# Breastfeeding on the island of Ireland







# Acknowledgements

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# **Key Points**

- Breastfeeding can make a significant contribution to population health by improving health outcomes for both mother and child.
- Breastfeeding rates in the Republic of Ireland and Northern Ireland have increased slowly over the last ten years. Northern Ireland has the lowest rate of breastfeeding within the UK.
- Breastfeeding rates in Northern Ireland are lower than those of the Republic of Ireland and the gap has increased over time.
- In 2015, the National Perinatal Reporting System recorded that 58% of babies in the Republic of Ireland were receiving any breastmilk on discharge from hospital. The Health Service Executive recorded that 35% of babies were receiving some breastmilk at three months.
- In 2015/16, the Northern Ireland Child Health System recorded that 46% of babies were receiving any breastmilk on discharge from hospital. 21% of babies were receiving some breastmilk at three months.
- Younger mothers and those living with socio-economic disadvantage were less likely to breastfeed in both jurisdictions. Older mothers and those in the highest socio-economic groups are the most likely to initiate breastfeeding and to continue with it.
- Data from Northern Ireland suggests that public attitudes and perceptions relating to breastfeeding are improving. Creating a supportive breastfeeding environment across the island is a shared challenge and forms the focus of strategies/action plans in both jurisdictions.

# Overview

This report presents a summary of strategies and current data on breastfeeding across the island of Ireland. The report also presents an overview of evidence on the contribution of breastfeeding to population health and on effective measures to support and enable breastfeeding.

This report presents information in four sections:

Section 1.	Evidence on the impact of breastfeeding on population health
Section 2.	Evidence on how breastfeeding can be best supported and enabled
Section 3.	Breastfeeding strategies on the island of Ireland
Section 4.	Data on breastfeeding on the island of Ireland

Within section 4, data are presented on starting to breastfeed and breastfeeding prevalence across the first year of life from nationally representative surveys and administrative datasets in both jurisdictions. In addition, data are presented on attitudes, perceptions and experiences relating to breastfeeding in both jurisdictions.

# Key Findings

#### Breastfeeding and population health

- Breastfeeding can make a significant contribution to population health by improving health outcomes for both mother and child.
- Further evidence is needed on how to best promote, support and enable breastfeeding across the island of Ireland. Evidence suggests a suite of measures to is required which includes access to timely and knowledgeable support within the healthcare system, training of health professionals, social mobilisation, mass media, legislation, policy, monitoring and enforcement, mother to mother support, counselling and specialist breastfeeding support.

#### Strategy /Action Plan and targets

- Both the Republic of Ireland and Northern Ireland have published breastfeeding strategies/action plans in the last five years. The significant public health contribution of breastfeeding is also recognised across related policy domains such as maternity, child health and healthy weight strategy.
- In the Republic of Ireland, the target is to improve breastfeeding duration rates by 2% per year between 2016 and 2021 for both exclusive and non-exclusive breastfeeding. The Health Service Executive has also set a target for 38% of all babies to be breastfeed at three months of age, increasing by 2% per year.
- In Northern Ireland, the target is for 70% of babies to be receiving breastmilk one week after birth and for 40% of babies to be breastfeeding at six months by 2025.

#### Data

- There are significant differences in data recorded on breastfeeding both within and between jurisdictions on the island. This limits meaningful comparison.
- In the Republic of Ireland, starting to breastfeed is measured based on data from the National Perinatal Reporting System which records whether the mother is breastfeeding on discharge from hospital.
- In Northern Ireland, there are two ways in which starting to breastfeed is measured. The Northern Ireland Maternity System (NIMATS) records if breastfeeding was attempted (breastfeeding is considered to have been 'attempted' if the baby has been put to the breast or received mother's breastmilk) and breastfeeding on discharge from hospital is recorded on the Child Health System.
- Breastfeeding data in the Republic of Ireland are not directly comparable with data collected through NIMATS.
- Measuring breastfeeding prevalence/duration across the first year of life is challenging

# in both jurisdictions due to issues of coverage and continuity in the information systems.

#### Starting to breastfeed

- In 2015, 58% of babies in the Republic of Ireland were receiving any breastmilk on discharge from hospital. 48% were breastfeeding exclusively and 10% were receiving both breastmilk and infant formula.
- In 2015, NIMATS reported that 57% of mothers attempted breastfeeding.
- > Northern Ireland has the lowest rate of breastfeeding within the United Kingdom.
- In 2015/16, 46% of babies in Northern Ireland were receiving any breastmilk on discharge from hospital. 38% were breastfeeding exclusively and 8% were receiving both breastmilk and infant formula.
- Rates of breastfeeding on discharge from hospital have increased in both jurisdictions in the last decade. The absolute level and the rate of change in Northern Ireland are lower than the Republic of Ireland. Between 2006 and 2015, rates increased from 40 to 45% in Northern Ireland and from 49 to 58% in the Republic of Ireland.
- The youngest mothers and those in lower socio-economic groups were least likely to be breastfeeding on discharge from hospital in both jurisdictions. In the Republic of Ireland, 'higher professional' mothers were more than twice as likely to exclusively breastfeed as 'unemployed mothers'. In Northern Ireland, any breastfeeding on discharge was twice as common among mothers living in the least deprived areas when compared to the most deprived areas.
- In the Republic of Ireland, Irish mothers were the least likely of all nationalities to start breastfeeding on discharge from hospital, and in Northern Ireland, mothers of 'White' ethnicity were less likely to breastfeed than mothers from other ethnic backgrounds.

#### Prevalence of breastfeeding across the first year of life

- In both jurisdictions, there was a steep decline in breastfeeding in the early weeks after birth. However, due to differences in the information systems, it was not possible to directly compare breastfeeding prevalence patterns across the island.
- Survey data on babies born in the Republic of Ireland in 2008 found that among babies who were ever breastfed, one in two were still receiving breastmilk at three months and around one in four at six months.
- The Health Service Executive recorded that 35% of all babies were receiving some breastmilk at the three month nurse visit in 2015.
- For babies born in Northern Ireland in 2014/15, 45% were breastfeeding on discharge from hospital, 35% at the first Health Visitor visit (10-14 days), 27% at six weeks, 21% at three months, 13% at six months and 7% at 12 months.

#### Attitudes, perceptions and experiences

- In the Republic of Ireland, the main reasons given for not breastfeeding included preference for formula feeding, inconvenience/ fatigue, difficulty with breastfeeding technique, did not want to breastfeed and, embarrassment/ negative societal attitudes towards breastfeeding.
- In Northern Ireland, the main reasons given for planning to use infant formula included having previously used formula, did not like the idea of breastfeeding, formula feeding fitted with their lifestyle, other people can feed the baby and put off by personal/others experience of breastfeeding.
- Breastfeeding mothers in Northern Ireland (42%) were the least likely to have breastfed their baby in public compared to mothers from Scotland (60%), England (59%) and Wales (52%).
- Survey data on attitudes and perceptions of breastfeeding are a feature of the information available on breastfeeding in Northern Ireland. Data are available on both

adult and child populations.

- Attitudes and perceptions towards breastfeeding have been improving in adults, particularly among males in Northern Ireland. Between 2012/13 and 2014/15 there was an increase from 58% to 69% of men supporting the view that there should be 'a law in Northern Ireland to protect women who want to breastfeed in public'.
- Most school-children in Northern Ireland aged 11-16 years were unable to identify exclusive breastfeeding as the healthiest way to feed a three month old baby.

