

Breastfeeding - A Great Start

A Strategy for Northern Ireland 2013-2023



June 2013

PAGE

CONTENTS

	Ministerial Foreword	3
	Executive Summary	5
Chapter 1	Introduction	9
Chapter 2	Approach to Developing the Strategy	16
Chapter 3	Breastfeeding Strategy 2013-2023: Vision,	20
	Aim, Values, Scope, Targets & Outcomes	
Chapter 4	Policy Context	25
Chapter 5	Summary of the Evidence and Best	27
	Practice	
Chapter 6	Breastfeeding Strategy 2013-2023:	33
	Outcomes and Actions	
Chapter 7	Making It Happen	48
Appendices	Appendix A - Key Definitions for Infant	50
	Feeding	
	Appendix B – Breast Milk	51
	Appendix C - Breastfeeding Rates	55
	Appendix D - Important Effects of	67
	Breastfeeding	
	Appendix E - Membership of Breastfeeding	69
	Strategy Writing Group	
	Appendix F - Examples of Policies,	72
	Standards and Guidance Supporting	
	Breastfeeding	
	Appendix G - Examples of Regional	74
	Materials to Support Breastfeeding	
	Appendix H - the UNICEF UK Baby	75
	Friendly Initiative Standards & Principles	
	Appendix I - Overview of Existing Support	78
	in the Community	
	Appendix J - Training of Health	80
	Professionals	
Bibliography		82

MINISTERIAL FOREWORD



As Minister for Health, Social Services and Public Safety I am very pleased to introduce the publication of **Breastfeeding – A great start: A Strategy for Northern Ireland 2013-2023.**

The protection, promotion and support of breastfeeding are vitally important public health issues. Breastfeeding promotes health, prevents disease and helps contribute to reducing health inequalities.

A healthy infancy is the foundation for lifetime health and wellbeing. Breast milk, as we all know, provides infants with all the nutrients and immune factors they need for healthy growth and development. Just as importantly, breastfeeding provides a unique early bonding experience for infants and their mothers which contributes greatly to the baby's psychological, emotional and social development.

Progress has been made in supporting and promoting this health enhancing and low cost feeding option; with initiation rates here doubling in the last 20 years. However, breastfeeding rates in Northern Ireland continue to remain the lowest in the United Kingdom, with no significant increase in the past five years.

This is not a situation that we, as a society, want to be in. The challenge is to encourage more parents to choose breastfeeding for their children and to ensure that they are supported to do so. It is time to normalise breastfeeding and create the right conditions for mothers to breastfeed in comfort, wherever they are. I am very pleased therefore that the Strategy provides for the introduction of legislation to strengthen support for breastfeeding here.

The vision is to provide babies with a good start to life by ensuring that

breastfeeding is the norm. Everyone has a role in this; from the parents themselves to the health professionals who can support mothers to breastfeed, and from wider family members who can provide encouragement to businesses and workplaces that can provide more conducive environments for breastfeeding.

I would like to take this opportunity to thank the members of the Breastfeeding Strategy Drafting Group for their work in producing such a valuable document. I am confident that this new strategy sets the right direction and that its effective implementation will deliver improved breastfeeding rates in Northern Ireland over the next ten years and beyond.



Edwin Poots MLA Minister for Health, Social Services and Public Safety

EXECUTIVE SUMMARY

Introduction

 The purpose of the Strategy is to improve the health and well-being of mothers and babies in Northern Ireland through breastfeeding. It sets out the strategic direction to protect, promote, support and normalise breastfeeding in Northern Ireland for the next ten years.

Overview

- 2. Breastfeeding is a fundamental public health issue because it promotes health, prevents disease and helps contribute to reducing health inequalities. Breastfeeding is accepted by the World Health Organisation as the optimal method for infant feeding. It provides the foundation for a healthy start in life and prevents disease in the short and long term for both babies and their mothers.
- 3. Breastfeeding initiation rates in Northern Ireland have almost doubled in the last 20 years from 36% to 64% in 2010, which suggests that more women want to breastfeed than bottle-feed. However, the breastfeeding rates here are the lowest in the UK, and have remained static for the past 5 years.

Contents

- 4. Chapter 1 highlights the importance of breastfeeding for both mothers and babies; the barriers to breastfeeding; and the challenge to increase our breastfeeding rates. Chapter 2 outlines the approach to developing the Strategy, including a public consultation in 2012.
- 5. **Chapter 3** includes the Strategy's aim to protect, promote, support and normalise breastfeeding so that women are able to make informed decisions and are supported to breastfeed; infants are increasingly fed exclusively with breast milk for the first six months of life, and thereafter are fed complementary foods with continued breastfeeding. This aim

supports the Strategy's vision that breastfeeding is the social and biological norm, and that mothers will be supported to give their babies a good start in life.

- 6. Chapter 4 outlines the policy context for breastfeeding in Northern Ireland, including international and local public health policies which influence breastfeeding rates. Chapter 5 summarises research evidence and best practice underpinning breastfeeding promotion and support.
- Chapter 6 sets out the 20 strategic actions underpinning the four outcomes of the Strategy. The outcomes and associated actions are set out below.

Outcome 1 - Supportive environments for breastfeeding exist throughout Northern Ireland

- Develop and implement breastfeeding support policies in all HSC organisations
- Provide supportive breastfeeding environments through staff education, and the implementation of policies which support best practice and training
- Provide information and education to pregnant women, mothers, fathers, birth partners, family members, to facilitate knowledge and understanding to enable informed decision-making about infant feeding
- Promote and further roll-out "Breastfeeding Welcome Here" to extend membership to more businesses and public facilities
- Introduce legislation to support breastfeeding in public places
- Encourage HSC organisations and DHSSPS to act as exemplar models in providing supportive employment environments for breastfeeding mothers returning to work
- Advocate for the strengthening of the legislation regulating Infant Formula and Follow-on Formula milks to prevent marketing of these products to the public
- Encourage Government Departments and Statutory bodies to recognise

the value of breastfeeding

Outcome 2 - Health and Social Care has the necessary knowledge, skills and leadership to protect, promote, support and normalise breastfeeding

- Provide both regional and local lead for implementation of the Breastfeeding Strategy
- Achieve and maintain UNICEF UK BFI accreditation in all maternity and community health care services, and support NI Universities to achieve UNICEF UK BFI University Standards accreditation for midwifery and health visiting training courses
- Encourage undergraduate and postgraduate education providers to include breastfeeding education to other relevant HSC professions
- Provide accessible breastfeeding, practical and problem solving support from a midwife, or a health visitor, or maternity support worker
- Develop and deliver community support programmes, including peer support targeting those least likely to breastfeed
- Provide mothers of vulnerable infants with tailored information and support for breastfeeding and, where appropriate, provide donor breast milk
- Monitor compliance and report violations under the WHO International Code of Marketing of Breast Milk Substitutes

Outcome 3 - High quality information systems in place that underpin the development of policy and programmes, and which support Strategy delivery

- Collect information on Northern Ireland prevalence of breastfeeding according to maternal age, education levels, socio-economic status etc.
- Collect, monitor, and report breastfeeding initiation rates and incidence at discharge, 10 days, 6 weeks, 3 months, 6 months regionally and locally
- Regularly review research information, support and commission local research, and adapt services in light of research findings

Outcome 4 - An informed and supportive public

- Develop and deliver programmes promoting breastfeeding and to facilitate change in attitudes and culture around breastfeeding
- Encourage Government Departments and Statutory Bodies to depict breastfeeding as the norm
- 8. Chapter 7 outlines how the Strategy will be taken forward and managed. A regional group, led by the Public Health Agency, and representative of key stakeholders, will be established to steer and drive forward delivery of the Strategy and its strategic actions. Progress on implementation will be monitored through routine accountability arrangements. Successful implementation of the Strategy will help to increase the initiation and duration of breastfeeding and improve public health.

CHAPTER 1 – INTRODUCTION

- 1.1 Breastfeeding is a fundamental public health issue because it promotes health, prevents disease and helps contribute to reducing health inequalities. It provides the foundation for a healthy start in life and prevents disease in the short and long-term for both babies and their mothers. The Department of Health, Social Services and Public Safety (the Department) is committed to protecting, promoting and supporting breastfeeding and improving breastfeeding rates in Northern Ireland.
- 1.2 Breastfeeding initiation rates here have almost doubled in the last 20 years from 36% in 1990 to 64% in 2010. However, our breastfeeding rates are the lowest in the UK and have remained static for the past 5 years.
- 1.3 The purpose of the Strategy is to improve the health and well-being of mothers and babies in Northern Ireland through breastfeeding. This will be achieved through partnership working across voluntary and statutory agencies.
- 1.4 Any amount of breastfeeding has benefits for both child and mother, and the longer the duration of breastfeeding, the greater the effect on improving the child's health. Virtually all mothers can breastfeed, provided they have accurate information and the support of their family, the health care system and society at large (WHO). However, it is also recognised that not all mothers will choose to breastfeed and that they should be supported whatever their infant feeding choice.

The Importance of Breastfeeding

1.5 Breast milk is the natural first food for babies, and breastfeeding is the natural way to feed infants and young children. The WHO recommends exclusive breastfeeding for newborns and for the first six months of life. The WHO defines exclusive breastfeeding as giving the infant no other food or drink – not even water – except breast milk. However, the infant can receive drops and syrups (vitamins, minerals and medicines). Other key definitions for infant feeding are included at **Appendix A**. Breastfeeding with appropriate complementary foods up to two years of age or beyond continues to contribute to the infants and young child's optimum nutrition, development and health.

- 1.6 Feeding at the breast has a positive effect on health and wellbeing and is associated with significantly improved health outcomes for both infants and mothers. There are three important elements of breastfeeding: nutrition, immunity and bonding.
- 1.7 Human milk provides infants with all the nutrients they need for healthy growth and development. Many of the components of breast milk cannot be manufactured. Breast milk is also easy to digest. The establishment of early breastfeeding is especially important for babies of diabetic mothers to prevent neonatal hypoglycaemia and enhance lactation. Ill or pre-term infants especially benefit from the antibodies, hormones, enzymes and growth factors contained in breast milk.
- 1.8 When an alternative to a mother's own milk is needed, donor breast milk is a better alternative to the mother's own breast milk than infant formula. Human milk banks exist to provide donor breast milk for babies in neonatal units. (Further information on breast milk is attached at **Appendix B**).
- 1.9 Furthermore, breastfed babies have less chance of being constipated; less likelihood of becoming obese and therefore developing type 2 diabetes and other illnesses later in life; and less chance of developing allergies and eczema. Breastfed infants also have less risk of cot death, which is also known as Sudden Infant Death Syndrome (SIDS).

- 1.10 Breast milk is a unique, constantly changing, protective substance that includes antibodies from the mother that help babies to combat infection. Breastfed babies have less chance of having diarrhoea and vomiting; fewer chest and ear infections; and less chance of having to go to hospital as a result of these illnesses. Babies born early are particularly vulnerable to some dangerous conditions such as neonatal necrotising enterocolitis (NEC), a very serious bowel disorder, and breast milk helps protect against this.
- 1.11 Breastfeeding can facilitate a mother's bonding with her baby. Breastfeeding is nurturing and can support and promote good parentchild relationships. Developing a close, warm relationship with a baby can provide benefits for emotional/ mental health and well-being throughout childhood, adolescence and into adult life.
- 1.12 Breastfeeding has significant benefits for women including a lower risk of osteoporosis, type 2 diabetes and female cancers (breast, uterine and ovarian); and women who breastfeed their children are able to lose weight gained during pregnancy more easily.

The Need for Action to Improve Health and Reduce Health Inequalities

- 1.13 Despite the guidance and evidence of the effects of breastfeeding Northern Ireland has low breastfeeding rates. These are similar to the rates in the Republic of Ireland, which may reflect similar attitudes across the island. (see Appendix C – Breastfeeding Rates). The incidence of breastfeeding is lowest among mothers from a lower socioeconomic group. Age also is a factor as teenage and young mothers are less likely to breastfeed than older mothers.
- 1.14 There is a potential for breastfeeding to reduce health and developmental inequalities in Northern Ireland. Research has found that breastfed children from lower socioeconomic groups had better

health outcomes than formula fed children from more affluent families.

- 1.15 Breastfeeding has been found to be associated with positive parenting behaviours, regardless of marital status or income level, in children's first year of life. Among single and low-income mothers, prolonged breastfeeding beyond 6 months of age seems to have a lasting effect on positive parenting behaviours up to age 5, thus, suggesting a potential protective effect of such longer breastfeeding for women with greater disadvantage.
- 1.16 **Appendix D** includes other important health and societal effects of breastfeeding.

Economic benefits of breastfeeding

- 1.17 Breastfeeding is beneficial to health outcomes but also on family finances through not purchasing formula and the equipment needed for artificial feeding (taking an average of 1 tin per week for 26 weeks plus bottles sterilising etc. it costs about £250 to formula feed for 6 months). Breastfeeding is a natural, renewable source of nutrition for babies, which has no packaging or transport delivery costs.
- 1.18 Breastfeeding saves costs on treating preventable illnesses and results in savings for the whole country. The cost of not breastfeeding is a significant burden on the health care system. A study reporting on data on 935 babies from 13 general practices in Glasgow reported that breastfed babies have 15% fewer GP consultations during their first six months of life than babies fed on formula.
- 1.19 A cost benefit analysis commissioned by UNICEF UK in 2012 suggests that if 45% of women exclusively breastfed for 4 months, and if 75% of babies in neonatal units were breastfed at discharge, every year there could be an estimated total saving of £17 million with:

- 3,285 fewer gastrointestinal infection-related hospital admissions and 10,637 fewer GP consultations, with over £3.6 million saved in treatment costs annually
- 5,916 fewer lower respiratory tract infection-related hospital admissions and 22,248 fewer GP consultations, with around £6.7 million saved in treatment costs annually
- 21,045 fewer acute otitis media (AOM) related GP consultations, with over £750,000 saved in treatment costs annually
- 361 fewer cases of necrotising enterocolitis (NEC), with £6 million saved in treatment costs annually.
- 1.20 The National Institute for Health and Clinical Excellence (NICE) has considered the cost of implementing its guidance on the routine postnatal care of women and their babies. Within this guidance, NICE reported on the costs of implementing the UNICEF UK Baby Friendly initiative (BFI), which is recommended as the minimum standard by NICE, and identified potential savings through reduced treatment costs for gastroenteritis, otitis media and asthma in babies.
- 1.21 Breastfeeding also has economic benefits for employers in the long term related to less parental time off work due to caring for sick children.

The Challenge

- 1.22 Research has shown that the reasons why women choose not to breastfeed or stop breastfeeding early are varied and complex.
- 1.23 Several factors may act as a barrier to the initiation and/ or duration of breastfeeding, including:
 - lack of knowledge about how to breastfeed and/ or lack of confidence in ability to breastfeed;
 - returning to work;

- perceived insufficient supply of breast milk;
- certain interventions during/after labour;
- lack of support to breastfeed from HSC staff in early stages after birth/ at discharge from hospital;
- problems experienced including sore/cracked nipples and poor management of common breastfeeding problems;
- lack of support from family and public;
- lack of appropriate places/ facilities to breastfeed in public areas/ or at work;
- perceived restricted freedom/ independence;
- convenience/ routine; and
- embarrassment (of self and others, e.g. breastfeeding in front of own older children).
- 1.24 Local cultural norms and attitudes are also a challenge. Despite awareness about the health benefits of breastfeeding being higher among mothers in Northern Ireland compared to mothers in GB, only 56% of mothers here said they had decided before the birth to breastfeed their baby, and mothers in Northern Ireland were more likely than their GB counterparts to say that they were only planning to use infant formula.
- 1.25 Across the UK the most common reasons given by mothers for stopping in the first two weeks were the baby not sucking/ rejecting the breast; having insufficient milk; having painful breasts or nipples. Between one week and four months, about one in five mothers reported giving up breastfeeding because it took too long or was too tiring. Between six and nine months, 22% of mothers reported returning to work as a reason for stopping breastfeeding.
- 1.26 Nine in ten mothers who gave up breastfeeding within six months would have preferred to breastfeed for longer, and among those who breastfed for at least six months, 40% would have liked to continue for

longer.

1.27 Evidence from the UK Infant Feeding Survey suggests that women can sometimes feel/ perceive themselves to be under pressure to breastfeed from health professionals. It is important for health care professionals to provide full information about the benefits of breastfeeding, but avoid the risk of inducing feelings of guilt in mothers who do not initiate or continue to breastfeed and to support the infant feeding choice.

