



# Analysis of Breastfeeding Status data for Sutton

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### Key points

In Sutton:

- National and international guidance and advice on the health benefits of exclusive breastfeeding that last far into the future are failing to reach many mothers in Sutton.
- Breastfeeding rates tail off quickly and dramatically from birth through to the first 6-8 weeks. Over this time breastfeeding (including both partial and exclusive) falls by 28%, and for exclusive breastfeeding, rates fall by nearly half (47%).
- Overall, the more deprived population groups have lower breastfeeding rates. This suggests that areas with high levels of deprivation as measured by IMD 2015 should be a focus. However, there are low rates of initiation throughout the borough suggesting that more affluent areas should not be neglected altogether.
- The white ethnic group has the lowest of all breastfeeding rates, especially White British.
- Younger mothers have lower breastfeeding rates at all key stages which indicates a need for more support for this age group including:
  - Multifaceted approaches to encourage young mothers to consider breastfeeding in the first place
  - Practical support to continue breastfeeding once initiated

### Introduction

The World Health Organisation and the Department of Health recommend that all babies are exclusively breastfed for the first six months (26 weeks) of their life. This is the healthiest way to feed a new baby and exclusive breastfeeding is widely considered the best source of nutrition for infants. After this period, it should continue for as long as the mother and baby wish while gradually introducing a more varied diet.

Breastfeeding is essentially cost free and evidence demonstrates that it improves the longer-term health of children and reduces the risk of future disease. It can contribute to a range of long term outcomes, for example reducing childhood obesity. It can also achieve rapid financial return on investment to health services, reducing hospital admissions and attendances in primary care.

For more information see the Breast Feeding Fact Sheet in Section 2: Children's health and wellbeing of the current Sutton JSNA at: [http://data.sutton.gov.uk/sutton\\_jsna/](http://data.sutton.gov.uk/sutton_jsna/)

## Analysis

Breastfeeding data for Sutton mothers was extracted and prepared from the RiO Community Health System on 24<sup>th</sup> June, 2015 by [chris.lovelace@smcs.nhs.uk](mailto:chris.lovelace@smcs.nhs.uk)

The dataset comprises:

- Data for Sutton registered patients (of which most but not all are residents – 99.6% are residents)
- Breastfeeding data for Sutton births between 1<sup>st</sup> January 2013 and 31<sup>st</sup> March 2015
- Place: Lower Super Output Area of the child (or mother if unavailable) at birth
- Demographics: Age of mother at childbirth and ethnicity
- Breastfeeding status at birth (where supplied by the maternity trust)
- Breastfeeding status at the 10 to 14 day new birth visit
- Breastfeeding status at the 6 to 8 week check

Breastfeeding is recorded according to whether it is:

- Totally (exclusively)
- Partially
- Not at all

This information is captured by the Health Visitor asking the mother directly about how the baby is being fed, except where recorded by the GP at the 6-8 week review.

The dataset comprises two whole years of data and the first three months (25%) of 2015.

Year	Number of records
2013	2,110
2014	2,624
2015 (3 months)	673
<b>Total</b>	<b>5,407</b>

The figures above for 2013 and 2014 are slightly lower than the actual number of live births recorded for Sutton residents.