#### 1. Evidence on the impact of breastfeeding on population health

"Infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. Thereafter, to meet their evolving nutritional requirements, infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond."

## (WHO and UNICEF, 2003)

Breastfeeding is the biologically natural way to provide infants with appropriate nutrition and weight gain as well as support child health and development. Breastfeeding plays a further important role in protecting infants from a number of communicable and noncommunicable diseases. In 2016, *The Lancet* published a series offering a recent and robust review of evidence available on breastfeeding. Victora et al (2016) estimate that, globally, 22,216 lives per year would be saved by increasing breastfeeding prevalence from present levels to 12 months per child in high income countries, and to two years per child in low and middle income countries. Furthermore, 20,000 deaths from breast cancer each year could be prevented by scaling up breastfeeding to near universal levels globally (**Table 1**).

CHILDREN				
Evidence supports the role of breastfeeding in	<ul> <li>reducing the risk of otitis media (ear infection)</li> <li>reducing the risk of diarrhoea</li> <li>reducing the risk of respiratory infections</li> <li>possibly protecting against allergic rhinitis</li> <li>lowering the risk of Sudden Infant Death Syndrome mortality</li> <li>possible increases in measured intelligence</li> <li>reducing the subsequent risk of childhood overweight</li> <li>increasing the risk of tooth decay<sup>1</sup></li> </ul>			
Evidence unclear/ does not support the role of breastfeeding in	<ul> <li>protecting against allergic disorders</li> <li>protecting against eczema</li> <li>protecting against food allergies</li> </ul>			
NURSING MOTHERS				
Evidence supports the role of breastfeeding in	<ul> <li>reducing the risk of breast cancer</li> <li>reducing the risk of ovarian cancer</li> <li>reducing the risk of type 2 diabetes</li> </ul>			
Evidence unclear/ does not support the role of breastfeeding in	<ul> <li>protecting against osteoporosis</li> <li>protecting against eczema</li> <li>regulating blood pressure</li> <li>regulating cholesterol levels</li> </ul>			

## Table 1: Evidence on population health outcomes supported by breastfeeding

Source: Adapted from Victora et al, 2016

<sup>&</sup>lt;sup>1</sup> Breastfeeding was associated with an increase in tooth decay in children breastfed for more than 12 months. This can be circumvented through improved oral health practices (Victora et al, 2016).

### 2. Evidence on how breastfeeding can be best supported and enabled

Rollins et al (2016) highlight that the promotion of breastfeeding is a collective societal responsibility, and devised a conceptual model outlining the components of an enabling environment for breastfeeding. The determinants occur at the structural, settings, and individual levels while interventions are required through several parallel channels. Such interventions include social mobilisation and mass media; legislation, policy, financing, monitoring and enforcement; counselling, support and lactation management. Interventions have the greatest positive impact on breastfeeding outcomes when they are delivered in combination.

Rollins et al (2016) propose six actions to protect, promote and support breastfeeding:

- Disseminate the evidence ensure that the value of breastfeeding is recognised
- Foster positive societal attitudes towards breastfeeding
- Show political will recognise that breastfeeding can save lives and money
- Regulate the breastmilk substitute industry properly implement the International Code of Marketing of Breastmilk Substitutes (WHO, 1981)
- Scale up and monitor breastfeeding interventions and trends in breastfeeding practices
- Allow institutions to exercise their authority and remove structural and societal barriers that hinder women's ability to breastfeed.

A recent review by the Health Research Board (Sutton et al, 2016) stated that there was consistent evidence that high intensity education, counselling and support programmes have the potential to improve breastfeeding rates, echoing findings from McAvoy et al (2014). A Cochrane Review (Balogun et al, 2016) considered interventions for promoting the initiation of breastfeeding. This review found that healthcare professional-led breastfeeding education and non-healthcare professional-led counselling and peer support interventions can result in increases in the number of women initiating breastfeeding. However, as the majority of trials were completed in the United States among specific groups, the generalisability of these findings to other settings may be limited, while the evidence available to the reviewers overall was considered low quality. A Cochrane Review (McFadden et al, 2017) concluded that the characteristic of effective breastfeeding support include: support that is offered as standard by trained personnel during antenatal and postnatal care; ongoing scheduled visits; and support that is tailored to the needs of the population group. McFadden and colleagues indicate support may be offered either by professional or lay peer supporters or a combination of both. The review concluded that face-to-face support was more effective for mothers exclusively breastfeeding.

Similarly, the National Institute for Health and Care Excellence (NICE) guidance on maternal and child nutrition recommends that commissioners and managers of maternity and children's services should adopt a multifaceted approach/ coordinated programme of interventions across different settings to increase breastfeeding rates. NICE recommends that this should include training for health professionals, implementation of breastfeeding peer-support programmes as well as joint working between health professionals and peer supporters. NICE guidance also highlights the need for education and information for pregnant women followed by proactive support in the postnatal period (NICE, 2014).

# 3. Breastfeeding strategies/action plans on the island of Ireland

# Republic of Ireland

*Breastfeeding in a Healthy Ireland* (Health Service Executive, 2017) is the current national action plan guiding the development of policy, practice and research on breastfeeding in Ireland. It has an overall target to improve exclusive and non-exclusive breastfeeding duration rates by 2% per annum up to 2021, and for all hospital groups and community healthcare organisations to implement standardised breastfeeding policies. These targets are to be achieved through investment in resources, personnel, training and governance structures.

This will include:

- implementing national standards for better healthcare and better maternity care;
- appropriate levels of provision of lactation consultants within hospitals and communities and referral pathways to access these services; and
- provision of breast pumps for women separated from their newborns due to hospitalisation.

In response to the recommendations of the *Review and Evaluation of Breastfeeding in Ireland – A Five Year Strategic Action Plan* (McAvoy, 2014) the new action plan committed to establishing an interagency group to address cultural barriers to breastfeeding in Ireland.

The Republic of Ireland's first national maternity strategy *Creating a better future together National Maternity Strategy 2016-2026* (Department of Health, 2016a), reflecting the focus placed on breastfeeding during the consultation process (Keilthy et al, 2015), recognises the the need for better breastfeeding support in the community and hospital. It also recognises the important role of maternity and related health services in promoting a supportive culture for breastfeeding and states its intention to provide both more and better quality breastfeeding support.

In addition to policies that directly relate to maternal and newborn care. the importance of breastfeeding is acknowledged in the Republic of Ireland's national policy framework for children and young people *Better* Outcomes, Brighter Futures (Department of Children and Youth Affairs, 2014) and also the obesity policy and action plan, A Healthy Weight for Ireland (Department of Health, 2016b). As part of the latter, the Department of Health and the Health Service Executive are charged with implementing and monitoring the forthcoming breastfeeding action plan, recognising that implementation



Source: Breastfeeding in a Healthy Ireland: Health Service Breastfeeding Action Plan 2016-2021 (Health Service Executive, 2017)

requires staff resource investments in acute and primary care settings in addition to enhanced training, provision of supports to mothers and social marketing. *A Healthy Weight for Ireland* also notes the duty of the Health Service Executive and the Food Safety Authority of Ireland to monitor compliance with the International Code of Marketing of Breast-milk Substitutes and its subsequent resolutions (WHO, 1981). The most recent nutritional guidelines in the Republic of Ireland offer guidance from age five onwards (Health Service Executive, 2016a). *A Healthy Weight for Ireland* commits to developing healthy eating guidelines for children age one to five over the period 2016-2017. *Breastfeeding in Ireland - A Five Year Strategic Action Plan* (Department of Health and Children, 2005) was the previous policy on the promotion, support and protection of breastfeeding in the Republic of Ireland. Responsibility for overseeing its implementation lay with the Health Service Executive and was overseen through a National Breastfeeding Coordinator and a National Breastfeeding Strategy Implementation Committee. The 2005 Strategic Action Plan set out five overarching goals, 18 objectives and 44 actions to provide for more effective promotion, support and protection of breastfeeding within the health services and at a wider societal level. The Institute of Public Health in Ireland (IPH) completed an evaluation of this Strategic Action Plan in 2014 (McAvoy et al, 2014). This evaluation informed the Health Service Executive's current breastfeeding action plan.

