Breastfeeding North Lincolnshire Insights report

North Lincolnshire Public Health Intelligence Team 2023

North Lincolnshire JSNA

Version 1.3

Control: Approved



This report seeks to answer the following questions:

- What are some of the benefits of breastfeeding?
- How does North Lincolnshire compare to the England average for breastfeeding rates at initiation and continuation at 6-8 weeks?
- What areas of North Lincolnshire have higher rates of breastfeeding at initiation?
- What impact does maternal age, ethnicity and level of deprivation have upon the likelihood of a baby receiving breast milk?
- Does a mother's smoking status affect the likelihood of them initiating breastfeeding?
- Are babies who are admitted and transferred to the Neonatal Intensive Care Unit less likely to have breastfeeding initiated?
- How many more women would need to initiate or continue breastfeeding for North Lincolnshire to be in line with the England average?

Terminology and Measures Used

- What is Breastfeeding Initiation?
 - Breastfeeding is defined as being initiated if a baby receives any breastmilk in the period between birth and being discharged.
- What is Breastfeeding Continuation?
 - Breastfeeding continuation refers to whether a baby still receives any breast milk as part of their diet.
- Measures of Continuation:
 - Totally Breastfed: This refers to babies who are fed 100% breastmilk.
 - Totally or Partially Breastfed: This refers to all babies who receive either 100% breast milk or a mixture of formula and breast milk.
- What is an MSOA?
 - A Middle Layer Super Output Area (MSOA) is a geographical area, usually made up of between 4 and 6 Lower Layer Super Output Areas, with a population of between 5,000 and 15,000 people (ONS, 2021)

Our local Vision

Our breastfeeding vision in North Lincolnshire is summarised in the bullet points below:

- Northern Lincolnshire is a breastfeeding friendly area
- Breastfeeding is the first choice for women supported by their partners
- All women and their partners receive consistent information and advice regarding breastfeeding
- Women and their partners have the knowledge, skills and confidence to breastfeed
- Women are supported to initiate and continue to breastfeed their babies for as long as they wish
- Women feel empowered to breastfeed within their networks and communities

Our Aim is to:

To improve the health and wellbeing of mothers and their babies and reduce health inequalities by supporting more women to breastfeed for longer

Key Findings

- Breastfeeding rates for North Lincolnshire are statistically significantly lower than the England average for both breastfeeding at first feed and at 6-8 weeks.
- A significant drop off in breastfeeding can be observed at ten days with further reductions by 6-8 weeks after birth. This reduction was seen most significantly in babies who were totally breastfed, suggesting an incremental movement to combined/ formula feeding, with a high drop off in the first 10 days.
- Lower rates of breastfeeding initiation were observed in more densely populated urban areas of Scunthorpe.
- Maternal age, ethnicity and level of deprivation can all influence how likely a baby is to be breastfed at initiation.
 Higher rates of breastfeeding were associated with lower levels of deprivation and increased with increasing
 maternal age. Of the 6 most common ethnicities, in North Lincolnshire, British mothers were least likely to
 breastfeed at initiation.
- Mothers who are not smoking at the time of delivery are more likely to initiate breastfeeding.
- Across North Lincolnshire 115 more babies would have needed to have had breastfeeding initiated to be in line with the England average in 2018/19, with more than 240 additional babies needing to continue to be breastfed at 6-8 weeks in 2021/22.

Breastfeeding

The World Health Organisation and UNICEF recommend breastfeeding is initiated within the first hour of birth and that children are exclusively breastfed for the first 6 months of life and that from the age of 6 months, and for up to 2 years of age, children should continue to breastfeed alongside the introduction of solid foods.

Globally, 40% of infants under six months of age are exclusively breastfed (WHO, 2022). In the UK at the time of the last Infant feeding survey in 2010, around 1% of infants were still exclusively breastfed at 6 months, and 34% received some breastmilk.

The benefits of breastfeeding for the baby are indicated to include protection against some child infections, possible increases in intelligence, protection against malocclusion and probable reductions in overweight and diabetes (Victora et al., 2016).

For mothers breastfeeding, protection is provided against breast cancer, and it could also improve spacing between births through lactational amenorrhea (Chowdhury et al., 2015; Victora et al., 2016). There may also be some protection against ovarian cancer and type 2 diabetes (Victora et al., 2016).

Research conducted by UNICEF found that increasing breastfeeding rates would likely translate to cost reductions for the NHS through reduced hospital admissions with infections in babies, and from mothers with cancer (UNICEF, 2012).

Breastfeeding Data Caveats

Comprehensive national data on breastfeeding in England currently has gaps.

The Infant Feeding Survey, investigating feeding attitudes and practice was discontinued in 2010. Published data for national prevalence on feeding status at 10 days and 6 months are not otherwise currently available.

The initiation of breastfeeding metric changed definition after 2016/17 due to a shift to the Maternity Services Dataset at source. Data are currently published to 2018/19 and show a nationally lower prevalence compared to the previous definition, changes in the way the statistic is derived and data quality issues could explain some of these differences.

