NHS Smoking Cessation Services
Scotland 2018/19
This is a National Statistics Publication

National Statistics status means that the official statistics meet the highest standards of trustworthiness, quality and public value. They are identified by the quality mark shown above.

The UK Statistics Authority has designated these statistics as National Statistics signifying compliance with the Code of Practice for Statistics.

Once statistics have been designated as National Statistics, it is a statutory requirement that the Code of Practice shall continue to be observed.

The statistics last underwent a full assessment by the Office for Statistics Regulation (OSR) against the Code of Practice in July 2013. The OSR is the regulatory arm of the UK Statistics Authority.

Find out more about the Code of Practice at:

Find out more about National Statistics at:
Contents

Introduction ..................................................................................................................3
Main Points ...................................................................................................................4
Results and Commentary ..............................................................................................5
  1. Quit attempts made in NHS stop smoking services .................................................5
  2. Success of quit attempts at four and twelve weeks ................................................6
  3. NHS Board ...........................................................................................................8
  4. Demographics .......................................................................................................10
    Gender ....................................................................................................................10
    Age .......................................................................................................................11
    Area deprivation ...................................................................................................14
    Pregnant Women ..................................................................................................15
    Prison Setting .......................................................................................................16
  5. Methods available to help quit attempts ...............................................................19
    Pharmacy and specialist services (non-pharmacy) ...............................................19
    Drug treatments to help stop smoking ..................................................................21
    Intervention type ..................................................................................................24
Glossary .......................................................................................................................26
List of Tables ...............................................................................................................27
Contact .......................................................................................................................28
Further Information ....................................................................................................28
Rate this publication .................................................................................................28
References ..................................................................................................................29
Appendices ................................................................................................................30
  Appendix 1 – Background information ....................................................................30
    A1.1 The national smoking cessation database and monitoring ..............................30
    A1.2 How the percentage of successful quit attempts are calculated .....................30
    A1.3 The smoking cessation HEAT target / Local Delivery Plan (LDP) Standard .....32
    A1.4 Confidence Intervals .....................................................................................33
  Appendix 2 – Publication Metadata ........................................................................35
  Appendix 3 – Early access details ..........................................................................37
  Appendix 4 – ISD and Official Statistics ..................................................................38
Introduction

Smoking remains a major cause of poor health in Scotland. It is a Scottish Government priority to support those who want to stop smoking. NHS Scotland stop smoking services, provide support that has been shown to be effective.

In June 2018 the Scottish Government published Raising Scotland’s Tobacco-free Generation: Our Tobacco-Control Action Plan 2018 [1]. This is a five-year action plan setting out interventions and policies to help reduce the use of and associated harms from using tobacco in Scotland. The actions are set out by category into:

- raising awareness
- encouraging healthier behaviour
- improving services
- providing protection through regulation

Achieving a reduction in population smoking rates to five per cent or less by 2034 remains a Scottish Government key objective.

This release by Information Services Division provides statistics from NHS stop smoking services in Scotland for the period April 2018 to March 2019, including trend data from April 2009 to March 2010. This report is supplemented by a dashboard and excel workbook.

Statistics are presented at national, NHS Board and Local Authority level along with breakdowns including age, gender, deprivation and drug treatments to help stop smoking.

Statistics are based on total ‘quit attempts’ made during the year, rather than total number of clients with a quit attempt, so could include repeat quit attempts for the same client.

Full background of the national stop smoking (smoking cessation) database and monitoring are available in Appendix A1.1.

Performance figures against the 2018/19 smoking cessation Local Delivery Plan (LDP) standard are available in the LDP Dashboard and LDP publication summary.
Main Points

Quit attempts in 2018/19

- In 2018/19, the number of attempts to stop smoking made with the help of NHS smoking cessation services fell for the seventh consecutive year to 51,078. This is a 7.9% reduction from 2017/18 and a 57.9% reduction from when the number of quit attempts were at their peak in 2011/12. There are a number of factors which can influence the use of NHS smoking cessation services these could include the use of electronic cigarettes and a reduction in smoking prevalence.

Success of quit attempts in 2018/19

- In 2018/19, of those making a quit attempt 38.7% (19,753) self-reported that they were still not smoking at four weeks. This figure fell to 23.6% (12,047) at twelve weeks.

- Of the 19,753 self-reported four-week quits, 12,248 (62.0%) were validated as not smoking through carbon monoxide testing, 396 (2.0%) were confirmed as smoking, while for 7,109 (36.0%) had no carbon monoxide reading taken or the result was unknown.
Results and Commentary

1. Quit attempts made in NHS stop smoking services

Attempts to quit smoking can be made by individual smokers with or without the support of NHS stop smoking services. This publication focuses on NHS stop smoking services including pharmacy services and specialist services (non-pharmacy), for example those services which sit within general practices, community and acute care.

In 2018/19 there were 51,078 quit attempts made with the help of NHS stop smoking services in Scotland. This figure is a reduction of 7.9% in the number of quit attempts compared with 2017/18 (55,454 quit attempts). The trend in the number of quit attempts between 2009/10 and 2018/19 is shown in Figure 1.

![Figure 1. Number of quit attempts made in NHS stop smoking services, Scotland; 2009/10 - 2018/19](image)

The trend for Scotland shows a reduction of 57.9% in the number of quit attempts between 2011/12, when number of quit attempts reached their peak, and 2018/19, though the rate of reduction has slowed since 2014/15.

There are a number of factors which can influence the use of NHS smoking cessation services these could include the use of electronic cigarettes and a reduction in smoking prevalence. The Scottish Health Survey reported that 19% of adults smoked in Scotland in 2018 compared to 25% in 2009.

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
2. Success of quit attempts at four and twelve weeks

Client follow-up at both four and twelve weeks can be carried out by face to face discussions, by telephone, by letter or by questionnaire. Information on successful quits at four week follow-up may either be self-reported or validated using carbon monoxide (CO) breath testing which detects current smoking. Carbon monoxide breath testing is a more rigorous method of confirming quits but requires attendance at a smoking cessation service. More information on how quit success is calculated is provided in Appendix A1.2.