CHAPTER 2 - APPROACH TO DEVELOPING THE STRATEGY

Breastfeeding Strategy for Northern Ireland (1999)

- 2.1 The first regional breastfeeding strategy, the Breastfeeding Strategy for Northern Ireland, published in 1999, aimed to promote and support breastfeeding. The Strategy recommended action by Departments, Health and Social Services Boards and Trusts, and Agencies including the non-statutory sector and lay groups under the following areas:
 - (i) Co-ordinating activities;
 - (ii) Commissioning services;
 - (iii) Collecting regional information;
 - (iv) Focusing research;
 - (v) Training health professionals;
 - (vi) Supporting special needs infants and their mothers;
 - (vii) Raising public awareness; and
 - (viii) Limiting promotion of artificial milk.

Review of the 1999 Breastfeeding Strategy

2.2 A review to assess the impact of the 1999 Breastfeeding Strategy concluded that significant progress had been made with all of the action areas being either fully or substantially implemented. Documentation on the review findings and the report's recommendations can be found at: http://www.publichealth.hscni.net/publications/review-breastfeeding-strategy-northern-ireland and http://www.dhsspsni.gov.uk/review_of_the_breastfeeding_strategy_for_northern_ireland_1999.pdf

- 2.3 Key achievements include:
 - the appointment of a Regional Breastfeeding Co-ordinator providing advice and support;
 - an increase in the number of local Breastfeeding Co-ordinator posts, particularly within Maternity Units;
 - implementation of UNICEF Baby Friendly Initiative (BFI) in the health sector;
 - the establishment of the Human Milk Bank to support breast milk feeding of special needs infants, providing donor milk to around 700 babies across Ireland;
 - delivery of support for health professionals including training courses BFI workshops, and resources – the first DVD breastfeeding teaching resource in the UK;
 - progress towards compliance with the WHO Code of Marketing of Breast Milk Substitutes;
 - delivery of regional public information campaigns, which evaluated positively;
 - development of community support for breastfeeding through the introduction of mother to mother peer support programmes; and
 - the establishment of the "Breastfeeding Welcome Here" scheme, with almost 300 members mainly from local business and councils.
- 2.4 To build on these achievements the Review Report recommended the development of a new Breastfeeding Strategy. It also recommended that the new Strategy should:
 - continue to focus on changing public perceptions and promoting positive attitudes towards breastfeeding;
 - support those least likely to breastfeed including young mothers and those in low income groups; and
 - address the requirements of those who may have particular needs for example, vulnerable infants (including ill, premature and infants with special needs), and those from communities with low breastfeeding rates.

Development of the New Strategy

- 2.5 The Department established a multi-sectoral Breastfeeding Strategy Writing Group to develop this strategic approach to help achieve a breastfeeding culture and improve breastfeeding rates over the next ten years. The full membership of the Writing Group is set out in Appendix E. The Strategy draws on international and UK breastfeeding policy and recommendations including "Protection Promotion and Support of Breastfeeding in Europe: A Blueprint for Action" (revised 2008) which is recommended as a model plan towards achieving protection, promotion and support of breastfeeding.
- 2.6 The draft Strategy was published for public consultation. Thirty eight responses were received from 30 individuals and 8 organisations. The consultation document can be viewed using the link below http://www.dhsspsni.gov.uk/showconsultations?txtid=56845
- 2.7 Key points raised in response to the consultation include:
 - Significant support for the aim to "normalise" breastfeeding;
 - Law on regulating infant formula and follow on milk needs strengthening;
 - Peer support should become an integrated part of maternity services
 - Strong support for the introduction of legislation to support and protect breastfeeding; and
 - Need for effective communication with the general public, families and women about the importance of breastfeeding.
- 2.8 The final strategy incorporates the Writing Group's recommendations for changes to the draft strategy following the consultation and to reflect consultation responses.

Strategy Document Structure

2.9 The structure of the remainder of this document is that **Chapter 3** gives the vision, aim, values, scope, targets and outcomes of the Strategy including targets for monitoring purposes; **Chapter 4** outlines the policy context for breastfeeding in Northern Ireland; **Chapter 5** outlines a summary of the research evidence and best practice underpinning breastfeeding promotion and support; **Chapter 6** sets out the Strategy's outcomes and strategic actions to help achieve these outcomes; and **Chapter 7** outlines how the Strategy will be taken forward and managed.

CHAPTER 3 – BREASTFEEDING STRATEGY 2013-2023: VISION, AIM, VALUES, SCOPE, TARGETS & OUTCOMES

Vision

- 3.1 The vision for the 2013-2023 Breastfeeding Strategy for Northern Ireland is that *"Breastfeeding is the social and biological norm, and mothers will be supported to give their babies a good start in life."*
- 3.2 It is recognised that it will take time for this vision to become reality. The Strategy therefore sets out the approach over the next ten years, including strategic actions.

Aim

- 3.3 The overall aim of the Breastfeeding Strategy 2013-2023 is to protect, promote, support, and normalise breastfeeding so that women are able to make informed decisions and are supported to breastfeed; infants are increasingly fed exclusively with breast milk for the first six months of life and, thereafter are fed complementary foods with continued breastfeeding.
- 3.4 There are several ways to help increase breastfeeding:
 - Protecting breastfeeding by ensuring marketing of milk substitutes does not undermine breastfeeding, and that women have the right to breastfeed in public;
 - **Promoting** breastfeeding by informing and influencing mothers, families, and the public about the benefits of breastfeeding;
 - Supporting breastfeeding by having health services and communities which actively support antenatal preparation for breastfeeding, and postnatal breastfeeding initiation and maintenance; and

• *Normalising* breastfeeding so that it is seen as the normal social and biological way to feed babies.

Values

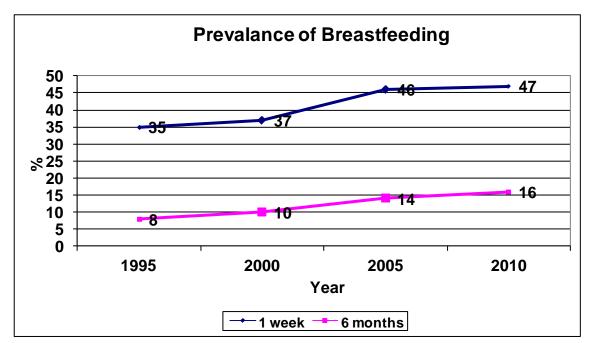
- 3.5 The following values and principles form the foundation of the Strategy and should be adopted in the delivery and evaluation of its supporting interventions, services and practices:
 - health as a fundamental human right;
 - respecting and supporting people's choices;
 - reducing health inequalities;
 - breastfeeding should be a positive experience for mothers, one made through educated choices without pressure, guilt or judgement;
 - the mother and child relationship is at the core of breastfeeding support whilst also recognising the importance of partner and widerfamily support;
 - effective and accessible services that are responsive and targeted to need;
 - applying an evidence-based approach, building on successful approaches;
 - integrated partnership working involving the statutory, voluntary and community sectors;
 - involving people and seeking their views in order to respond to the differing needs of individuals and groups; and
 - linkings with other healthy lifestyle strategies.

Scope

- 3.6 Breastfeeding improves health outcomes for both mothers and children and makes a significant contribution to improving health at a population level. The Strategy, therefore, takes a population-based approach to ensure that all support is made available to every mother and baby.
- 3.7 However, some groups require particular action and their requirements must be addressed. Groups requiring specific support, include:
 - those in areas of low breastfeeding rates;
 - young mothers;
 - vulnerable infants (including premature infants and those with disabilities, long term illness and gut problems);
 - mothers of multiple births;
 - families with inborn errors of metabolism (e.g. galactosaemia among Travellers); and
 - mothers from ethnic minority groups and migrants.
- 3.8 The Strategy is primarily for health professionals, policy-makers, education establishments and voluntary and community organisations who will have key roles in the implementation plans for the Strategy. It is also intended that it informs and influences policies towards breastfeeding in the judicial system, local councils and other public sector organisations, and in the private sector. The latter includes the media, retailers, and food outlets who all have important roles in promoting and supporting breastfeeding. In addition, the Strategy is also intended to be relevant to the general public, in recognition of the important role that families and society have in supporting mothers' breastfeeding their children.

Targets

- 3.9 The Strategy adopts two long-term targets;
 - By 2025, 70% of all infants will be breastfed by one week after birth [Source: Infant Feeding Survey or Child Health System.]
 - By 2025, 40% of all infants will still be breastfed at 6 months [Source: Infant Feeding Survey or Child Health System.]





Source: Infant Feeding Survey 1995-2010

- 3.10 Clearly achievement of these targets may be beyond the lifespan of the Strategy. However, it is anticipated that the results from the 2015 and 2020 Infant Feeding Surveys will provide an indication of progress.
- 3.11 The following measures will also be used to monitor and evaluate progress on the Strategy's implementation and to inform future planning:
 - a. Breastfeeding rate at initiation (Northern Ireland Maternity System NIMATS);

- b. Exclusive and partial feeding rate (Child Health System) at:
 - > discharge
 - > 10 days
 - ➢ 6 weeks
 - > 3 months
 - ➢ 6 months
- c. Breastfeeding rate differential between socio-economic groups (CHS); and
- d. Rate of breast feeding and donor milk feeding in neonatal units.

Outcomes

3.13 The Strategy sets 4 strategic outcomes:

<u>Outcome-1</u>: Supportive environments for breastfeeding exist throughout Northern Ireland;

<u>Outcome-2</u>: Health and Social Care (HSC) has the necessary knowledge, skills and leadership to effectively protect, promote, support and normalise breastfeeding;

<u>**Outcome-3</u>**: High quality information systems in place that underpin the development of policy and programmes, and which support strategy delivery; and</u>

<u>Outcome-4</u>: An informed and supportive public.

CHAPTER 4 – POLICY CONTEXT

Introduction

- 4.1 There are a number of national and international policies, standards and guidance for improving breastfeeding rates. These include the WHO Global Strategy for Infant and Young Child Feeding (2003); the European Commission Protection, Promotion and Support of Breastfeeding in Europe: A Blueprint for Action (2004, revised 2008); UNICEF Baby Friendly Initiative (BFI); UN Convention of the Rights of the Child, NICE Guidance on Maternal and Child Nutrition, Post-natal Care, and Antenatal Care, and Midwifery 2020.
- 4.2 Local public health policies also influence breastfeeding rates and breastfeeding is supported through other strategies and frameworks including the Department's public health Strategy *Investing for Health* (2002-2012) which is the main policy driver for improving health and well-being and reducing health inequalities in Northern Ireland. A new Public Health Strategy is currently being developed and has a strong focus on early years. Other highly relevant Northern Ireland public health policies are: the Child Health Promotion Framework 'Healthy Child, Healthy Future'; A Strategy for Maternity Care in Northern Ireland 2012-2018; the Fit Futures Implementation Plan and Framework for Preventing and Addressing Overweight and Obesity in Northern Ireland 2012-2022: 'A Fitter Future for All'; and OFMDFM's Child Poverty Strategy and Children and Young People's Strategy Action Plan.
- 4.3 **Appendix F** details how breastfeeding is incorporated in some of these policies, standards and guidelines.
- 4.4 The previous Breastfeeding Strategy for Northern Ireland, published in 1999, led to improvements in the promotion and support of breastfeeding and this new Strategy aims to build on that work.

Breastfeeding and the Law

- 4.5 Currently in Northern Ireland, breastfeeding mothers are protected by law under the provision of goods or services paragraphs in sex discrimination legislation. Similar protection is given to breastfeeding women in GB under the Equality Act 2010.
- 4.6 Breastfeeding laws to specifically support and encourage breastfeeding have been introduced in many countries and US states. In 2005, the Scottish Executive, recognising that social and cultural attitudes are important influencing factors in breastfeeding decisions enacted legislation to ensure that breast and bottle feeding mothers and babies have unimpeded access to public services and spaces, and to further encourage the promotion of breastfeeding.
- 4.7 Under the Scottish legislation, the Breastfeeding etc. (Scotland) Act 2005, it is an offence to deliberately prevent or stop a person from feeding milk to a child (under two years of age) in their charge in a public place or licensed premises, so long as the child is lawfully allowed to be there. If a person does so, while acting in the course of employment, then the employer is also deemed liable. The offence currently carries a fine of up to £2,500.
- 4.8 There is no equivalent legislation in England, Wales or Northern Ireland.

CHAPTER 5 – SUMMARY OF THE EVIDENCE AND BEST PRACTICE

Introduction

- 5.1 A woman's decision to breastfeed is influenced by many factors including her own experiences and influences by friends and family, the media as well as through health advice. There is considerable widely accepted evidence about the benefits of breastfeeding. In contrast, evidence about various ways in which we can effectively promote and support breastfeeding is still developing. To take breastfeeding forward it is essential that policy and practice is underpinned by high quality and relevant research.
- 5.2 Research on attitudes to breastfeeding undertaken in Northern Ireland in 1999 indicates that the reasons why respondents did not breastfeed include:
 - never considered breastfeeding as an option;
 - bottle-feeding seen as more convenient;
 - felt too embarrassed to breastfeed;
 - mothers said they or their baby were too ill;
 - lack of confidence in their ability to breastfeed; and
 - lack of support and encouragement to breastfeed.
- 5.3 Further research reveals a contradiction in terms of what the general public here believes about the benefits of breastfeeding compared to their attitude to breastfeeding in terms of social acceptability.
- 5.4 The effective promotion and support of breastfeeding behaviour is, therefore, complex and requires consideration of variation between individuals, communities, cultures and society.

Systematic Review Evidence

- 5.5 A systematic review is an assessment and synthesis of evidence.There have been a number of systematic reviews around breastfeeding.
- 5.6 In summary, evidence from systematic review indicates that:
 - breastfeeding education should be provided for all women;
 - additional breastfeeding support in the postnatal period should be part of routine care;
 - face to face support strategies are more likely to be successful;
 - all midwives should receive extra training in the promotion and support of sustained breastfeeding; and
 - both peer and professional breastfeeding support should be provided for women to empower them to start and continue breastfeeding.

Other Research Evidence and Best Practice Advice

5.7 Research into the promotion and support of breastfeeding continues to provide new evidence which has not yet been systematically reviewed. Emerging evidence in relation to birth experiences, the psychology of breastfeeding behaviour, and the complex health care needs of pregnant women should also be considered in the development of breastfeeding strategy and interventions.

Information and Support

5.8 Evidence suggests that all pregnant women should be provided with one to one discussion on breastfeeding from a health professional or peer supporter. Young mothers and those on low income will benefit from small informal group instruction on breastfeeding facilitated by the statutory or voluntary sector as appropriate. The Health and Social Care Sector and voluntary groups have resources, including a DVD and a website for parents, available to support health professionals to discuss breastfeeding with pregnant women (**Appendix G**).

Women's Birth Experience and Starting Breastfeeding

- 5.9 Women's birth experiences have a direct impact upon their breastfeeding outcomes. Many practices around birth influence breastfeeding. For example, the WHO (2004) reported that emergency caesarean section is associated with significantly shorter breastfeeding behaviour. Practices which aim to connect mothers and babies such as early skin-to-skin contact, baby-led feeding and keeping mother and baby together are important positive interactions.
- 5.10 All staff who are involved in supporting women to make informed decisions about mother and infant care need to be aware of the potential effect on breastfeeding. In line with the Strategy for Maternity Care in Northern Ireland 2012- 2018 the culture should be the normalisation of birth and a reduction in intervention rates. All mothers should be supported to initiate breastfeeding soon after birth. This should start with skin-to-skin contact immediately after birth or as soon as mother and infant are able. Care practices and procedures should not interfere with the opportunity for mother and baby to benefit from skin-to-skin contact for as long as they wish or at least until after the first breastfeed.
- 5.11 In order to strengthen maternity practices to support breastfeeding, WHO and UNICEF launched the Baby Friendly Hospital Initiative (BFI). This initiative works with the health service to ensure a high standard of care for pregnant women and breastfeeding mothers and babies and should be adopted as a minimum standard (**Appendix H**). The UNICEF BFI programme was introduced in Northern Ireland in 1994 and is currently supported by the Public Health Agency (PHA) and all five HSC Trusts to facilitate and increase breastfeeding rates.

Continuing Breastfeeding

- 5.12 While breastfeeding is a natural act, it is also a learned skill. An extensive body of research has demonstrated that mothers require active support for establishing and sustaining appropriate breastfeeding practices.
- 5.13 Many women stop breastfeeding in the period shortly after discharge from hospital and in the following months. Some 35% of women who gave up breastfeeding in the first week after birth did so because the baby was not sucking or was rejecting the breast. However the frequent problems experienced in the early days, - including sore and cracked nipples, babies refusing to take the breast, and the perception that the mother does not have enough milk, - can and should generally be prevented.
- 5.14 The UNICEF BFI best practice standards have recently been revised. These new standards incorporate the previous standards as specified in Ten Steps to Successful Breastfeeding and Seven Point Plan for Sustaining Breastfeeding in the Community but update and expand them to fully reflect the evidence base on delivering the best outcomes for mother and babies. Appendix H provides an overview of the revised UNICEF UK Baby Friendly Initiative Standards. Appendix I provides an overview of existing support and breastfeeding in the community and includes Surestart and pharmacy settings.
- 5.15 Researchers have considered the psychological processes that underpin sustained breastfeeding behaviour. It has been shown that women who successfully breastfeed are those who feel confident in their ability and hold positive attitudes towards breastfeeding. Conversely, a strong association between low maternal confidence and early breastfeeding cessation has also been reported.
- 5.16 To increase breastfeeding it is, therefore, crucial to strengthen a

mother's belief in her capability to breastfeed. One example of utilising this concept comes from research in Northern Ireland which demonstrated that motivationally designed instruction can improve early breastfeeding success.

