

# Publication Report



## Breastfeeding Statistics

Financial Year 2009/10

Publication Date – 26 October 2010



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## 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 (ie assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (ie legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (ie 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](#).

## Introduction

Encouraging and supporting breastfeeding is recognised as an important public health activity. There is good evidence that breastfeeding in infancy has a protective effect against many childhood illnesses. Breastfed infants are likely to have a reduced risk of infection, particularly those affecting the ear, respiratory tract and gastro-intestinal tract. This protective effect is particularly marked in low birth weight infants. Other probable benefits include improved cognitive and psychological developments, and a reduced risk of childhood obesity. There is evidence that women who breastfed have lower risks of breast cancer, epithelial ovarian cancer and hip fracture later in life.

A key section of the 2007 Scottish Government action plan '[Better Health, Better Care](#)' lays out the benefits of giving children the 'best possible start'. These actions include encouraging NHS Boards to increase the proportion of newborn children who are exclusively breastfed. A health improvement target has been set to increase the proportion of newborn children exclusively breastfed at 6-8 weeks in Scotland from 26.2% in 2006/07 to 32.7% in 2010/11 (an increase of 25%).

Support and encouragement for breastfeeding can be provided at many levels. For example: health promotion campaigns at a national level; policies in maternity hospitals at NHS board level and primary care teams working with individual women and groups within the community. While these can support and encourage mothers to initiate and continue breastfeeding, there are a wide range of other factors that influence mothers. Maternal age and deprivation are known to be strongly associated with the likelihood of breastfeeding.

This release provides an update of breastfeeding statistics for NHS Boards that participate in the Child Health Systems Programme - Pre-School (CHSP-PS) system. All NHS Boards in Scotland provide a Child Health Surveillance Programme where children are offered reviews at various stages of their life. NHS Boards use the CHSP-PS system to record information on breastfeeding collected at the public health nurse/health visitor First Visit review (at around 10 days old) and the 6-8 week review. At these reviews, the health professional (normally a public health nurse/health visitor) records whether a mother is exclusively breastfeeding (baby is fed breast milk only), mixed feeding (baby is fed both breast and formula milk), or if the baby is being fed formula milk only. The overall breastfeeding rate includes babies who are exclusively breastfed and babies who are mixed breast and formula fed.

This update includes data for the financial year 2009/10 by NHS Board, Community Health Partnership and Council Area and also presents analyses by deprivation, maternal age and smoking status. Data are not available for NHS Grampian and NHS Orkney as these Boards had not implemented CHSP-PS for the time period presented (they have since implemented). Breastfeeding rates for the calendar year 2009 by NHS Board, Community Health Partnership and Council Area have also been updated (the previously published rates for calendar year 2009 were provisional). Following a consultation with users on the timing and content of the publication, in future, breastfeeding statistics for the financial year only will be published annually in October.

## Key Points

Among the 12 participating NHS Boards in Scotland:

- The overall breastfeeding rate and exclusive breastfeeding rate have remained relatively stable since 2001/02.
- In 2009/10, a total of 45.6% of babies were breastfed at the First Visit review, which takes place at around 10 days (compared with the 2008/09 level of 45.4%). This includes 36.3% of babies who were exclusively breastfed (compared with 37.2% in 2008/09).
- At the 6-8 week review, the overall breastfeeding rate was 36.0% in 2009/10 (36.2% in 2008/09). This includes 26.1% of babies who were exclusively breastfed (26.6% in 2008/09).

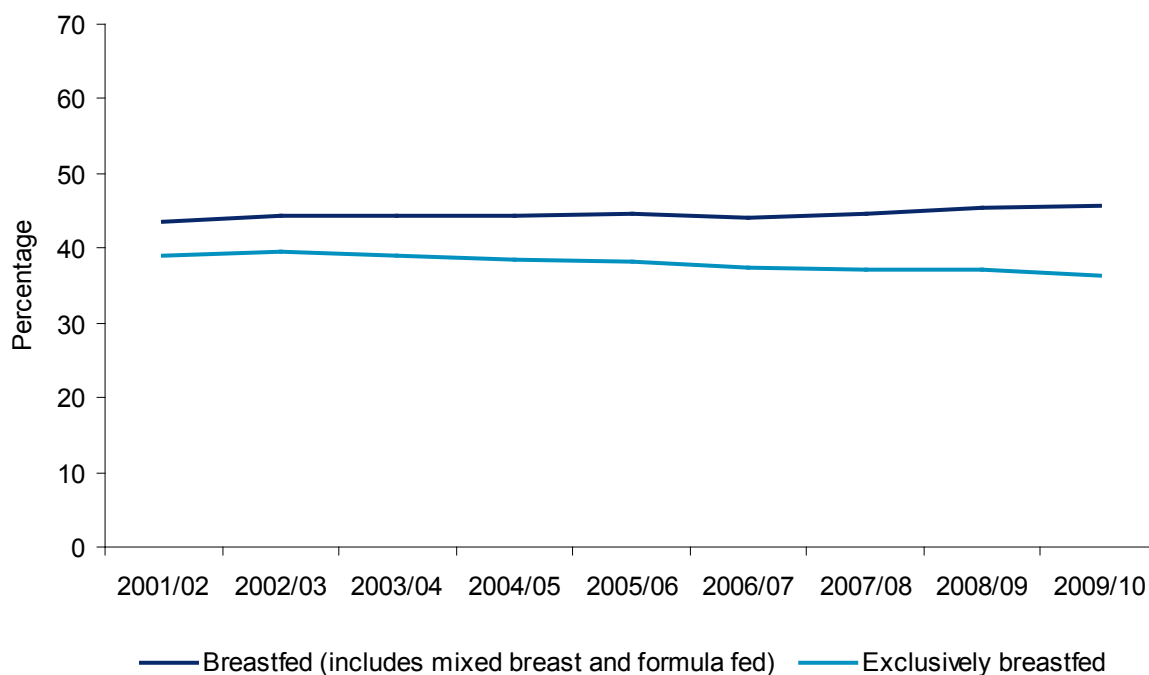
## Results and Commentary

### Breastfeeding at the First Visit

Among the 12 participating NHS Boards in Scotland, the overall breastfeeding rate and exclusive breastfeeding rate at the First Visit review (which takes place at around 10 days) have remained relatively stable since 2001/02.