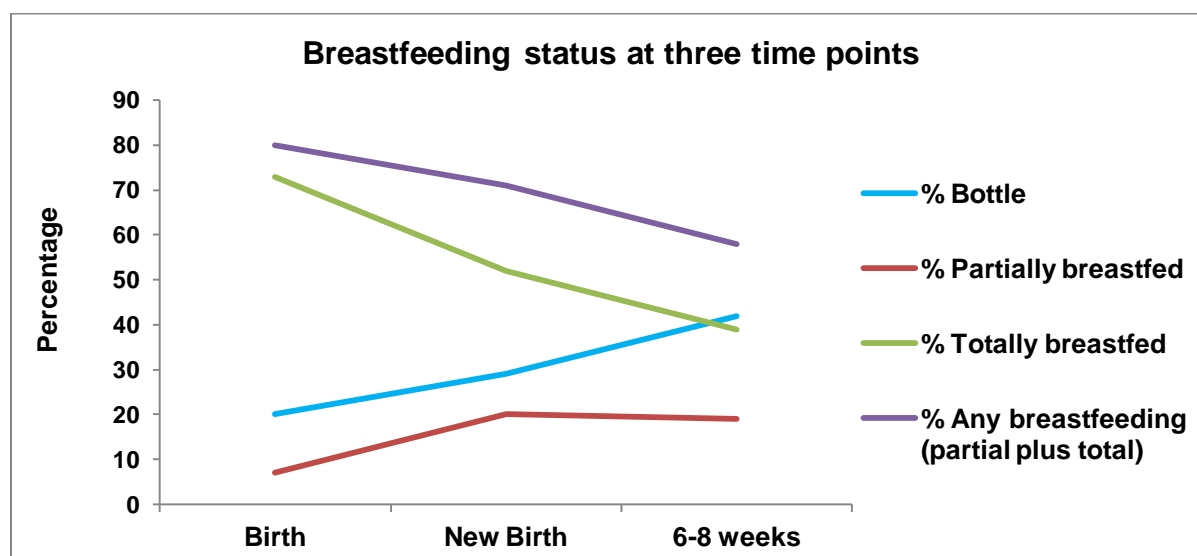
## Percentage of babies being breastfed at Birth, New Birth Visit and 6-8 weeks, by year

The table below shows that breastfeeding rates drop off over time, with the highest rates at birth and the new birth visit (usually at 10-14 days after birth). Trends remained similar over the time period for which data is available.

*It is important to note that rates of exclusive breastfeeding drop quickly over time from birth. Breastfeeding rates from birth through to 6-8 weeks fell by 28% for any form of breastfeeding (from 80% at birth down to 58% at 6-8 weeks), and by 47% for exclusive breastfeeding (from 73% at birth down to 39% at 6-8 weeks).*

*NB: The data in the first four columns refer to the percentage of births whose breastfeeding status was known. If this was calculated as a percentage of the total dataset including the 'unknowns', these rates would be lower.*

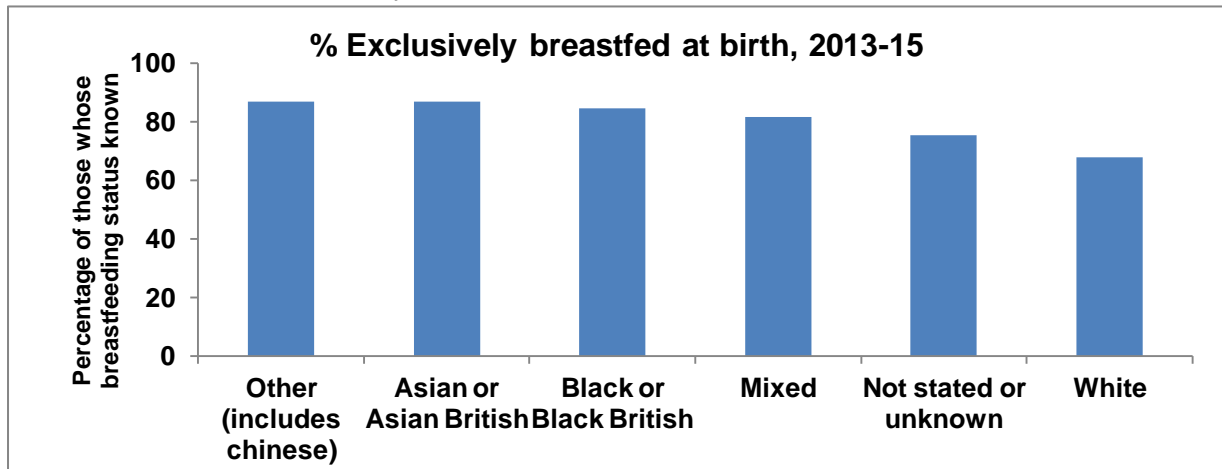
	Year	% Bottle	% Partially breastfed	% Totally breastfed	% Any breastfeeding (partial plus total)	% of total dataset whose BF status was Unknown
<b>Birth</b>	2013	20	6	74	80	45
	2014	20	7	73	80	42
	2015	21	7	72	79	33
	<b>Total</b>	<b>20</b>	<b>7</b>	<b>73</b>	<b>80</b>	<b>42</b>
<b>New Birth Visit</b>	2013	28	20	53	72	14
	2014	29	20	51	71	9
	2015	30	19	52	70	5
	<b>Total</b>	<b>29</b>	<b>20</b>	<b>52</b>	<b>71</b>	<b>10</b>
<b>6-8 weeks</b>	2013	41	19	40	59	7
	2014	43	19	38	57	5
	2015	42	15	43	58	11
	<b>Total</b>	<b>42</b>	<b>19</b>	<b>39</b>	<b>58</b>	<b>6</b>