# Northern Ireland

*Breastfeeding – A Great Start – A Strategy for Northern Ireland 2013-2023* (DHSSPS, 2013) aims to ensure that by 2025, 70% of all infants are breastfed at one week after birth and 40% of all infants are breastfed at six months. This strategy outlines four outcomes and 20 strategic actions underpinning these targets.

The four strategy outcomes include ensuring:

- supportive environments for breastfeeding in Northern Ireland;
- health and social care has the necessary knowledge, skills and leadership to protect, promote, support and normalise breastfeeding;
- that high quality information systems are in place that underpin the development of policy and programmes which support delivery of the strategy; and
- an informed and supportive public.

Breastfeeding is recognised in related policy domains in Northern Ireland. *Making Life Better - a whole system strategic framework for public health* (DHSSPS, 2014a) and *A Fitter Future for All: Framework for Preventing and Addressing Overweight and Obesity in Northern Ireland* (DHSSPS, 2012a) both commit to implementing *Breastfeeding – A Great Start* (DHSSPS, 2013). *Making Life Better* also commits to support women who are least likely to breastfeed. It states that it will develop and implement strategies, action plans and targeted programmes to increase breastfeeding rates and it will consider legislation to protect women who breastfeed in public in Northern Ireland. In January 2017, Northern Ireland's Health Minister announced plans to introduce legislation to protect mothers who wish to breastfeed in public places (Department of Health, 2017), which would be broadly similar to legislation currently in place in the Republic of Ireland. A Strategy for Maternity Care in Northern Ireland 2012 - 2018 (DHSSPS, 2012b) places an emphasis on the promotion of breastfeeding; and recognises the need to do this in the antenatal period through education, at the hospital during postnatal care, and at home through the community midwife.

The World Breastfeeding Trends Initiative (WBTI) produced 2016 Report Cards for each of the UK jurisdictions. Across the UK, Northern Ireland scored highest on the indicators relating to



Source: Breastfeeding – A Great Start – A Strategy for Northern Ireland (DHSSPS, 2013)

breastfeeding policies and programmes and were one of the top two UK countries in relation to the overall WBTI score (World Breastfeeding Trends Initiative, 2016).

### 4. Data on breastfeeding on the island of Ireland

There are multiple sources of data on breastfeeding across the island.

In the Republic of Ireland, the first nationally representative data available on breastfeeding occurs at the point of discharge from hospital. Data are recorded using the National Perinatal Reporting System (NPRS) and published annually (Healthcare Pricing Office, 2017). Data on breastfeeding prevalence across the first year of life are recorded by the Health Service Executive as captured by public health nurse visits in the first week after birth and at three months. The Growing Up in Ireland study provided survey data on breastfeeding prevalence in the first nine months of life for infants born in 2008.

A new information system (Maternal and Neonatal Clinical Management System) is being piloted in two maternity hospitals. This will record whether a first breastfeed ever occurred.

In Northern Ireland, there are two measures of breastfeeding initiation. The Northern Ireland Maternity System (NIMATS) records if breastfeeding was attempted<sup>2</sup> (Public Health Agency, 2016). Breastfeeding on discharge from hospital is recorded on the Northern Ireland Child Health System (CHS) which is also used to record infant feeding status at time points during the first year of the child's life (Public Health Agency, 2017).

**Tables 2** and **3** present a summary of the main data sources used in this report onbreastfeeding initiation and prevalence across the island of Ireland.

Data source	Year	Variable	Definition of breastfeeding	
National Perinatal Reporting System	2015	Feeding on discharge as recorded by clinical staff	Exclusive breastfeeding Any breastfeeding includes either breast or combined on discharge from hospital.	
Childhood Obesity Surveillance Initiative	2012 (Infants born around 2005)	Ever breastfed by maternal self-report (retrospective for first nine months with longitudinal data available after nine months)	Parents of children in first class were asked: Was your child ever breastfed (Options: Yes / No) If Yes, for long was your child breastfed: (Options: Less than 1 month; About 1, 2, 3, 4, 5 or 6 months; More than 6 months)	
Growing Up in Ireland	2015 (Infants born in 2008)	Ever breastfed by maternal self-report (retrospective)	Exclusive breastfeeding - Infant has been fed only breastmilk (expressed or from the breast) Complementary feeding – combination of breastfeeding and use of formula	
National Infant Feeding Survey	2008	Initiation – first feed after birth Feeding at 48 hours or on discharge	Exclusive –fed only from the breast Combination of breastmilk and formula/water Expressed breastmilk	
Health Service Executive Key Performance Indicator Metadata	2016	Exclusively and not exclusively breastfed at first Public Health Nurse visit (within 72 hours of discharge) and at three months	Exclusive breastfeeding: The infant has received only breastmilk from his/her mother, or expressed breastmilk, and no other liquids or solids with the exception of drops or syrups consisting of vitamins, mineral supplements or medicines. Partial (not exclusive) breastfeeding: The infant receives some breastfeeds, and some artificial feeds, either milk or cereal or other foods.	

Table 2. Summary of data sources used in this report on breastfeeding in the Republic of	
Ireland	

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<sup>&</sup>lt;sup>2</sup> Breastfeeding is considered to have been attempted if the baby has been put to the breast or received mother's breastmilk.

# Table 3. Summary of data sources used in this report on breastfeeding in Northern Ireland

Data source	Year	Variable	Definition of breastfeeding	
Northern Ireland Child Health System	2014/15	Breastfeeding on discharge recorded by clinical staff	Total - infants who have received breastmilk only (this may be expressed breastmilk) - that is, they have NOT received formula milk, any other liquids or food.	
			Partial - infants who have received any breastmilk (this may be expressed breastmilk) as well as formula milk or any other liquids or food.	
			Any breastfeeding - babies who are receiving only breastmilk and those who are receiving both breastmilk and formula.	
		Breastfeeding prevalence at time points beyond	Breastfeeding prevalence beyond discharge is measured as follows;	
		discharge.	<b>Before 6 months</b> Total, Partial or not at all – breastmilk* only (within the previous 24 hours)	
			<b>6 months onwards</b> (it is acknowledged that most infants will be receiving solids at this stage)	
			Total – breastmilk* only as the milk element of a weaning diet (within the previous 24 hours)	
			Partial – some breastmilk* and formula as the milk element of a weaning diet (within the previous 24 hours)	
			Not at all - no breastmilk* (within the previous 24 hours) *can be expressed breastmilk	
Northern Ireland Maternity System	2016	Breastfeeding attempted recorded by clinical staff	Breastfeeding is considered to have been attempted if the baby has been put to the breast or received mother's breastmilk.	
UK Infant Feeding Survey	2010	Breastfed initially by maternal self-report (retrospective)	Breastfed initially - babies whose mothers put them to the breast, even if this was on one occasion only. It includes giving babies expressed breastmilk.	
		Breastfeeding prevalence by maternal self-report (retrospective)	Prevalence of breastfeeding is defined as the proportion of all babies who are being breastfed at specific ages, even if they are also receiving infant formula or solid food.	