Of the 51,078 quit attempts made in 2018/19 in Scotland, 39.0% (19,753) resulted in a self-reported successful quit at the four week follow-up stage. A further 13.7% (7,004) were reported as unsuccessful and for 47.4% (24,321) no information was available.

Of the 19,753 self-reported four week successful quits, 62.0% (12,248) were confirmed successful using carbon monoxide testing, 2.0% (396) were not confirmed (and therefore were still smoking) and 36.0% (7,109) had no carbon monoxide reading taken or the result was unknown.

Over the period 2009/10 to 2018/19 the percentage of self-reported successful quit attempts at four weeks ranged between 35.9% (2014/15) and 39.3% (2010/11) (Figure 2).

![Figure 2: Percentage of successful four and twelve week quit attempts in Scotland; 2009/10 – 2018/19](image)

At twelve weeks, successful self-reported quits dropped to 23.6% (12,047) of quit attempts made, while unsuccessful quits and those with no information available rose to 17.5% (8,960) and 58.9% (30,071) respectively.
The percentage of successful quits at twelve weeks decreased between 2009/10 (17.1%) to 2013/14 (14.1%) before a large increase in 2014/15 (19.1%). Since then the percentage of successful quits at twelve weeks has increased to 23.6% in 2018/19.

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
3. NHS Board

Figure 3 shows the percentage of successful quit attempts at four weeks in 2018/19 by NHS Board. The percentage of successful quit attempts for NHS Boards ranged from 33.4% in NHS Lothian to 81.1% in NHS Orkney.

**Figure 3: Percentage of successful four week quit attempts (95% confidence intervals) by NHS Board; 2018/19**

The percentage of successful quit attempts at four weeks in NHS Lothian, NHS Borders, NHS Highland were significantly lower than the Scotland figure (39.0%), while the percentage of successful quit attempts in NHS Ayrshire & Arran, NHS Grampian, NHS Dumfries & Galloway, NHS Forth Valley, NHS Western Isles and NHS Orkney were significantly higher. The successful quit attempts at four weeks in the remaining NHS Boards (NHS Tayside, NHS Greater Glasgow & Clyde, NHS Shetland, NHS Lanarkshire and NHS Fife) were not statistically different from Scotland.

The percentage of cases where information on quit success was unavailable varied widely between NHS Boards and may affect the comparisons. More information on unavailable data can be found in Appendix A1.2.
Figure 4 (below) shows that in 2018/19 the percentage of successful quit attempts at twelve weeks also varied between NHS Boards, from 19.1% in NHS Borders to 69.8% in NHS Orkney.

Figure 4: Percentage of successful twelve week quit attempts (95% confidence intervals) by NHS Board; 2018/19

Note: If the 95% confidence interval does not include the Scottish percentage, the NHS Boards percentage is statistically significantly different from Scotland (‘higher’ or ‘lower’); if the confidence interval includes the Scottish percentage, the NHS Boards percentage is assessed as being similar to Scotland. Further information on confidence intervals is available in Appendix A1.4.

The percentage of successful quit attempts at twelve weeks in NHS Borders, NHS Lothian, NHS Highland, NHS Lanarkshire were significantly lower than the Scotland figure (23.6%), while the percentage of successful quit attempts in NHS Grampian, NHS Dumfries & Galloway, NHS Forth Valley, NHS Western Isles, and NHS Orkney were significantly higher. The remaining NHS Boards (NHS Fife, NHS Greater Glasgow & Clyde, NHS Ayrshire & Arran, NHS Tayside and NHS Shetland) were not statistically different from Scotland.

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) – Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
4. Demographics

Gender

The Scottish Health Survey 2018 reported that, 17% of females currently smoked compared to 21% of males [2].

In 2018/19, a higher number of quit attempts through NHS stop smoking services were made by females (56%, 28,570) compared to males (44%, 22,499) (Figure 5).

Figure 5: Number of quit attempts by gender; 2018/19

In terms of quit attempt success, males had a slightly higher success percentage in quitting smoking at both the four and twelve week follow-up stages. The percentage of successful quit attempts made by males at four and twelve weeks in 2018/19 were 40.0% and 24.6% respectively, compared to 37.6% and 22.7% respectively for females (Figure 6).
For percentage of quits over time, Figure 6 shows that the percentage of successful quits was consistently higher for males than for females at both four and twelve weeks in each year between 2009/10 to 2018/19.

Following a decrease in the percentage of successful twelve week quits between 2009/10 to 2013/14 there has generally been an increase to 2018/19.

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook

Age

The 2018 Scottish Health Survey reported that the highest smoking prevalence was among those aged 25-54 (22-24%) \(^2\). Figure 7 (below) presents information on quit attempts made at NHS stop smoking services in 2018/19 by age group. The largest number of quit attempts was made by 45-54 year olds, with 12,183 (24%) quit attempts being made in this age group.
With the exception of the youngest (under 16 years) and the oldest (75 years and over) age groups, the percentage of successful quit attempts increased as age group increased at both the four and twelve week follow-up (Figure 8).

Figure 9 below presents information on the age and sex breakdown of successful four and twelve week quit attempts.

For females the percentage of successful quit attempts at four weeks rose from 17.4% in the under 16 age group to 46.0% in the 64-74 age group before decreasing slightly to 43.3% in the 75 and over age group. Excluding the youngest and oldest age groups for males there
was an increase in the percentage of successful four week quits with age, from 22.9% in the 16-17 age group to 50.3% in the 65-74 age group.

At the twelve week follow-up stage, the percentage of successful quit attempts for females rose from 10.9% in the under 16 age group to 31.5% in the 65-74 age group, the percentage for males increased from 7.6% in the 16-17 age group to 36.5% in the 65-74 age group.