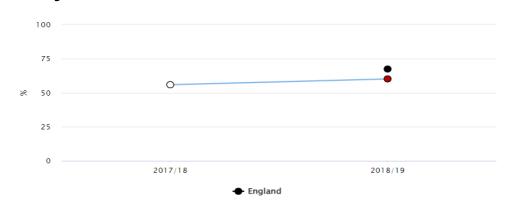
Prevalence data relating to breastfeeding at 6-8 weeks has patchy coverage across England, with many local authority areas not meeting validation criteria of 95% of babies with a feeding status in quarterly and annual data. This was the case for North Lincolnshire in 2021/22, who returned 94% of valid statuses for the cohort, and for this reason the value was not published.

Data presented in this document is a mixture of locally derived, from health visiting and maternity services, and where possible and available, published national annual data.

Source descriptions, and derivation methods where needed, are provided.

Headline Data – Baby's First Feed Breastmilk

Baby's First Feed Breastmilk, North Lincolnshire



Recent trend: Could not be calculated

		North Lincolnshire		Yorkshire and the	
Period		Count	Value	Humber	England
2017/18	0	835	55.9%	*	*
2018/19	•	950	60.1%	56.4%	67.4%

Source: Maternity Services Dataset (MSDS)

- The last available data reporting on a national level, for baby's first feed breastmilk (similar to initiation), is from **2018/19**.
- In 2018/19, the rate increased by 4.2 percentage points upon the previous year to 60.1%.

Baby's First Feed Breastmilk, 2018/19

Area ▲▼	Value ▲ ▼
England	67.4
Yorkshire and the Humber region	56.4
York	76.0
Sheffield	71.7 H
North Yorkshire	71.2 H
Calderdale	64.6
East Riding of Yorkshire	64.5
Doncaster	62.9 ⊢
North Lincolnshire	60.1
Rotherham	59.6 ⊢
Bradford	59.3
Kirklees	59.2 H
North East Lincolnshire	52.0 ⊢⊣
Kingston upon Hull	51.8
Wakefield	49.2
Barnsley	47.4
Leeds	*

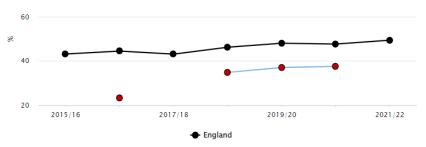
Source: Maternity Services Dataset (MSDS)

- North Lincolnshire ranked statistically significantly lower than the England average.
- In the Yorkshire and Humber region, North Lincolnshire ranked 7th overall.

(OHID, 2022)

Headline Data – Breastfeeding Prevalence at 6-8 Weeks After Birth

Breastfeeding Prevalence at 6-8 Weeks, North Lincolnshire Trend



Recent trend: Could not be calculated

Period	North	Lincolnshire	Yorkshire and the	England
	Count	Value	Humber	
2015/16		421 *	*	43.2%*
2016/17	•	413	23.4% *	44.4%*
2017/18		504 *	*	43.1%*
2018/19	•	577	34.8% *	46.2%*
2019/20	•	593	37.0% *	48.0%*
2020/21	•	583	37.6% *	47.6%*
2021/22		586 *	*	49.3%

Source: OHID's (formerly PHE) interim reporting of health visiting metrics

- North Lincolnshire has remained statistically significantly lower than the **England average** for breastfeeding prevalence at 6-8 weeks over the last 7 years, where data has been available.
- In the year **2021/22**, the proportion of known statuses for North Lincolnshire was below the validation threshold of 95%.

Breastfeeding Prevalence at 6-8 Weeks, in the Yorkshire and Humber Region, 2020/21

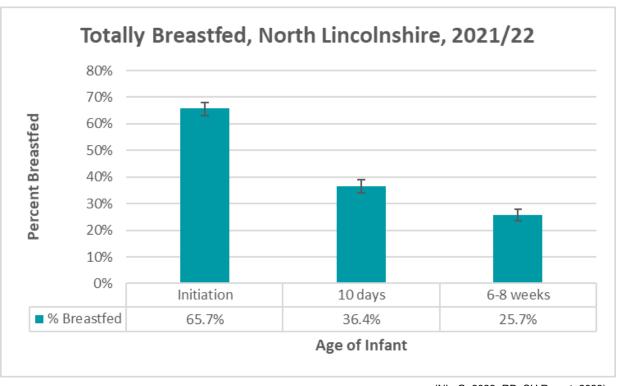
Area ▲ ▼	Value ▲ ▼		
England	47.6*		
Yorkshire and the Humber region	*		
North Yorkshire	50.3	H	
East Riding of Yorkshire	45.3	H	
Bradford	42.6	Н	
North Lincolnshire	37.6	H	
Kingston upon Hull	34.8	H	
Rotherham	34.2	H	
Doncaster	33.5	Н	
Barnsley	33.3	H	
North East Lincolnshire	28.7	— —	
Calderdale	*		
Kirklees	*		
Leeds	*		
Sheffield	*		
Wakefield	*		
York	*		

Source: PHE's interim reporting of health visiting metrics

In the year 2020/21, **North Lincolnshire** was ranked 4th highest in the Yorkshire and Humber region, out of the 9 local authorities with available data in the region. Six local authority areas did not meet the validation threshold. (OHID, 2022)