Table 4. Summary of data sources used in this report in relation to attitudes, perceptions and experiences of breastfeeding in the Republic of Ireland and Northern Ireland

Data source	Year	Overview of questions asked in relation to attitudes, perceptions and experiences of breastfeeding
		Republic of Ireland
National Infant Feeding survey	2008	Mothers who breastfed initially were asked to describe how they felt about the duration of their breastfeeding experience. Mothers were asked if they would like to have breastfed for longer; if they breastfed for as long as intended; or if they breastfed for longer than intended. The survey also explored factors which assisted mothers to continue or stop breastfeeding. The questionnaire asked mothers 'who or what influenced them most / least to continue breastfeeding'. Mothers were also asked 'who or what influenced them to stop breastfeeding'. Mothers who had discontinued breastfeeding between 3-4 months and 6-7 months were asked why they stopped breastfeeding.
Growing Up in Ireland Survey	2015 (Infants born in 2008)	The Growing Up in Ireland survey asked mothers (of babies aged 9 months) who had ever breastfed about their reasons for stopping breastfeeding.
		Northern Ireland
UK Infant Feeding Survey	2010	Mothers across the UK completed a postal or online survey at three time points following the birth of their child. Mothers were asked why they planned to formula feed and why they planned to breastfeed. Reponses were collated as open-ended responses and categorised thereafter. Mothers were asked when their baby had last received breastmilk/put to the breast and the reasons for stopping breastfeeding at different time points (open-ended response). Mothers were also asked to identify which of the following statements best described how long they breastfed for: I would have like to have breastfed for longer I breastfed as long as I intended I breastfed for longer than I intended The question was also asked: 'What would have helped mothers breastfeed longer?'
Health Survey Northern Ireland	2012/13 2014/15	<ul> <li>Adults aged 16+ were invited to asked to give their opinion on breastfeeding using the following pre-determined responses: 'Breastfeeding is normal'; 'Breastfeeding is good for baby'; 'Breastfeeding is embarrassing'; 'Breastfeeding is distasteful'; and 'Breastfeeding is offensive'.</li> <li>The survey also asked respondents their views on breastfeeding in public. Response options included:</li> <li>Women should be made to feel comfortable breastfeeding their babies in public</li> <li>Women should only breastfeeding their babies at home or in private</li> <li>There should be a law in Northern Ireland to protect women who want to</li> </ul>

		<ul> <li>breastfeed in public</li> <li>Formula feeding is more convenient than breastfeeding</li> <li>Formula is as healthy for an infant as breastmilk</li> <li>Breastfeeding is more convenient that formula</li> </ul>
Young Person's Behaviour and Attitudes Survey	2016	Young people aged 11-16 years were asked in a school-based survey: 'What do you think is the healthiest way to feed a 3 month old baby?' Response options included: Breastfeeding only; Bottle feeding only; Breast and bottle feeding; Breastfeeding and some solids; Bottle feeding and some solids; and Breast and bottle feeding and some solids. Respondents were also asked: What do you first think of when you see a woman breastfeeding her baby? Response options included: I feel uncomfortable I think it is a nice thing for a mum and baby I think it is just a normal part of life I have never seen anyone breastfeeding
Breastfeeding and maternity care research (report prepared for Public Health Agency)	2016	Four focus group discussions and two mini groups were held with new mothers (n=42) across Northern Ireland. A 'new' mother was defined as a woman who had given birth in the last six months. Reasons for ceasing or not starting breastfeeding were discussed with new mothers.

## 4.1 Starting to breastfeed

# Starting to breastfeeding in the Republic of Ireland

# Any breastfeeding on discharge

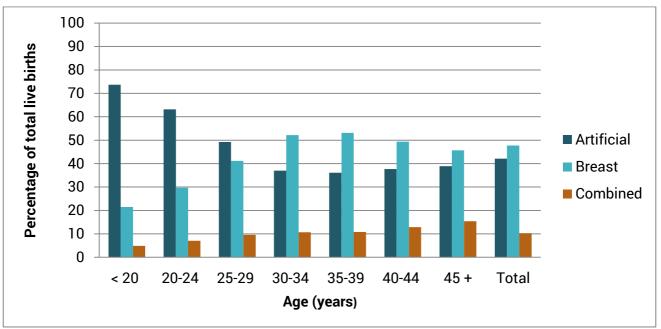
The Republic of Ireland's most recent data are from 2015 and relate to breastfeeding status on hospital discharge (Healthcare Pricing Office, 2017). In 2015, 58% of babies were breastfed compared to 48.9% in 2006. In 2015, 47.7% of babies were exclusively breastfed compared to 44.4% in 2006. Combination feeding on discharge from hospital was an increasing trend over the period with minimal increases in exclusive breastfeeding (McAvoy et al, 2014).

Mothers in older age categories and mothers of singletons were more likely to breastfeed





than younger mothers, and mothers who had multiple births. Exclusive breastfeeding was the most common feeding type among mothers aged 30 or older (**Figure 1**).

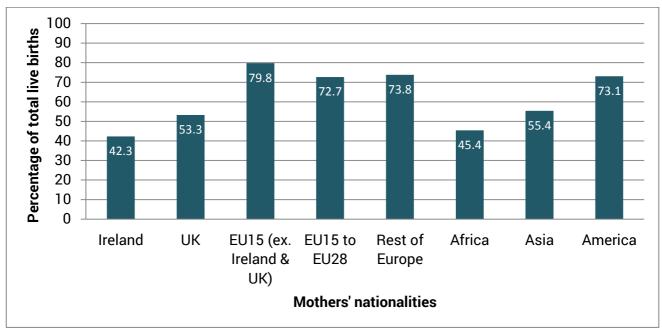




Source: National Perinatal Reporting System (Healthcare Pricing Office, 2017)

# Exclusive breastfeeding on discharge

Mothers from the EU-15 (excluding Ireland and the UK) reported the highest rate of exclusive breastfeeding (79.8%) in 2015. Mothers from the United States and the wider European area all recorded levels of 70% or more. Mothers from the Republic of Ireland recorded the lowest rates of exclusive breastfeeding (42.3%). However, low rates were also recorded for UK mothers (53.3%) (**Figure 2**). Increases in breastfeeding rates in the Republic of Ireland were significantly driven by an increase in immigrant mothers from countries with high breastfeeding rates in their country of origin (Brick and Nolan, 2014; Layte et al, 2013). However, mothers from the EU, Asia and Africa all recorded a decrease in exclusive breastfeeding on discharge over the decade, potentially due to an 'acculturation' effect. In other words, the more time spent living in Ireland, the less likely women were to maintain the high rate of breastfeeding in their country of origin (Castro et al, 2014).



# Figure 2: Percentage of babies who were exclusively breastfed (on discharge from hospital) by mothers nationality (Republic of Ireland, 2015)

Source: National Perinatal Reporting System (Healthcare Pricing Office, 2017)

Socioeconomic status was also a determinant of breastfeeding. Exclusive breastfeeding was most frequently reported among 'higher professional' mothers (65.6%) and 'skilled manual workers' (63.5%), but was least common among 'unemployed mothers' (28.6%).