In 2009/10, a total of 45.6% of babies were breastfed at the First Visit review. This comprises 36.3% of babies who were exclusively breastfed and 9.3% who were fed both breast milk and formula milk (mixed feeding). This compares with a breastfeeding rate in 2008/09 of 45.4% (37.2% of babies exclusively breastfed and 8.2% mixed breast and formula fed).

#### Breastfeeding at the First Visit; Year of Birth 2001/02 to 2009/10<sup>1</sup>

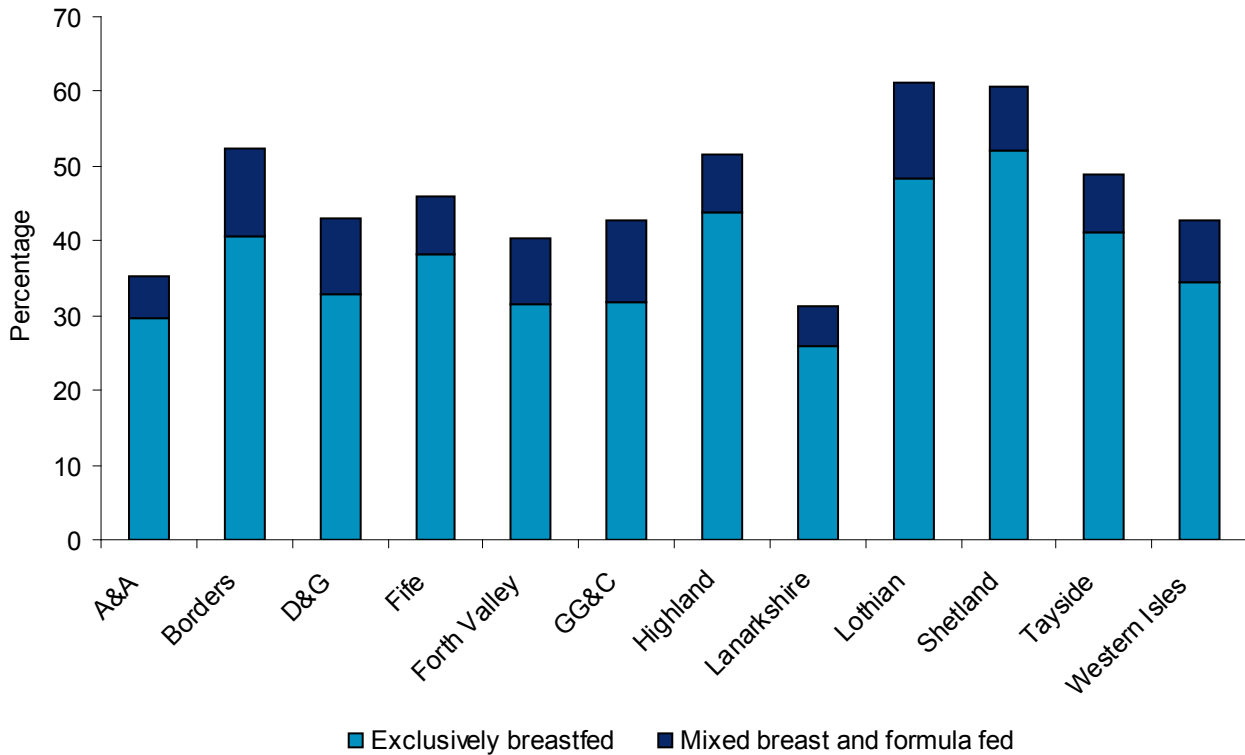


1. The CHSP-PS system, from which these statistics are derived, was introduced in 1991 and the number of participating boards has increased over the years. All NHS boards in Scotland now use the CHSP-PS, however data for NHS Grampian and NHS Orkney are not included as these Boards had not implemented the system for the time period reported. The 12 NHS boards areas using the system in financial year 2009/10 account for approximately 89 percent of Scotland's pre-school population.

Source: ISD Scotland, CHSP-PS Aug 2010

The prevalence of breastfeeding at the First Visit varies by geographical area. For example, exclusive breastfeeding rates in 2009/10 range from 25.8% in NHS Lanarkshire to 52.0% in NHS Shetland.

**Breastfeeding at the First Visit by NHS Board of Residence<sup>1</sup>; Year of Birth 2009/10**



Key  
 A&A: Ayrshire & Arran  
 D&G: Dumfries & Galloway  
 GG&C: Greater Glasgow & Clyde

1. Data are not presented for NHS Grampian and NHS Orkney as these Boards had not implemented the CHSP-PS system, from which these statistics are derived, for the time period reported.