The previous figure illustrates that the rate of any form of breastfeeding (i.e. including both partial and exclusive) falls from birth through to the 6-8 week stage. The rate of exclusive (total) breastfeeding drops sharply in the first two weeks but then continues to fall through to 6 to 8 weeks. This is of concern as it indicates that the recommendations and advice by WHO and the Department of Health, and information about the wide range of long term health benefits of exclusive breastfeeding are not getting through to many mothers in Sutton.

### Breastfeeding rates at Birth by ethnicity

The following graph and table profile breastfeeding initiation by ethnicity of the mother. Those of White British ethnicity rank the lowest.



Ethnicity	% Bottle*	% Partially breastfed*	% Totally breastfed*	% Totally breastfed inc. status unknown
Asian or Asian British	4	9	87	48
Black or Black British	6	10	85	49
Mixed	14	4	82	53
Other	7	6	87	52
White	26	6	68	41
Ethnicity not stated or unknown	16	8	75	38
<b>Total</b>	<b>20</b>	<b>7</b>	<b>73</b>	<b>42</b>

The data in the first three columns is the percentage of births whose breastfeeding status was known. The 4<sup>th</sup> column includes those unknown so rates are lower.

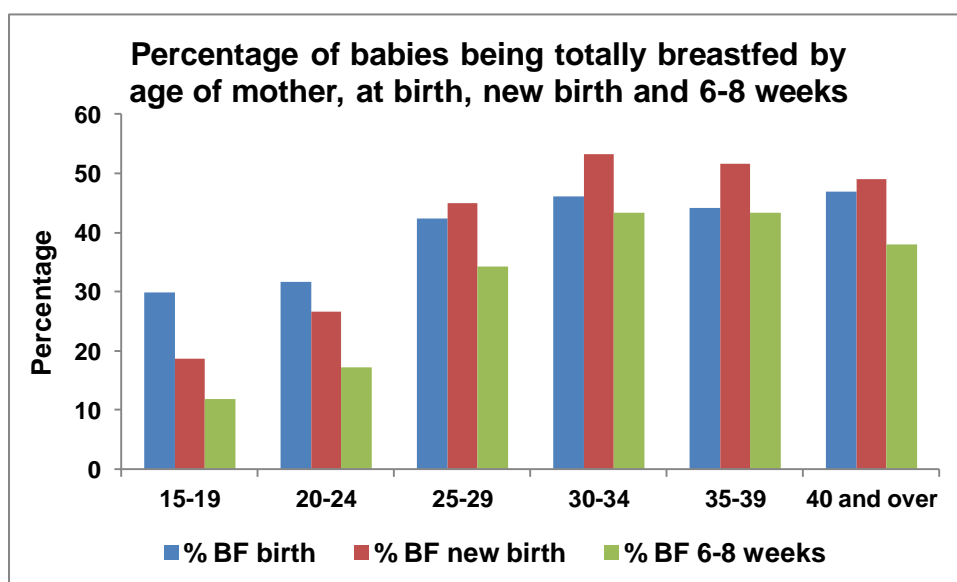
### Exclusive breastfeeding status by age band of mother, by percentage

The table and graph below show that overall the proportion of babies exclusively breastfed is highest for older mothers aged 25 and over. The lowest rates are for the younger age groups, particularly those under 20. Exclusive breastfeeding rates tail off by the 6-8 week check.

