Contents

Introduction .................................................................................................................................................. 2
  The health benefits of breastfeeding ...................................................................................................... 2
International and Scottish policy on infant feeding .................................................................................. 2
Information used in this publication ........................................................................................................ 3
Other sources of information on infant feeding in Scotland .................................................................. 4
New interactive visual content .................................................................................................................. 4
Main points ................................................................................................................................................ 5
Results and Commentary .......................................................................................................................... 6
  The proportion of babies who were ever breastfed .............................................................................. 6
Infant feeding at the Health Visitor first visit .......................................................................................... 7
Infant feeding at the 6-8 Week review ....................................................................................................... 8
Drop off in breastfeeding as babies get older ............................................................................................ 9
Relationship between breastfeeding and mothers’ age, deprivation level, and ethnicity .......... 10
Variation in breastfeeding rates across Scotland .................................................................................... 12
  Promoting and supporting breastfeeding in Scotland ........................................................................ 13
References .................................................................................................................................................. 15
Supporting information accompanying this report .................................................................................. 17
List of Tables .............................................................................................................................................. 18
Contact ..................................................................................................................................................... 19
Further Information ................................................................................................................................. 19
Rate this publication ................................................................................................................................. 19
Introduction

The health benefits of breastfeeding

Breastfeeding provides the best nutrition for babies and young children and supports children’s health in the short and longer term. There is strong evidence that breastfeeding reduces children’s risk of gut, chest, and ear infections and leads to a small but significant improvement in brain development and IQ. Growing evidence suggests that breastfeeding also protects against Sudden Infant Death Syndrome (‘cot death’), promotes healthy weight in childhood and into adulthood, and reduces the risk of Type 1 and Type 2 diabetes and childhood leukaemia. There is evidence that nutrition in early life (when babies are in the womb and through early childhood) influences children’s long term risk of high blood pressure and heart disease, however the specific role of breastfeeding in influencing these important outcomes is currently unclear.

Breastfeeding also benefits mothers’ health, with strong evidence that it reduces the risk of breast and ovarian cancer, and some evidence that it may also promote maternal healthy weight and reduce the risk of Type 2 diabetes. The benefits of breastfeeding for both baby and mother are seen across the world, including in high income countries such as Scotland.

International and Scottish policy on infant feeding

In recognition of the important health benefits of breastfeeding, the World Health Organisation and Scottish Government recommend that children are exclusively breastfed (that is they receive no fluids or food apart from breast milk) for the first 6 months of life then, after the introduction of solid foods, children continue to be breastfed up to their second birthday or for as long as the mother and baby wish. The recommendation for exclusive breastfeeding for the first 6 months of life is echoed by professional child health organisations in the UK and around the world. The UK Scientific Advisory Committee on Nutrition is currently developing up to date guidance on feeding in the first year of life. The report will be published in late 2017 or early 2018.

---

a World Health Organisation. 10 facts on breastfeeding. [http://www.who.int/features/factfiles/breastfeeding/en/]
Information used in this publication

This publication reports on breastfeeding rates in Scotland, with the most recent results being for babies born in the year April 2016 to March 2017. The information it contains comes from Health Visitor reviews of children at around 10 to 14 days of age (the ‘Health Visitor first visit’) and 6 to 8 weeks of age (the ‘6-8 week review’). These child health reviews are offered to all children as part of the universal Child Health Programme(14). At each review, the Health Visitor asks the mother:

- Whether the baby has ever been breastfed
- Whether the baby has always been exclusively breastfed
- How the baby is currently feeding (i.e. over the 24 hours leading up to the review)

The questions on whether the baby has ever been breastfed and whether the baby has always been exclusively breastfed were added to the child health reviews in February 2016. Results relating to these questions are therefore provided for babies born in 2016/17 only. The question on current feeding has been included in the child health reviews for many years, hence results relating to this question are provided for babies born in 2001/02 to 2016/17.