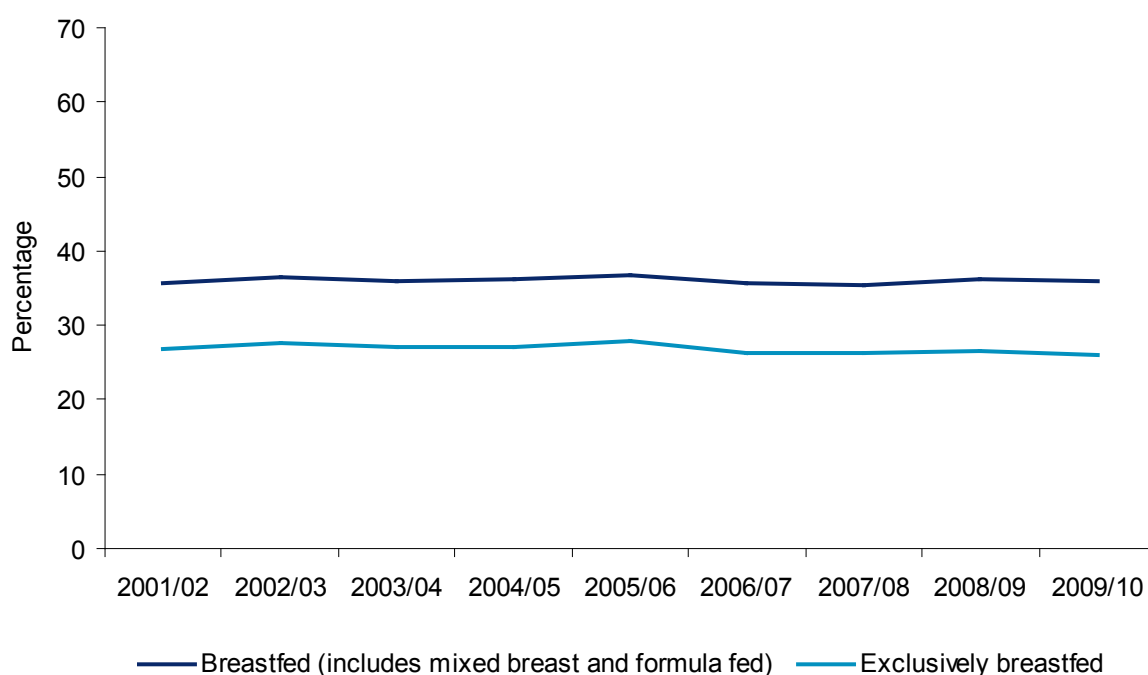
Source: ISD Scotland, CHSP-PS Aug 2010

## Breastfeeding at the 6-8 Week Review

Among the 12 participating NHS Boards in Scotland, the prevalence of breastfeeding at the 6-8 week review has remained relatively stable since 2001/02.

The overall breastfeeding rate at the 6-8 week review was 36.0% in 2009/10. A total of 26.1% of babies were exclusively breastfed and 9.9% were mixed breast and formula fed. In 2008/09, the breastfeeding rate was 36.2% (26.6% exclusive breastfeeding and 9.7% mixed feeding).

### Breastfeeding at the 6-8 Week Review; Year of Birth 2001/02 to 2009/10<sup>1</sup>



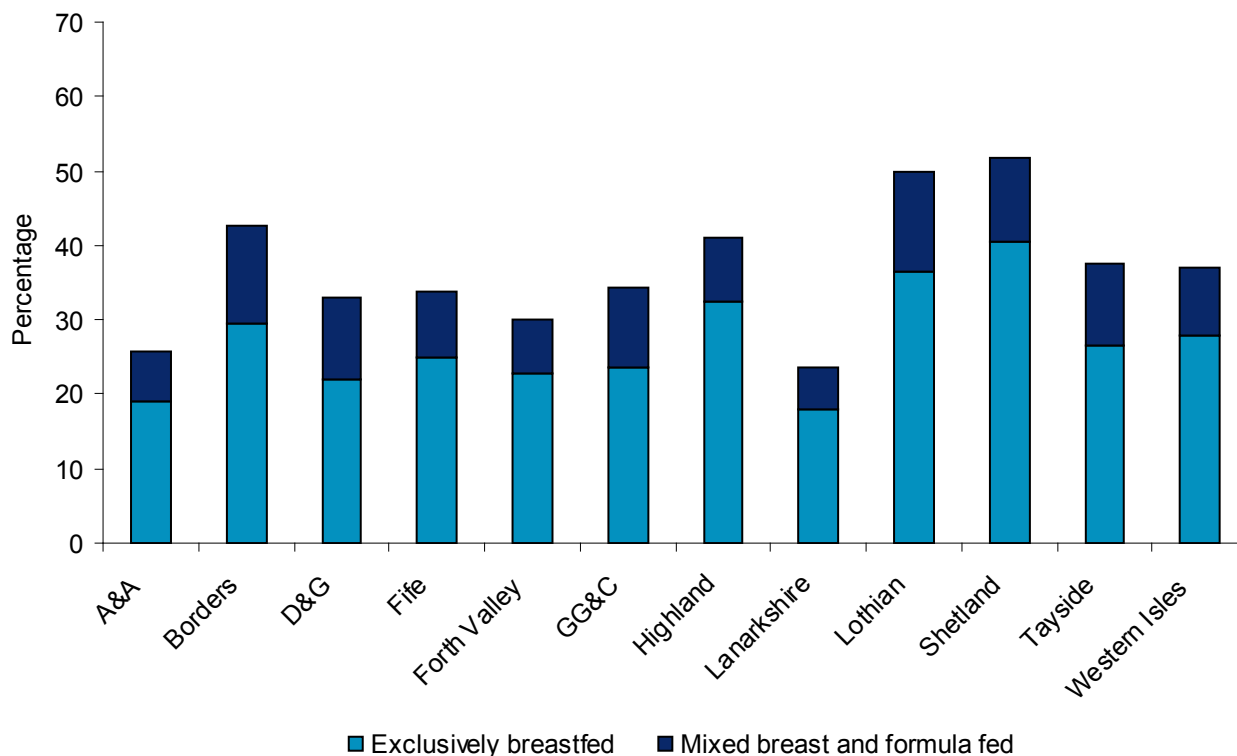
1. The CHSP-PS system, from which these statistics are derived, was introduced in 1991 and the number of participating boards has increased over the years. All NHS boards in Scotland now use the CHSP-PS, however data for NHS Grampian and NHS Orkney are not included as these Boards had not implemented the system for the time period reported. The 12 NHS boards areas using the system in financial year 2009/10 account for approximately 89 percent of Scotland's pre-school population.