Pregnant Women with Complex Health Care Needs

5.17 More women are presenting with complexities in pregnancy whether social or medical and it is important to support these women to breastfeed. Research evidence over the last decade suggests that women defined as overweight and obese are less likely to initiate or sustain breastfeeding. Breastfeeding was found to be less common in women with diabetes. In addition, there may be a reduction in the risk of mothers developing Type 2 diabetes from the protective effect of lactation.

Benefits of Breast Milk for III or Premature Babies

- 5.18 There is evidence that breastfeeding/ breast milk feeding of infants in neonatal units has both short-term and long-term benefits to health. Breast milk has been shown to reduce infection and necrotising enterocolitis (NEC) as well as evidence of longer term neurodevelopmental advantages.
- 5.19 Rates of breastfeeding/ breast milk feeding are low in many neonatal units internationally. In Northern Ireland, during 2009, for the 1,397 infants discharged home directly from neonatal care, 21% were being exclusively breast fed. In addition, 16% were receiving both breast milk and formula/ fortifier. The majority of infants (63%) were receiving formula milk only.

Marketing and Media

5.20 A study in the UK found that the media rarely present positive

information on breastfeeding and health professionals and policy makers should therefore be aware of the impact this may have on any initiatives.

5.21 Alternative infant foods to breast milk are widely promoted and marketed. The WHO International Code of Marketing Breast Milk Substitutes seeks to secure safe and adequate nutrition for infants by protecting and promoting breastfeeding. It also aims to ensure the proper use of breast milk substitutes, when these are necessary, on the basis of adequate information and through appropriate marketing and distribution. Like the rest of the UK, Northern Ireland has enacted legislation encompassing some, but not all provisions of the Code. Health professionals have responsibilities to ensure that healthcare facilities are not used for product promotion; and monitor and report violations against the Code under the provisions of the International Code of Marketing of Breast Milk Substitutes. **Appendix J** gives current training of health professionals.

CHAPTER 6 – BREASTFEEDING STRATEGY 2013-2023: OUTCOMES AND ACTIONS

6.1 The Breastfeeding Strategy 2013-2023 sets 4 strategic outcomes:
<u>Outcome-1</u>: Supportive environments for breastfeeding exist throughout Northern Ireland;
<u>Outcome-2</u>: Health and Social Care (HSC) has the necessary knowledge, skills and leadership to effectively protect, promote, support and normalise breastfeeding;
<u>Outcome-3</u>: High quality information systems in place that underpin the based on the feedback of the systems in place that underpin the based on the feedback of the systems in place that underpin the based on the feedback of the systems in place that underpine the systems in place the systems in place that underpine the systems in place that underpine the systems in place the systems in place that underpine the systems in place the s

development of policy and programmes, and which support strategy delivery; and

<u>Outcome-4</u>: An informed and supportive public.

The rationale for these outcomes, and the strategic actions necessary to achieve the outcomes, are set out in the remainder of this chapter.

Outcome - 1: Supportive environments for breastfeeding exist throughout Northern Ireland

- 6.2 The creation of supportive environments will facilitate mothers to breastfeed their children in surroundings conducive to breastfeeding, with confidence and without intrusion. Expectant mothers should be provided with information about breastfeeding outside the home/ in public and this should be reinforced with further information after the birth. To further ensure that the home environment is supportive, information on infant feeding and the importance of breastfeeding should be relevant for partners and grandparents.
- 6.3 Accessible advice and support from health professionals and community-based advisors contributes towards supportive environments. All mothers should also routinely be offered breastfeeding support in hospital and when home, where visits from the community midwifery services are recognised as a valuable support.

- 6.4 All premises which are open to the public whether in the public sector, community sector, or local businesses such as restaurants and retailers should be encouraged to promote the 'Breastfeeding Welcome Here' Scheme to support mothers' breastfeeding their babies when out and about. At present, the Scheme applies to businesses and some council premises only. It is the intention to work for the extension of the Scheme to a wider range of premises used by the public and to encourage statutory bodies to depict breastfeeding as the norm when the opportunity arises through the development of publicity and public information material.
- 6.5 The Department intends to introduce legislation to support and protect breastfeeding infants and their mothers in public places. This is seen as a way to change the current culture in Northern Ireland where mothers who breastfeed their babies are not seen as the norm.
- 6.6 Women who are combining breastfeeding and working require workplace policies to facilitate supportive environments. There is a need for good practice such as flexible working and breaks to express milk. There is an opportunity for Health and Social Care organisations and the Department to lead on this issue as exemplar employers.
- 6.7 It is also important that the judicial system is made aware of the vital importance of breastfeeding so that judicial processes, arrangements and decisions involving mothers and babies are, as far as possible, supportive of breast milk feeding. This would, for example, need to be the case in matrimonial disputes, childcare arrangements, jury duty, refugee and asylum cases, and custody arrangements.

6.8 Regular television and media advertising of branded follow-on milks and toddler milks helps to perpetuate bottle feeding as the norm in Northern Ireland. This advertising is controlled by UK wide law and codes regulating infant formula and follow-on milk marketing to the public. DHSSPS and other organisations or individuals should advocate for strong controls on advertising.

Strategic Actions	Completion timescale	Lead organisation(s)	Indicator(s)
Develop and implement breastfeeding support policies in all HSC organisations.	Short.	HSC organisations.	Policies in place.
Provide supportive breastfeeding environments through staff education, and the implementation of policies which support best practice and training.	Ongoing.	HSC Trusts.	Implementation of relevant NICE guidance. BFI awards across the HSC sector.
Provide information and education to pregnant women, mothers, fathers, birth partners, family members, to facilitate knowledge and understanding to enable informed decision- making about infant feeding.	Ongoing.	HSC Trusts.	Implementation of relevant NICE guidance. BFI awards across the HSC sector.
Promote and further roll-out "Breastfeeding Welcome Here" to extend membership to more businesses and public facilities.	Ongoing.	PHA.	Membership numbers. Public sector and community/voluntary sector membership.
Introduce legislation to support breastfeeding in public places.	Medium.	DHSSPS.	Public consultation. Legislation enacted.
Encourage HSC organisations and DHSSPS to act as exemplar models in providing supportive employment environments for breastfeeding mothers returning to work.	Medium.	DHSSPS, HSCB, PHA.	HR policies in place that reflect BFI. Employee survey feedback.

Outcome - 1: Supportive environments for breastfeeding exist throughout Northern Ireland

Strategic Actions	Completion timescale	Lead organisation(s)	Indicator(s)
Advocate for the strengthening of the legislation regulating Infant Formula and Follow-on Formula milks to prevent the marketing of these products to the public.	Medium.	DHSSPS, PHA, HSCB.	Change to existing legislation.
Encourage Government Departments and Statutory Bodies to recognise the value of breastfeeding.	Ongoing.	DHSSPS, PHA.	Policies in place in statutory settings.

Short	Within 3 years
Medium	Within 5 years

Outcome - 2: Health and Social Care (HSC) has the necessary knowledge, skills and leadership to protect, promote, support and normalise breastfeeding

- 6.9 The HSC sector has a central role in advocating and implementing breastfeeding policy and best practice. A designated Regional Lead for Breastfeeding for Northern Ireland based within the PHA should continue to provide leadership and co-ordination of activities which are in support of the Strategy. HSC organisations should also continue to provide and support Trust-based breastfeeding co-ordinator posts and to continue to develop community based breastfeeding co-ordinator posts. All staff who are involved in supporting women to make informed decisions about mother and infant care need to be aware of the potential effect on breastfeeding. In line with the Strategy for Maternity Care in Northern Ireland 2012-2018 the culture should be the normalisation of birth and a reduction in intervention rates.
- 6.10 Adoption of the UNICEF UK Baby Friendly Initiative (BFI), for both maternity and community healthcare services is important to ensure the same standard of care is available for all women, including those who choose to deliver their baby at home or leave hospital after a short stay. In addition, Northern Ireland University departments responsible for midwifery, health visitor and public health nurse education should be supported to achieve UNICEF UK BFI University Standards accreditation. Furthermore, expectant and new mothers need information that enables them to make informed choices about infant feeding. This information should help them to understand breastfeeding, including how the body physically changes to make milk and how to make use of their babies' natural reflexes to maximise milk supply for initiation and continuation of breastfeeding. Provision of such information to pregnant women should be consistent, available in different formats and be accessible throughout NI to all pregnant women and in line with UNICEF UK BFI.

- 6.11 The specific needs of vulnerable infants, ill or pre-term babies should be addressed within the broader range of breastfeeding support services. All mothers of infants being cared for in neonatal units should be provided with information and support to enable them to initiate and maintain lactation through expression of breast milk. The Donor Milk Bank should be promoted and supported.
- 6.12 All interventions need to be in line with DHSSPS endorsed NICE guidance and with BFI guidance to support mothers to initiate and establish breastfeeding and ensure any difficulties in breastfeeding are addressed.
- 6.13 Depending on their level of involvement in antenatal and postnatal care, HSC staff require varying degrees of education and training to enable them to actively protect, promote, support and normalise breastfeeding. All staff supporting women to breastfeed should receive continuing education in breastfeeding. Appropriate and standardised training and education of registered and pre-registered health professionals including GPs, obstetricians and paediatricians as well as maternity staff, is essential to ensure consistency of message and approach at all times. Staff should be aware of the impact of birth practices, medical interventions and medication on breastfeeding and management of these issues.
- 6.14 The NIPEC (Northern Ireland Practice and Education Council) review of the impact of the maternity support worker role demonstrated the invaluable contribution maternity support workers make in supporting breastfeeding women. However, given earlier discharge from hospital following birth, further development is required to improve access to this service in the community as well as in hospital. A strong emphasis on partnership working is vital to strengthen and deliver the full range of community support services - including antenatal and postnatal education, breastfeeding support groups, visits and telephone support.

The services provided by Breastfeeding Counsellors, Lactation Consultants and volunteer peer supporters need to be promoted, encouraged and facilitated.

- 6.15 The evidence indicates the need to target support intervention at young mothers and those from lower socio-economic communities. The evidence base suggests that informal small group ante-natal sessions, involvement of family members, promoting self-efficacy, and addressing the barriers to breastfeeding are the most effective interventions for these mothers. These types of evidence based programmes including others such as the family nurse partnership programme can be delivered by both professionals and peer volunteers.
- 6.16 It would also be beneficial to effectively engage with the network of over 500 community pharmacies throughout Northern Ireland as a potential partner to help deliver breastfeeding promotion and support. Community Pharmacies are uniquely located within communities that they serve and are accessible at short notice for confidential access to contemporary professional advice, information and services that contribute towards improved health and wellbeing. For example some Pharmacists are included in the work of the "Building the Community Pharmacy Partnership" (BCPP).

Outcome - 2: Health and Social Care has the necessary knowledge, skills and leadership to protect, promote, support and normalise breastfeeding

Strategic Action	Completion timescale	Lead organisation(s)	Indicator(s)
Provide both regional and local lead for implementation of the breastfeeding strategy.	Ongoing.	PHA.	Regional lead co-ordinator post and local breastfeeding co-ordinator's in place.
Strategy implementation action plan in place.	Short.	PHA.	Implementation of action plans in support of the strategy.
Achieve and maintain UNICEF UK BFI accreditation in all maternity and community health care services, and support NI Universities to achieve UNICEF UK BFI University Standards accreditation for midwifery and health visiting training courses.	Medium.	PHA, HSC Trusts, Sure Starts.	Proportion of UNICEF UK BFI awards in maternity services, health visiting services, Sure Starts and Universities.
Encourage undergraduate and postgraduate education providers to include breastfeeding education to other relevant HSC professions.	Medium.	PHA.	Breastfeeding included in course curriculums.
Provide accessible breastfeeding, practical and problem solving support from a midwife, or a health visitor, or maternity support worker.	Short.	HSC Trusts.	Surveys.

Strategic Action	Completion timescale	Lead organisation(s)	Indicator(s)
Develop and deliver community support programmes including peer support targeting those least likely to breastfeed.	Medium.	HSC Trusts, PHA.	Breastfeeding support services are commissioned by Health and Social Care Board and PHA. Evidence of joint programmes with voluntary and community organisations. Number of active peer support groups. Number of community pharmacies engaged in delivering breastfeeding promotion and support.
Provide mothers of vulnerable infants with tailored information and support for breastfeeding and where appropriate provide donor breast milk.	Ongoing.	HSC Trusts.	Number or percentage of babies in Neonatal units who are breastfed or receive donor breast milk.
Monitor compliance and report violations under the WHO International Code of Marketing of Breast Milk Substitutes.	Ongoing.	PHA, HSC Trusts.	Records of reported violations.

Short	Within 3 years
Medium	Within 5 years

Outcome - 3: High quality information systems are in place that underpin the development of policy and programmes, and which support strategy delivery

- 6.17 Ongoing data collection and analysis, and further local research are essential to inform the approach to breastfeeding promotion; enable monitoring of the delivery of the Strategy; and ensure that interventions are targeted at those mothers least likely to breastfeed.
- 6.18 Information on breastfeeding is collated from a variety of sources, including the Northern Ireland Maternity System (NIMATS), Child Health System (CHS) and through surveys such as the UK Infant Feeding Survey. There is a need to improve the rate of collection, analysis and use of this data to inform service changes and improve breastfeeding initiation and duration. This requires training, local emphasis on accurate data input, and consideration of how local trends of breastfeeding could be monitored, for example by Local Commissioning Groups, and collated against the Multiple Deprivation Measure.
- 6.19 Younger mothers, mothers from lower socio-economic groups, and mothers with lower educational levels are less likely to initiate and continue breastfeeding. Further local research is necessary to identify the causal factors for this and to identify effective intervention to address these factors. Potential areas for future consideration in terms of local research are set out in the table below.

Potential research areas for future consideration

- Attitude and motivation to breastfeeding and interventions that have the capability to change the behaviour and attitudes of multiple user groups, including younger people;
- Investigation of how those who are disadvantaged learn about breastfeeding and how to deliver breastfeeding promotion and support to those least likely to breastfeed;
- Exploration into the reasons why so many women here stop breastfeeding before they intended to and what might help them sustain breastfeeding for longer;
- Investigation of the challenges associated with promoting and supporting breastfeeding for women who live with complex health needs and who face difficulties with breastfeeding;
- Assessment of the challenges and solutions associated with breastfeeding following instrumental and premature birth;
- Assessment of the challenges and needs of mothers of babies being cared for in neonatal units;
- Exploration of the benefits of on-line and inter-active media support for breastfeeding women, peer support women and health professionals;
- Consideration of family social support factors and of the consistency of professional support;
- Promoting normalisation and reducing unnecessary interventions in childbirth;
- Exploration of the impact on breastfeeding rates of increasing migrant population;
- Review of the effect of HSC service approaches to breastfeeding support and of early discharge on breastfeeding rates; and
- Consideration of the impact of legislation to make breastfeeding more socially acceptable.

Outcome - 3: High quality information systems in place that underpin the development of policy and programmes, and which support strategy delivery

Strategic Action	Completion timescale	Lead organisation(s)	Indicator(s)
Collect information on Northern Ireland prevalence of breastfeeding according to maternal age, education levels, socio- economic status etc.	Ongoing.	DHSSPS.	Participation in national and local surveys.
Collect, monitor, and report breastfeeding initiation rates & incidence at discharge, 10 days, 6 weeks, 3 months, and 6 months - regionally and locally.	Ongoing.	HSC Trusts, DHSSPS, PHA.	Quarterly statistical reports. Annual health intelligence breastfeeding briefing reports.
Regularly review research information, support and commission local research, and adapt services in light of research findings.	Ongoing.	PHA.	Agreed prioritised research programme, including any opportunities for all Ireland research. Evidence of service improvement based on research findings.

Short	Within 3 years
Medium	Within 5 years

Outcome - 4: An informed and supportive public

- 6.20 An informed and supportive public is essential to achieve normalisation of breastfeeding. There should be meaningful engagement with the general public, the business community, families and women about the importance of breastfeeding to maternal and child health and wellbeing. Action should be taken to increase public acceptance by promoting and supporting breastfeeding as the natural, normal and desirable way of feeding babies.
- 6.21 The Department and Health and Social Care sector will work with other sectors to develop methods to encourage breastfeeding to be represented as the norm in publications and media. It is important to ensure that breastfeeding is viewed as the social norm by the next generation of parents by promoting breastfeeding awareness for children of nursery, primary and post primary age.
- 6.22 Effective influencing of public attitudes to, and the culture around, breastfeeding will require innovative approaches to engage with young women, particularly those from more disadvantaged backgrounds. The use of social media will be necessary in addition to more traditional approaches through, for example, Breastfeeding Awareness Week events, poster campaigns, DVDs and so forth.