**Figure 9: Percentage of successful four and twelve week quit attempts by gender and age group in Scotland; 2018/19**

See associated dashboard and tables for further information:
- NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
- NHS Smoking Cessation Services (Scotland) – Excel Workbook
Area deprivation

The prevalence of current smoking, based on the 2018 Scottish Health Survey, was highest among people living in the most deprived areas in Scotland (32%), compared to those living in the least deprived areas (9%)\(^2\). It is therefore important that stop smoking services reach people living in these areas.

The most deprived areas (quintile 1) accounted for 37.6% (19,215) of all quit attempts in Scotland, compared to quintile 5, the least deprived, accounting for 6.7% (3,414) of quit attempts.

The percentage of successful quit attempts at four weeks was highest in the least deprived areas (40.9%) and lowest in the most deprived group (37.6%) shown in Figure 10 below. In 2018/19, the difference in the percentage of successful quit attempts at 4 weeks between the most deprived and least deprived areas was the smallest for the years presented (3.4 percentage points compared to 11.1 percentage points in 2010/11).

**Figure 10: Percentage of successful four week quit attempts by deprivation quintiles: Scotland; 2009/10 – 2018/19**

At twelve weeks, the percentage of successful quit attempts was, as for four weeks, highest in the least deprived areas (25.6%) and lowest in the most deprived areas (21.9%) (Figure 11). After a decline in the percentage of successful quit attempts at twelve weeks in most deprivation quintiles between 2009/10 and 2013/14, the percentages increased until 2016/17. Since then there has been a small increase in derivation quintile 1 and a small decrease in deprivation quintile 5.
Figure 11: Percentage of successful twelve week quit attempts by deprivation quintiles: Scotland; 2009/10 - 2018/19

See associated dashboard and tables for further information:

NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook

Pregnant Women

Smoking in pregnancy carries serious health risks for both the woman and her unborn child. In 2018/19, there were 1,412 quit attempts made by pregnant women with support from NHS stop smoking services, an 8.9% decrease from the previous year (2017/18), and the sixth consecutive year when a decrease has been seen.

Of the 1,412 quit attempts made by pregnant women, 44.3% (625) resulted in a quit at four weeks, a four percentage point increase from 2017/18. Of the 625 self-reported quits, 40.8% (255) were confirmed using a carbon monoxide test, 2.4% (15) failed the carbon monoxide test and were confirmed as smoking, and 56.8% (355) had no carbon monoxide reading taken or the result was unknown.

The percentage of self-reported successful quit attempts at twelve weeks was 30.7% (433), a 5.1 percentage point increase from 2017/08.

The percentage of successful quit attempts at both four and twelve weeks in 2018/19 are at their highest levels to date (Figure 12).
Figure 12: Percentage of successful four and twelve week quit attempts at Scotland level amongst pregnant women; 2009/10 - 2018/19

The percentage of successful quit attempts at four and twelve weeks for pregnant women who smoke varied considerably by NHS Board. Full information is available in the dashboard and excel workbook. Care should be taken when comparing areas as some percentages are based on very small numbers.

The Information Services Division publishes information on the numbers of women who were current smokers at the time of booking their first antenatal appointment at hospital, published in the Births in Scottish Hospitals report.

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook

Prison Setting

Smoking prevalence of those in prison in Scotland is higher than in the general population. From a survey carried out by the Scottish Prison Service in 2017, it was found that over two thirds of prisoners (68%) reported they were smokers. Following the release of Scottish Government’s tobacco control strategy ‘Creating a Tobacco-free Generation’ (2013) [3], The Scottish Prison Service committed in July 2017 to making all prisons smoke (tobacco)-free by the end of 2018. Prisons in Scotland became smoke free in November 2018, though vaping is permitted.

Before this change came into effect, data collected from 2013/14 until 2017/18 showed that the number of quit attempts made across the fifteen prisons in Scotland increased year-on-
year from 650 in 2013/14 to 1,754 in 2017/18 (Figure 13). In 2017/18, six of the fifteen prisons in Scotland had increased numbers of quit attempts compared to the previous year. The largest increase was at Polmont in NHS Forth Valley which had an increase of 211 quit attempts from 66 to 277.

Figure 13: Number of quit attempts in Scotland’s Prisons; 2013/14 - 2017/18

In 2017/18, of the 1,754 quit attempts made in a prison setting, 37.5% (658) resulted in a successful quit at four weeks, a 4.2 percentage point increase from 2016/17. The percentage of self-reported successful quit attempts dropped to 20.6% (362) at twelve weeks, a 2.0 percentage point increase from 2016/17.

Figure 14 shows the percentage of successful quit attempts at four and twelve weeks in the prison setting over time. At four weeks the percentage of successful quit attempts decreased between 2013/14 and 2014/15 and remained stable in 2015/16. Since then the percentage of successful quit attempts at four weeks has increased, although this is still lower than 2013/14.

At twelve weeks the percentage of successful quit attempts decreased slightly between 2013/14 and 2014/15 and has increased since then.
Figure 14: Percentage of successful four and twelve week quit attempts in Scotland’s Prisons; 2013/14 - 2017/18

It is important note that prisons differ in a number of characteristics, e.g. population size, smoking prevalence, and these differences should be taken into consideration when interpreting the prison figures.

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
5. Methods available to help quit attempts

Pharmacy and specialist services (non-pharmacy)

Pharmacy stop smoking services accounted for nearly three quarters (74.2%, 37,907) of quit attempts made in Scotland in 2018/19, compared to just over a quarter (25.8%, 13,171) of quit attempts made at specialist stop smoking services.

The split of pharmacy and specialist services to support quit attempts varied among NHS Boards from all pharmacy in NHS Tayside (100%) to mainly specialist services in NHS Western Isles (95.1%) (Figure 15).