Source: ISD Scotland, CHSP-PS Aug 2010

Breastfeeding rates at the 6-8 week review vary by geographical area. For example, exclusive breastfeeding rates in 2009/10 range from 18.0% in NHS Lanarkshire to 40.4% in NHS Shetland. A small proportion of this variation may be accounted for by differences in the timing of the 6-8 week review.



**Breastfeeding at the 6-8 Week Review by NHS Board of Residence<sup>1</sup>;  
Year of Birth 2009/10**



**Key**

A&A: Ayrshire & Arran

D&G: Dumfries & Galloway

GG&C: Greater Glasgow & Clyde

1. Data are not presented for NHS Grampian and NHS Orkney as these Boards had not implemented the CHSP-PS system, from which these statistics are derived, for the time period reported.

Source: ISD Scotland, CHSP-PS Aug 2010

Breastfeeding rates at the First Visit and 6-8 week review are available for financial years 2001/02 to 2009/10, by NHS Board of Residence, Council Area and Community Health Partnership. For tables and charts please see:

[Breastfeeding by NHS Board of Residence and Financial Year](#)

[Breastfeeding by Council Area and Financial Year](#)

[Breastfeeding by Community Health Partnership and Financial Year](#)

Tables and charts are also available for calendar years 2001 to 2009:

[Breastfeeding by NHS Board of Residence and Calendar Year](#)

[Breastfeeding by Council Area and Calendar Year](#)

[Breastfeeding by Community Health Partnership and Calendar Year](#)

Following a consultation with users on the timing and content of the publication in March 2010, in future, breastfeeding statistics for the financial year only will be published annually in October.

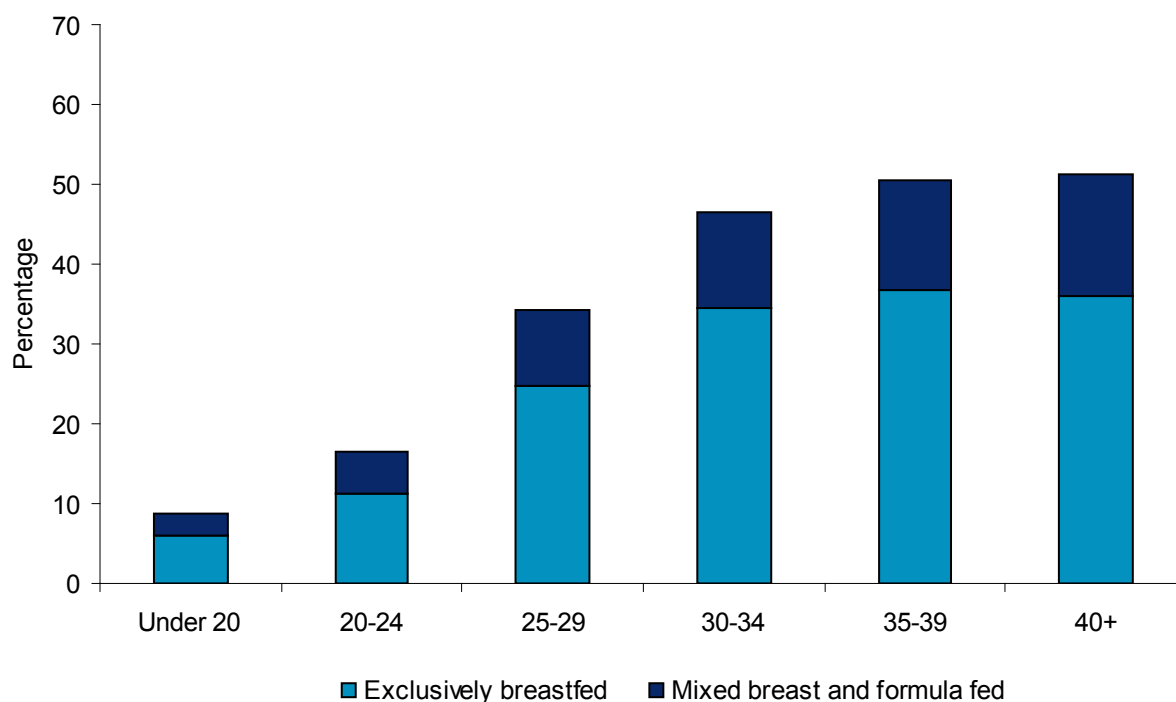
## Breastfeeding by Maternal Age, Deprivation and Smoking Status

There are a number of personal, social and cultural issues that are strongly associated with the likelihood of breastfeeding including maternal age, deprivation and smoking status. The analysis presented in this section demonstrates the correlation between each of these factors and breastfeeding.