Strategic Action	Completion timescale	Lead organisation(s)	Indicator(s)
Develop and deliver programmes promoting breastfeeding and to facilitate change in attitudes and culture around breastfeeding.	Ongoing.	PHA.	Regional/ All Ireland social marketing strategy is in place. Social marketing campaigns. Public awareness and public attitudes.
Encourage Government Departments and Statutory Bodies to depict breastfeeding as the norm.	Ongoing.	DHSSPS. PHA.	Breastfeeding policies in place. Evidence of positive breastfeeding messages.

Short	Within 3 years
Medium	Within 5 years

CHAPTER 7 – MAKING IT HAPPEN

Introduction

7.1 Successful implementation of the Strategy will help to increase the initiation and duration of breastfeeding and improve public health. This in turn will also lead to a reduction in health inequalities. Implementation will be led by the Public Health Agency through a detailed strategy action plan based on the outcomes and strategic actions set out in this strategy document.

From Strategy to Action

- 7.2 The Department, HSC organisations, and the voluntary and community sector have important roles in achieving the Strategy's outcomes through the delivery of its strategic actions. Key delivery partners include the Department, PHA, HSC Board and Trusts; health professionals; education and training establishments; voluntary organisations including La Leche League, NCT and Tiny Life; the community sector including Sure Starts, local Breastfeeding Support groups and peer support groups; the Food Standards Agency; local councils and the private sector including retailers and food outlets.
- 7.3 These stakeholders and/or their representative bodies will contribute to the development and delivery of the strategy action plan which will specify what each organisation will deliver to contribute to the Strategy's outcomes.

Managing the Strategy's delivery

7.4 A strategy implementation steering group, chaired by the PHA and made up of key stakeholders, with the authority to co-opt representatives as necessary, will be established to steer and drive forward delivery of the Strategy and its strategic actions. Progress reports will be submitted through the Chair, on behalf of the Group, to the Department.

Monitoring, measurement and evaluation

- 7.5 The Strategy's delivery will be monitored through the steering group and the Department. Working with the steering group, the PHA will produce an annual review of progress on implementation of the action plan and on progress against the milestones that will be set out in the action plan. This progress report will be submitted to the Department.
- 7.6 To assist in monitoring progress on the strategic actions, it will be necessary to establish baseline measures for each of the indicators identified in Chapter 6. Progress will then be measured and reported from these baselines. To support this, the PHA will also produce an annual health intelligence report on breastfeeding in Northern Ireland.
- 7.7 Overall evaluation of the Strategy is the responsibility of the Department. To assist with evaluation, interim reviews of the strategy will be carried out in 2016 and 2019, with a final overall evaluation of the Strategy to be conducted in 2022/23.

APPENDIX A

KEY DEFINITIONS FOR INFANT FEEDING

Artificial feeding	Infant is fed only on a breast milk substitute
Baby Friendly Initiative (BFI)	Is a best practice assessment and accreditation process to ensure a high standard of care in relation to infant feeding for pregnant women and mothers and babies.
Breastfeeding Initiation	Is when a baby has at least one breastfeed.
Breastfeeding Peer Support	Mother to mother support given by women who have breastfed their own children and provide effective ongoing support and encouragement.
Breast milk substitutes	Any food being marketed or otherwise represented as a partial or total replacement for breast milk, whether or not it is suitable for that purpose.
Complementary feeding	The child receives both breast milk and solid (semi-solid or soft) foods. It is not recommended to provide any solid, semi-solid or soft foods to children less than six months of age.
Exclusive breastfeeding	Infant receives only breast milk (including breast milk that has been expressed or from donor breast milk) and nothing else, except for oral rehydration therapy, medicines and vitamins and minerals.
Formula	Artificial milks for babies made out of a variety of products, including sugar, animal milks, soybean, and vegetable oils. They are usually in powder form, to mix with water.
Partial breastfeeding	Infant receives both breast milk and any other food or liquid including water, non-human milk and formula before 6 months of age

APPENDIX B

BREAST MILK

Breast Milk

Milk composition is species specific. Human breast milk provides all of the nutrients, vitamins and minerals an infant needs for growth for the first six months, and no other liquids or food are needed. In addition, breast milk carries antibodies from the mother that help combat disease. Formula milk is just a food. It has none of the enzymes, ligands, immune properties or infection protection properties.

Composition

Protein in breast milk is rich in lactalbumin (whey) and low in casein (curd) compared with cow's milk. The amino acid content is more suited to the needs of the infant. The fat content is rich in essential fatty acids particularly the long chain polyunsaturated fatty acids. Breast milk contains lipase, which aids fat absorption. The principal carbohydrate in breast milk is the disaccharide lactose, which is also present in cow's milk in a different chemical form. Breast milk provides the infant with his / her vitamin, mineral and trace element requirements. Breast milk also contains hormones and growth factors such as epidermal growth factors to assist maturation of the infant gut. Anti-inflammatory molecules in human milk help to prevent conditions such as necrotising enterocolitis. Breastfeeding provides unique ongoing passive immunity through maternal production of antibodies by the broncho and gut associated lymphoid tissue pathways.

The protein, carbohydrate and fat profiles are unique to breast milk and differ in many ways from other animal milks. Breast milk also contains a range of bioactive components, including anti-microbial and anti-inflammatory factors, digestive enzymes, hormones and growth factors. Anti-microbial agents include leucocytes, secretory immunoglobulin (Ig)A, IgM and IgG antibodies, oligosaccharides, lysozyme, lactoferrin, lipids, fatty acids and mucins. Growth factors are thought to be important for gut maturation. Lactoferrin is one of several specific binders in human milk that greatly increase the bioavailability of micronutrients.

The role of leptin in breast milk may be of particular importance in the early development of both adipose tissue and appetite regulatory systems in the infant, and ultimately on propensity to obesity in later life. A recent study showed that administration of physiological levels of leptin to suckling rats caused a significantly lower body weight in adulthood. Observational studies have shown that breastfeeding is associated with lower rates of childhood obesity. Bearing in mind the absence of leptin in formula milk, this may have important implications for the prevention of obesity in children and in adults.

Colostrum, produced during the first few days is low in volume but high in density and high in anti-microbial factors. Volume and nutrient content reach a peak, in mature breast milk, several weeks or months after birth. Breast milk volume varies as a baby's need varies. The mother's macronutrient intakes do not have much influence on milk composition, but her diet does affect the long-chain fatty acid and vitamin content of her milk.

Studies have shown that in the first three months, mothers of fully breast-fed babies produce about 800 ml of milk a day. The amount is very similar among women all over the world. On average, 100g of human milk provides:

- 289 kJ (69 kcal) of energy
- 1.3g protein
- 4.1g fat
- 7.2g carbohydrate (mainly lactose)
- 34 mg calcium

Anti-infective properties of breast milk

Colostrum is the concentrated milk produced in the first few days after birth. Apart from providing nutrients and fluid required by the infant, like mature breast milk, colostrum supplies immunoglobulins. It also has a laxative effect which reduces the severity of physiological jaundice. The transfer of lymphocytes and macrophage cells from breast milk enhances the infant's gut defences. Other anti-infective agents in breast milk are the iron binding protein lactoferrin and the enzyme lysozyme. Breast milk also contains viral fragments, which help enhance the effectiveness of vaccines.

Storage

Breast milk can be stored in the fridge for up to five days and frozen for up to three months.

Human Milk Bank

The Western Health and Social Care Trust operate the human milk bank that collects and processes milk in accordance with the NICE clinical guidelines.

The donors are mothers who are providing breast milk to their baby and have excess; or who have stored milk, for example whilst the baby is hospitalised and then choose to give this milk to the bank.

Donor mothers are health screened and then blood tested for HIV 1& 2, HTLV 1&2, Hepatitis B & C and Syphilis.

Donated milk is pooled from a single donor, checked for bacteria, pasteurised and graded according to the type of milk, it is then deep frozen. Milk leaving the bank is traceable from the donor to the receiving baby. All milk leaves the bank in tamper evident bottles.

Main use of Donor milk

- Babies in Neo-natal units- when mother's milk is not available;
- Babies with gut disorders;

- Babies with cardiac problems; and
- Babies with malabsorption problems.

Benefit of breast milk and donor breast milk

- Protection from infection. Donor breast milk is the next best thing to a
 mother's own breast milk if she is unable to feed her baby for whatever
 reason, or if her baby requires additional milk for a time. Donor breast milk
 has benefits over formula because it contains a variety of protective factors
 which help protect a sick premature baby from infection. These small
 babies are very prone to catch infections and they need all the help they
 can get. These protective factors, such as immunoglobulins, are not
 present in formula prepared from cow's milk.
- Protection from necrotising enterocolitis (NEC). Not only does donor breast milk protect from infection but it also has a protective role against the syndrome called necrotising enterocolitis (NEC).
- Easier to digest. A preterm baby's gut is very delicate and it absorbs breast milk more easily than formula milk because the balance of proteins is different. A sick baby needs to be fed very gently and very small amounts of breast milk gradually acclimatise the gut to food. This is especially true for babies who have had gut surgery when their gut needs to be introduced to food very gradually.

Infection and Illness

Where the infant's medical condition prevents breastfeeding, the mother should be encouraged and supported to express and store breast milk until the infant recovers.

Mastitis is defined as an inflammatory condition of the breast that may or may not be accompanied by infection. Mastitis is a common complication of breastfeeding and can lead to mother's stopping breastfeeding. The GAIN guidelines on the Treatment, Management and Prevention of Mastitis provide a structure for health professionals dealing with women with mastitis.

APPENDIX C

BREASTFEEDING RATES

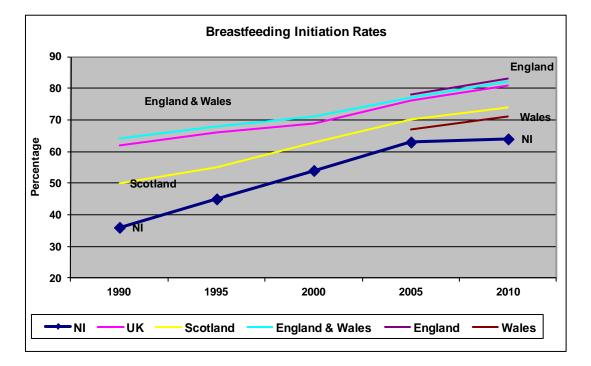
Breastfeeding Rates in Northern Ireland and the UK

Northern Ireland has the lowest rates for breastfeeding in the UK. The UK Infant Feeding Survey (IFS) provides national estimates of breastfeeding incidence, prevalence and duration rates.

Initiation rates

The results from the IFS 2010 show that the breastfeeding initiation rate in Northern Ireland is 64%, which is similar to the rate 5 years ago. Despite the breastfeeding initiation rate almost doubling in the last 20 years, the rate in NI has consistently remained the lowest in the UK. Chart 2 below provides a comparison of the initiation rates across the UK. NI initiation rate of 64% compared to England 83%, Scotland 74% and Wales 71%. The UK breastfeeding initiation rate is 81%.



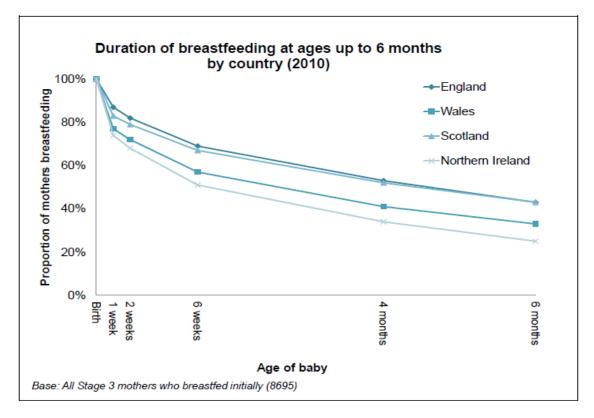


Source: IFS 2010

Duration rates

Mothers in Northern Ireland, who choose to breastfeed, do so for a shorter period than breastfeeding mothers in GB. The duration of breastfeeding refers to the length of time that mothers who breastfeed initially continue to breastfeed even if they are also giving their baby other milk and solid foods. Chart 3 below shows the comparative decline in the duration of breastfeeding from birth in 2010 across Northern Ireland, Scotland, England and Wales. Northern Ireland has the highest rate of fall-out in duration of breastfeeding; at one week 26% of mothers in NI who had breastfed initially had stopped. At six months, over three-quarters of mothers in Northern Ireland who breastfed initially had stopped.

Chart 3 - Duration of Breastfeeding among mothers who breastfed initially, by country



Source: IFS 2010

Prevalence of Exclusive Breastfeeding

In 2010, Northern Ireland had the lowest prevalence of exclusive breastfeeding at birth (52%) compared to England 71%, Scotland 63% and Wales 57%. Of those mothers in Northern Ireland who were exclusively breastfeeding at birth, only 13% were continuing to do so at six weeks, compared with England 24%, Scotland 22%, Wales 17%. At 6 months the level of exclusive breastfeeding was negligible.

Northern Ireland Breastfeeding Rates at Discharge from Hospital

The Northern Ireland Maternity System and the Child Health System collates information on the feeding status of infants at discharge from hospital. Chart 4 below shows the total number of births and the number of infants receiving any breast milk at discharge from hospitals in Northern Ireland between 2004 and 2010. The number of infants receiving any breast milk includes babies who are receiving only breast milk and those who are receiving both breast milk and formula. It should be noted there has been a significant increase in the total number of births from 2004 at 22,318 to 25,273 in 2011. The length of time in hospital following childbirth has decreased which means that breastfeeding at discharge is measured earlier than in previous years.

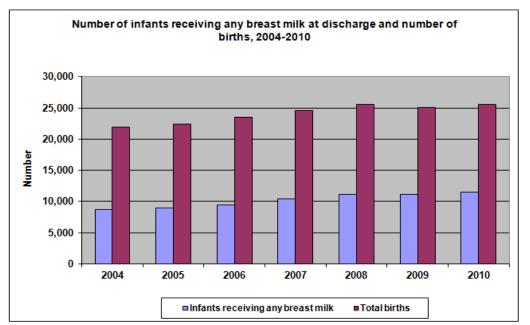


Chart 4 - Total Number of Births and Number of infants receiving any breast milk at discharge

Source: CHS

In 2010, the Northern Ireland regional breastfeeding rate was 44.9%. The South Eastern Health and Social Care Trust/ Local Commissioning Group area had the highest breastfeeding rates at discharge (50.8%), followed by the Southern (46.4%), Belfast (46%), Northern (42.6%) and Western (38.7%).

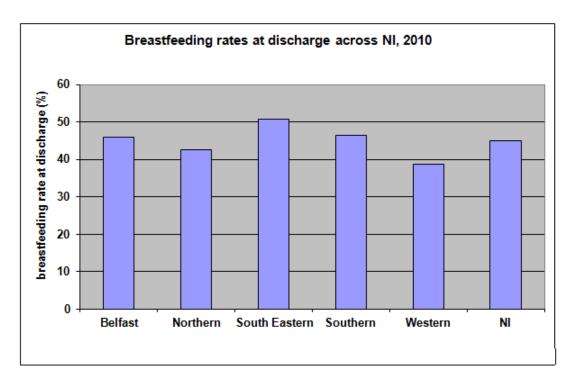


Chart 5 - Northern Ireland Breastfeeding rates at discharge in 2010

Source: CHS

Breastfeeding in the Republic of Ireland

The overall percentage of total live births exclusively breastfed at time of discharge from hospital in the Republic of Ireland (ROI) in 2009 was 45%. Chart 6 below shows the percentage of mothers' breastfeeding at discharge (which is slightly different due to plurality of births).

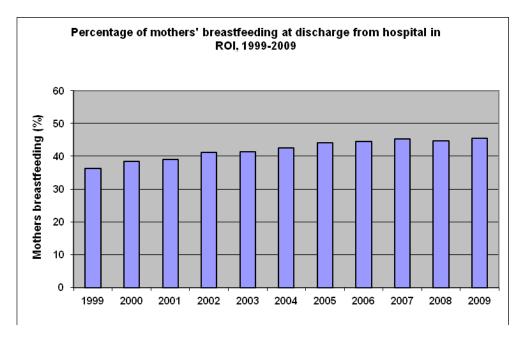


Chart 6 - Percentage of ROI mothers' breastfeeding at discharge

Source: Economic and Social Research Institute (ESRI), Dublin.

In ROI, breastfeeding is more common than artificial feeding among mothers aged 30 years and older; almost half the babies born to mothers aged 40 and older were exclusively breastfed compared with just over one fifth of those born to mothers aged under 20.