Drop-off – Totally Breastfed Babies, 2021/22

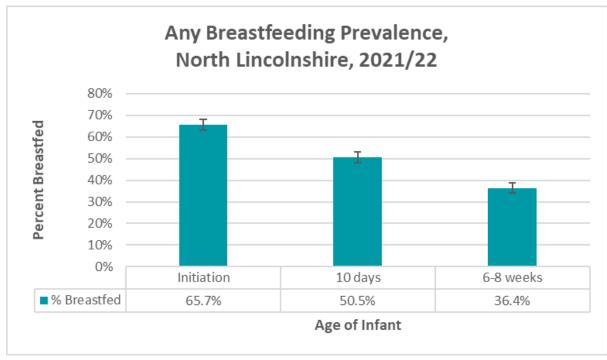
- A **significant drop off** in babies totally breastfed is observed at 10 days, with a further reduction at 6-8 weeks.
- A decrease of 40 percentage points was seen in **North Lincolnshire** from initiation to **6-8 weeks**. with a decrease of almost 30 percentage points occurring by 10 days.



(NLaG, 2022, RDaSH Report, 2022)

(Initiation data is binary Yes/No for breastfeeding, same data is used as initial start point for both total and partial breastfeeding.)

Drop-off – Any Breastfeeding Prevalence, 2021/22



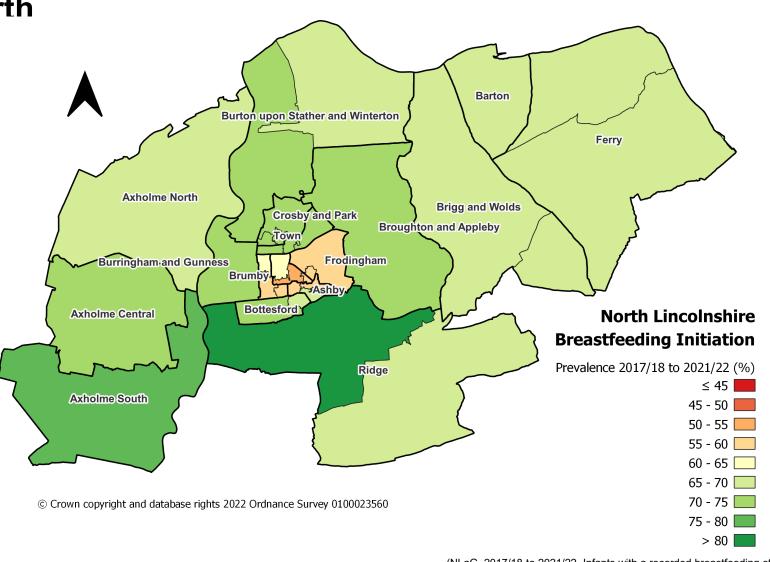
(NLaG, 2022, RDaSH Report, 2022)

- While a **drop off** in any breastfeeding prevalence remains evident between initiation, 10 days and 6-8 weeks, it is not as significant as the drop off seen in babies totally breastfed.
- Breastfeeding prevalence dropped by 29.3 percentage points between initiation and 6-8 weeks. By 10 days, a drop of 15.2 percentage points was seen.
- It can be estimated just over half of all babies for whom breastfeeding was initiated, continued to receive some breastmilk by 6-8 weeks in North Lincolnshire in 2021/22*

*(on overall percentage prevalence basis, as individual outcomes are not tracked In 2021/22, North Lincolnshire did not meet the 95% data validation threshold for continuation at 6-8 weeks, returning 94% of valid statuses for the cohort. For this reason, the figure was not published but we have used the figures as shown above)

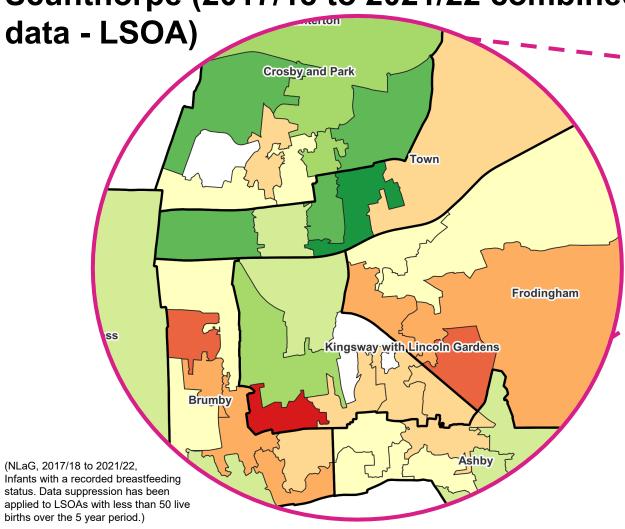
Breastfeeding Initiation in North Lincolnshire (2017/18 to 2021 combined data - MSOA)