### Maternal Age

There is a strong association between breastfeeding and the age of the mother. Older mothers are more likely to breastfeed than younger mothers, however the differences in breastfeeding rates above the 30-34 age group is less apparent. In 2009/10, only 6.1% of mothers aged under 20 were exclusively breastfeeding at 6-8 weeks, compared with 36.0% of mothers aged 40 and over. A similar pattern is seen in the overall breastfeeding rate.

#### Breastfeeding at the 6-8 Week Review by Maternal Age; Year of Birth 2009/10

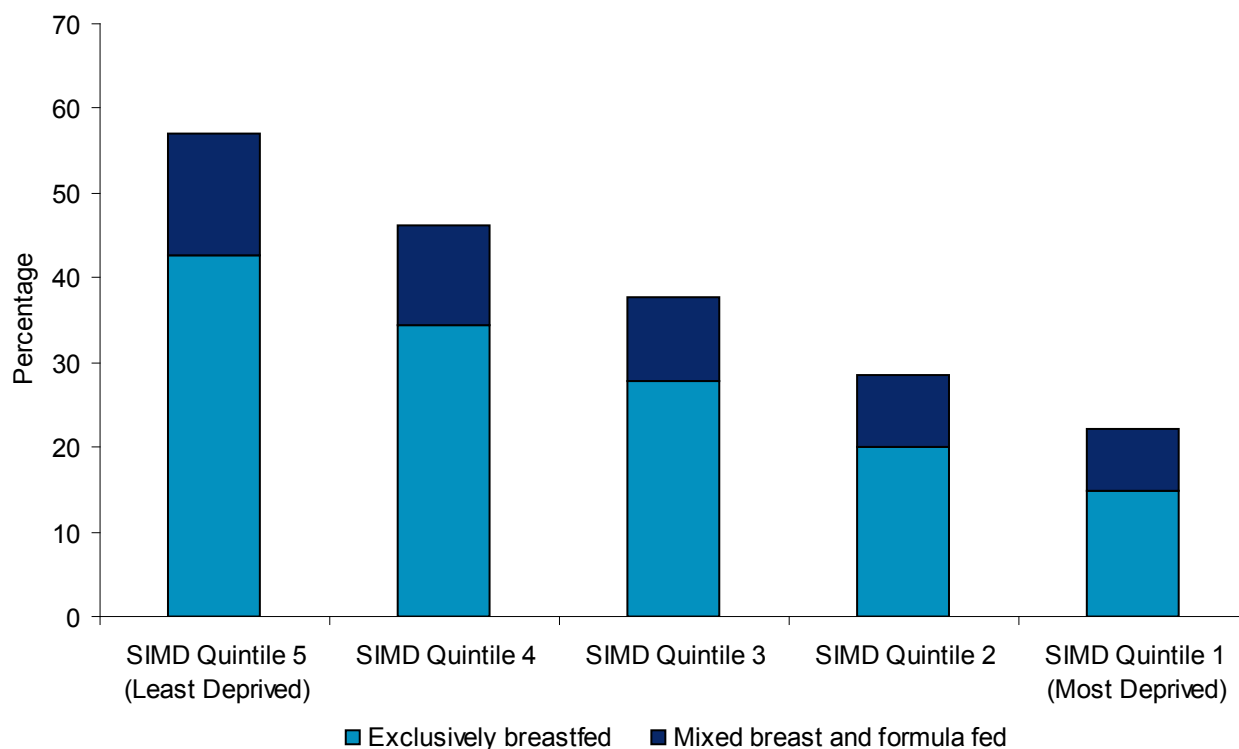


Source: ISD Scotland, CHSP-PS Aug 2010

## Deprivation

There is a clear association between breastfeeding and deprivation. In 2009/10, 42.6% of mothers in the least deprived areas were exclusively breastfeeding at the 6-8 review, compared with 14.9% of mothers in the most deprived areas. This means mothers in the least deprived areas were nearly three times as likely to exclusively breastfeed at 6-8 weeks compared with mothers in the most deprived areas. A similar pattern is seen in the overall breastfeeding rate.

**Breastfeeding at the 6-8 Week Review by Scottish Index of Multiple Deprivation (SIMD) 2009 quintile; Year of Birth 2009/10**