International Comparison

It is difficult to compare rates of breastfeeding among EU countries as not all EU Member States gather regular data on breastfeeding and accurate comparisons are difficult as definitions and data collection methods vary between countries. Chart 7 below shows a comparison of breastfeeding rates across countries from national surveys collected between 1998 and 2007; however care is needed when making comparisons due to the lack of standard methods of data collection and of application of definitions.

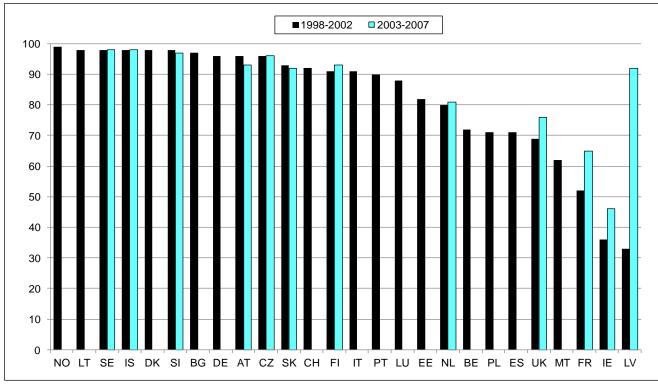


Chart 7 - Rate of initiation of breastfeeding in EU countries

Key

NO - Norway	SI - Slovenia	SK - Slovakia	LU - Luxemburg	ES – Spain
,			LO - Luxemburg	1
LT - Lithuania	BG - Bulgaria	CH - Switzerland	EE - Estonia	UK – United Kingdom
SE - Sweden	DE - Germany	FI - Finland	NL - Netherlands	MT - Malta
IS - Iceland	AT - Austria	IT - Italy	BE - Belgium	FR - France
DK - Denmark	CZ – Czech Republic	PT - Portugal	PL - Poland	IE - Ireland
				LV - Latvia

As indicated in Chart 7 above, between the periods surveyed, improvements in the rates of initiation of breastfeeding are reported from Ireland, France, Latvia and the UK. (The large increase reported between the two survey periods for Latvia is probably due to changes in survey definitions and methods).

Considering data available in the WHO-HFA (Health for All) database and other data reported by countries participating in EU-funded projects, it would appear that initiation, exclusivity and duration are relatively higher in Scandinavian countries and lower in Belgium, France, Greece, Ireland and UK.

Source: European Commission

In the United States, 'Breastfeeding report cards' provide state-by-state data from the Centres for Disease Control and Prevention (CDC). For 2010, the CDC data shows that 3 out of every 4 new mothers in the United States start out breastfeeding. However, the US national rates of breastfeeding at 6 (43.0%) and 12 (22.4%) months as well as rates of exclusive breastfeeding at 3 (33.0%) and 6 (13.3%) months remain stagnant and low.

Variations in Breastfeeding

A number of factors including birth order, education level, age of mother and socio-economic status can influence breastfeeding rates. In Northern Ireland, similar to the rest of the UK, the highest incidences of breastfeeding were found among mothers from managerial and professional backgrounds, those with the highest educational levels, those aged 30 or over and first time mothers.

In Northern Ireland the incidence of breastfeeding initiation was:

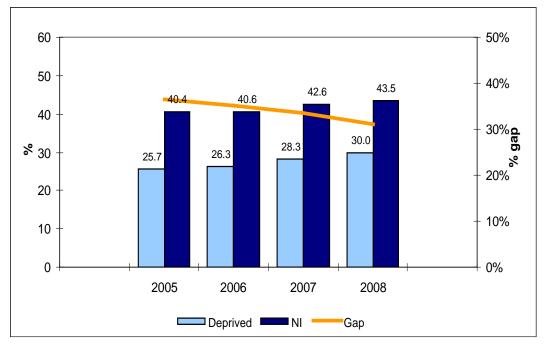
- higher for first-born babies (70%) than for second or subsequent-born babies (60%);
- highest among babies whose mothers has completed full-time education aged over 18 years (77%) compared to rates among mothers who left education aged 17 or 18 years (50%) and aged 16 or under (43%);
- highest among mothers aged 30 and over (74%) and lowest among mothers aged 20 or under (34%); and
- highest among mothers from managerial and professional occupations (81%) and lowest for those who report having never worked (30%).

There are differences in the socio-economic classification of mothers in Northern Ireland. The IFS shows that the largest increase in incidence of breastfeeding initiation was in the 'routine and manual' occupations (increase from 49% in 2005 to 56% in 2010). However, the incidence of breastfeeding in those who report never having worked decreased from 37% in 2005 to 30% in 2010.

Across the UK, younger mothers, mothers from lower socio-economic groups, and mothers with lower educational levels are less likely to initiate and continue breastfeeding.

Deprivation

Breastfeeding rates at discharge from hospital are strongly associated with deprivation status. An inequalities gap in breastfeeding rates is illustrated by Chart 8 below. The proportion of mothers that were still breastfeeding on discharge from hospital improved both in deprived areas and in NI as a whole over the period. In 2005, the proportion of mothers that were breastfeeding was 36% lower in the most deprived areas than the average across NI. By 2008, the gap had fallen to 28%.



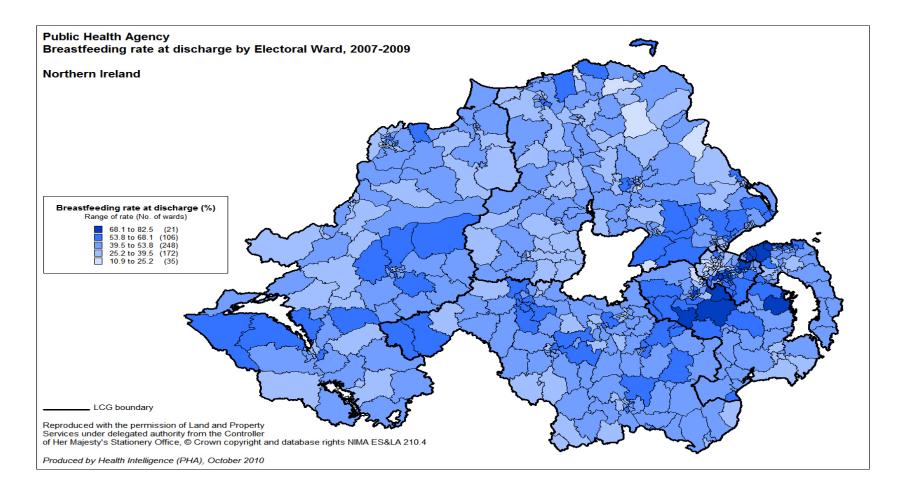


Source: Child Health System / Project Support Analysis Branch

The PHA has mapped the variation in average breastfeeding rates at discharge for 2007 – 2009 across Northern Ireland. Mothers living in the 20% least deprived wards in Northern Ireland are on average twice (1.9 times) as likely to breastfeed as those mothers living in the 20% most deprived wards.

The lowest breastfeeding rates at discharge were found in Newlodge (11%), Whiterock (12.4%), Ardoyne (13.1%) wards while the highest breastfeeding rates at discharge are observed in Ballyholme (82.5%), Stormont (78.9%) and Malone (78%) wards. Chart 9 below shows the variation in breastfeeding rates at discharge across Northern Ireland by electoral area for that three year period.

Chart 9 - Breastfeeding Rate at Discharge by Electoral Ward in NI



Source: Public Health Agency

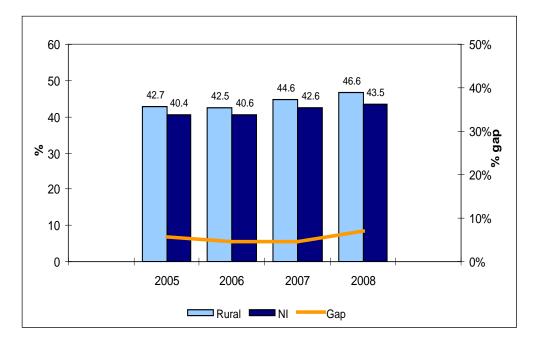
Research suggests that young women from low income areas are least likely to breastfeed for a number of reasons including embarrassment, lack of role models, fear of pain, misconceptions that their baby will not gain sufficient weight from breastfeeding alone, and exposure to a bottle-feeding culture, which promotes the use of artificial formula.

Young mothers (<20 years) from the most deprived areas are more likely to smoke (23%) compared to NI average 12.4% and least deprived areas (6%). The breastfeeding rate among young mothers (<20 years) who smoke from most deprived areas is 14%. Older mothers (25+ years) from most deprived areas are less likely to breastfeed (38%) compared to NI average (50%) and least deprived areas (61%). Among older mothers (25+ years) who smoke, those from deprived areas are less likely to breastfeed (20%) compared to NI average (25%) and least deprived areas (33%).

Rural Areas

As illustrated in Chart 10 below, the breastfeeding rates on discharge from hospital show that those living in rural areas have slightly higher breastfeeding rates on discharge from hospital compared to the NI average breastfeeding rate on discharge and the gap has remained fairly consistent across the time period.

Chart 10 - Breastfeeding on Discharge from Hospital in Rural Areas and NI



Source: Child Health System / Project Support Analysis Branch

Minority Ethnic Groups

In the UK, mothers from minority ethnic groups (Asian, black or of mixed origin) were more likely to initiate and continue breastfeeding compared to white mothers.

The breastfeeding rates among Travellers are low. The All Ireland Traveller Health Study shows that the rate for children overall was 5.6% in the Republic of Ireland and 7.1% in Northern Ireland. Older Traveller women had substantially higher rates of breastfeeding.

APPENDIX D

IMPORTANT EFFECTS OF BREASTFEEDING

Breastfeeding reduces the risk of disease, enhances social and emotional development, and has economic benefits for mothers, families and the health care system.

Benefits for Child	Benefits for Mum	Benefits for Society
Reduces the risk of	Reduced risk of ovarian,	Breastfeeding creates a
gastroenteritis, middle	uterine and breast	special bond between
ear, respiratory and	cancers.	mother and baby and
urinary tract infections.		the interaction between
Optimum neurological	Enhanced post partum	the mother and child
development.	weight loss – uses up to	during breastfeeding
	500 calories a day.	has positive
Reduces the risk of		repercussions for life, in
necrotising enterocolitis	Delayed return of	terms of stimulation,
(NEC).	fertility.	behaviour, speech,
		sense of wellbeing and
Reduced risk of Sudden	Breastfeeding releases	security and how the
Infant Death Syndrome.	a hormone in the mother	child relates to other
	(oxytocin) that causes	people.
Exclusive breastfeeding	the uterus to return to its	
offers some protection	normal size more	Breastfeeding is good
against the development	quickly.	for the environment. It
of atopic disorders and		produces no waste and
other allergies. Where	Reduced risk of	requires no packaging.
there is a strong family	postmenopausal	
history of eczema,	osteoporotic hip	
asthma or cow's milk	fracture.	
protein intolerance,		
breastfeeding should be		
encouraged.		

Benefits for Child	Benefits for Mum	Benefits for Society
The act of breastfeeding	Diabetic women	Breastfeeding is
itself stimulates proper	improve their health by	convenient. It needs
growth of the mouth and	breastfeeding. Not only	no preparation and
jaw, and secretion of	do nursing infants have	does not require
hormones for digestion	increased protection	heating.
and satiety.	from juvenile diabetes,	
	the amount of insulin	Breastfeeding has
Health benefits lasting	that the mother requires	been linked with
into childhood	postpartum goes down.	improved educational
Reduced risk of:		and social outcomes.
 diseases of the respiratory system; allergic disorders; Type 1 and Type 2 diabetes; raised systolic blood pressure; childhood obesity; and childhood leukaemia. Protection against cardio-vascular disease.	The emotional health of the mother may be enhanced by the relationship she develops with her infant during breastfeeding, resulting in fewer feelings of anxiety and a stronger sense of connection with her baby. A woman's ability to	Breastfeeding is economical – as breastfeeding avoids the financial burden of families buying infant formula. Health care system saves expenditure on fewer hospital admissions, GP visits, medicines for childhood illnesses such as otitis
Infants who are breast- fed longer have fewer dental cavities throughout their lives.	produce all of the nutrients that her child needs can provide her with a sense of confidence.	and gastroenteritis.

APPENDIX E

MEMBERSHIP OF THE BREASTFEEDING STRATEGY WRITING GROUP

Name	Organisation	Representative
Dr Heather Livingston,	Department of Health, Social	Breastfeeding
Chair	Services & Public Safety Acute	Policy
	Services - Child & Maternal Health	
Gerard Collins/ Janet	Department of Health, Social	Breastfeeding
Moore/ Lorraine Rae/	Services & Public Safety – Health	Policy
June Hamilton/Amy	Improvement Policy –	(Secretariat)
Stevenson	Breastfeeding	
Angela McLernon	Department of Health, Social	Child Health
	Services & Public Safety Nursing –	Nursing
	Child Health	
Ann McCrea	Human Milk Bank	Service for special
		needs infants
Blanaid Bruce/ Valerie	Uplift	Voluntary
Morrison		
Carolyn Moorhead	Queens University Belfast - School	Teaching/ Training
	of Nursing & Midwifery	
Catherine Irvine/Alison	South Eastern Health & Social	Breastfeeding Co-
McDade	Care Trust	ordinator,
Denise Boulter/Brenda	Department of Health Social	Midwifery
Devine/Zoe Boreland	Services & Public Safety Nursing	Nursing
Donna Walls	Mid Ulster Mums	Voluntary
Dr Diana Gossrau-Breen/	Public Health Agency, Health	Research
Gillian Gilmore/ Julie	Intelligence	
Neill		

Name	Organisation	Representative
Dr Fiona Kennedy	Public Health Consultant, Public	Maternity Services/
	Health Agency	Neo-natal units
Dr Mary Donnelly (GP)	GP	GP Training
Gillian Anderson	Breastfeeding Coordinator, (Antrim	Breastfeeding Co-
	Area Hospital)	ordinator
Gillian Weir/Gwen	Child Health System User	Information/
Gillespie		Statistics
Glynis Henderson	CCEA	Education
		Curriculum
Ian McClure	Health Development Policy,	Obesity Policy
	Obesity, DHSSPS	
Janet Calvert	PHA – Regional Health & Social	Regional
	Wellbeing Improvement Manager	Breastfeeding
	lead – Breastfeeding	Coordinator/
		Implementation
Janet Taylor	Child Health Services, South	Community
	Eastern Health & Social Care Trust	Representative
Liz McGourty	Midwife Education Consultant,	Training
	Beeches Management Centre	
Margaret Rose	Maternity Services	Maternity Services
McNaughton		
Dr Mary Donnelly (Board)	Medical Advisor, Primary Care,	Primary Care
	HSCB – Southern Area	
Maria Herron	Mothers Voices, Maternity	User
	Services	Representative
Dr Nicola Armstrong	Public Health Agency – Research	Research
	& Development	
Sarah McCann	La Leche League	Voluntary
Naomhin McGarrity	Breastfeeding Mum from Surestart	User
	Colin	

Name	Organisation	Representative
Rosemary Kerr	Breastfeeding/ Parentcraft	Breastfeeding
	Coordinator	Coordinator
Wendy Nesbitt	Community Dietitian, South East	Dietitian
	Health & Social Care Trust	
Professor Marlene	University of Ulster, School of	Academic
Sinclair (Deputy: Patricia	Nursing and Midwifery	Research
Gillen)		
Dr Jenny McNeill	Queen's University Belfast, School	Academic
	of Nursing and Midwifery	Research
Dr Stan Craig	Belfast Health & Social Care Trust	Neonatal
Dr Sanjeev Bali	Northern Health & Social Care	Neonatal
	Trust	
Assistant Professor	RCM research fellow and lecturer,	Academic
Janine Stockdale	Trinity College, Dublin	Research

APPENDIX F EXAMPLES OF POLICIES, STANDARDS AND GUIDANCE SUPPORTING BREASTFEEDING

Investing for Health

The public health strategy *'Investing for Health'*, which was published in March 2002, sets a framework for improving health and reducing health inequalities. It seeks to encourage and enable people to make healthier choices. The Strategy acknowledges that breastfeeding is the best means of giving infants a healthy start in life and endorses the actions in the Breastfeeding Strategy to promote and support breastfeeding. A new Public Health Strategy is currently being developed.

Fit Futures and Obesity Prevention

The Department developed the Fit Futures Implementation Plan in 2007 -*'Focus on Food, Activity and Young People',* to specifically address the growing problem of childhood obesity including action to increase the percentage of children being breastfed at six months. The Framework for Preventing and Addressing Overweight and Obesity in Northern Ireland 2012-2022: *'A Fitter Future for All'* was launched for implementation in March 2012. The Framework contains outcomes relevant to breastfeeding.

Healthy Child Healthy Future

The framework for the universal child health promotion programme in Northern Ireland (2010) sets out a clear core programme of child health contacts that every family can expect. Promotion and assistance with breastfeeding is integral to the programme both during pregnancy and postnatally.