In this report, ‘breastfeeding’ includes being fed at the breast and being fed expressed breast milk. Being ‘always exclusively’ breastfed means that the baby has only ever been breastfed from birth up to the time of their review, and has never received fluids or food (except medicines) apart from breast milk. Current feeding method is recorded as breast only, formula only, mixed (i.e. both breast and formula milk), or other (i.e. the very small number of children on specialist non milk feeding for medical reasons).

Coverage of the Health Visitor first visit is very high and coverage of the 6-8 week review is high. Comparing the number of live births registered to the number of reviews recorded for babies born in that year suggests that 98% of babies born in 2016/17 received their first visit and 90% received their 6-8 week review. When a review is provided, the quality of information recorded on infant feeding is high. In 2016/17, 99% of first visit records and 98% of 6-8 week review records contained valid information on the baby’s current feeding method. The information contained in this report therefore provides an accurate picture of how babies in Scotland are fed.

---------------------------


Other sources of information on infant feeding in Scotland

Other sources of information are available on infant feeding in Scotland. The UK wide Infant Feeding Survey was carried out every 5 years between 1975 and 2010, and provides some results for Scotland specifically\(^d\). As the Infant Feeding Survey has now been discontinued, the Scottish Government has commissioned a Scottish Maternal and Infant Nutrition Survey: the results will be published in 2018. The Growing Up in Scotland Survey also includes detailed information on infant feeding\(^e\). Growing Up in Scotland is following up two groups of children born in Scotland in 2004/05 and 2010/11.

New interactive visual content

For the first time, we have provided an interactive display of information on infant feeding along with this publication. This can be found in the Infant Feeding Dashboard. The dashboard presents information on feeding over time, by NHS Board, local authority, deprivation level, maternal age, maternal smoking status, ethnicity, and Looked After Child (LAC) status. We would welcome any feedback on this new way of presenting information. Please email nss.isdchildhealth@nhs.net.


Main points

- Breastfeeding protects the health of children and mothers. Current guidance recommends that babies should receive just breast milk for the first 6 months of life then, after introduction of solid foods, should continue to breastfeed up to their second birthday or for as long as the mother and baby wish.

- Breastfeeding rates in Scotland are low compared to those in other countries worldwide. The proportion of babies who were breastfed for at least some time has increased in Scotland over recent years, and there has been a slight increase in the proportion of babies breastfed for at least 6 weeks after birth.

- Among babies born in Scotland in 2016/17, 63% had ever been breastfed (breastfed for at least some time after their birth) and 41% were being breastfed by 6-8 weeks of age.

- Breastfeeding is much more common among older mothers. 56% of mothers aged 40 or over were breastfeeding at the 6-8 week review compared to 12% of mothers aged under 20.

- White Scottish babies are less likely to be breastfed than babies from any other ethnic group.
Results and Commentary

The proportion of babies who were ever breastfed

Information recorded at the Health Visitor first visit shows that 63% of babies born in Scotland in 2016/17 were “ever breastfed”, that is, were breastfed for at least some period of time after their birth.

![Figure 1 – Proportion of babies ever breastfed, 2016/17](image)

Source: ISD Scotland, CHSP-PS August 2017

For comparison, the Infant Feeding Survey found that 50% of babies born in Scotland in 1980 were ever breastfed, increasing to 74% of babies born in 2010, with increases seen from 1990 onwards. The Infant Feeding Survey also found that the proportion of babies ever breastfed in Scotland was consistently and substantially lower than that achieved in England. For example, 83% of babies born in England in 2010 were ever breastfed. The Growing Up in Scotland study found that 60% of babies born in Scotland in 2004/05 were ever breastfed, increasing to 63% of babies born in 2010/11.

The Infant Feeding Survey included fewer families from Scotland than Growing Up in Scotland (around 2-3,000 compared to 5-6,000). Both surveys are at risk of overestimating breastfeeding rates as older women from less deprived areas are more likely to respond to the survey and also more likely to breastfeed. Regardless of these limitations, the survey results show that the proportion of babies ever breastfed has increased in Scotland over recent years, however it remains relatively low compared to that achieved in England.
Infant feeding at the Health Visitor first visit

At the time of the Health Visitor first visit at around 10-14 days of age, 50% of babies born in 2016/17 were receiving any breastfeeding. Thirty seven percent were being exclusively breastfed (receiving breast milk only) and a further 14% were receiving mixed feeding (receiving both breast and formula milk).