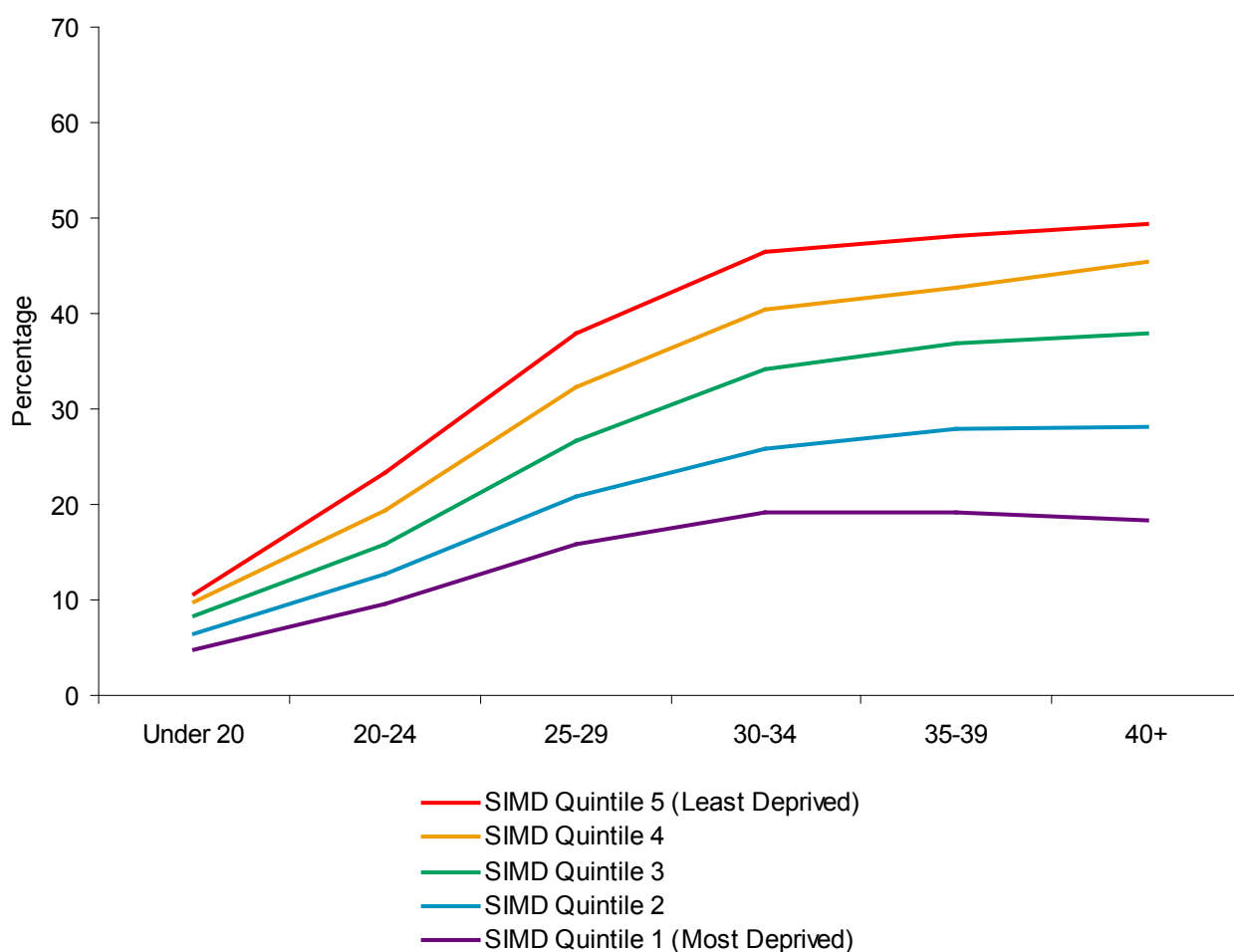


Source: ISD Scotland, CHSP-PS Aug 2010

## Maternal Age and Deprivation

Older mothers are more likely to breastfeed but the effect of age is less pronounced in the more deprived areas. The combined effect of the age of the mother and deprivation on breastfeeding rates is such that, for children born between 2001/02 and 2009/10, only 4.8% of younger mothers (under 20 years of age) in the most deprived areas were exclusively breastfeeding at 6-8 weeks compared with 18.3% of mothers aged 40 and over. In comparison, 10.7% of younger mothers in the least deprived areas were exclusively breastfeeding at 6-8 weeks compared with 49.3% of mothers aged 40 and over.

### Exclusive Breastfeeding at the 6-8 Week Review by Maternal Age and Scottish Index of Multiple Deprivation (SIMD) 2009 quintile; Years of Birth 2001/02-2009/10



Source: ISD Scotland, CHSP-PS Aug 2010

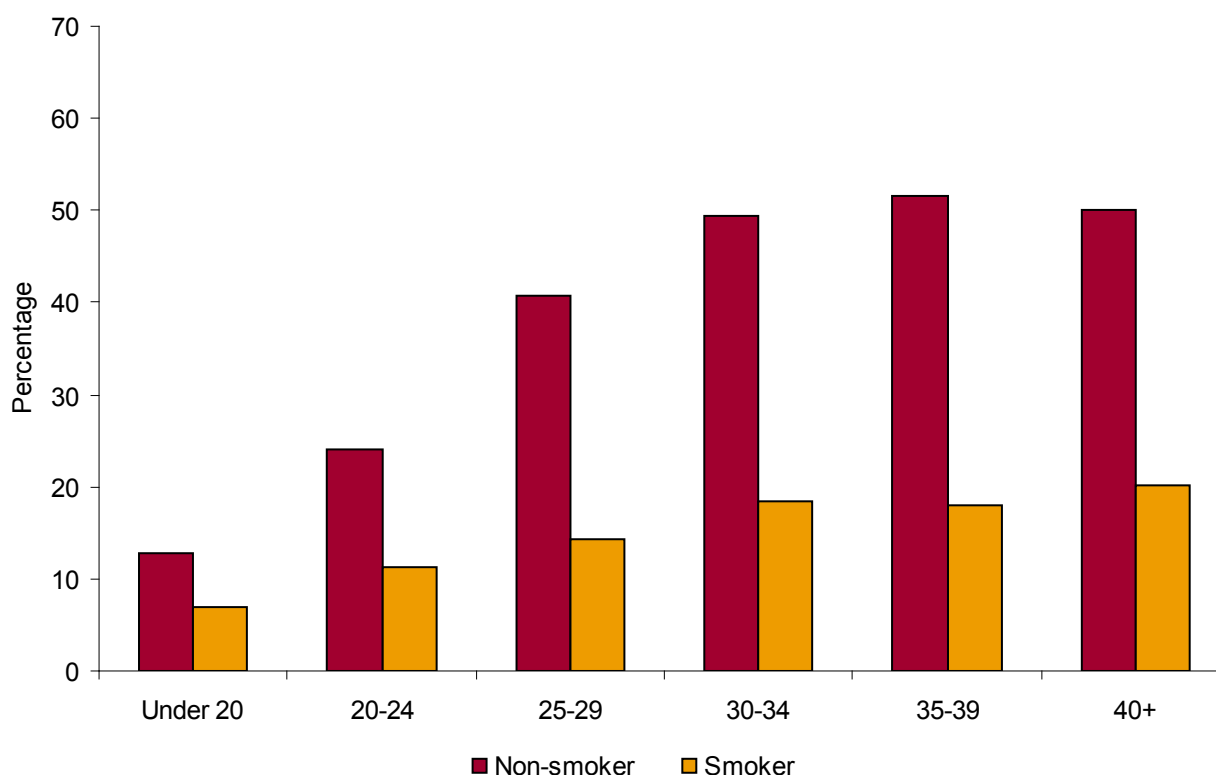
## Smoking

Passive smoking has adverse effects on children's health and is known to significantly increase the risk of sudden infant death, middle ear disease, meningitis and admission to hospital for respiratory disease.