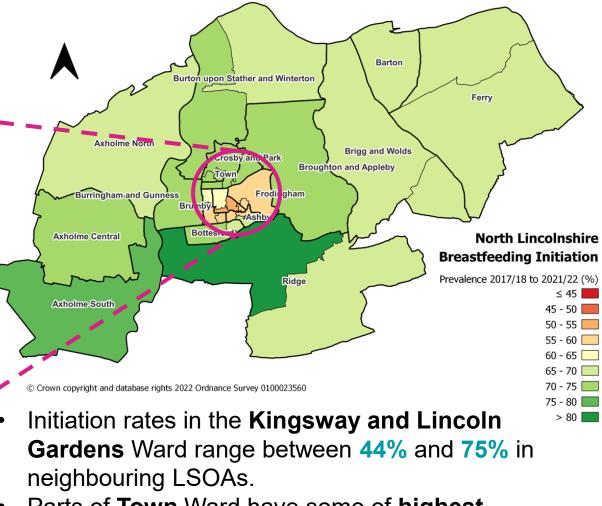
- The map shows the prevalence of breastfeeding initiation, in North Lincolnshire over the last 5 years by MSOA.
- Rural areas appear to experience higher levels of breastfeeding initiation compared to central Scunthorpe.
- Prevalence ranges between 83% in parts of Ridge Ward and 51% in areas within Kingsway with Lincoln Gardens Ward.



(NLaG, 2017/18 to 2021/22, Infants with a recorded breastfeeding status)

Breastfeeding Initiation in Central Scunthorpe (2017/18 to 2021/22 combined





 Parts of Town Ward have some of highest breastfeeding initiation rates in North Lincolnshire with 81% of babies having breastfeeding initiated.

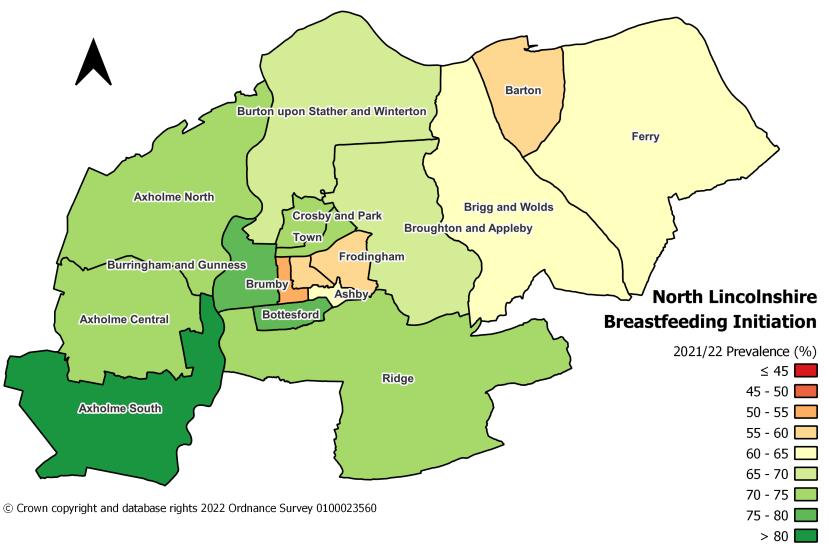
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Breastfeeding Initiation by North

Lincolnshire Ward 2021/22

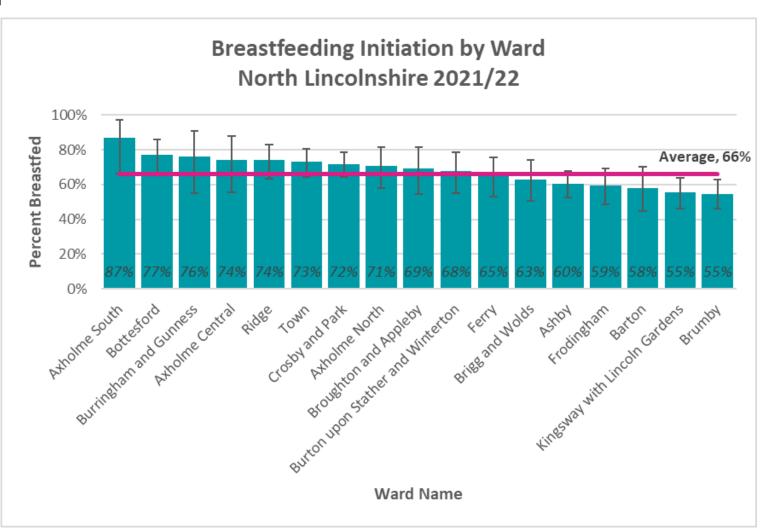
 Brumby Ward had the lowest level of breastfeeding initiation in 2021/22 with 55% of babies breastfed.

 Axholme South Ward had the highest rate with 87% of babies breastfed.