In 2018/19, of the 19,753 four week quits in Scotland, 12,922 (65.4%) were made in pharmacy services and 6,831 (34.6%) in specialist services. Of the 12,047 quits at twelve weeks in 2018/19 in Scotland, there were 7,259 (60.3%) made in pharmacy services, and 4,788 (39.7%) made in specialist services.

Consistently pharmacies have had lower percentages of successful quit attempts at four and twelve weeks than specialist stop smoking services. In 2018/19, the percentage of successful four and twelve week quits were 34.1% and 19.1% in pharmacies compared to 51.9% and 36.4 % in specialist services (Figure 16).
The percentage of successful quit attempts at both four and twelve weeks for specialist services and pharmacy have remained relatively stable since 2015/16, although there has been an increase in successful quit attempts for specialist services in 2018/19 where the percentage success has increased from 48.2% in 2017/18 to 51.9% for four weeks, and 32.8% to 36.4% for twelve.

**Figure 16: Percentage of successful four and twelve week quit attempts via pharmacy / specialist services: Scotland; 2009/10 - 2018/19**

![Chart showing percentage of successful quit attempts via pharmacy / specialist services: Scotland; 2009/10 - 2018/19](image)

The percentage of successful quit attempts at four and twelve weeks for pharmacy and specialist services vary considerably by NHS Board (see Figure 17 and Figure 18).

**Figure 17: Percentage of successful four and twelve week quit attempts via specialist services: NHS Board; 2018/19**

![Chart showing percentage of successful quit attempts via specialist services: NHS Board; 2018/19](image)
Figure 18: Percentage of successful four and twelve week quit attempts via pharmacy:
NHS Board; 2018/19

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook

Drug treatments to help stop smoking

There are various different products that can be used to help people quit smoking these include:

- Nicotine replacement therapy – a medication that provides a low level of nicotine, without the tar, carbon monoxide and other poisonous chemicals present in tobacco smoke.
- Varenicline - a prescription medication which reduces cravings for and decreases the pleasurable effects of cigarettes and other tobacco products.
- Bupropion – a prescription medication. It reduces interest in smoking, and nicotine cravings and withdrawal are reduced.

For the 51,078 quit attempts in 2018/19, Nicotine Replacement Therapy (NRT) as more that one NRT product combined accounted for 44.5% of quit attempts. Usage of NRT as a single product accounted for 19.8% of quit attempts and varenicline accounted for 17.8% (Table 1).
Table 1 – Drug treatment used in quit attempts; 2018/19

<table>
<thead>
<tr>
<th>Drug treatment</th>
<th>Quit Attempts</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRT - more than one product</td>
<td>22,706</td>
<td>44.5%</td>
</tr>
<tr>
<td>NRT - single product</td>
<td>10,120</td>
<td>19.8%</td>
</tr>
<tr>
<td>Varenicline</td>
<td>9,101</td>
<td>17.8%</td>
</tr>
<tr>
<td>None/Unknown</td>
<td>8,747</td>
<td>17.1%</td>
</tr>
<tr>
<td>NRT + Varenicline (change in product)</td>
<td>320</td>
<td>0.6%</td>
</tr>
<tr>
<td>Bupropion</td>
<td>39</td>
<td>0.1%</td>
</tr>
<tr>
<td>NRT + Bupropion (change in product)</td>
<td>36</td>
<td>0.1%</td>
</tr>
<tr>
<td>NRT - not specified</td>
<td>9</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

There has been a year-on-year decline in the percentage of quit attempts using Nicotine Replacement Therapy as a single product, with the percentage falling from 68.1% in 2009/10 to 19.8% in 2018/19 of all overall quit attempts in Scotland (Figure 19).

The percentage of quit attempts using a combination of more than one NRT product has increased from 11.0% in 2009/10 to 49.8% in 2015/16 before a decrease to 44.5% in 2018/19 (Figure 19).

In 2018/19 the percentage of quit attempts using varenicline only (17.8%) is the highest it has been over the time period (Figure 19).

Figure 19: Percentage of quit attempts by drug treatment: Scotland; 2009/10 - 2018/19
The percentage of successful quit attempts at four and twelve weeks for specific drug treatments are shown in Figure 20. In 2018/19, at both four and twelve weeks the highest percentage success was for bupropion only (69.2% and 43.6% respectively).

Varenicline had the second highest percentage of successful quit attempts at four and twelve weeks (51.2% and 34.4% respectively).

Please note that the percentages for bupropion only are based on very small numbers and this should be taken into account when interpreting this information (see Table 1).

NRT as a single product had a slightly higher percentage success at four and twelve weeks than combination NRT (38.6% compared to 35.4% at four weeks, and 24.3% compared to 20.3% at twelve weeks).

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
Intervention type

There are a number of interventions that can be used to support attempts to quit smoking. These include structured, multiple sessions that can take the form of one-to-one support, couple / family group based support, telephone support, or closed group course support where participants join on the same date and attend for a set period. Another approach uses open (rolling) groups where participants can join and leave at any time (so may include people at different stages of their quit attempt).

Some quit attempts use a combination of both group and one-to-one support (either face-to-face or via telephone).

Pharmacy services are based almost entirely on one-to-one support, but there is more variation in specialist services. Figure 21 shows the intervention types used in the number of quit attempts (14,187) made through specialist services. It can be seen that one-to-one support was the most frequently used option for quit attempts (10,857, 76.5%). The next most frequently used intervention was telephone support which was used in 1,683 quit attempts (11.9%) followed by open (rolling groups) which was used in 1,322 attempts (9.3%). Closed group support was used in 239 attempts (1.7%), and couple / family group based support in just 86 attempts (0.6%).

Figure 21: Number of specialist services quit attempts by intervention type: Scotland; 2018/19

One-to-one support services were used in the highest number of quit attempts (Figure 21), however, telephone support had the highest percentage of successful quit attempts at four and twelve weeks with 68.3% and 50.3% respectively (Figure 22).