In more detail: the younger age groups, i.e. those under 25 years, have low rates of initiation of exclusive breastfeeding and this falls off within weeks. The profile for the older age groups is variable but in general those who initiate exclusive breastfeeding go on to continue this through to 6-8 weeks. This would suggest two main areas of work:

- i) Increase the proportion of mothers who exclusively breastfeed from birth, especially in the younger (under 25) age group
- ii) Maintain and support exclusive breastfeeding in this younger age group

Age group	Percentage breastfeeding		
	Birth	New Birth Visit	6-8 weeks
15-19	30	19	12
20-24	32	27	17
25-29	42	45	34
30-34	46	53	43
35-39	44	52	43
40+	47	49	38

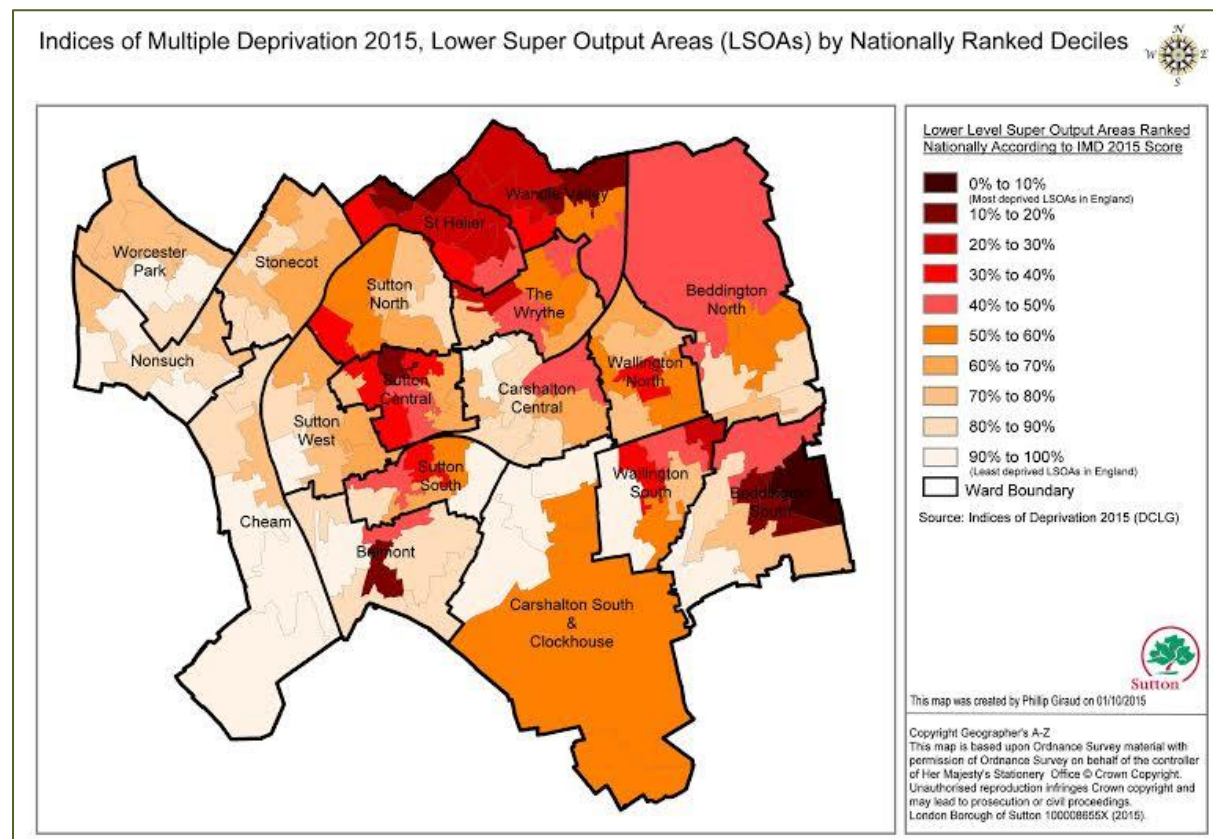


*NB: This data presents the percentage of babies exclusively (totally) breastfed of all births, including those where status not known.*

## Geographical analysis

*NB: The following tables present the percentage of babies exclusively (totally) breastfed of all births, including those where status not known.*

In the following section rates of exclusive breastfeeding are presented by both ward and the smaller geographical level of Middle Super Output Area (MSOA). The data are presented for all three time points: Birth, New Birth Visit and 6-8 week check. The MSOA level data indicates variations in breastfeeding status within wards, for example around the Roundshaw Estate in Beddington South. To some extent lower rates correspond to Sutton's areas of deprivation as indicated in the map below.