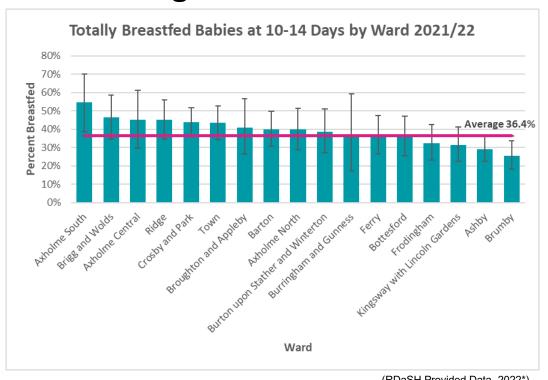
Breastfeeding Initiation by Ward

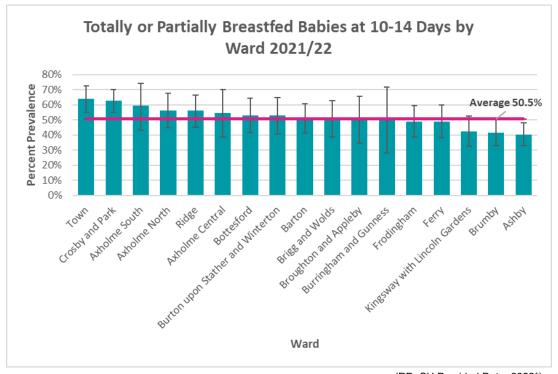
- In 2021/22 breastfeeding initiation prevalence, in North Lincolnshire wards, had a range of 32 percentage points between the wards with highest and lowest rates.
- Axholme South ward had the highest prevalence with 87% of babies breastfed at birth.
- Kingsway with Lincoln Gardens ward and Brumby ward had the lowest prevalence just 55% of babies breastfed at birth.
- On average 66% of babies were breastfed at birth in North Lincolnshire.



(NLaG, 2021/22)

Breastfeeding Continuation at 10-14 Days by Ward





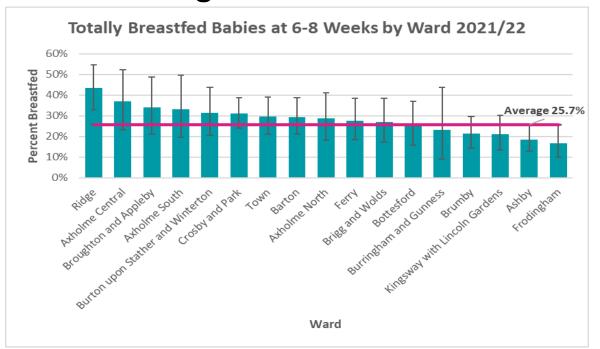
(RDaSH Provided Data, 2022*)

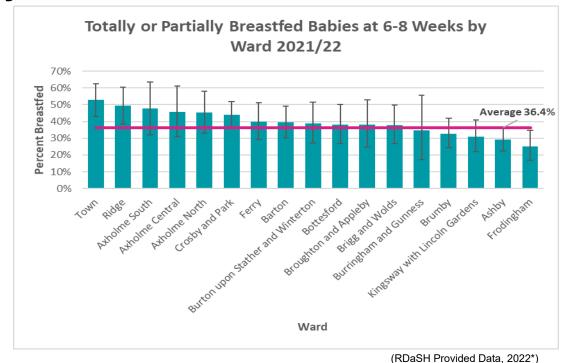
(RDaSH Provided Data, 2022*)

- **Axholme South Ward** had the **highest** prevalence (55%) of babies who were totally breastfed at 10-14 days with Town (64%) and Crosby and Park (63%) Wards having the highest rates regarding totally or partially breastfed babies.
- Breastfeeding continuation at 10-14 days was lowest in Kingsway with Lincoln Gardens, Ashby and **Brumby** Wards for both totally breastfed babies and totally or partially breastfed.

* Annual data so totals may vary, as not the same cohort across all measurements.

Breastfeeding Continuation at 6-8 Weeks by Ward





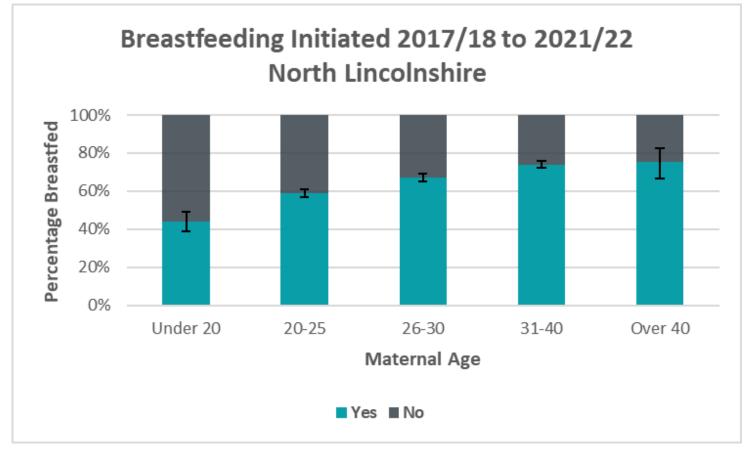
(RDaSH Provided Data, 2022*)

Ridge Ward has the highest rate of babies (44%) who are totally breastfed and the second highest (49%) who are totally or partially breastfed. Town Ward has the highest rate for totally or partially breastfed with 53% of babies receiving some breast milk.