Closed groups and open (rolling) groups had similar percentages of successful quits at four weeks with 54.0% and 54.5% respectively.
Couple and family groups had the second highest percentage success (41.9%) at twelve weeks. The lowest twelve week success percentage was for one-to-one support (35.1%).

Figure 22: Percentage of successful four and twelve week quit attempts by intervention type: Scotland; 2018/19

See associated dashboard and tables for further information:
NHS Smoking Cessation Services (Scotland) - Tableau Dashboard
NHS Smoking Cessation Services (Scotland) – Excel Workbook
## Glossary

### Data Zones
A data zone is the key small-area statistical geography in Scotland. The data-zone geography covers the whole of Scotland and nests within local authority boundaries. Data zones are groups of Census output areas and have populations of between 500 and 1,000 household residents. Where possible, they have been made to respect physical boundaries and natural communities. They have a regular shape and, as far as possible, contain households with similar social characteristics.

### Deprivation
The [Scottish Index of Multiple Deprivation (SIMD)](https://www.gov.scot/data/datasets/health/health-statistics-and-reports/scottish-index-of-multiple-deprivation) identifies small area concentrations of multiple deprivation across all of Scotland in a consistent way. It allows effective targeting of policies and funding where the aim is to wholly or partly tackle or take account of area concentrations of multiple deprivation.

### Deprivation Quintile
The [Scottish Index of Multiple Deprivation (SIMD)](https://www.gov.scot/data/datasets/health/health-statistics-and-reports/scottish-index-of-multiple-deprivation) ranks small areas (called data zones) from most deprived (ranked 1) to least deprived (ranked 6,976) and these can be categorised into quintiles in two ways (population-weighted or non-population weighted). For this report quintiles are based on population-weighted quintiles.

Population-weighted quintiles are calculated by ranking all data zones from most to least deprived and then grouping these into 5 quintiles with approximately 20% of the population in each quintile.

Non-population weighted quintiles are calculated by ranking all data zones from most to least deprived and then grouping these into 5 quintiles with 20% of the data zones in each quintile.

### Scottish Health Survey
The [Scottish Health Survey (SHeS)](https://www.rcseng.ac.uk/publications-and-resources/surveys-and-reports/scottish-health-survey) provides a detailed picture of the health of the Scottish population in private households and is designed to make a major contribution to the monitoring of health in Scotland. Smoking prevalence in the adult population is one of many indicators reported on.
## List of Tables

<table>
<thead>
<tr>
<th>File name</th>
<th>File and size</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS Smoking Cessation Services (Scotland) 2018/19 Annual Dashboard</td>
<td>N/A</td>
</tr>
<tr>
<td>NHS Smoking Cessation Services (Scotland) 2018/19 Excel Workbook</td>
<td>xlsx (1.5 MB)</td>
</tr>
</tbody>
</table>
Contact

Marium Uddin  
Principal Information Analyst  
Health & Social Care  
Phone: 0131 275 6742  
Email: marium.uddin@nhs.net

Ruth Gordon  
Senior Information Analyst  
Health & Social Care  
Phone: 0131 275 6335  
Email: r.gordon@nhs.net

Further Information

Further Information can be found on the ISD website.  
The next release of this publication will be October 2020.

Rate this publication

Please provide feedback on this publication to help us improve our services.
References

1. Raising Scotland’s Tobacco-free Generation: Our Tobacco-Control Action Plan 2018
2. Scottish Health Survey 2018
3. Tobacco Control Strategy - Creating a Tobacco-Free Generation
4. Turning the tide on tobacco: Smoking in England hits a new low
Appendices

Appendix 1 – Background information

A1.1 The national smoking cessation database and monitoring

In July 2005 ISD Scotland set up a national smoking cessation database to capture data on people presenting to NHS services in Scotland for help to stop smoking. This is a web-based system, accessible over the NHS net, with over 300 registered users across Scotland. Users include: smoking cessation coordinators/managers in NHS boards; cessation practitioners; admin and public health analyst staff; and ISD-based IT, analyst and database management personnel.

The database is designed to collect the national minimum dataset for smoking cessation services plus additional information to meet local needs and to provide extra local functionality such as reports, letter generation and arranging client appointments. The national database is used by all 14 NHS Boards in Scotland. NHS Greater Glasgow & Clyde used a local system until the end of December 2015.

Further background to the national database and monitoring is available on the smoking cessation page on the ISD website. This includes the national minimum dataset for smoking cessation services, guidelines for using the minimum dataset, a definition of smoking cessation services to be included in the national monitoring along with data protection and client confidentiality guidance.

In addition, a guide to smoking cessation in Scotland contains various documents providing guidance for health professionals and smoking cessation co-ordinators and advisers on smoking cessation.

ISD published the Smoking Cessation Services (Scotland) 2016/17 report on 23 October 2017. This included for the first time a Tableau dashboard, ISD undertook a user consultation in August/September 2018 to ask for feedback of the dashboard. Results of the consultation are available on the ISD Smoking Cessation page.

A1.2 How the percentage of successful quit attempts are calculated

The percentage of successful quit attempts (also known as quit rates) are calculated as the number of records where the client self-reported as ‘not smoked, even a puff, in the last two weeks’ (four-week follow-up) or ‘smoked up to five cigarettes since four-week follow-up’ (twelve week follow-up) as a percentage of total quit attempts made/quit dates set. This approach follows the Russell standard, a well validated approach to measuring outcomes from smoking cessation interventions.