NICE Guidance

The NICE clinical guidelines on antenatal care, intrapartum care and postnatal care for women and babies have been endorsed for application in the HSC and all promote breastfeeding.

WHO Global Strategy for infant and young child feeding

The WHO states that breastfeeding is the normal way of providing young infants with the nutrients they need for healthy growth and development. Virtually all mothers can breastfeed, provided they have accurate information, and the support of their family, the health care system and society at large. Exclusive breastfeeding is recommended up to 6 months of age, with continued breastfeeding along with appropriate complementary foods up to two years of age or beyond.

WHO/ UNICEF Baby Friendly Initiative (BFI)

The Baby-Friendly Initiative (BFI) is a global effort launched by WHO and UNICEF to implement practices that protect, promote and support breastfeeding. It was launched for hospitals in 1991, and has since been revised, updated and expanded for integrated care. The initiative reflects new research and experience, and includes supporting mothers who are not breastfeeding. To date approximately 61% of all births in Northern Ireland are in a BFI maternity facility.

EU Protection, promotion and support of breastfeeding in Europe - A Blueprint for Action

The protection, promotion and support of breastfeeding are a public health priority throughout Europe. Low rates and early cessation of breastfeeding have important adverse health and social implications for women, children, the community and the environment, resulting in greater expenditure on national health care provision, and increase inequalities in health. The Blueprint provides a framework for the development of national or local plans, under the headings of policy and planning; information, education and communication; training; protection by marketing restrictions, promotion and support; monitoring and research.

Midwifery 2020

This UK-wide policy recognises the important role midwives have to play in promoting and supporting breastfeeding.

APPENDIX G EXAMPLES OF REGIONAL MATERIALS TO SUPPORT BREASTFEEDING

<u>www.breastfedbabies.org</u> is a Public Health Agency website which contains information on breastfeeding for both the public and professionals. In addition, the table below includes examples of leaflets and materials that are available to promote and support breastfeeding.

During the antenatal period

- Off to a Good Start
- Feeding Your Baby
- Bump to Breastfeeding DVD
- The Pregnancy Book
- What Dads should know about breastfeeding

For breastfeeding mothers

- Off to a Good Start
- Feeding Your Baby
- Bump to Breastfeeding DVD
- Birth to Five Book
- Breastfeeding and Returning to Work
- Breastfeeding Out and About
- Breastfeeding Welcome Here
 Scheme and materials

APPENDIX H

UNICEF UK BABY FRIENDLY INITIATIVE STANDARDS AND PRINCIPLES

Building a firm foundation

- 1. Have written policies and guidelines to support the standards.
- 2. Plan an education programme that will allow staff to implement the standards according to their role.
- 3. Have processes for implementing, auditing and evaluating the standards.
- 4. Ensure that there is no promotion of breast milk substitutes, bottles, teats or dummies in any part of the facility or by any of the staff.

An educated workforce

Educate staff to implement the standards according to their role and the service provided.

Parents' experiences of maternity services

- 1. Support pregnant women to recognise the importance of breastfeeding and early relationships on the health and wellbeing of their baby.
- 2. Support all mothers and babies to initiate a close relationship and feeding soon after birth.
- 3. Enable mothers to get breastfeeding off to a good start.
- 4. Support mothers to make informed decisions regarding the introduction of food or fluids other than breast milk.
- 5. Support parents to have a close and loving relationship with their baby.

Parents' experiences of neonatal units

- 1. Support parents to have a close and loving relationship with their baby.
- 2. Enable babies to receive breast milk and to breastfeed when possible.
- 3. Value parents as partners in care.

Parents' experiences of health visiting services

- 1. Support pregnant women to recognise the importance of breastfeeding and early relationships on the health and wellbeing of their baby.
- 2. Enable mothers to continue breastfeeding for as long as they wish.
- 3. Support mothers to make informed decisions regarding the introduction of food or fluid other than breast milk.
- 4. Support parents to have a close and loving relationship with their baby.

Parents' experiences of Sure Starts

- 1. Support pregnant women to recognise the importance of early relationships to the health and wellbeing of their baby.
- 2. Protect and support breastfeeding in all areas of the service.
- 3. Support parents to have a close and loving relationship with their baby

Building on good practice

Demonstrate innovation to achieve excellent outcomes for mothers, babies and their families.

Principles

- Practices which help successful breastfeeding should become routine. These include allowing mothers and their babies' unhurried time in skin contact with each other straight after delivery, and ensuring that mothers know how to put their babies to the breast in an effective, pain free way.
- Practices which undermine successful breastfeeding should be ended. These include giving unnecessary feeds of baby milk or water, separating babies from their mothers and restricting or scheduling their feeding times.
- Parents should receive accurate, timely and effective information about successful breastfeeding during their antenatal and postnatal care. This will ensure they are able to make informed choices.
- 4. All staff should be trained, appropriately to their role, in the skills they need to support successful breastfeeding. Health care employers should also be able to expect that newly qualified midwives, health

visitors and other staff have received similar training during their preregistration courses.

APPENDIX I

OVERVIEW OF EXISTING SUPPORT IN THE

COMMUNITY

O and a famil	Along to be all shows all blacks the baset of the first of the Pferror in the
Surestart	Aims to help give children the best possible start in life and provide
	advice and support for breastfeeding mums. A significant number of
	Sure Start programmes in Northern Ireland have achieved UNICEF
	UK BFI accreditation or are working towards full accreditation.
Breastfeeding	Launched in 2005, this scheme aims to make it easier for mothers to
Welcome	recognise places where they could breastfeed their baby when out
Here	and about, and to help improve social acceptability of breastfeeding
	in public. Local councils and businesses sign up to the scheme and
	display a 'Breastfeeding Welcome Here' sticker in their window.
Family Nurse	A preventive programme for young first time mothers, FNP offers
Partnership	intensive and structured home visiting, delivered by specially trained
(FNP)	family nurses from early pregnancy until the child is two. The
	emphasis is on building strong relationships between the client and
	family nurse to facilitate behaviour change and tackle the emotional
	problems that prevent some mothers and fathers caring well for their
	child. Evaluation in GB has been positive and the PHA has begun
	piloting the programme in Northern Ireland. Early indicators in terms
	of breastfeeding initiation are encouraging.
Breastfeeding	Provide practical help with breastfeeding at a community level, either
Counsellors	individually or in group settings. Support may be provided over the
and Volunteer	telephone after an initial face to face visit. Volunteer peer support
Peer	workers have been recommended as an invaluable form of
Supporters	breastfeeding support in the community by NICE, with guidelines
	suggesting women should have contact with peer supporters within
	48 hours of a home birth or hospital discharge. Voluntary
	organisations supporting breastfeeding in the community include
	both La Leche League and the National Childbirth Trust, whose
	trained Breastfeeding Counsellors provide encouragement, mother

	to mother support, and antenatal and postnatal education; and
	breastfeeding support groups. They promote and protect
	breastfeeding within the community, and assist HSC Trusts in
	attaining UNICEF BFI status. Counsellors receive regular ongoing
	training and supervision, and are kept up to date with the latest
	breastfeeding research.
Lactation	Have a formal qualification (International Board Certified Lactation
Consultants	Consultant Exam) and provide a high level of expertise and advice to
	breastfeeding mothers in the hospital, community and voluntary
	settings.
Building the	BCPP is a partnership between the Community Development and
Community -	Health Network (CDHN) and the Health and Social Care Board
Pharmacy	(HSCB) which has been operational for over 10 years. During this
Partnership	time it has supported over 500 projects involving community
(BCPP)	pharmacists and community organisations working with groups of
	local people to address health needs and tackle health inequalities
	using a community development approach. The projects aim to
	help build individual's confidence and responsibility for their health
	and improve engagement with local services, particularly for more
	disadvantaged groups. Many BCPP projects involve women, new
	mothers, children and babies. More details about the projects and
	how to apply funding through the programme are available at
	http://www.cdhn.org/pages/index.asp?title=Building_the_Community-
	Pharmacy_Partnership

APPENDIX J

TRAINING OF HEALTH PROFESSIONALS

Queens University,Currently provides breastfeeding education for pre- registration nursing and a minimum of 18 hours breastfeeding education in the 2 pre-registration courses. QUB also provides a post-registration midwifery breastfeeding management and promotion module when required by HSC Trusts.The University of UlsterThe University of Ulster provides pre-registration training for student Health Visitors and Public Health Nurses which includes 18 hours of breastfeeding education as part of the course.GPsIncludes an E-learning breastfeeding resource GPs developed by UNICEF, endorsed by the Royal College of General Practitioners. This resource is accessible to all GPs and is available from the PHA. Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service postTraining on breastfeeding is provided for midwives, health visitors, neonatal nurses and paediatric nurses within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK BabyBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity staff, health visiting teams and Sure Starts is provided		
OOObreastfeeding education in the 2 pre-registration courses. QUB also provides a post-registration midwifery breastfeeding management and promotion module when required by HSC Trusts.The University of UlsterThe University of Ulster provides pre-registration training for student Health Visitors and Public Health Nurses which includes 18 hours of breastfeeding education as part of the course.GPsIncludes an E-learning breastfeeding resource GPs developed by UNICEF, endorsed by the Royal College of General Practitioners. This resource is accessible to all GPs and is available from the PHA. Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK Baby Friendly InitiativeTraestfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity	Queens University,	Currently provides breastfeeding education for pre-
courses. QUB also provides a post-registration midwifery breastfeeding management and promotion module when required by HSC Trusts.The University of Ulster The University of Ulster provides pre-registration training for student Health Visitors and Public Health Nurses which includes 18 hours of breastfeeding education as part of the course.GPsIncludes an E-learning breastfeeding resource GPs developed by UNICEF, endorsed by the Royal College of General Practitioners. This resource is accessible to all GPs and is available from the PHA. Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK BabyTraining on breastfeeding is provided for midwives; health visitors, neonatal nurses and paediatric nurses within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK Baby Friendly InitiativeBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity	Belfast	registration nursing and a minimum of 18 hours
midwifery breastfeeding management and promotion module when required by HSC Trusts.The University of UlsterThe University of Ulster provides pre-registration training for student Health Visitors and Public Health Nurses which includes 18 hours of breastfeeding education as part of the course.GPsIncludes an E-learning breastfeeding resource GPs developed by UNICEF, endorsed by the Royal College of General Practitioners. This resource is accessible to all GPs and is available from the PHA. Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK BabyTraining on breastfeeding is provided for midwives, health visitors, neonatal nurses and paediatric nurses within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK Baby Friendly InitiativeBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		breastfeeding education in the 2 pre-registration
module when required by HSC Trusts.The University of UlsterThe University of Ulster provides pre-registration training for student Health Visitors and Public Health Nurses which includes 18 hours of breastfeeding education as part of the course.GPsIncludes an E-learning breastfeeding resource GPs developed by UNICEF, endorsed by the Royal College of General Practitioners. This resource is accessible to all GPs and is available from the PHA. Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK BabyTraining on breastfeeding is provided for midwives; a heastfeeding and by the HSC Clinical Education Centre.UNICEF UK Baby Friendly InitiativeBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		courses. QUB also provides a post-registration
The University of UlsterThe University of Ulster provides pre-registration training for student Health Visitors and Public Health Nurses which includes 18 hours of breastfeeding education as part of the course.GPsIncludes an E-learning breastfeeding resource GPs developed by UNICEF, endorsed by the Royal College of General Practitioners. This resource is accessible to all GPs and is available from the PHA. Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK BabyTraining on breastfeeding coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK Baby Friendly InitiativeBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		midwifery breastfeeding management and promotion
training for student Health Visitors and Public Health Nurses which includes 18 hours of breastfeeding education as part of the course.GPsIncludes an E-learning breastfeeding resource GPs developed by UNICEF, endorsed by the Royal College of General Practitioners. This resource is accessible to all GPs and is available from the PHA. Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK BabyTraining on breastfeeding is provided for midwives; a new approach is provided by the HSC Clinical Education Centre.UNICEF UK BabyBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		module when required by HSC Trusts.
Nurses which includes 18 hours of breastfeeding education as part of the course.GPsIncludes an E-learning breastfeeding resource GPs developed by UNICEF, endorsed by the Royal College of General Practitioners. This resource is accessible to all GPs and is available from the PHA. Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK BabyTraining on breastfeeding is provided for midwives; a new approach is provided by the PHA for maternity	The University of Ulster	The University of Ulster provides pre-registration
education as part of the course.GPsIncludes an E-learning breastfeeding resource GPs developed by UNICEF, endorsed by the Royal College of General Practitioners. This resource is accessible to all GPs and is available from the PHA. Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK BabyTraining on breastfeeding is provided for midwives; a new approach is provided by the PHA for maternity		training for student Health Visitors and Public Health
GPsIncludes an E-learning breastfeeding resource GPs developed by UNICEF, endorsed by the Royal College of General Practitioners. This resource is accessible to all GPs and is available from the PHA. Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK BabyTraining on breastfeeding is provided for midwives; a new approach is provided by the PHA for maternity		Nurses which includes 18 hours of breastfeeding
developed by UNICEF, endorsed by the Royal College of General Practitioners. This resource is accessible to all GPs and is available from the PHA. Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK Baby Friendly InitiativeTraestfeeding and by the HSC Clinical Education centre.UNICEF UK Baby Friendly InitiativeBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		education as part of the course.
College of General Practitioners. This resource is accessible to all GPs and is available from the PHA. Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK Baby Friendly InitiativeTraining on breastfeeding is provided for midwives; a new approach is provided by the PHA for maternity	GPs	Includes an E-learning breastfeeding resource GPs
In-service post registration trainingTraining on breastfeeding is provided for midwives, health visitors, neonatal nurses and paediatric nurses within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK BabyBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		developed by UNICEF, endorsed by the Royal
Some short sessions of breastfeeding awareness training for GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK BabyTraining on breastfeeding is provided for midwives; and by the HSC Clinical Education Centre.UNICEF UK Baby Friendly InitiativeBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		College of General Practitioners. This resource is
In-service post registration training Training or GPs are also delivered at local level or through the Child Health Surveillance training programme. Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration training UNICEF UK Baby Friendly InitiativeTraining on breastfeeding is provided for midwives, health visitors, neonatal nurses and paediatric nurses within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK Baby Friendly InitiativeBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		accessible to all GPs and is available from the PHA.
In-service postTraining on breastfeeding is provided for midwives, health visitors, neonatal nurses and paediatric nurses within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK BabyBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		Some short sessions of breastfeeding awareness
Programme.Breastfeeding is also part of the GP training curriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration trainingTraining on breastfeeding is provided for midwives, health visitors, neonatal nurses and paediatric nurses within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK Baby Friendly InitiativeBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		training for GPs are also delivered at local level or
In-service post registration trainingTraining ourriculum under the headings of care of children and young people; healthy people; and women's health.In-service post registration trainingTraining on breastfeeding is provided for midwives, health visitors, neonatal nurses and paediatric nurses within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK Baby Friendly InitiativeBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		through the Child Health Surveillance training
In-service post registration trainingTraining on breastfeeding is provided for midwives, health visitors, neonatal nurses and paediatric nurses within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK Baby Friendly InitiativeBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		programme. Breastfeeding is also part of the GP
In-service post registration trainingTraining on breastfeeding is provided for midwives, health visitors, neonatal nurses and paediatric nurses within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK Baby Friendly InitiativeBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		training curriculum under the headings of care of
In-service postTraining on breastfeeding is provided for midwives, health visitors, neonatal nurses and paediatric nurses within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK BabyBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		children and young people; healthy people; and
registration traininghealth visitors, neonatal nurses and paediatric nurses within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK BabyBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity		women's health.
registration trainingwithin Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK BabyBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity	In-service post	Training on breastfeeding is provided for midwives,
within Trusts by Breastfeeding Coordinators (where this role exists) and by the HSC Clinical Education Centre.UNICEF UK BabyBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternity	registration training	health visitors, neonatal nurses and paediatric nurses
Centre.UNICEF UK BabyBreastfeeding and Relationship Building Course: a new approach is provided by the PHA for maternityFriendly Initiativenew approach is provided by the PHA for maternity		within Trusts by Breastfeeding Coordinators (where
UNICEF UK BabyBreastfeeding and Relationship Building Course: aFriendly Initiativenew approach is provided by the PHA for maternity		this role exists) and by the HSC Clinical Education
Friendly Initiative new approach is provided by the PHA for maternity		Centre.
Friendry initiative	UNICEF UK Baby	Breastfeeding and Relationship Building Course: a
-	Friendly Initiative	new approach is provided by the PHA for maternity
		staff, health visiting teams and Sure Starts is provided
	, ,	staff, health visiting teams and Sure Starts is provided

	on a regional basis by PHA as required. Neonatal
	nursing and midwifery staff are also offered the
	opportunity to attend the UNICEF breastfeeding and
	lactation management course.
Support staff	Attend breastfeeding training at a level appropriate to
	their role. Maternity healthcare assistants or
	maternity support workers who are expected to
	provide practical support for breastfeeding are
	provided with knowledge and skills training to enable
	them to effectively support breastfeeding mothers.
Sure Start	Staff are provided with breastfeeding training to
	support best practice in the community setting.
	Those who are not expected to provide practical
	breastfeeding support are provided with breastfeeding
	awareness sessions.
Pharmacists	Many in NI offer specialised advice for breastfeeding
	mothers and provide ongoing encouragement in the
	community on a range of issues from promotion of
	breastfeeding, practical support and guidance, dietary
	advice, to the use of prescribed and over the counter
	medicines, treatment of minor ailments and smoking
	cessation support. Equally many pharmacists' source
	and supply specialist products to support
	breastfeeding often for babies with specific needs e.g.
	cleft palate. Postgraduate training is available for
	Pharmacists from the Northern Ireland Centre for
	Pharmacy Learning and Development titled "The
	Pharmaceutical Care of the Breastfeeding Mother".
1	

BIBLIOGRAPHY

Aaltonen, A. S. & Tenovuo J. Association between mother-infant salivary contacts and caries resistance in children: a cohort study. Ped Dentistry 1994; 16(2):110-16.