Among the 63,012 singleton births in 2015 in the Republic of Ireland, 48.3% were exclusively breastfed, while 32.2% of the 2,429 multiple births were exclusively breastfed.

Among the 206 home births in 2015, 95.1% recorded exclusive breastfeeding, rising to 96.1% for any breastfeeding. Rates of breastfeeding have been consistently above 90% since 2006 for babies born at home. This provides evidence that women selecting for home birth are also more likely to breastfeed or may support the hypothesis that home birth can support breastfeeding initiation.

# Starting to breastfeed in Northern Ireland

# Attempted breastfeeding

According to NIMATS, over half of babies were put to the breast or received mother's breastmilk in 2015. Breastfeeding was attempted for 56.7% of births, up from 54.0% in 2012 (Public Health Agency, 2016).

Women in older age categories were more likely to attempt breastfeeding than women in younger age categories, with women aged 30 or over more than twice as likely to attempt breastfeeding than women under 20 years (**Figure 3**).

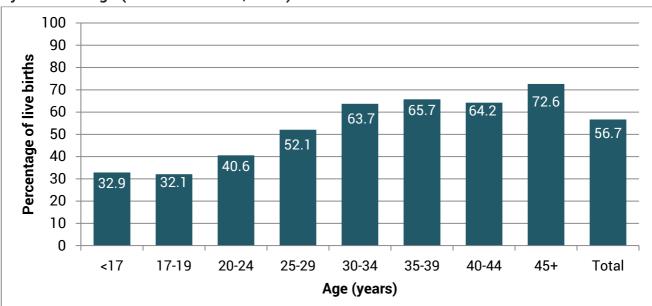


Figure 3: Percentage of babies who were put to the breast or received mothers' breastmilk by mothers' age (Northern Ireland, 2015)<sup>3</sup>

There is also a clear association between breastfeeding and deprivation. In 2015, the rate of attempted breastfeeding was 41.4% among mothers living in the 20% most deprived Super Output Areas (SOAs)<sup>4</sup> in Northern Ireland, compared to 71.0% among those living in the 20% least deprived SOAs (Public Health Agency, 2016).

Maternal age and deprivation are related to breastfeeding in both jurisdictions. However, it is likely that these factors are not acting independently in influencing the likelihood of breastfeeding. In particular, younger motherhood is strongly associated with deprivation. The teenage birth rate (under 20) in the most deprived areas was six times the rate in the least deprived areas of Northern Ireland (DHSSPS, 2015a).

Source: Northern Ireland Maternity System (Public Health Agency, 2016)

<sup>&</sup>lt;sup>3</sup> Data includes live births to Northern Ireland resident mothers. Data for under 17s and over 45s should be treated with caution due to relatively low numbers.

<sup>&</sup>lt;sup>4</sup> Super Output Areas (SOA) are a geography for the collection and publication of small area statistics. For further information see:

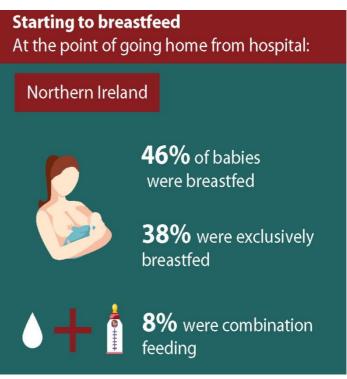
http://neighbourhood.statistics.gov.uk/HTMLDocs/nessgeography/superoutputareasexplained/outputareas-explained.htm Accessed 14 November 2016

# Breastfeeding on discharge

The Northern Ireland Child Health System (CHS) recorded that, 46.0% of infants were receiving any breastmilk on discharge from hospital; 38.1% were 'totally' breastfed and 7.9% 'partially' breastfed in 2015/16 (Public Health Agency, 2017).

Women of Asian, Black and mixed/other ethnicity were more likely to breastfeed than women of White ethnicity or those who did not report their ethnic background.<sup>5</sup>

Determinants of breastfeeding on discharge from hospital in Northern



Source: Child Health System (Public Health Agency, 2017)

Ireland were similar to those for the Republic of Ireland. Breastfeeding was more common among older women, women from higher socioeconomic backgrounds, and women with singleton births.

A study reported on the feeding status of 97,737 babies born between the financial years 2012/13 and 2015/16, found that around one quarter (24%) of babies from the most deprived backgrounds were exclusively breastfeeding when leaving hospital compared to 51% from the least deprived (The Detail, 2017).

# UK Infant Feeding Survey (IFS)

2010 Infant Feeding Survey (IFS) data were collected at three stages: Stage 1- babies aged four to ten weeks; Stage 2 - babies aged four to six months; and Stage 3 - babies aged eight to ten months.

The UK IFS reported that the initial rate of breastfeeding (this includes all babies who were put to the breast at all, even if this was on one occasion only; it also includes giving expressed breastmilk to the baby) in Northern Ireland was lower than other UK countries (McAndrew et al, 2012).

<sup>&</sup>lt;sup>5</sup> Source: NIMATS, Public Health Agency, Health Intelligence Unit, unpublished data. See also Table 10.2, <u>http://www.publichealth.hscni.net/sites/default/files/RUAG%20report%20Childrens%20Health%20in%20NI%2</u> <u>0up%20to%202015-16%20data%20FINAL%20May%202017.pdf</u>

63% of mothers in Northern Ireland reported that their baby was ever put to the breast in 2005 and 64% in 2010. While these rates increased between 2005 and 2010 in England and Scotland, the rate declined in Wales and remained stable in Northern Ireland. The IFS also reported that Northern Ireland had the lowest rate of exclusive breastfeeding at birth among other UK countries, with little change between 2005 (55%) and 2010 (52%). This stalling of progress in breastfeeding rates recorded in the IFS was not mirrored in data recorded by the CHS (**see Table 5**).

Analyses conducted on the UK IFS revealed that a number of factors including birth order, maternal age, previous breastfeeding behaviour, ethnicity, and socio-economic status influence breastfeeding rates (McAndrew et al, 2012).

The IFS was discontinued in 2014 and the Northern Ireland Child Health System is the main source of data on breastfeeding<sup>6</sup> in Northern Ireland. However, it must be noted that the methodology used in the IFS to measure breastfeeding is different from that used in routine reporting systems such as CHS. Results from IFS tend to give a higher rate of breastfeeding initiation, possibly due to selective participation of mothers who breastfeed responding to the survey. Similar findings have been observed for England and Scotland<sup>7</sup>.

# 4.2 Trends in starting to breastfeed across the island of Ireland

**Table 5** presents data on breastfeeding on discharge from hospital from both jurisdictions. The comparability of data from the NPRS and the CHS has not been formally assessed but the measures are assumed to be broadly similar. This would indicate that women in Northern Ireland were less likely to be breastfeeding at discharge after birth than women in the Republic of Ireland. Over the last decade breastfeeding rates improved by 9% in the Republic of Ireland and by 5% in Northern Ireland.