Since 2001/02, the proportion of babies receiving any breastfeeding at this stage has increased slightly. The proportion of babies being exclusively breastfed has declined marginally (although there is a suggestion the decline has halted and rates have started to increase slightly since 2015/16) but this decline has been more than offset by a substantial increase in the proportion of babies receiving mixed feeding.

Figure 2 – Current feeding at Health Visitor first visit, 2001/02 to 2016/17

Source: ISD Scotland, CHSP-PS August 2017
Infant feeding at the 6-8 Week review

At the time of the 6-8 week review, 41% of babies born in 2016/17 were receiving any breastfeeding. Thirty percent were being exclusively breastfed and a further 11% were receiving mixed breast and formula feeding.

Since 2001/02, the proportion of babies receiving any breastfeeding at this stage has increased slightly. This is due to small increases in the proportion of babies receiving exclusive and mixed breastfeeding, particularly in the most recent years.

Figure 3 – Current feeding at 6-8 week review, 2001/02 to 2016/17

The proportion of babies born in 2016/17 reported as always exclusively breastfed from birth to the time of the 6-8 week review was 28%. This is slightly lower than the 30% that were reported as exclusively breastfed over the 24 hours leading up to the review. This is to be expected as a small number of babies may have required temporary supplementary feeding prior to exclusive breastfeeding being established.

For comparison, the Infant Feeding Survey found that 50% of babies born in Scotland in 2010 were receiving any breastfeeding at 6 weeks of age. Growing Up in Scotland found that 42% of babies born in Scotland in 2010/11 were receiving any breastfeeding at 6 weeks of age, with 36% receiving exclusive breastfeeding and the remainder receiving mixed breast and formula feeding. The Infant Feeding Survey found that the proportion of babies born in Scotland in 2010 who were exclusively breastfed from birth up to 6 months of age (i.e. fed in line with current recommendations) was extremely low at 1%.
Drop off in breastfeeding as babies get older

Among babies born in 2016/17 who were ever breastfed, 79% were still being breastfed at the time of their Health Visitor first visit (58% exclusive and 22% mixed breastfeeding) and the remaining 21% of babies were no longer being breastfed.

By the time of their 6-8 week review, 65% of babies born in 2016/17 who were ever breastfed were still being breastfed (48% exclusive and 17% mixed breastfeeding) and the remaining 35% of babies were no longer being breastfed.

There is some variation in the timing of the 6-8 week review across Scotland, with some Boards delivering the review relatively early in the 6-8 week window and some relatively late. As breastfeeding declines as babies get older, Boards delivering their 6-8 week review relatively late will appear to have a greater decline in breastfeeding rates up to the point of the review than Boards delivering the review relatively early.

![Figure 4 – Babies born in 2016/17 who have ever been breastfed: Current breastfeeding status at Health Visitor first visit and 6-8 week review](source: ISD Scotland, CHSP-PS August 2017)

For comparison, the Infant Feeding Survey found that, among babies born in Scotland in 2010 who were ever breastfed, 78% were still being breastfed (exclusive or mixed) at 2 weeks of age, declining to 68% at 6 weeks, and 43% at 6 months. Results from successive Infant Feeding Surveys show that, although the proportion of women attempting to breastfeed has increased since 1990, the proportion of mothers who subsequently stop breastfeeding before their baby is 6 weeks old has remained unchanged. Similarly, Growing Up in Scotland found that, among babies born in Scotland in 2010/11 who were ever breastfed, 67% were still being breastfed (exclusive or mixed) at 6 weeks of age, declining to 40% at 6 months. It is clear from the child health review and survey data that the most rapid drop off in breastfeeding occurs over the first 2 weeks after birth, with a more gradual decline seen thereafter.
Relationship between breastfeeding and mothers’ age, deprivation level, and ethnicity

There are strong associations between mothers’ age, deprivation level, and ethnicity and breastfeeding rates (15, 16).