As the denominator is total quit dates set, large numbers of cases lost to follow-up greatly lower the calculated percentage of successful quits. There are also NHS Boards in Scotland with particularly high percentages of cases lost to follow-up; this is shown in the tables A1 and A2.
Table A1 – Four week follow up

<table>
<thead>
<tr>
<th>NHS BOARD</th>
<th>Quit (not smoking at Four weeks) (%)</th>
<th>Smoking at Four Weeks (%)</th>
<th>Unknown (%)</th>
<th>Blank (%)</th>
<th>Lost to follow up (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ayrshire &amp; Arran</td>
<td>41.0</td>
<td>11.3</td>
<td>1.9</td>
<td>32.7</td>
<td>13.1</td>
</tr>
<tr>
<td>Borders</td>
<td>34.9</td>
<td>11.2</td>
<td>0.9</td>
<td>35.9</td>
<td>17.2</td>
</tr>
<tr>
<td>Dumfries &amp; Galloway</td>
<td>43.2</td>
<td>19.3</td>
<td>0.6</td>
<td>20.1</td>
<td>16.8</td>
</tr>
<tr>
<td>Fife</td>
<td>40.2</td>
<td>14.9</td>
<td>0.4</td>
<td>29.7</td>
<td>14.8</td>
</tr>
<tr>
<td>Forth Valley</td>
<td>45.2</td>
<td>9.1</td>
<td>1.4</td>
<td>30.7</td>
<td>13.6</td>
</tr>
<tr>
<td>Grampian</td>
<td>41.6</td>
<td>17.2</td>
<td>1.1</td>
<td>6.6</td>
<td>33.5</td>
</tr>
<tr>
<td>Greater Glasgow &amp; Clyde</td>
<td>38.3</td>
<td>14.5</td>
<td>1.8</td>
<td>26.5</td>
<td>19.0</td>
</tr>
<tr>
<td>Highland</td>
<td>35.8</td>
<td>12.7</td>
<td>1.1</td>
<td>39.7</td>
<td>10.7</td>
</tr>
<tr>
<td>Lanarkshire</td>
<td>39.3</td>
<td>16.2</td>
<td>1.2</td>
<td>25.7</td>
<td>17.6</td>
</tr>
<tr>
<td>Lothian</td>
<td>33.4</td>
<td>9.1</td>
<td>0.7</td>
<td>33.6</td>
<td>23.3</td>
</tr>
<tr>
<td>Orkney</td>
<td>81.1</td>
<td>7.5</td>
<td>0.0</td>
<td>7.5</td>
<td>3.8</td>
</tr>
<tr>
<td>Shetland</td>
<td>38.9</td>
<td>13.0</td>
<td>0.6</td>
<td>17.9</td>
<td>29.6</td>
</tr>
<tr>
<td>Tayside</td>
<td>37.3</td>
<td>13.1</td>
<td>1.2</td>
<td>30.0</td>
<td>18.4</td>
</tr>
<tr>
<td>Western Isles</td>
<td>76.4</td>
<td>19.4</td>
<td>0.0</td>
<td>1.4</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Table A2 – Twelve week follow up

<table>
<thead>
<tr>
<th>NHS BOARD</th>
<th>Quit (Not smoking at Twelve weeks) (%)</th>
<th>Smoking at Twelve Weeks (%)</th>
<th>Unknown (%)</th>
<th>Blank (%)</th>
<th>Lost to follow up (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ayrshire &amp; Arran</td>
<td>23.5</td>
<td>14.1</td>
<td>0.2</td>
<td>37.1</td>
<td>25.1</td>
</tr>
<tr>
<td>Borders</td>
<td>19.1</td>
<td>13.4</td>
<td>0.0</td>
<td>47.2</td>
<td>20.2</td>
</tr>
<tr>
<td>Dumfries &amp; Galloway</td>
<td>29.9</td>
<td>24.6</td>
<td>0.1</td>
<td>24.9</td>
<td>20.5</td>
</tr>
<tr>
<td>Fife</td>
<td>23.3</td>
<td>18.2</td>
<td>0.1</td>
<td>36.6</td>
<td>21.8</td>
</tr>
<tr>
<td>Forth Valley</td>
<td>30.1</td>
<td>11.6</td>
<td>0.2</td>
<td>38.2</td>
<td>19.9</td>
</tr>
<tr>
<td>Grampian</td>
<td>27.8</td>
<td>21.7</td>
<td>0.5</td>
<td>10.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Greater Glasgow &amp; Clyde</td>
<td>23.4</td>
<td>18.9</td>
<td>0.3</td>
<td>33.8</td>
<td>23.6</td>
</tr>
<tr>
<td>Highland</td>
<td>20.7</td>
<td>14.8</td>
<td>0.2</td>
<td>49.5</td>
<td>14.8</td>
</tr>
<tr>
<td>Lanarkshire</td>
<td>21.7</td>
<td>20.6</td>
<td>0.3</td>
<td>28.5</td>
<td>29.0</td>
</tr>
<tr>
<td>Lothian</td>
<td>20.4</td>
<td>11.4</td>
<td>0.4</td>
<td>39.3</td>
<td>28.4</td>
</tr>
<tr>
<td>Orkney</td>
<td>69.8</td>
<td>7.5</td>
<td>0.0</td>
<td>13.2</td>
<td>9.4</td>
</tr>
<tr>
<td>Shetland</td>
<td>23.5</td>
<td>19.1</td>
<td>0.0</td>
<td>23.5</td>
<td>34.0</td>
</tr>
<tr>
<td>Tayside</td>
<td>23.6</td>
<td>18.1</td>
<td>0.2</td>
<td>32.1</td>
<td>26.0</td>
</tr>
<tr>
<td>Western Isles</td>
<td>68.8</td>
<td>22.9</td>
<td>0.0</td>
<td>4.9</td>
<td>3.5</td>
</tr>
</tbody>
</table>
Care should be taken in making direct comparisons between the Scotland and England quit rates. There may be differences, for example, in the types of services included in the English monitoring, or the profile of clients seen in services.

Most commonly, ‘lost to follow-up’/’unknown’/’blank’ will be due to failure to make contact with the client or non-return of follow-up questionnaire; or administrative factors such as late receipt of initial quit attempt information; or follow-ups not undertaken or not recorded. The figure will include a proportion of cases (around 1% of the total) where client did not consent to follow-up or client had died. It is important to be aware of the influence of cases ‘lost to follow-up/unknown/blank when looking at NHS Board quit rates.