<sup>&</sup>lt;sup>6</sup> Total, partial and not at all breastfeeding

<sup>&</sup>lt;sup>7</sup> Scotland: <u>http://www.isdscotland.org/Health-Topics/Child-Health/Publications/2015-10-27/2015-10-27-Breastfeeding-Report.pdf</u>

England: <u>https://www.england.nhs.uk/statistics/wp-content/uploads/sites/2/2014/03/Breastfeeding-1314Q3.pdf</u>]

Table 5: Breastfeeding rates on discharge from hospital across the island of Ireland from2006-2015

Breastfeeding Rates (% live births)		Breastfeeding Rates (% live births)	
Year	Republic of Ireland (At discharge)	Year	Northern Ireland (At discharge)
2006	48.9	2006	40.4
2007	50.6	2007	42.4
2008	51.1	2008	43.6
2009	52.8	2009	44.4
2010	54.1	2010	44.9
2011	55.3	2011	44.0
2012	55.4	2012	42.6
2013	55.9	2013	45.2
2014	57.0	2014	45.6
2015	58.0	2015	45.1
Rates of breastfeeding have increased by 9% in a decade Rates of breastfeeding have increased by 5% in a decade			
Republic of I	reland	Northern Irelan	ıd

Sources:

Republic of Ireland: National Perinatal Reporting System 2006-2015

**Northern Ireland:** Data for 2006-2013 obtained from *Health Intelligence Briefing – Breastfeeding in Northern Ireland, Public Health Agency, 2016.* Data for 2014 & 2015 are unpublished data from the Child Health System, supplied by Public Health Agency.

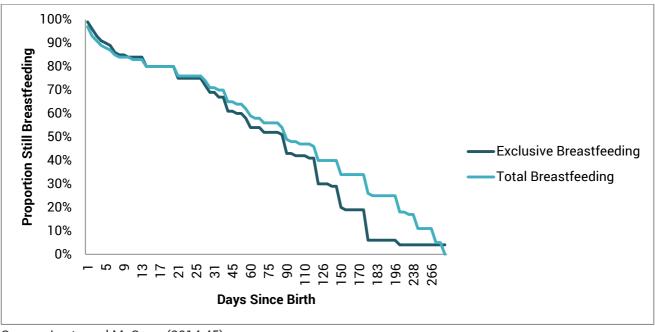
# Breastfeeding prevalence across the first year of life in the Republic of Ireland

There are two sources of data available on breastfeeding prevalence across the first year of life. There are data based on the retrospective report of breastfeeding by mothers taking part in longitudinal or repeat cross-sectional surveys (Growing Up in Ireland, COSI etc). There are also data collected through administrative datasets as linked to the Health Service Executive (2016b) key performance indicator for breastfeeding (exclusive and not exclusively) at the Public Health Nurse (PHN) visit.

The HSE target in 2015 was that 56% of babies would be receiving some breastmilk at the first PHN visit (within 72 hours discharge) and that 38% of all babies would be receiving breastmilk at the three month visit. In 2015, the HSE recorded a rate of 53.7% at first PHN visit, and 35.4% at the three month PHN visit. Comparing the HSE target to the NPRS data for the same year suggests that there was around a 23% drop in breastfeeding between discharge from hospital and three months.

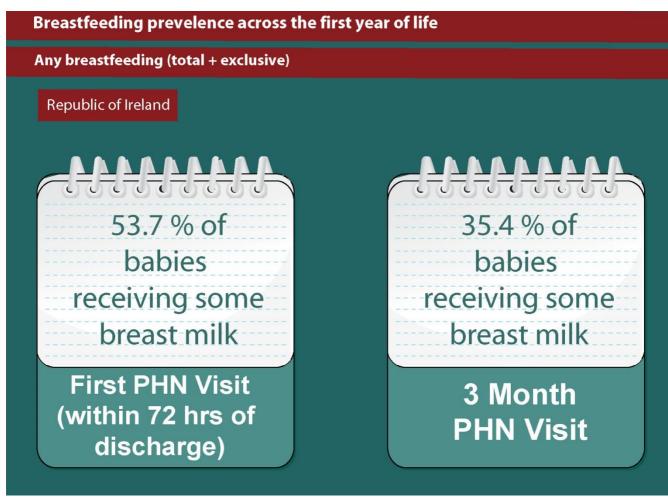
The Republic of Ireland does not routinely collect representative data monitoring prevalence of breastfeeding throughout the first year of life in contrast to the Northern Ireland Child Health System (CHS). However, the Growing Up in Ireland (GUI) study provides useful information for infants born in 2008, particularly as this survey records breastfeeding at set time points among the same mother-baby dyad unlike the HSE data. There are limitations to using the data. Over time women could be moving between exclusive and partial breastfeeding; this is recalled data; and different people may have differing interpretations of breastfeeding definitions. The data refer to infants born nearly a decade ago. Of mothers giving birth in 2008, 55.8% reported they had ever breastfeed their baby.

**Figure 4** shows findings from an analysis of breastfeeding prevalence across the first nine months of a child's life. Of mothers who reported that they had ever breastfed, 92.4% continued to breastfeed for the first two days of the infant's life, 70% maintained breastfeeding at 30 days and 50% by around three months (Layte and McCrory, 2014). In summary, this suggests that one in two infants who were ever breastfed were still breastfed at three months and one in four such infants were still breastfed at six months.





Source: Layte and McCrory (2014:45)



Source: Health and Wellbeing Key Performance Indicator Data (Health Service Executive, 2016b)

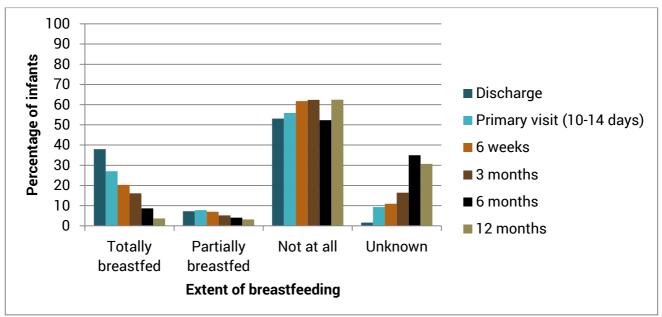
The Childhood Obesity Surveillance Initiative (COSI) provides survey data on breastfeeding prevalence based on the recollection of mothers on their breastfeeding pattern. Data were collected when their children were in first class (circa seven years old) in 2012 (Heinen et al, 2016). This survey suggests that 55.8% of babies born in 2005 were ever breastfed and that a third of all babies who were ever breastfed were breastfed for less than two months.

# Breastfeeding prevalence across the first year of life in Northern Ireland

The Northern Ireland Child Health System (CHS) is the main data source on breastfeeding during the first year of a child's life. CHS records breastfeeding status on discharge from hospital, and at 10-14 days, six weeks, three months, six months and 12 months.

It should be noted that there is an inevitable time lag in reporting data on breastfeeding at time points beyond discharge from hospital. For example, data on breastfeeding at discharge is available for 2014/15 and 2015/16. However, data for subsequent time points (ie 10-14 days through to twelve months) are available for 2014/15 due to the time lag of babies reaching twelve months.

Among all live born infants in 2014/15, 45.2% were breastfed on discharge from hospital, 34.8% at the first visit, 27.3% at six weeks, 21.3% at three months, 12.7% at six months and 6.9% at 12 months (**Figure 5**). There are challenges in follow-up of mothers in the community that hamper the recording of infant feeding status over time. The percentage of 'unknowns' recorded at six months and 12 months (35.0% and 30.7% respectively), highlights the need for caution in interpretation of the figures, particularly after six months of age. With these caveats in mind, current estimates are that one in three babies in Northern Ireland were breastfeeding at 10-14 days, one baby in four at six weeks, one baby in five at three months and at best, one baby in eight at six months and one baby in 14 at 12 months.