### Exclusive breastfeeding at birth by ward, 2013-15

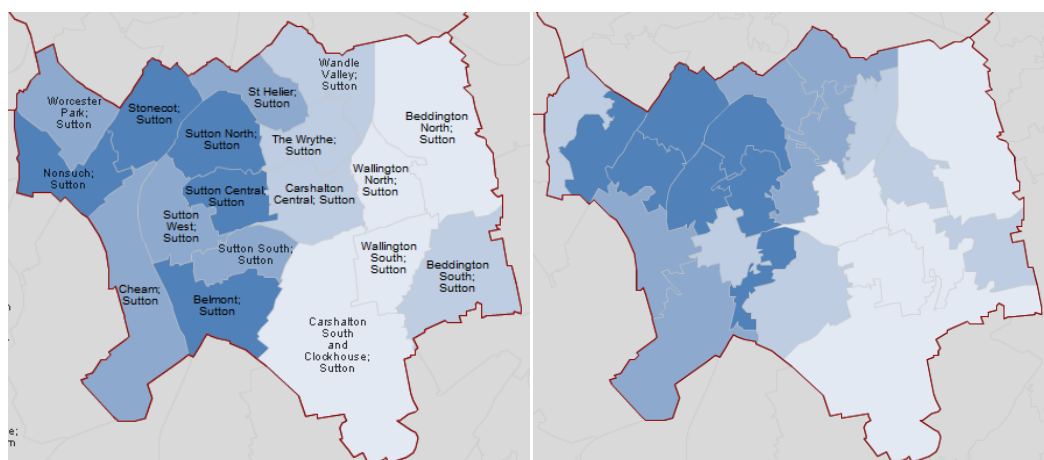
Ward	% exclusive breastfeeding at Birth
Sutton Central	27
Sutton North	31
Stonecot	32
Belmont	34
Nonsuch	34
Cheam	34
St Helier	36
Sutton West	37
Worcester Park	39
Sutton South	39
Wandle Valley	42
The Wrythe	47
Beddington South	48
Carshalton Central	54
Wallington South	57
Beddington North	57
Wallington North	59
Carshalton South and Clockhouse	70

**1a) Breastfeeding at birth by ward**

**1b) Breastfeeding at birth by MSOA**

Light = higher breastfeeding prevalence

Darker = lower prevalence



The two maps above rank levels of breastfeeding by ward (1a) and the smaller geographic level of MSOA (1b) which illustrates variation within wards.

At birth there does not appear to be a strong link with deprivation, but this could be due to hospital best practice to put the baby to the breast, which means that status is recorded as breastfeeding even if this only happens once.

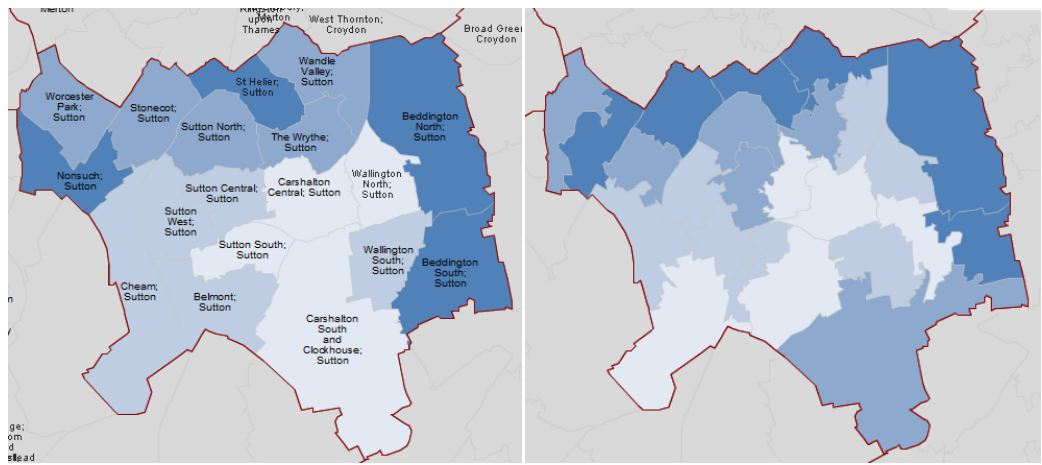


### Exclusive breastfeeding at New Birth Visit by ward, 2013-15

Ward	% exclusive breastfeeding at New Birth
Nonsuch	36
St Helier	37
Beddington South	38
Beddington North	39
Wandle Valley	40
Worcester Park	41
Stonecot	42
Sutton North	47
The Wrythe	47
Cheam	47
Wallington South	47
Sutton West	49
Belmont	50
Sutton Central	50
Wallington North	53
Sutton South	56
Carshalton South and Clockhouse	56
Carshalton Central	58