This report includes statistics on Carbon monoxide (CO) validated quits at four weeks after the quit date, as well as self-reported quits. Carbon monoxide breath test validation measures the level of carbon monoxide and provides an indication of the level of use of tobacco. Care should be taken in interpreting these statistics as there are variations across the country in the percentage of quit attempts where carbon monoxide validation has been attempted, as shown in the table below.

**Table A3 – Percentage of quits confirmed by Carbon monoxide reading**

<table>
<thead>
<tr>
<th>NHS Board</th>
<th>Total quit attempts</th>
<th>Quit confirmed by CO reading (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ayrshire &amp; Arran</td>
<td>3,411</td>
<td>64.1</td>
</tr>
<tr>
<td>Borders</td>
<td>940</td>
<td>50.3</td>
</tr>
<tr>
<td>Dumfries &amp; Galloway</td>
<td>1,281</td>
<td>65.7</td>
</tr>
<tr>
<td>Fife</td>
<td>2,971</td>
<td>49.1</td>
</tr>
<tr>
<td>Forth Valley</td>
<td>2,094</td>
<td>49.2</td>
</tr>
<tr>
<td>Grampian</td>
<td>4,995</td>
<td>47.8</td>
</tr>
<tr>
<td>Greater Glasgow &amp; Clyde</td>
<td>13,684</td>
<td>67.9</td>
</tr>
<tr>
<td>Highland</td>
<td>2,467</td>
<td>48.5</td>
</tr>
<tr>
<td>Lanarkshire</td>
<td>7,633</td>
<td>65.4</td>
</tr>
<tr>
<td>Lothian</td>
<td>6,946</td>
<td>56.5</td>
</tr>
<tr>
<td>Orkney</td>
<td>53</td>
<td>60.5</td>
</tr>
<tr>
<td>Shetland</td>
<td>162</td>
<td>30.2</td>
</tr>
<tr>
<td>Tayside</td>
<td>4,297</td>
<td>91.1</td>
</tr>
<tr>
<td>Western Isles</td>
<td>144</td>
<td>13.6</td>
</tr>
</tbody>
</table>

**A1.3 The smoking cessation HEAT target / Local Delivery Plan (LDP) Standard**

A series of HEAT targets for the NHS were published in 2007, including a target related to smoking cessation. This target was: ‘Through smoking cessation services, support 8% of each NHS Board’s smoking population in successfully quitting (at one month post quit) over the period 2008/09 to 2010/11’. This was measured through a separate target monitoring
process, using data from the national cessation services monitoring and national database. Final data on performance against the target was published in September 2011.

From 1 April 2011, there was a successor smoking cessation HEAT target for 2011/12 to 2013/14 which had an explicit focus for the first time on inequalities in smoking rates. The target was ‘To deliver at least 80,000 successful quits (at one month post quit) including 48,000 in the 40% most deprived within-Board Scottish Index of Multiple Deprivation areas over the three years ending March 2014’. Progress towards the target in 2011/12 to 2012/13 was reported in ISDs short report in September 2013 with the final performance figures reported in September 2014.

A new HEAT target was introduced from 1 April 2014 with the emphasis on targeting people in deprived areas where smoking prevalence is highest. The target was to achieve at least 12,000 successful quits, at twelve weeks post quit, in the 40% most deprived within-Board Scottish Index of Multiple Deprivation areas (60% for island NHS Boards) over 1 year ending March 2015. Performance figures were reported in October 2015.

In April 2015 the previous HEAT target was replaced by a Local Delivery Plan standard. This focused on targeting people in deprived areas where smoking prevalence is highest. The target was to achieve at least 7,278 successful quits, at twelve weeks post quit, in the 40% most deprived within-Board Scottish Index of Multiple Deprivation areas (60% for island NHS Boards) over 1 year ending March 2016. The performance results against this standard were reported in the Smoking Cessation Services (Scotland) 2015/16 report.

Another Local Delivery Plan standard was introduced in April 2016. The standard was to achieve at least 9,404 successful quits, at twelve weeks post quit, in the 40% most deprived within-Board Scottish Index of Multiple Deprivation areas (60% for island NHS Boards) over 1 year ending March 2017. The performance results against this standard were reported in the Smoking Cessation Services (Scotland) 2016/17 report.

The 2017/18 Local Delivery Plan standard was introduced in April 2017. The standard was to achieve, as for the 2016/17 Local Delivery Plan Standard, at least 9,404 successful quits, at twelve weeks post quit, in the 40% most deprived within-Board Scottish Index of Multiple Deprivation areas (60% for island NHS Boards) over 1 year ending March 2018.

In 2018/19 due to a change in methodology and the exclusion of prisons the 2018/19 the LDP Standard was 7,568 successful twelve week quits in the most deprived areas.

Performance results against this standard are reported in the Local Delivery Plan standard publication summary and dashboard.

A1.4 Confidence Intervals

A confidence interval is a range of values that is normally used to describe the uncertainty around a point estimate of a quantity, for example a mortality rate. In the case of indicators based on a sample of the population, uncertainty arises from random differences between the sample and the population itself. The stated value should therefore be considered as only an estimate of the true or ‘underlying’ value. Confidence intervals quantify the uncertainty in
this estimate and, generally speaking, describe how different the point estimate could have been if the underlying conditions stayed the same, but chance had led to a different set of data. The wider the confidence interval, the greater the uncertainty in the estimate.

Confidence intervals are given with a stated probability level. In this report this is 95%, and so there is a 95% probability (i.e. a 19 in 20 chance) that the confidence interval includes the ‘true’ value of the indicator. The use of 95% is arbitrary, but is conventional practice in medical and public health statistics.