# Figure 5: Prevalence of breastfeeding across the first year of life (Northern Ireland, infants born in 2014/15<sup>8</sup>)

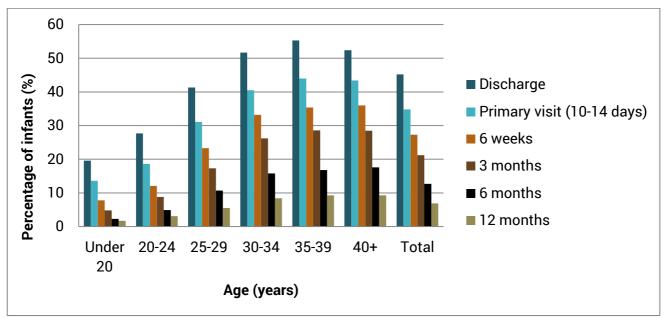
Source: CHS (PHA, Health Intelligence Unit, unpublished data)

Across all maternal age categories, the rate of any<sup>9</sup> breastfeeding dropped across the first year of the infant's life, with relatively few mothers in Northern Ireland breastfeeding at twelve months (**Figure 6**). However, CHS data for 2014/15 shows that mothers aged 30 or over were around four times more likely to report breastfeeding at six weeks compared to mothers aged under 20 years. This pattern is principally driven by the higher likelihood of older mothers starting to breastfeed.

Breastfeeding prevalence was also associated with socioeconomic status. CHS data reveals the levels of breastfeeding by deprivation status, with higher rates of breastfeeding at discharge and across the first year of life in the least deprived areas of Northern Ireland (**Figure 7**). Overall rates of breastfeeding at six months are below 20% across all areas, and by one year, infants in the least deprived quintile (12.1%) were three times more like to be breastfeeding compared to those in the most deprived quintile (3.9%).

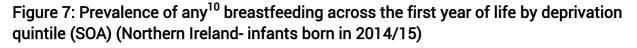
<sup>&</sup>lt;sup>8</sup> Live births to Northern Ireland resident mothers; feeding data for infants born in 2014/15 may not be fully recorded.

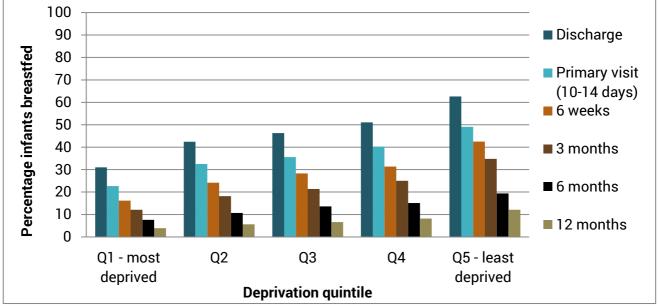
<sup>&</sup>lt;sup>9</sup> Combined total and partial breastfeeding



# Figure 6: Prevalence of any<sup>10</sup> breastfeeding across the first year of life by maternal age<sup>11</sup> (Northern Ireland, infants born in 2014/15)

Source: Child Health System (Public Health Agency, 2017)





Source: Child Health System (Public Health Agency, 2017)

<sup>&</sup>lt;sup>10</sup> Combined total and partial breastfeeding

<sup>&</sup>lt;sup>11</sup> Live births to Northern Ireland resident mothers; feeding data for infants born in 2013/14 may not be fully recorded.



Source: Child Health System (unpublished data, Public Health Agency)

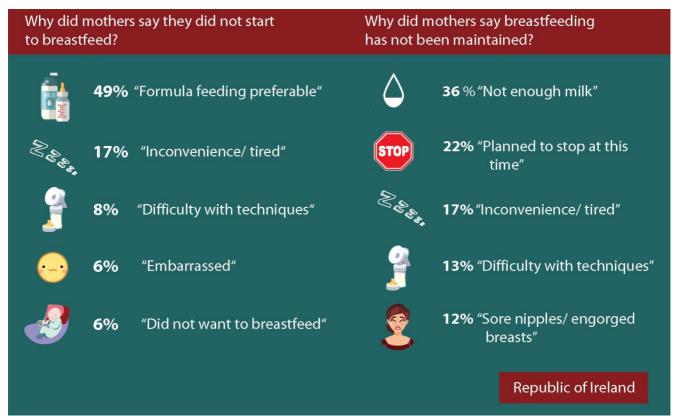
#### 4.5 Attitudes perceptions and experiences related to breastfeeding across the island

Creating environments and cultures where women feel supported and empowered to both start and maintain breastfeeding has been identified as important within policies in both jurisdictions (DHSSPS, 2013; Health Service Executive, 2017). This section of the report provides an overview of data on attitudes and perceptions of the general public to breastfeeding, as well as the attitudes, perceptions and experiences of mothers. These data provide insights into infant feeding cultures across the island and into infant feeding decisions made by families in terms of starting and maintaining breastfeeding.

# Republic of Ireland

There is no nationally representative data on public attitudes and perceptions to breastfeeding among the general adult or child population available in the Republic of Ireland. The Growing Up in Ireland survey examined the reasons provided by mothers for not breastfeeding. Almost half (48.8%) reported that formula feeding was 'preferable', while 17.2% reported inconvenience/fatigue and a further 8.3% of women stated 'difficulty with breastfeeding technique' as the reason for choosing not to breastfeed. Younger women (under 25) (9.7%) were more likely to report embarrassment/ social stigma as the reason for not breastfeeding compared to women aged 35 or over (3.4%) (Layte and McCrory, 2014).

The National Infant Feeding Survey (2008) examined mothers' reasons for stopping breastfeeding. The most frequently cited reasons was 'busy lifestyle/ other children' (25%), followed by 'perceived insufficient milk supply/ hungry baby' (20.3%), 'lack of facilities or uncomfortable feeding in public' (17.2%) and 'felt it was time to stop / breastfed as long or longer than intended' (13.0%). Other reasons for stopping breastfeeding included problems with breastfeeding, returning to work and lack of support for breastfeeding/ wanted partner to share feeding (Begley et al, 2008).



Source: Growing Up in Ireland Survey (Layte and McCrory, 2014) and The National Infant Feeding Survey (Begley et al, 2012)

In the Republic of Ireland, 45% of mothers who had stopped breastfeeding at around 3-4 months reported that they would have liked to have breastfed for longer. Around a quarter (24%) of those mothers who breastfed until their baby was 6-7 months reported that they would have liked to have breastfed for longer. When their babies were 3-4 months, breastfeeding mothers were asked for their views on who or what helped them most to continue breastfeeding. Over 7 in ten (73.3%) said that their 'own experience' had helped them continue breastfeeding, around a third (31.4%) said their partner, whilst one in five (22.3%) identified health professionals as helping them continue breastfeeding. Other reasons identified by breastfeeding mothers included support from their mother, other relatives, books/ magazines/ TV and peer or support groups (Begley et al, 2008).

# Northern Ireland

Health Survey Northern Ireland 2012/13 and 2014/15 provide data on public attitudes to breastfeeding among the general population. The majority of respondents agreed or strong agreed that 'breastfeeding is normal' and 'good for baby'. In 2014/15, around one in eight of the general adult population agreed that 'breastfeeding is embarrassing' (**Table 6**). Between 2012/13 and 2014/15 there was an increase in the proportion of respondents who agreed that 'Women should be made to feel comfortable breastfeeding their babies in public' and that there should be 'a law in Northern Ireland to protect women who want to breastfeed in public'; this shift was particularly apparent among males where support increased from 66% to 77% and 58% to 69% respectively (DHSSPS, 2014b; DHSSPS, 2015b).