Kingsway with Lincoln Gardens, Ashby and Brumby Wards continue to have some of the lowest breastfeeding continuation rates. Frodingham has the lowest rate with 17% of babies totally breastfeed and 25% totally or partially continuing with breastfeeding at 6-8 weeks.

^{*} Annual data so totals may vary, as not the same cohort across all measurements.

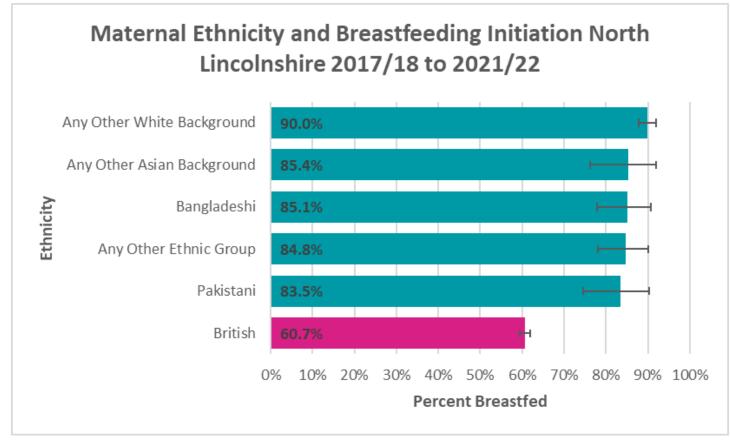
Maternal Age and Breastfeeding



(NLaG, 2017/18 to 2021/22, Infants with a recorded breastfeeding status)

- Data over the last 5 years demonstrates a positive correlation between increasing maternal age and increasing rates of breastfeeding initiation.
- Mothers aged under 20 were least likely to initiate breastfeeding with a prevalence of just 44%.
- Meanwhile, 75% of mothers aged over 40 initiated breastfeeding, the highest prevalence over all age categories.

Impact of Ethnicity

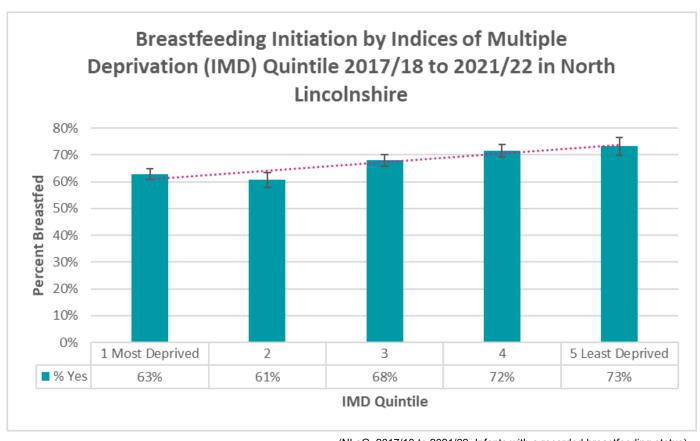


(NLaG, 2017/18 to 2021/22, Infants with a recorded breastfeeding status – Ethnic groups with 50 or more infants delivered in 5 year period)

- A range of 29.3 percentage points
 difference in prevalence of breastfeeding
 initiation was found across the 6 most
 common maternal ethnicities, in North
 Lincolnshire, over the last 5 years.
- Babies of mothers who identified as being of British ethnicity had the lowest rates of breastfeeding initiation, just 60.7%.
- In contrast, babies born to mothers who identified as being of Any Other White Background were significantly more likely to have breastfeeding initiated, with 90% of babies being breastfed over the last 5 years.

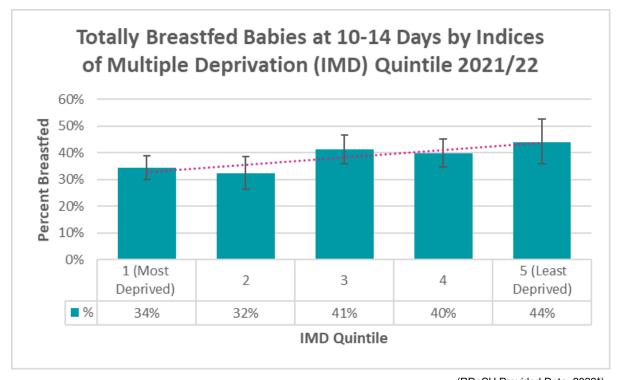
Breastfeeding Initiation and Deprivation

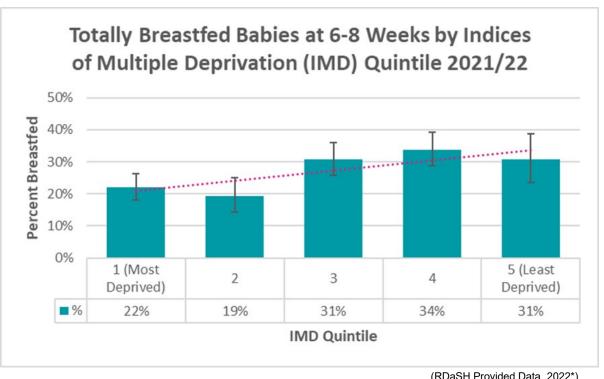
- Babies born to mothers living in higher levels of deprivation are less likely to have breastfeeding initiated.
- Just 63% of babies born in the **most** deprived quintile had breastfeeding initiated.
- This compares to 73% of babies born in the least deprived quintile, who had breastfeeding initiated.