Non-smoking mothers are around three times as likely to exclusively breastfeed as mothers who smoke. This is likely to be a reflection of an association between smoking and other social and cultural factors. The smoking status of mothers is recorded at the First Visit Review at around 10 days. In 2009/10, 41.5% of non-smoking mothers exclusively breastfed their babies, compared with 13.6% of mothers who smoked. A similar pattern is seen in the overall breastfeeding rate and across maternal age groups and deprivation categories.

Please note that a mother's smoking status is only recorded at the First Visit review and is not available from data collected at the 6-8 week review.

### Exclusive Breastfeeding at the First Visit by Maternal Age and Smoking Status; Year of Birth 2009/10



Source: ISD Scotland, CHSP-PS Aug 2010

Breastfeeding rates by maternal age, deprivation and smoking status are available for financial years 2001/02 to 2009/10. For tables and charts please see:

[Breastfeeding by maternal age](#) 

[Breastfeeding by deprivation](#) 

[Breastfeeding by maternal age and deprivation](#) 

[Breastfeeding by maternal age and smoking status](#) 

[Breastfeeding by deprivation and smoking status](#) 

## Glossary

CHSP-PS

Child Health Systems Programme – Pre-School

## List of Tables

Table No.	Name	Time period	File & size
1, 2	<a href="#">Breastfeeding at the First Visit and 6-8 week review by NHS Board of Residence</a>	Financial years 2001/02 to 2009/10	Excel [148kb]
3, 4	<a href="#">Breastfeeding at the First Visit and 6-8 week review by Council Area</a>	Financial years 2001/02 to 2009/10	Excel [221kb]
5, 6	<a href="#">Breastfeeding at the First Visit and 6-8 week review by Community Health Partnership</a>	Financial years 2001/02 to 2009/10	Excel [250kb]
7, 8	<a href="#">Breastfeeding at the First Visit and 6-8 week review by Maternal Age</a>	Financial years 2001/02 to 2009/10	Excel [71kb]
9, 10	<a href="#">Breastfeeding at the First Visit and 6-8 week review by Deprivation</a>	Financial years 2001/02 to 2009/10	Excel [68kb]
11, 12	<a href="#">Breastfeeding at the First Visit and 6-8 week review by Maternal Age and Deprivation</a>	Financial years 2001/02 to 2009/10	Excel [243kb]
13	<a href="#">Breastfeeding at the First Visit by Smoking Status and Maternal Age</a>	Financial years 2001/02 to 2009/10	Excel [78kb]
14	<a href="#">Breastfeeding at the First Visit by Smoking Status and Deprivation</a>	Financial years 2001/02 to 2009/10	Excel [89kb]
A1, A2	<a href="#">Breastfeeding at the First Visit and 6-8 week review by NHS Board of Residence</a>	Calendar years 2001 to 2009	Excel [151kb]
A3, A4	<a href="#">Breastfeeding at the First Visit and 6-8 week review by Council Area</a>	Calendar years 2001 to 2009	Excel [260kb]
A5, A6	<a href="#">Breastfeeding at the First Visit and 6-8 week review by Community Health Partnership</a>	Calendar years 2001 to 2009	Excel [266kb]

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## Further Information

Further information on the CHSP Pre-School system, including details of other analyses available, is given on the [child health pages](#) of the ISD website.

Information on other ISD publications and datasets can be found on the [ISD website](#).



## Appendix

### A1 – Background Information

1. The CHSP-PS system, from which these statistics are derived, was introduced in 1991 and the number of participating boards has increased over the years. All NHS Boards in Scotland now use the CHSP-PS, however data are not presented for NHS Grampian and NHS Orkney as these Boards had not implemented the system for the time period reported. The 12 NHS boards areas using the system in financial year 2009/10 account for approximately 89 percent of Scotland's pre-school population.
2. There may be some variation between public health nurses in terms of how they define whether a mother is exclusively breastfeeding, mixed feeding or if the baby is being fed formula milk only. In order to improve consistency, recent guidance for public health nurses specifies that the feeding method recorded on CHSP-PS should relate to the type of milk feeding in the last 24 hours. This differs from the World Health Organization (WHO) definition of exclusive breastfeeding where the baby has only ever been given breast milk and has never been fed formula milk, solid foods, or any other liquids.
3. Data limitations and review of methodology:

#### (a) Postcode derived information

The CHSP-PS system, from which these statistics are derived, facilitates the call/recall of children for reviews from shortly after birth until school entry and records results. The system is dynamic, with ongoing updating of records. Historically each year's release of breastfeeding statistics has been based on the latest available data from the CHSP-PS which allows for additions and amendments to the review data. It has recently been identified that where a child's postcode of residence has changed, in some instances the derived NHS Board, Community Health Partnership and Council Area and SIMD quintile may not reflect where the child lived at the time of their First Visit/ 6-8 week review.