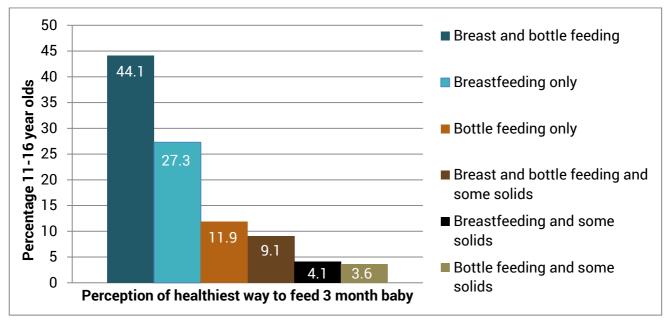
Proportion of respondents who	Year		
'agreed' or 'strongly agreed' that	2012/13	2014/15	
breastfeeding is normal	89%	92%	
breastfeeding is good for baby	85%	90%	
breastfeeding is embarrassing	17%	13%	
breastfeeding is distasteful	4%	4%	
breastfeeding is offensive	3%	4%	

#### Table 6. Public attitudes to breastfeeding in Northern Ireland among adults

Source: Health Survey Northern Ireland (DHSSPS, 2014b; DHSSPS, 2015b)

The Young Person's Behaviour and Attitudes Survey (2016) provides representative data on the perceptions of breastfeeding among young people in post-primary education in Northern Ireland. **Figure 10** illustrates how young people responded when asked what they thought was the healthiest way to feed a three month old baby. The most common response was breast and bottle feeding (44.1%) followed by breastfeeding only (37.3%). Over half of all young people (54.4%) considered that seeing a woman breastfeeding her baby was just part of normal life. One in ten (10.2%) 11-16 year olds said it was a nice thing for a mum and baby. Less than one in five (17.5%) said they felt uncomfortable, whilst a similar number (17.9%) reported that they had never seen a woman breastfeeding (Central Survey Unit, 2017). A separate study showed that young people in Northern Ireland who had seen a breastfeeding mother or were breastfed themselves as a child were significantly more likely to intend to breastfeed or encourage their partner to do so (Giles, et al, 2010).

# Figure 10: Young people's perception of the healthiest way to feed a three month old baby in Northern Ireland



Source: Young Person's Behaviour and Attitudes Survey (2016) (Central Survey Unit, 2017)

The UK IFS 2010<sup>12</sup> asked women why they planned to use infant formula. More than one reason could be provided. The most common reason for using formula was because previous children had been fed with formula milk. Among mothers who planned to formula feed, it was reported that they did not like the idea of breastfeeding; formula feeding was considered convenient for lifestyle reasons; other people could feed the baby; and previous difficulties with breastfeeding as well as being put off by the experience of other mothers (McAndrew et al, 2012).

According to the UK IFS, the most commonly cited reason for stopping breastfeeding in the survey period<sup>13</sup> was perceived insufficient milk. Other reasons included: the baby would not suck/ rejected or would not latch on; painful breasts/ nipples; and demands of a hungry baby or the frequency of feeding. Less frequently cited reasons included fatigue, returning to work, mother's illness and coping with other children/relatives. At the end of the survey period, mothers who had breastfed initially were asked if they had ever breastfed their baby in a public place. Findings from the IFS showed that across the UK, breastfeeding mothers from Northern Ireland (42%) were the least likely to have breastfed their baby in a public place compared to mothers from Scotland (60%), England (59%) and Wales (52%).

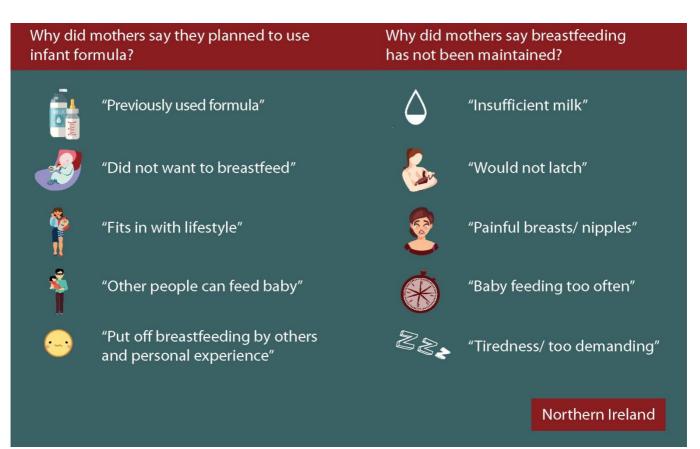
<sup>&</sup>lt;sup>12</sup> These findings apply to women across the UK; data specifically for Northern Ireland is not recorded.

<sup>&</sup>lt;sup>13</sup> Up to six months and less than nine months

breastfeeding in public primarily because of a lack of suitable places to feed (eg mother and baby room), not feeling confident enough and concerns about hygiene. Other reasons cited by breastfeeding mothers included: 'baby won't always feed' and 'being made to feel uncomfortable' (McAndrew et al, 2012).

A qualitative study of the views of women who maintained breastfeeding, ceased breastfeeding, and decided not to breastfeed at all was undertaken across the Health and Social Care Trusts in Northern Ireland. In the study sample, all non-breastfeeding mothers had other children. When asked why they had decided not to breastfeed, the majority reported that they had not breastfed their first child and therefore did not intend to breastfeed subsequent children. Women also reported that they were keen to get back to old routines and it was perceived that breastfeeding could be a barrier to this. Breastfeeding was also considered inconvenient, especially where other children had to be cared for. A perceived stigma/ sense of embarrassment with breastfeeding outside the home was identified as a reason not to breastfeed. When asked why they stopped breastfeeding within the first two months, mothers reported lack of support from midwives, exhaustion, difficultly establishing breastfeeding and feeling restricted to feeding at home as the main reasons (Glass, 2016). A further study in Northern Ireland showed that among mothers who had planned to breastfeed, the most commonly cited reason for doing so was related to benefits for baby (Sloan et al, 2010).

Findings from the 2010 UK IFS indicated that 63% of mothers in Northern Ireland who stopped breastfeeding during the survey period reported that they would have liked to breastfeed for longer. Across all four UK countries, the earlier a woman ceased breastfeeding the more likely she was to express a desire to have breastfed for longer. Four out of five mothers, who stopped breastfeeding when their baby was less than six weeks old, indicated they would have liked to breastfeed for longer while 44% of mothers who stopped breastfeeding at 4-6 months indicated they would have liked to breastfeed for longer. In the main, mothers reported that more support and guidance from hospital staff/ midwives/ family; if baby had latched on easier; producing more milk; and less pain/ more comfort as the reasons which would have helped them breastfeed for longer (McAndrew et al, 2012).



Source: UK Infant Feeding Survey 2010 (McAndrew et al, 2012)

# Useful resources

# For support and advice on breastfeeding Northern Ireland:

http://www.publichealth.hscni.net/publications?keys=breastfeeding http://www.breastfedbabies.org/

# Republic of Ireland:

www.breastfeeding.ie

# For further information on breastfeeding policies Northern Ireland: <u>https://www.health-ni.gov.uk/publications/breastfeeding-strategy</u>

# Republic of Ireland: https://www.breastfeeding.ie/Uploads/breastfeeding-in-a-healthy-ireland.pdf

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