Breastfeeding is much more common among older compared to younger mothers. Among babies born in 2016/17, 56% of babies born to mothers aged 40 years or over were breastfed (exclusive or mixed) by the time of their 6-8 week review, compared to 12% of babies born to mothers aged less than 20 years.

Breastfeeding is much more common among mothers living in less compared to more deprived areas. Among babies born in 2016/17, 60% of babies born to mothers living in the least deprived areas of Scotland (Scottish Index of Multiple Deprivation quintile 5) were breastfed (exclusive or mixed) by the time of their 6-8 week review, compared to 26% of babies born to mothers living in the most deprived areas (quintile 1).

In general, young mothers and mothers from deprived areas are both less likely to attempt breastfeeding and, if they do attempt it, more likely to stop shortly after delivery than mothers from more advantaged groups. Inequalities in infant feeding therefore become more pronounced as babies get older.
Babies from minority ethnic groups are more likely to be breastfed than White Scottish babies. Among babies born in 2016/17, 85% of babies of Black, Caribbean or African ethnicity were breastfed (exclusive or mixed) by the time of their 6-8 week review, compared to 33% of White Scottish babies.

**Figure 7 – Infant Feeding at 6-8 week review by baby’s ethnicity, 2016/17**

Source: ISD Scotland, CHSP-PS August 2017

Note: The figures in the centre of the rings show the number of babies with a valid feeding type
Variation in breastfeeding rates across Scotland

The population living in different areas of Scotland varies in terms of levels of deprivation, the proportion of mothers in different age groups, and ethnic diversity. These factors therefore influence the breastfeeding rates seen in different areas. In addition, attitudes to breastfeeding in local communities, and the level of breastfeeding support available to mothers, can also vary between areas and influence breastfeeding rates. In general, breastfeeding rates are higher in the East and North of Scotland, and lower in the West and South.

Figure 8 – Proportion of babies breastfeeding at the 6-8 week review by NHS Board, 2016/17

Source: ISD Scotland, CHSP-PS August 2017
Promoting and supporting breastfeeding in Scotland

Breastfeeding rates in Scotland are low compared to those achieved in other countries (3). Although rates have improved to some extent over recent years, the gains have mainly been seen in the proportion of mothers attempting breastfeeding and in early mixed feeding, with little improvement seen in sustained exclusive breastfeeding. There is therefore considerable scope to further improve the health of babies and mothers, and reduce inequalities in health, through increasing sustained exclusive breastfeeding (17).

International policies and initiatives to promote breastfeeding include:

- The World Health Organisation's International Code of Marketing of Breast-milk Substitutes which seeks to protect mothers and babies from inappropriate, commercially driven, promotion of formula feeding (18)
- UNICEF’s Innocenti Declaration (19)
- WHO's Global strategy for infant and young child feeding (20) and implementation plan (21)
- The European Commission's blueprint for action on breastfeeding (22)

There have been a number of policy developments in Scotland to support breastfeeding over recent years, including:

- Passing of the Breastfeeding etc. (Scotland) Act 2005 which protects mothers’ right to breastfeed their children in all public places (23)
- Development of information for parents on breastfeeding including the Ready Steady Baby booklet (1), the Off to a Good Start booklet (9), the FeedGood website (8), and the UK wide National Breastfeeding telephone helpline
- Implementation of the UNICEF UK Baby Friendly Initiative (11) in Scotland which seeks to improve breastfeeding support provided through health services by accrediting maternity services, and more recently health visiting, and neonatal services, that meet minimum standards
- Publication of an overarching national strategy on improving maternal and infant nutrition in 2011 (10)
- Publication of The Best Start: A Five-Year Forward Plan for Maternity and Neonatal Care in Scotland in 2017 (24)

---

• A commitment to increasing support for breastfeeding in the Scottish Government’s Programme for Scotland 2017-18 (25)

There is good evidence that interventions can work to improve breastfeeding rates. The available evidence has been summarised in numerous literature reviews(26-28) and clinical guidelines(29-31).