This is not considered to have a significant effect on the rates reported, particularly at NHS board level. Preliminary investigations suggest the impact on the reported figures at NHS board level is mainly in range 0.0 to 0.3 percentage points, although some smaller Boards may see slightly larger differences for some years. The impact on some rates at CHP/council area level and by SIMD quintile may also be slightly greater. Rates for the most recent time periods are likely to be affected less than those for the earliest time periods reported. The overall Scotland rates are not affected.

In order to prevent further imprecision in the postcode derived information being introduced, for this release figures for 2001/02 to 2007/08 have not been updated from the latest available CHSP-PS data.

#### (b) Timing of the 6-8 week review

Among participating NHS Boards, there is some variation in the timing of the 6-8 week review, although the majority of 6-8 week reviews in Scotland are carried out before babies are 9 weeks old. The maximum age limit for the 6-8 week review is

recommended as 12 weeks. Variation in the timing of the 6-8 week review will have some effect on the reported rates as there is a known drop-off in breastfeeding rates with time.

ISD are exploring methodology changes which will take account of these limitations and improve the accuracy of the breastfeeding statistics derived from data collected on CHSP-PS. Any proposed change will involve a consultation with users of these statistics. The next release is scheduled for October 2011. If necessary an interim release will be published.

4. Breastfeeding rates from child health surveillance data are often compared to breastfeeding rates from the UK wide [Infant Feeding Survey](#) which has been carried out every five years since 1975. The Infant Feeding Survey is based on a sample of mothers in Scotland and uses the WHO definition of exclusive breastfeeding. Results of the survey tend to give a higher breastfeeding rate compared with data from CHSP-PS; however the trends demonstrated are similar.

## A2 – Publication Metadata (including revisions details)

Metadata Indicator	Description
Publication Title	Breastfeeding Statistics
Description	Update of breastfeeding statistics at the First Visit and 6-8 week review. Data are presented by: NHS Board, Council Area, Community Health Partnership, maternal age, deprivation and smoking status.
Theme	Health and Social Care
Topic	Child Health
Format	PDF document and Excel workbooks
Data source(s)	Child Health Systems Programme Pre-School (CHSP Pre-School)
Date that data is acquired	16 August 2010
Release date	26 October 2010
Frequency	Annual. From 2010 the timing of this publication will move from May to October. In this transition year (2010) there will be two releases, an interim release of statistics in May and the main release in October.
Timeframe of data and timeliness	Includes children born up to 31 March 2010 and 6-8 week review data to July 2010. No delays between data availability and processing of data for publication.
Continuity of data	See notes 1 and 2 in <a href="#">Appendix A1 – Background Information</a>
Revisions Statement	Data for the previous financial year are updated in the next release. See note 3 in <a href="#">Appendix A1 – Background Information</a>
Revisions relevant to this publication	Data for financial year 2008/09 updated.
Concepts and definitions	See note 2 in <a href="#">Appendix A1 – Background Information</a>
Relevance and key uses of the statistics	Making information publicly available for planning, epidemiology, provision of services and providing comparative information. Monitoring progress towards the national target.
Accuracy	Quality checks are conducted at data entry by NHS Boards. Data are compared to previous year's figures and to expected trends.
Completeness	At time of extraction, first visit data for the latest financial year are considered to be complete and data for the 6-8 week review are estimated to be approximately 99% complete.
Comparability	The Department of Health publishes statistics on <a href="#">breastfeeding initiation and prevalence at 6-8 weeks in England</a> . Breastfeeding rates from CHSP Pre-School data are often compared to rates published in the UK wide <a href="#">Infant Feeding Survey</a> (see note 4 in <a href="#">Appendix A1 – Background Information</a> ).
Accessibility	It is the policy of ISD Scotland to make its web sites and products accessible according to <a href="#">published guidelines</a> .
Coherence and clarity	Breastfeeding tables and charts are accessible via the

Value type and unit of measure	<a href="#">ISD website</a> . Drop down menus are presented for selection of geography i.e. NHS Board, Community Health Partnership and Council Area.
Disclosure	Numbers and percentages Low risk of disclosure; no disclosure methods were employed
Official Statistics designation	National Statistics
UK Statistics Authority Assessment	Awaiting assessment by UK Statistics Authority
Last published	25 May 2010
Next published	25 October 2011
Date of first publication	Data available back to 2001. Due to phased implementation of the CHSP Pre-School system, data are available for some NHS boards for earlier years.
Help email	<a href="mailto:NSS.isdchildhealth@nhs.net">NSS.isdchildhealth@nhs.net</a>
Date form completed	April 2011

## **A3 – Early Access details (including Pre-Release Access)**

### **Pre-Release Access**

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", ISD are 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 and, separately, those receiving extended Pre-Release Access.

### **Standard Pre-Release Access:**

- Scottish Government Health Department
- NHS Board Chief Executives
- NHS Board Communication leads

### **Extended Pre-Release Access**

This extended Pre-Release Access is given to a small number of named individuals in the Scottish Government Health Department (Analytical Services Division). This Pre-Release Access is for the sole purpose of enabling that department to gain an understanding of the statistics prior to briefing others in Scottish Government (during the period of standard Pre-Release Access).

- Scottish Government Health Department (Analytical Services Division)

These statistics will also have been made available to those who needed access to 'management information', ie as part of the delivery of health and care:

- NHS Board Directors of Public Health (except NHS Grampian and NHS Orkney)
- NHS Board Infant Feeding Leads

These statistics will also have been made available to those who needed access to help quality assure the publication:

- Chair of CHSP Pre-School National User Group