Abrahams, S. W. and Labbok, M. H. (2009) Exploring the impact of the Baby Friendly Hospital Initiative on trends in exclusive breastfeeding. *International Breastfeeding Journal*, 4, 11, 6 pages

Aldennan, B.W, Weiss, N.S., Daling, J.R. et al. Reproductive history and postmenopausal risk of hip and forearm fracture. Am J Epidemiol1986; 124:262-267.

Anderson, J.W., Johnstone, B.M., and Remley, D.T. (1999) Breastfeeding and cognitive development: a metaanalysis. *Am J Clin Nutr*, 70, pp525–35.

Aniannson, G., Alm, B., Anderssin, B. *et al. (1994)* A prospective cohort study on breastfeeding and otitis media in Swedish infants. Pediatr Infec Dis J, 13, p183-188

Arenz, S., Ruckerl, R., Koletzko, B., von Kries, R. (2004) Breastfeeding and childhood obesity – a systematic review. Int J Obes Relat Metab Disord, 28, p1247-1256.

Avery, M., Duckett, L., Dodgson, J., Savik, K., & Henly, S. (1998). Factors associated with very early weaning among primiparas intending to breastfeed. *Maternal and Child Health Journal*, *2* (3), p167-179.

Babyzone. (ND) Breastfeeding Multiples: Yes, It's Possible. (online) Available at <u>http://www.breastfeed.com/how-to/basics/breastfeeding-multiples</u>

Bachrach, V.R., Schwarz, E. and Bachrachm L.R. (2003) Breastfeeding and the risk of hospitalisation for respiratory disease in infancy: a meta-analysis. Arch Pediatr Adolesc Med, 57, p237-243

Barnes, J., Ball, M. Meadows, P., Howden, B., Jackson, A., Henderson, J. and Niven, L. (2011) The Family-Nurse Partnership Programme in England: Wave 1 implementation in toddlerhood & a comparison between Waves 1 and 2a of implementation in pregnancy and infancy, Department of Health, London

Battersby, S. (2007) An Evaluation of La Leche League GB's Breastfeeding Peer Counsellor Programme (online) Available at <u>http://www.lllgbbooks.co.uk/media/LaLecheMedia/Training/LLLGBPCPEvaluation2007.pdf</u>.

Berniax, L. W., Beaman, M. L. and Schmidt, C.A. (2010) Success of an education intervention on maternal/newborn nurses' breastfeeding knowledge and attitudes. *JOGNN: Journal of Obstetric Gynaecologic and Neonatal Nursing*, 39, 6 pp 658-666

Bisquera, J.A., Cooper, T.R., and Berseth, C.L. (2002) Impact of necrotizing enterocolitis on length of stay and hospital charges in very low birth weight infants. *Pediatrics*, 109, p423–8.

Bolling, K., Grant, K., Hamlyn, B. and Thornton, A. (2007) *Infant Feeding Survey 2005,* United Kingdom: Information Centre, Government Statistical Service

Boyd, C.A., Quigley, M.A., Brocklehurst, P. (2007) Donor breast milk versus infant formula for preterm infants: a systematic review and meta-analysis. *Arch Dis Child Fetal.* 92, p169–175.

Breastfeeding etc. (Scotland) Act 2005. Available at http://www.legislation.gov.uk/asp/2005/1/contents

Britton, C., McCormick, F. M., Renfrew, M. J., Wade, A. And King S. E. (2007) Support for breastfeeding mothers. Cochrane Database of Systematic Reviews, Issue 1

Bunick, M., Gao, D. and Moore, L. (2006) An investigation of the field trip model as a method for teaching breastfeeding to pediatric residents. *Journal of Human Lactation*, 22, 2, pp 195-202

Burke V *et al.* Breastfeeding and overweight longitudinal analysis in an Australian birth cohort. J of Pediatrics 2006;147:56-61.

Burt, S., Whitmore, M. and Vearncombe (2006) The development and delivery of a practice-based breastfeeding education package for general practitioners in the UK. *Maternal and Child Nutrition,* 2, 2, pp 91-102

Capsi, A., et al. (2007) Moderation of breastfeeding effects on the IQ by genetic variation in fatty acidemetabolism. PNAS. 10. p1073

Cattaneo, A,. Yngve, A., Koletzko, B. *et al.*(2005) Protection, promotion and support of breast-feeding in Europe: current situation. Public Health Nutr 8, p39–46.

Cattanoe, A., et al. (2009) 'Protection, promotion and support of breastfeeding in Europe: progress from 2002-2007', Public Health Nutrition, 13(6), p751-759.

Centres for Disease Control and Prevention National Immunization Survey. (2008), Provisional Data, 2008 births. Breastfeeding outcome indicators: ever breastfed, breastfeeding at 6 months, breastfeeding at 12 months, exclusive breastfeeding at 3 months, exclusive breastfeeding at 6 months. Available at http://www.cdc.gov/breastfeeding/pdf/2011BreastfeedingReportCard.pdf

Chapman, D.J., Morel, K., Anderson, A.K., Damio,G., and Pérez-Escamilla, R. (2010) Breastfeeding Peer Counselling: From efficacy through scale-up. *JhumLact*, 26(3).

Chertok, I. R. & Hoover, M. (2009). Breastfeeding legislation in states with relatively low breastfeeding rates compared to breastfeeding legislation of other states. *Journal of Nursing Law*, 13(2), p45-53.

Chien, P.F. and Howie, P.W. (2001) Breast milk and the risk of opportunistic infection in infancy in industrialised and non-industrialised settings. Adv Nutr Res, 10, p69-104

Chua. S, Arukumaran, S., Lim, I., Selamat, N., Ratnam, S.S. (1994) Influence of breastfeeding and nipple stimulation on uterine activity. Br J Obstet Gynaecol. 101, p804-805.

Chung, M., Raman, G., Trikalinos, T., Lau, J., and Ip, S (2008) Interventions in primary care to promote breastfeeding: an evidence review for the US Preventative Services Task Force. *Annals of Internal Medicine*, 149, pp565-582

Creedy, D. K., Cantrill, R. M. and Cooke, M. (2008) Assessing midwives' breastfeeding knowledge: properties of the Newborn Feeding Ability questionnaire and Breastfeeding Initiation Practices scale. *International Breastfeeding Journal*, 3, 7

Cumming, R.G. and Klineberg, R.J. (1993) Breastfeeding and other reproductive factors and the risk of hip fractures in elderly women. Intl J Epidemiol; 22:, p684-691.

Dennis, C.L. (2003) Breastfeeding self-efficacy scale: psychometricassessment. Journal of Obstetric, *Gynecologic* and Neonatal Nursing 32(6), p734-44.

Department of Health and Social Services. (1999) Breastfeeding strategy for Northern Ireland. Belfast: DHSS. Available at <u>www.dhsspsni.gov.uk/breastfeeding.pdf</u>

Department of Health, Social Services and Public Safety. (2002) Investing for Health. Belfast: DHSSPS. Available at http://www.dhsspsni.gov.uk/showconsultations?txtid=10415

Department of Health, Social Services and Public Safety. (2005) A Healthier Future. A twenty year vision for health and well-being in Northern Ireland 2005-2025. Belfast. DHSSPS, Available at http://www.dhsspsni.gov.uk/healthyfuture-main.pdf

Department of Health, Social Services and Public Safety. (2006) Fit Futures Implementation Plan. Belfast: DHSSPS. Available at http://www.dhsspsni.gov.uk/fit-futures-implementation-plan.pdf

Department of Health, Social Services and Public Safety. Project Support Analysis Branch, Information Analysis Directorate. (2009) Northern Ireland Health and Social Care Inequalities Monitoring System Third Update Bulletin. Available at http://www.dhsspsni.gov.uk/inequalities_monitoring_update3.pdf

Department of Health, Social Services and Public Safety. (2010) Healthy Child, Healthy Future. Belfast: DHSSPS. Available at http://www.dhsspsni.gov.uk/healthychildhealthyfuture.pdf

Department of Health, Social Services and Public Safety. (2010) A report of the review of the Breastfeeding Strategy. Belfast, DHSSPS. Available at http://www.dhsspsni.gov.uk/review_of_the_breastfeeding_strategy_for_northern_ireland_1999.pdf

Department of Health, Social Services and Public Safety. (2012). Health and Social Care Inequalities Monitoring System Fourth Update Bulletin.

Department of Health, Social Services and Public Safety. (2012) A Fitter Future For All: An Obesity Prevention Framework for Northern Ireland. Belfast: DHSSPS. Available at <u>http://www.dhsspsni.gov.uk/framework-preventing-addressing-overweight-obesity-ni-2012-2022.pdf</u>

Department of Health, Social Services and Public Safety (2012) A Maternity Care Strategy for Northern Ireland 2012-2018. (online) Available at <u>http://www.dhsspsni.gov.uk/maternity-strategy</u>

Demott, K., Bick, D., Norman, R., Ritchie, G., Turnbull, N., Adams, C., Barry, C., Byrom, S., Elliman, D., Marchant, S., Mccandlish, R., Mellows, H., Neale, C., Parkar, M., Tait, P., and Taylor, C. (2006) Clinical Guidelines And Evidence Review For Post Natal Care: Routine Post Natal Care Of Recently Delivered Women And Their Babies London: National Collaborating Centre For Primary Care And Royal College Of General Practitioners.

Dewey, K.G., Heinig, M.J. and Nommsen-Rivers, L.A. (1995) Differences in morbidity between breastfed and formula fed infants. J Pediatr, 126, p696-702

Dick, M.J, Evans, M.L, Arthurs, J.B, Barnes, J.K, Caldwell, R.S., Hutchins, S.S. (2002) Predicting early breastfeeding attrition. *Journal of Human Lactation* 18(1), p21-8.

Duckett, L., Henly, S., Avery, M., Potter, S., Hills-Bonczyk, S., and Hulden, R. (1998) A theory of planned behaviorbased structural model for breastfeeding. *Nursing Research*. 47(6), p325–336.

Duncan, B., Ely, J., Holberg, CJ. et al.(1993) Exclusive breastfeeding for at least 4months protects against otitis media. Pediatrics, 91, p867-872

Dykes, F. (2006) The education of health practitioners supporting breastfeeding women: time for critical reflection. *Maternal and Child Nutrition*, 2, 4, pp 204-216

Dyson, L., Renfrew, M., McFadden, A., McCormick, F., Herbert, G and Thomas, J. (2006) Promotion of Breastfeeding initiation and duration. Evidence into Practice Briefing

Dyson, L., McCormick, F. M. and Renfrew, M. J. (2008). Interventions for promoting the initiation of breastfeeding. Cochrane Database of Systematic Reviews, Issue 2, John Wiley & Sons: Chichester, UK.

El-Mohandes, A.E., Picard, MB., Simmens, S.J., and Keiser, J.F. (1997) Use of human milk in the intensive care nursery decreases the incidence of nosocomial sepsis. *J Perinatol*, 17, p130–4.

Equality Act 2010. Available at http://www.legislation.gov.uk/ukpga/2010/15/pdfs/ukpga_20100015_en.pdf

European Commission. (2008) Protection, promotion and support of breastfeeding in Europe: a blueprint for action (revised edition). <u>http://www.healthpromotionagency.org.uk/work/breastfeeding/pdfs/newblueprintprinter.pdf</u>

Fairbank, L., O'Meara, S., Sowden, A J., Renfrew, M J., Woolridge, M M. (2001) Promoting the initiation of breast feeding. *Quality in Health Care* 10:123–127.

Flynn, A.M. Natural Family Planning. Br J Family Planning. 1996;21:146-148.

Forster, D.A. and McLachlan, H.L. (2007). Breastfeeding Initiation and Birth Setting Practices: A Review of the Literature. *Journal of Midwifery and Women's Health*, 52, p273-280.

Furman, L., Taylor, G., Minich, N., and Hack, M. (2003) The effect of maternal milk on neonatal morbidity of very low-birth-weight infants. *Arch Pediatr Adolesc Med*, 157, p66–71.

Gartner, L.M., Morton, J., Lawrence, R.A., et al. Breastfeeding and the Use of Human Milk. Pediatrics 2005;115 (2):496-506

Gerstein, H.C. (1994) Cow's milk exposure and type 1 diabetes mellitus. A critical overview of the clinical literature. Diabetes Care. 17, p13-19.

Gillman, M.W., Rifas-Shiman, S.L., Camargo, C.A., Jr., et al. (2001) Risk of overweight among adolescents who were breastfed as infants. JAMA., 285(19), p2461-7.

Greer *et al.* (2008) Effects of Early Nutritional Interventions on the Development of Atopic Disease in Infants and Children: The Role of Maternal Dietary Restriction, Breastfeeding, Timing of Introduction of Complementary Foods, and Hydrolyzed Formulas. Pediatrics, 121, p183-191.

Grossman, X., Chaudhuri, J. And Feldman-Winter (2009) Hospital education in Lactation Practices (Project HELP): does clinician education affect breastfeeding initiation and exclusivity in the hospital? *Birth*, 36, 1, pp 54-59

Gutman, L.M., Brown, J. and Akerman, R. (2009). Nurturing parenting capabilities: the early years. London: Institute of education. Available at <u>http://eprints.ioe.ac.uk/2051/1/Gutman2009Nuturing.pdf</u>

Hannula,L., Kannonen,M.and Tarkka,M.T.(2008) A systematic review of professional support interventions for breastfeeding. *Journal of Clinical Nursing*, 17, p1132-1143.

Harder, T. et al. Duration of breastfeeding and risk of overweight: a meta-analysis. AM J Epidemiology, 162:397-403

Hawkins, S.S., Lamb, K., Cole, T.J., and Law, C (2008) Influence of moving to the UK on maternal health behaviours – a prospective cohort study. British Medical Journal 336:1052.

Health Promotion Agency for Northern Ireland (2003) Breastfeeding in Northern Ireland: A summary report of knowledge attitudes and behaviour. Health Promotion Agency, Belfast.

Health Promotion Agency for Northern Ireland (2006) Examining changes in knowledge and attitudes towards breastfeeding in Northern Ireland 1999- 2004. Health Promotion Agency. Belfast.

Henderson, L,. Kitzinger, J., and Green, J. (2000) Representing infant feeding: content analysis of British media portrayals of bottle feeding and breastfeeding. *BMJ*. 321, p1196–8.

Hilson, J.A., Rasmussen, K.M., and Kjolhede, C.L. (2006) Excessive weight gain during pregnancy is associated with earlier termination of breast-feeding among white women. *J Nutr*, 136, p1–7.

Hoddinott, P., Tappin D., and Wright C. (2008) Breastfeeding, Breastfeeding Medical Journal, 336, pp881-87

Horta, B. et al. (2007) Evidence on the long-term effects of breastfeeding: Systematic reviews and meta-analyses. Geneva, World Health Organisation.

Horwood, L.J. and Fergusson, D.M. (1998) Breastfeeding and later cognitive and academic outcomes [abstract]. Pediatrics, 101(1).

Howie, P.W., Forsyth, J.S., Ogston, S.A., Clark, A. and Florey C du V. Protective effect of breastfeeding against infection. MBJ 1990, 300, p 11-16

Ip, S. et al. (2007) Breastfeeding and maternal and infant health outcomes in developed countries: evidence report/ technology assessment no.153. Rockville, MD: Agency of Healthcare Research and Quality Publication. Available at http://www.ahrq.gov/clinic/tp/brfouttp.htm

Jackson, A. (2007) Breastfeeding education and professional development in the North Trent Neonatal Network. *MIDIRS Midwifery Digest*, 17, 1, pp 90-93

Kitsantas, P., and Pawloski, L. (2010). Maternal obesity, health status during pregnant, and breastfeeding initiation and duration. *J Mater-Fetal Neonat Med*, 23,p135-141.

