean risks for men (1.14) than for women (1.05).

- Among those with only one of the risk factors, the most common for men was drinking over the recommended limit (15% of men reporting this as their only risk) and for women the most common single risk was failing to meet the physical activity recommendation (16% of women).

- For those reporting two risk factors, failing to meet physical activity recommendations and obesity was the most common combination. Women were significantly more likely to have this combination than men (11% of all women compared to 6% of men).

- The proportion of all adults assessed to be failing to meet physical activity recommendations and obese only increased with age, from 3% of those aged 16-24 to 18% of those aged 75 and over. A similar age-related pattern is seen for adults who both smoked and failed to meet physical activity recommendations: just 2% of those aged 16-24 exhibited these risks, rising to 5-6% of those aged 55 and over.

- Adults living in the most deprived areas were twice as likely to have two or more risk factors (41%) as those living in the least deprived areas (20%).

- Adults who reported having two or more age-standardised risk factors (smoking, alcohol consumption, obesity, or low exercise levels) were more likely to have a long-term condition (54%) than adults with one risk factor (44%) or no risk factor (37%).
The proportion of adults reporting to be in ‘very good’ or ‘good’ health was significantly higher amongst the youngest age group (88% of those aged 16-24) and lower amongst the oldest age group (52% of those aged 75 and over).

Almost all children aged 0-15 continued to report to be in ‘very good’ or ‘good’ health (95%) in 2015/2016. Overall, girls were more likely than boys to report this (97% and 94% respectively).

Reported levels of ‘good’ or ‘very good’ health were lowest among children aged 14-15 (91%), compared to 95-98% for children aged 0-13.

The prevalence of limiting long-term health conditions was significantly higher in the older age groups than younger age groups (from 7% of those aged 0-15, to 60% of those aged 75 and over).

More than one in seven (15%) adults provided regular, unpaid care to a family member, friend or someone else in 2016, with women more likely to do so than men (17% and 13% respectively).

Of all children aged 4-15, 3% provided care, with older children more likely to provide care than younger (5% of those aged 12-15 compared with 1% of those aged 4-11).

Women working full time were significantly more likely to provide unpaid care than men working full time (17% and 12% respectively).

In 2015/2016, adults providing unpaid care were most likely to do so for 5-19 hours per week.

Those over the age of 65 were most likely to provide more than 50 hours of care per week at 24%, compared with 13-14% of those aged 16-64.
MENTAL HEALTH

- Average levels of wellbeing for adults, as measured by the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS), have remained stable since 2008, with scores ranging from 49.7 to 50.0 (49.8 in 2016).
- Reported mental wellbeing varied significantly by age with the highest mean WEMWEBS score reported for those aged 65-74 (50.8) and the lowest for those aged 45-54 (49.0).

- In 2016, 15% of adults exhibited signs of a possible psychiatric disorder (GHQ-12 score of four or more), the proportion remaining relatively static since 2003.
- Ex-drinkers were most likely to have symptoms of a possible psychiatric disorder (28%), followed by non-drinkers (20%) and those drinking over 35 units per week (18%); those drinking within the recommended maximum of 14 units a week and those drinking between 14 and 35 units a week were the least likely (14% and 11% respectively).

- The mean life satisfaction score for adults was 7.8 in 2016 (on a scale of 0-10).
- Adults aged 65-74 had the highest percentage of above average reported life satisfaction (41%), whilst those aged 45-54 had the highest percentage of below average life satisfaction (39%).

- Adults living in the most deprived areas reported lower life satisfaction and lower mental wellbeing than those in the least deprived areas (mean life satisfaction score was 7.3 in the most deprived areas, compared with 8.1 in the least; mean WEMWEBS scores were 47.4 in the most deprived areas, compared with 51.5 in the least).
CARDIOVASCULAR CONDITIONS AND DIABETES

- Among adults aged 16 and over, 19% had some form of cardiovascular disease (CVD) or diabetes, 15% had any CVD, and 5% had diabetes. These numbers have remained relatively stable in recent years.

- In 2016, 8% of adults reported ischaemic heart disease (IHD) or stroke. This level has remained unchanged since 2008.

- Older people were more likely to have some form of CVD or diabetes than young people (47% of those aged 75 and over compared with 5% of those aged 16-24).

- The prevalence of IHD or stroke was also significantly associated with age, with less than 1% of those aged 16-44 reporting, compared with 29% of those aged 75 and over.

- In 2016, those in the most deprived areas reported a higher prevalence of some form of CVD than those in the least deprived areas (18% and 12% respectively).

- Prevalence of any CVD was highest among ex-drinkers (23%) followed by those that had never drunk alcohol (18%) or drank over 35 units per week (17%). Prevalence was lowest for those who drank between 14 and 35 units per week (13%) or drank within the recommended guidelines of a maximum of 14 units a week (15%).

- Ex-drinkers were more likely to have had a stroke (5%) than those drinking within or outwith the recommended guidelines (2-3%) and never drinkers (3%), (age standardised).

- The prevalence of CVDs (with the exception of stroke) and diabetes was significantly higher among adults who were obese, compared with those who were underweight, of normal weight, or overweight (but not obese).
RESPIRATORY

- In 2016, 4% of adults reported having Chronic Obstructive Pulmonary Disease (COPD), continuing the stable level since 2008.

- Reported COPD was associated with area deprivation; 2% of adults in the two least deprived quintiles, compared with 7% of those in the most deprived areas.

- At 10% in 2016, the proportion of all children, aged 0-15 years, that had reported doctor-diagnosed asthma has remained unchanged from 2015, reinforcing the observation of reduced levels since 2003 (16%).

- The prevalence of having wheezed in the last 12 months was higher among older adult age groups (17-18% for those aged 45 and over compared to 11-13% for those aged 16-44).

- The prevalence of ever wheezing was also linked to deprivation, with prevalence higher in the most deprived areas (36%) than the least deprived areas (25%).

- The prevalence of COPD varied with smoking status, from 1% of those who never or occasionally smoked, to 8% of those who smoked 20 cigarettes or more per day.