(NLaG, 2017/18 to 2021/22, Infants with a recorded breastfeeding status)

Deprivation and Continuation of Exclusive Breastfeeding





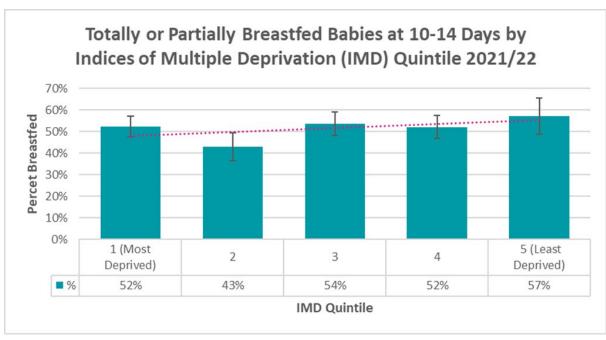
(RDaSH Provided Data, 2022*)

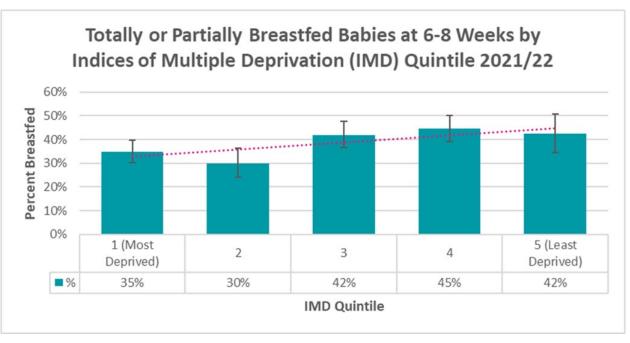
(RDaSH Provided Data, 2022*)

Deprivation level appears to continue to have an impact upon breastfeeding continuation rates with there being around 10 percentage points difference between babies, who are exclusively breastfed, living in some of the most and least deprived areas of North Lincolnshire at 10-14 days and 6-8 weeks.

^{*} Annual data so totals may vary, as not the same cohort across all measurements.

Deprivation and Any Prevalence of Breastfeeding Continuation





(RDaSH Provided Data, 2022*)

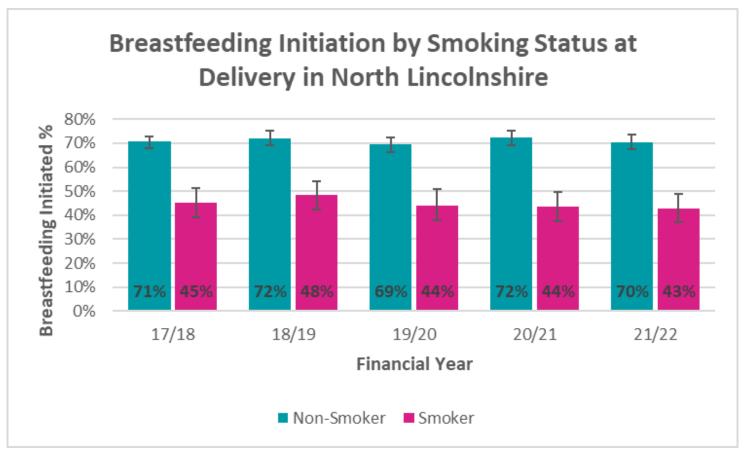
(RDaSH Provided Data, 2022*)

- Whilst a correlation between total or partial continuation of breastfeeding and deprivation level remains existent at both 10-14 days and 6-8 weeks, **the largest difference exists** between the **2nd and 4th most deprived** quintiles at 6-8 weeks.
- As seen with the initiation rates, other factors including maternal age and ethnicity also influence breastfeeding which may explain the **reduction in rates** between the **most deprived and 2nd most deprived** quintiles.

^{*} Annual data so totals may vary, as not the same cohort across all measurements.

Smoking Status at Time of Delivery

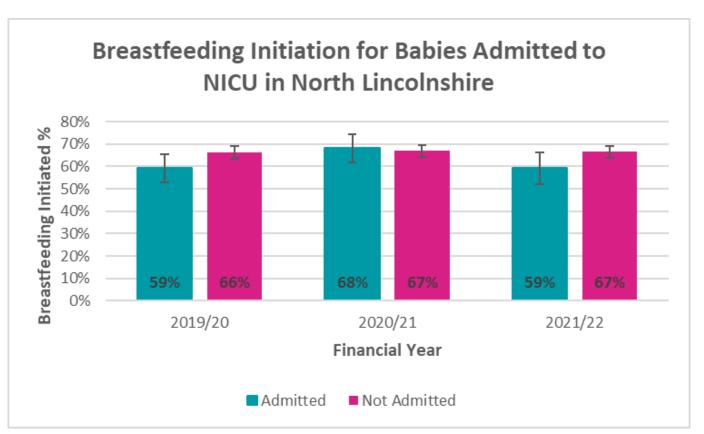
- Mothers who were **not-smoking** at the time of delivery are **more likely** to initiate breastfeeding.
- 7 in 10 mothers who were not smoking at the time of delivery initiated breastfeeding.
- Less than half of babies born to mother who smoked at the time of delivery had breastfeeding initiated.
- Figures have remained similar over the last **5 years** suggesting that this is a common pattern.