The 95% confidence interval for an indicator value for an area is used to compare that area against the overall Scotland value. The Scotland value is treated as an exact reference value, allowing the confidence interval for an indicator value to be used to test whether the value was statistically significantly different to the Scottish figure. If the interval does not include the Scottish value, the area is assessed as being statistically significantly different from Scotland (perhaps ‘better’ or ‘worse’, depending on the indicator); if the interval includes the Scottish value, the area is assessed as being similar to Scotland. This is illustrated in the example below.

NHS Board 1: NHS Board is statistically significantly higher than the Scotland average.
NHS Board 2: NHS Board is similar to the Scotland average.
NHS Board 3: NHS Board is similar to the Scotland average.
NHS Board 4: NHS Board is statistically significantly lower than the Scotland average.
## Appendix 2 – Publication Metadata

<table>
<thead>
<tr>
<th>Metadata Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication title</td>
<td>NHS Smoking Cessation Service Statistics (Scotland) 1 April 2018 to 31 March 2019</td>
</tr>
<tr>
<td>Description</td>
<td>This release presents data on quit attempts made with the help of NHS stop smoking services during the financial years, 2009/10 – 2018/19, and the outcomes of those quit attempts.</td>
</tr>
<tr>
<td>Theme</td>
<td>Health and Social Care</td>
</tr>
<tr>
<td>Topic</td>
<td>Lifestyles &amp; Behaviours</td>
</tr>
<tr>
<td>Format</td>
<td>PDF report with Tableau Dashboard and excel workbook</td>
</tr>
<tr>
<td>Data source(s)</td>
<td>The national minimum dataset for smoking cessation services in Scotland (2012/13 - 2018/19); Scottish Surveys Core Questions; Scottish Health Survey (2018); and Maternity information - Scottish Morbidity Records 02 (SMR02).</td>
</tr>
<tr>
<td>Date that data are acquired</td>
<td>31 July 2019, from national smoking cessation database.</td>
</tr>
<tr>
<td>Release date</td>
<td>22 October 2019</td>
</tr>
<tr>
<td>Frequency</td>
<td>Annual</td>
</tr>
<tr>
<td>Timeframe of data and timeliness</td>
<td>The timeframe for this publication is the financial year 2018/19 (data for 2009/10 to 2018/19 are also shown).</td>
</tr>
<tr>
<td>Continuity of data</td>
<td>2009/10 – 2018/19</td>
</tr>
<tr>
<td>Revisions statement</td>
<td>Data are generally noted as provisional (due to a small shortfall in completeness of data) at time of publication. The data are then revised in the following year publication.</td>
</tr>
<tr>
<td>Revisions relevant to this publication</td>
<td>Figures from 2014/15 onwards have been revised following the discovery and removal of duplicate records, and therefore some figures may have reduced.</td>
</tr>
<tr>
<td>Concepts and definitions</td>
<td>Background to the national smoking cessation services monitoring and national smoking cessation services database are available on the smoking cessation page on the ISD Scotland website.</td>
</tr>
<tr>
<td>Relevance and key uses of the statistics</td>
<td>The national cessation monitoring analyses produced by ISD are used to provide vital evidence of the reach and quit success of NHS smoking cessation services in Scotland. The cessation monitoring data are also used for smoking cessation HEAT (Health Improvement, Efficiency, Access and Treatment) target monitoring and Local Delivery Plan (LPD) monitoring.</td>
</tr>
<tr>
<td>Accuracy</td>
<td>Data were cross-checked against national smoking cessation database ‘standard reports’ and results from the previous annual monitoring reports.</td>
</tr>
<tr>
<td>Completeness</td>
<td>The report acknowledges missing smoking cessation information has an impact on quit rates, and that it is important to be aware of the influence of this when looking at NHS Board quit rates.</td>
</tr>
<tr>
<td>Comparability</td>
<td>Due to the introduction of smoke-free prisons in November 2018, data for prisons are excluded for 2018/19.</td>
</tr>
<tr>
<td>Accessibility</td>
<td>It is the policy of ISD Scotland to make its web sites and products accessible according to published guidelines.</td>
</tr>
<tr>
<td>Coherence and clarity</td>
<td>The report includes detail on the background to the national smoking cessation services monitoring in Scotland as well as analysis results. The report has been produced using the standard ISD publications template and is available as a PDF file. Information is presented in a tableau dashboard and an excel workbook.</td>
</tr>
<tr>
<td>Value type and unit of measurement</td>
<td>Quit attempt ‘numbers’ and ‘percentage’ of successful quit attempts are presented.</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Disclosure</td>
<td>The ISD protocol on Statistical Disclosure Protocol is followed.</td>
</tr>
<tr>
<td>Official Statistics designation</td>
<td>National Statistics</td>
</tr>
<tr>
<td>UK Statistics Authority Assessment</td>
<td>July 2013</td>
</tr>
<tr>
<td>Last published</td>
<td>23 October 2018</td>
</tr>
<tr>
<td>Next published</td>
<td>October 2020</td>
</tr>
<tr>
<td>Date of first publication</td>
<td>2009</td>
</tr>
<tr>
<td>Help email</td>
<td><a href="mailto:marium.uddin@nhs.net">marium.uddin@nhs.net</a></td>
</tr>
<tr>
<td>Date form completed</td>
<td>October 2019</td>
</tr>
</tbody>
</table>
Appendix 3 – Early access details

Pre-Release Access
Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", ISD is obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access.

Standard Pre-Release Access:
- Scottish Government Health Department
- NHS Board Chief Executives
- NHS Board Communication leads
- NHS Board Smoking Cessation Co-ordinators
- Sheila Duffy, Chief Executive, ASH Scotland
Appendix 4 – ISD and Official Statistics

About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

**Purpose:** To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.

**Mission:** Better Information, Better Decisions, Better Health

**Vision:** To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of ‘Official Statistics’. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

ISD’s statistical publications are currently classified as one of the following:

- National Statistics (i.e. assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (i.e. legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (i.e. still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

Further information on ISD’s statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the [ISD website](http://isdwebsite.com).