Overall, it is likely that comprehensive approaches that consider a wide range of issues will be required to significantly improve sustained breastfeeding rates. Interventions within the health service, such as ensuring the availability and quality of breastfeeding support for new mothers, are important. Equally, wider interventions, such as restricting the inappropriate promotion of formula milk and ensuring supportive employment policies that allow women to continue to breastfeed after returning to work(32), will also be required.
References


For the first time, we have provided an interactive display of information on infant feeding along with this publication. This can be found in the Infant Feeding Dashboard. The dashboard presents information on feeding over time, by NHS Board, local authority, deprivation level, maternal age, maternal smoking status, ethnicity, and Looked After Child (LAC) status. We would welcome any feedback on this new way of presenting information. Please email nss.isdchildhealth@nhs.net.

We have also provided supporting data in Excel tables. We will release more detailed ‘Open Data’ tables over the course of 2017/18 to allow more flexible use of data by interested readers.

We have provided a technical report which gives background and supporting information on data quality and methods.
# List of Tables

<table>
<thead>
<tr>
<th>Table No.</th>
<th>Name</th>
<th>Time period</th>
<th>File &amp; size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Data completeness by financial year of birth</td>
<td>2001/02-2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>2</td>
<td>Data completeness by NHS Board</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>3</td>
<td>Breastfeeding initiation by maternal age</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>4</td>
<td>Breastfeeding initiation by deprivation level</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>5</td>
<td>Breastfeeding initiation by NHS Board</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>6</td>
<td>Current feeding at First Visit by year of birth</td>
<td>2001/02-2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>7</td>
<td>Current feeding at First Visit by maternal age and year of birth</td>
<td>2001/02-2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>8</td>
<td>Current feeding at First Visit by deprivation level and year of birth</td>
<td>2001/02-2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>9</td>
<td>Current feeding at First Visit by NHS Board</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>10</td>
<td>Current feeding at 6-8 Week Review by year of birth</td>
<td>2001/02-2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>11</td>
<td>Current feeding at 6-8 Week Review by maternal age and year of birth</td>
<td>2001/02-2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>12</td>
<td>Current feeding at 6-8 Week Review by deprivation level and year of birth</td>
<td>2001/02-2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>13</td>
<td>Current feeding at 6-8 Week Review by NHS Board</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>14</td>
<td>Maintenance of exclusive breastfeeding by maternal age</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>15</td>
<td>Maintenance of exclusive breastfeeding by deprivation level</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>16</td>
<td>Maintenance of exclusive breastfeeding by NHS Board</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>17</td>
<td>Drop off in breastfeeding by maternal age</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>18</td>
<td>Drop off in breastfeeding by deprivation level</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>19</td>
<td>Drop off in breastfeeding by NHS Board</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>20</td>
<td>Current feeding at First Visit by ethnicity</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>21</td>
<td>Current feeding at 6 to 8 Week Review by ethnicity</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>22</td>
<td>Breastfeeding at First Visit by maternal smoking status</td>
<td>2001/02-2016/17</td>
<td>Excel [209kb]</td>
</tr>
<tr>
<td>23</td>
<td>Timing of 6 to 8 Week Reviews by NHS Board</td>
<td>2016/17</td>
<td>Excel [209kb]</td>
</tr>
</tbody>
</table>
Contact

Dr Rachael Wood  
Consultant in Public Health Medicine  
rachaelwood@nhs.net  
0131 275 7028

Susanne Brunton  
Principal Information Analyst  
susanne.brunton@nhs.net  
0131 275 7646

Samantha Clarke  
Senior Information Analyst  
samanthaclarke@nhs.net  
0131 275 6149

Further Information

Further information on the CHSP Pre-School system, including details of other analyses available can be found on the child health pages of the ISD website.

Rate this publication

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