(NLaG, 2017/18 to 2021/22, Infants with a recorded breastfeeding status)

Admission and Transfer to the Neonatal Intensive Care Unit (NICU)

 Over the last 3 years there was no statistically significant difference, in the breastfeeding initiation rates, between infants who were admitted to NICU and those who were not.



(NLaG, 2019/20 to 2021/22, All infants)

Reaching the England Average – Initiation

How many more women would need to initiate breastfeeding to be in line with the England Average in 2018/19?

England Average: 67.4%

North Lincolnshire Average: 60.1%

115 more infants would have needed to have been breastfed at birth, to reach the England Average.

Using 'baby's first feed breastmilk' indicator which is closest analogue to initiation methodology.

Reaching the England Average – 6-8 Weeks

How many more women would need to continue totally or partially breastfeeding at 6 to 8 weeks to be in line with the England Average in 2021/22?*

England Average: 54.7%

North Lincolnshire Average: 38.7%

242 more infants would have need to continue being at least partially breastfed, at 6 to 8 weeks, to reach the England average.

^{*} Infants whose breastfeeding status was known and were totally or partially breastfed according to OHID (2022) provisional data.

Examples illustrating what are we doing to encourage more women to breastfeed

UNICEF Baby Friendly Accreditation (BFI) at Stage 3: Ensures all staff who support pregnant and breastfeeding women have the knowledge and skills to support them through training and continuous audit. Mums are also audited to understand their experiences of services. Services are assessed by UNICEF BFI Officers and accreditation is only achieved when all the standards have been reached.

UNICEF BFI Sustainability Award: Services are working towards the sustainability award which focusses on leadership, culture, monitoring and progression in relationship to promoting and supporting breastfeeding. There is a locally developed action plan.

Development of a Northern Lincolnshire Breastfeeding Strategy: Work has been carried out to develop a Northern Lincolnshire Breastfeeding Strategy. See embedded plan on a page:

Examples illustrating what are we doing to encourage more women to breastfeed

Baby Feeding Team

Deliver antenatal workshops to expectant parents around infant feeding. Provide support to all breastfeeding women on ward 26 and in the community. The staff are highly trained and as they have all been breastfeeding mums themselves they can provide peer support and spend time unpicking problems and developing solutions for any mum who is struggling with her breastfeeding journey.

Volunteer Breastfeeding Peer Supporters

Volunteer Breastfeeding Peer Supporters run breastfeeding cafes across North Lincolnshire where mums can meet, share stories, receive support with any issues related to feeding, gain confidence feeding whilst out and about. The volunteers attend a 6-week training programme to give them the knowledge and skills to run groups and support breastfeeding women. There are currently five groups running in Barton Children's Centre, Ashby Children's Centre, Scunthorpe Library, Café Natura (seasonal) The Arc in Westcliff and a further one planned for the end of January at Crosby Collaborative Coffee Shop.

Examples illustrating what are we doing to encourage more women to breastfeed

Breastfeeding Welcome Here Scheme

North Lincolnshire has had a Breastfeeding Welcome Here scheme since 2012. It is a directory of venues who are happy to welcome and support breastfeeding women into their premises. The directory has been updated during 2022 and there are currently 56 venues who have signed up. During this time one of the units in the market has also been designated as a feeding are for any mums who need to feed their babies whilst they are in town.

Family Hubs

One of the funded streams in the Family Hubs initiative is to increase the breastfeeding rates. Public Health have developed the delivery plan for this element of the Family Hubs and it aligns with the vision for breastfeeding in North Lincolnshire.

Data sources:

Middle Super Output Area population estimates (supporting information) - Office for National Statistics (ons.gov.uk) Mid-2020 edition (release data 16/09/21)

Breastfeeding (who.int) (accessed 23/08/2022)

<u>Infant feeding survey 2010 – HSCIC</u> (accessed 23/08/2022)

Breastfeeding and maternal health outcomes: a systematic review and meta-analysis, R. Chowdhury et al, Acta Paediatrica, Volume 104, Issue S467, P.96-113, July 14, 2015.

Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect, C. Victora et al, LANCET, <u>Volume 387</u>, <u>Issue 10017</u>, P475-490, January 30, 2016.

Preventing disease and saving resources: the potential contribution of increasing breastfeeding rates in the UK (unicef.org.uk) (accessed 23/08/2022)

Public Health Outcomes Framework - Data - OHID (phe.org.uk) baby's first feed breastmilk (accessed 06/09/2022)

Public Health Outcomes Framework - Data - OHID (phe.org.uk) breastfeeding at 6-8 week (current method) (accessed 06/09/2022)