### 2a) New Birth Visit breastfeeding by ward 2B) New Birth Visit breastfeeding by MSOA

Light = higher breastfeeding prevalence      Darker = lower prevalence



As before, the two maps above rank levels of breastfeeding by ward (2a) and MSOA (2b).

There appear to be lower breastfeeding rates at the New Birth Visit in some of the more deprived parts of the borough, confirmed by the correlation test shown in the Appendix.

### Exclusive breastfeeding at 6-8 weeks by ward, 2013-15

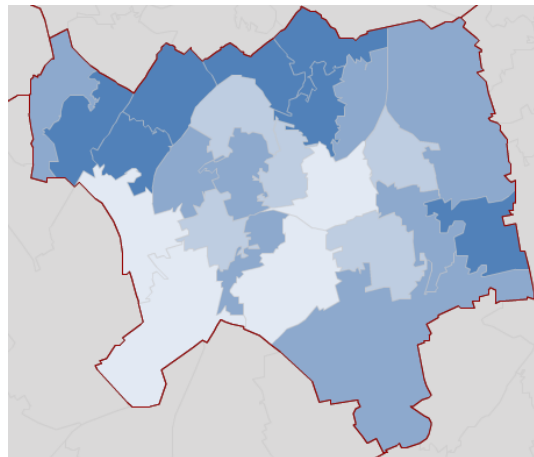
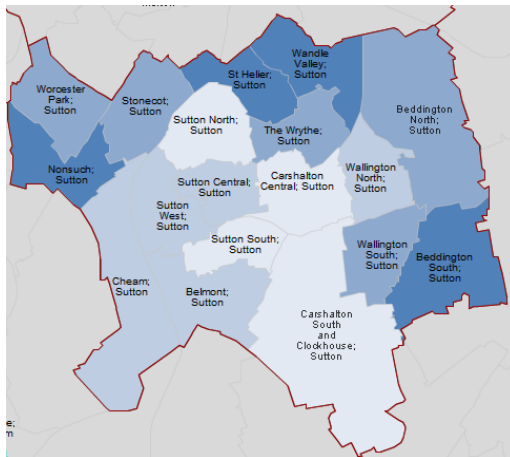
Ward	% exclusive breastfeeding at 6-8 weeks
St Helier	25
Nonsuch	30
Beddington South	30
Wandle Valley	31
Beddington North	34
Stonecot	34
Wallington South	34
The Wrythe	36
Worcester Park	37
Sutton West	39
Sutton Central	40
Cheam	40
Belmont	41
Wallington North	42
Sutton North	42
Sutton South	42
Carshalton South and Clockhouse	43
Carshalton Central	47

#### 6-8 week breastfeeding by ward

#### 6-8 week breastfeeding by MSOA

Light = higher breastfeeding prevalence

Darker = lower prevalence



The maps above rank levels of breastfeeding by ward (3a) and MSOA (3b) at 6-8 weeks.

Again, there appears to be some correlation between levels of breastfeeding and areas of deprivation. This is supported by the correlation statistical test shown in the Appendix.

## **Breastfeeding and deprivation**

In order to further explore the impact of deprivation on breastfeeding rates, correlations were made between the rank of deprivation and the rank of the proportion of babies exclusively breastfed by Lower Super Output Area within Sutton.

The following graphs indicate that overall exclusive breastfeeding rates are lower in the more relatively deprived areas. The relationship between deprivation and lower breastfeeding rates becomes progressively stronger at the two follow up checks.

This analysis indicates that by 8 weeks deprivation is a key determinant of breastfeeding status and determines 40% of the variability which is generally perceived as a very high proportion. Hence, to some extent, intervention can be focussed on the deprived communities without needing further in depth prevalence analysis.

**APPENDIX: Correlation between deprivation and exclusive breastfeeding**