Kostraba, J.N., Cruickshanks, K.J., Lawler-Heavner, J., et al. (1993) Early exposure to cow's milk and solid foods in infancy, genetic disposition, and the risk of IDDM. Diabetes. 42, p288-295.

Kreiger N, Kelsey JL, Holford TR, O'ConnorT. An epidemiologic study of hip fracture in postmenopausal women. Am J Epidemiol 1982; 116: 141-148.

Kull, I., Wickman, M., Lilja, G., Nordvall, S. L., and Pershagen, G. (2002) Breastfeeding and allergic diseases in infants—a prospective birth cohort study Archives of Diseases in Childhood: 87; 478-481.

Kwan, M.L., Buffler, P.A., Abrams, B., and Kiley, V.A. Breastfeeding and the risk of childhood leukemia: a metaanalysis. Public Health Rep 2004;119:521-535 Labbok, M.H. "Does Breastfeeding Protect against Malocclusion? An Analysis of the 1981 Child Health Supplement to the National Health Interview Survey" American Journal of Preventive Medicine, 1987

Lawrence R. (1994) Breastfeeding A guide for the medical profession; 4th Edition Mosby. St. Louis. M1 USA pg 273.

Lawrence, R. A. and Lawrence, R.M. (2011) Breastfeeding Guide for the medical profession, 7th Edition Elsevier, Mosby, Missouri

Layte, R. and McCrory (2012). Velocity of weight gain in infancy and risk of obesity at age three – presentation at the Children's Research Network of Ireland and Northern Ireland inaugural conference September 26 2012 – available at <u>www.childrensresearchnetwork.org</u>.

Lucas, A., Morley, R., Cole, T.J., and Gore, S.M. (1994) A randomised multicentre study of human milk versus formula and later development in preterm infants. *BMJ*, 70, p141.

Lucas, A., and Cole, T.J. (1990) Breast milk and neonatal necrotizing enterocolitis. Lancet, 336, p1519-23.

Lucas, A., Morley, R., Cole, T.J., Lister, G. and Leeson-Payne, C. (1992) Breast milk and subsequent intelligence quotient in children born preterm. Lancet, 339. p261-264.

Makrides, M., Neumann, M.A., Simmer, K., Pater, J. and Gibson, R. (1995) Are long chain polyunsaturated fatty acids essential in infancy? Lancet, 345, p1463-1468.

McAvoy, H; Sturely, J; Burke, S. and Balanda, K (2006). Inequalities in the occurrence of low birth weight babies in Ireland. Institute of Public Health in Ireland –available at <u>www.publichealth.ie</u>

McConnachie, A. *et al* (2004) Modelling consultation rates in infancy: influence of maternal and infant characteristics, feeding type and consultation history. Br J Gen Pract; 54, p598-603.

McFadden, A., Renfrew, M. J., Wallace, L. M. (2007) Does breastfeeding really matter? A national multidisciplinary breastfeeding knowledge and skills assessment. *MIDIRS Midwifery Digest*, 17, 1 pp 85-88

McNeill, J., Lynn F., and Alderdice F. (2012) Public Health Interventions in Midwifery: a systematic review of systematic reviews. *BMC Public Health* 12, p955. Available at <u>http://www.biomedcentral.com/1471-2458/12/955</u>

McNeill, J., Lynn, F. and Alderdice, F. (2010) Systematic Review of Reviews: The Public Health Role of the Midwife, School of Nursing & Midwifery, Queen's University Belfast.

Mezzacappa, E.S. Breastfeeding and maternal stress response and health (Review). Nutr Rev. 2004 Jul;62(7 Pt 1):261-8

Midwifery 2020: delivering Expectations for the Future. UK Health Departments 2010. Available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/147752/dh 119470.pdf.pdf

Miller. L, C., Cook, J. T. and Brooks, C. W. (2007) Breastfeeding Education, Empowering future healthcare provider. *Nursing for Women's Health*, 11, 4, pp 374-380

Mills, S. (2009). Workplace lactation programs: A critical element for breastfeeding mothers' success. *American* Association of Occupational Health Nursing Journal, 57, 227-231.

Moore, E.R., Anderson, G.C., Bergman, N. and Dowswell, T. (2012) Early skin-to-skin contact for mothers and their healthy newborn infants (Review). (online) Available at http://www.externt.lul.se/LUL/Quality.nsf/0/00DFBC374C68A375C1257A640031F1F3/\$File/Early%20skin-to-skin%20contact%20for%20mothers%20and%20their%20healthy,%20Moore%20ER%20et%20al.pdf.

Muller, C., Newburn, M., Wise, P., Dodds, R. and Bhavnani, V. (2009) NCT Breastfeeding Peer Support Project, London National Childbirth Trust (NCT)

Narayanan, I., Prakash, K., Prabhakar, A.K., and Gujral, V.V. (1982) A planned prospective evaluation of the antiinfective property of varying quantities of expressed breast milk. *Acta Paediatr Scand*, 71, p441–5.

Narayanan, I., Prakash, K., Murthy, NS., and Gujral, V.V. (1984) Randomised controlled trial of effect of raw and

holder pasteurised human milk and of formula supplements on incidence of neonatal infection. Lancet ii, p1111-3.

National Collaborating Centre for Primary Care (2006). Postnatal Care: routine postnatal care of women and their babies. NICE guidelines CG37. London, UK: National Institute for Health and Clinical Excellence

Natural Resources Defence Council. Health - Benefits of breastfeeding. http://www.nrdc.org/breast milk/benefits.asp

Neonatal Intensive Care Outcomes Research and Evaluation Database (NICORE). Accessed 24 January 2011.

NICE (ND) Homepage (online) Available at www.nice.org.uk.

NICE. (2006) Postnatal care: routine postnatal care of women and their babies: costing report. Implementing NICE guidance in England. Available at www.nice.org.uk/nicemedia/pdf/implementation_tools/cg37costingreport.doc

NICE. (2008) Peer support programme for women who breastfeed commissioning guide. (online) Available at http://www.nice.org.uk/media/63D/7B/BreastfeedingCommissioningGuide.pdf.

NICE (2008) PH11 Maternal and child nutrition: guidance (online) Available at http://guidance.nice.org.uk/PH11/Guidance/

NICE (2008). Improving the nutrition of pregnant and breastfeeding mothers & children in low income households. Public Health Guideline 11. (online) Available at http://www.nice.org.uk/nicemedia/pdf/PH011guidance.pdf

NICE (2008) Intrapartum care of healthy women and their babies during childbirth. Clinical Guideline CG55 (online) Available at http://www.nice.org.uk/nicemedia/live/11837/36275/36275.pdf

NICE (2008) CG62 CG62 Antenatal care: Routine care for the healthy pregnant woman (online) Available at http://www.nice.org.uk/CG62

NICE. (2008) Routine antenatal care for healthy pregnant women. NICE clinical guideline 62. Available at http://www.nice.org.uk/nicemedia/pdf/CG062PublicInfo.pdf

Northern Ireland Statistics and Research Agency (2012) Registrar General Annual Reports (online) Available at http://www.nisra.gov.uk/archive/demography/publications/births deaths/births and deaths 2004.pdf

Oddy, W.H., Li, J., Landsborough, L., Kendall, G.E., Henderson, S., and Downie, J. (2006) The association of maternal overweight and obesity with breastfeeding duration. Journal of Pediatrics. 149(2), p185-91.

Office of the First Minister and Deputy First Minister. Children and Young People's Strategy Action Plans 2006-2016 Belfast: OFMDFM. Available at http://www.ofmdfmni.gov.uk/index/equality/children-voung-people/childrenand-voung-people-strategy.htm

Office of the First Minister and Deputy First Minister. (2011) Child Poverty Strategy. Belfast: OFMDFM. Available at http://www.ofmdfmni.gov.uk/final child poverty strategy - agreed by executive - 22 march 2011.pdf

Palmer, G. (2009) The Politics of Breastfeeding. When breasts are bad for business 3rd edition London: Pandora Press http://onlinelibrary.wiley.com/doi/10.1046/j.1523-536X.2002.00184.x/abstract

Parikh, N, Hwang, S., et al. (2009) Breastfeeding in infancy and adult cardiovascular disease risk factors. The. American Journal of Medicine, 122(7), 656-663.

Pisacane, A., Graziano, L., Mazzarella, G., Scarpellino, B. and Zona, G. (1992) Breastfeeding and urinary tract infection. J Pediatr, 120, p87-89

Protheroe, L., Dyson, L., Renfrew, M.J., Bull, J., and Mulvihill, C. (2003) The effectiveness of public health interventions to promote the initiation of breastfeeding Evidence briefing. Mother and Infant Research Unit, University of Leeds.

Public Health Agency. (2010) A review of the Northern Ireland breastfeeding strategy. Belfast: Public Health Agency, Available at

http://www.publichealth.hscni.net/sites/default/files/breastfeeding%20strategy%20review_3.pdf

Public Health Agency (2012) Health Intelligence Briefing. Breastfeeding in Northern Ireland. Belfast. PHA.

Quigley, M., Henderson, G., Anthony, M.Y., and McGuire, W. (2007) Formula milk versus donor breast milk for feeding preterm or low birth weight infants. Cochrane Database of Systematic Reviews 2007, Issue 4. Art. No.: CD002971. DOI: 10.1002/14651858.CD002971.pub2.

Quigley, M. A., *et al.* (2007) "Breastfeeding and hospitalization for diarrheal and respiratory infection in the United Kingdom Millennium Cohort Study." Pediatrics, 119, p837-842

Renfrew, M. J., McFadden, A. and Dykes, F. (2006) Addressing the learning deficit in breastfeeding: strategies for change. *Maternal and Child Nutrition*, 2, 4, pp 239-244

Renfrew, M.J., Dyson, L., McCormick, F., Misso, K., Stenhouse, E., King, S.E. and Williams, A.F. (2010) Breastfeeding promotion for infants in neonatal units: a systematic review Child: care, health and development 36:2, p165-178

Renfrew, MJ., McCormick, FM., Wade, A., and Dowswell, T. (2012) Support for healthy breastfeeding mothers with healthy term babies. *Cochrane Database of Systematic Reviews 2012*. Iss 5. Art No CD001141. DOI: 10.1002/14651858. CD001141.pub4.

Rosenblatt KA, Thomas DB and the WHO Collaborative Study of neoplasia and steroid contraceptives. Lactation and the risk of epithelial ovarian cancer. Intl J Epidemiol 1993;22-192-197

Rossman. B., Engstrom, J.L., Meier, P.P., Vonderheid, S.C., Norr, K.F. and Hill, P.D. (2011) They've Walked in my shoes': Mothers of Very Low Birth Weight Infants and Their Experiences With Breastfeeding Peer Counsellors in the Neo-Natal Intensive Care Unit. *JhumLact*. 27(1).

Rowe-Murray, HJ and JRW Fisher 2002. Baby friendly hospital practices: Cesarean section is a persistent barrier to early initiation of breastfeeding. *Birth* 29(2), p124-131.

Ruowei, L., Jewell, S., Grummer-Strawn, L. (2003) Maternal obesity and breastfeeding practices. *The American Journal of Clinical Nutrition*, 77, p931-6

Saarinen, U.M. and Kajosaari, M. (1995) Breastfeeding as prophylaxis against atopic disease: prospective followup study until 17 years old. Lancet, 346, p1065-1069.

Scott Taylor, J., Kacmar, J. E., Nothnagle, M. and Lawrence, R. A. (2005). A systematic review of the literature associating breastfeeding with type 2 diabetes and gestational diabetes. *Journal of the American College of Nutrition*, 24, p320-326.

Sikorski, J., Renfrew, M. J., Pindoria, S. and Wade, A. (2003) Support for breastfeeding mothers: a systematic review. *Paediatric and Perinatal Epidemiology*, 17, pp 407-417

Sittlington, J., Stewart-Knox, B., and Wright, M., (2007) Infant-feeding attitudes of expectant mothers in Northern Ireland. *Health Education Research*, 22, p561-570.

Spiby, H., McCormick, F., Wallace, L., Renfrew, M. J., D'Souza, L. and Dyson, L. (2009). A systematic review of education and evidence-based practice interventions with health professionals and breastfeeding counsellors on duration of breastfeeding. *Midwifery*, 25, p50-61.

Stockdale, J., *et al.*, (2011a) Understanding Motivational Theory and the Psychology of Breastfeeding, in Theory for Midwifery Practice, R. Bryar and M. Sinclair, Editors., Palgrave Macmillan: Basingstoke.

Stockdale, J., *et al., (*2011b) Motivation, Breastfeeding and Midwives: Theory in Action, in Theory for Midwifery practice, R. Bryar and M. Sinclair, Editors., Palgrave Macmillan: Basinstoke

Stuebe, A.M., Rich-Edwards, J., Willett, W., Manson, J., and Michels, K. (2005) Duration of Lactation and Incidence of Type 2 Diabetes. JAMA;294:2601-2610

Tarrant, R., Younger, K., Sheridan-Pererira, M., White, M., Kearney (2009) 'The prevalence and determinants of breastfeeding initiation and duration in a sample of women in Ireland, *Public Health Nutrition*, 13:6, pp760-770

The Collaborative Group on Hormonal Factors in Breast Cancer. (2002) Breast cancer and breastfeeding: collaborative re-analysis of individual data from 47 epidemiological studies in 30 countries, including 50,302 women with breast cancer and 96,973 women without the disease. Lancet, 360, p187-195.

The Sex Discrimination (Northern Ireland) Order 1976. Available at http://www.ofmdfmni.gov.uk/index/equality/sex-discrimination-and-equalpay/sex-discrimination-order.htm

Thomas, P (2006) Suck on this. Ecologist, 36,3, pp22-23

Thurman, S. E. and Jackson-Allen, P. L. (2008) Integrating lactation consultants into primary health care services: are lactation consultants affecting breastfeeding success? *Pediatric Nursing*, 34, pp 419-425

UK Baby Friendly Initiative Annual Conference (2004) Influence of infant feeding practices on health inequalities in childhood. Professor Stewart Forsyth, Consultant Paediatrician, Ninewells Hospital and Medical School, Dundee. Available from www.babyfriendly.org.uk

UK Baby Friendly Initiative http://www.unicef.org.uk/babyfriendly/

UK Infant Feeding Survey (2005) Information Centre for Health and Social Care website: <u>http://www.hscic.gov.uk/searchcatalogue?productid=1376&q=infant+feeding+2005&sort=Relevance&size=20&pa</u> <u>ge=1#top</u>

UNICEF: http://www.unicef.org/nutrition/index_24824.html

UNICEF. (2012). Preventing disease and saving resources: the potential contribution of increasing breastfeeding rates in the UK. (online) Available at http://www.unicef.org.uk/Documents/Baby_Friendly/Research/Preventing_disease_saving_resources.pdf?epslang_uage=en

UNICEF (2012) Skin to Skin Contact. (online) Available at http://www.unicef.org.uk/BabyFriendly/Resources/Guidance-for-Health-Professionals/Learning-about-breastfeeding/Skin-to-skin-contact/

UNICEF (ND) Guide to the Baby Friendly Initiative Standards. (online) Available at http://www.unicef.org.uk/Documents/Baby_Friendly/Guidance/Baby_Friendly_guidance_2012.pdf

UNICEF UK Baby Friendly Initiative. (2009) Developing a Breastfeeding Strategy: evidence and appendices. (online) Available at http://www.unicef.org.uk/Documents/Baby Friendly/Guidance/4/Strategy Appendix.pdf

University of Bristol (1991/1992) Avon Longitudinal Study of Parents and Children (ALSPAC) (online) Available at http://www.bristol.ac.uk/alspac/

Wambach K. A. (1997) Breastfeeding intention and outcome: A test of the theory of planned behavior. *Research in Nursing and Health.* 20, p51–59.

Wilson, A.C., Forsythe, J.S., Greene, S.A., Irvine, L., Hau, C. and Howie, P.W. (1998) Relation of infant diet to childhood health: seven year follow up of cohort of children in Dundee infant feeding survey. BMJ, 316, p21-25.

World Cancer Research Fund/American Institute for Cancer Research. (2007) Food, Nutrition, Physical Activity and the Prevention of Cancer: a Global Perspective. Washington DC, Association for International Cancer Research.

World Health Organisation: http://www.who.int/nutrition/topics/exclusive_breastfeeding/en/

World Health Organisation (1981). International code of marketing of breast milk substitutes. Geneva: WHO. <u>http://whqlibdoc.who.int/publications/9241541601.pdf</u>

World Health Organisation. (2003) Global strategy for infant and young child feeding. Geneva: WHO. <u>http://www.who.int/nutrition/publications/gs_infant_feeding_text_eng.pdf</u>

World Health Organisation (ND) Breastfeeding (online) Available at http://www.who.int/topics/breastfeeding/en/.

World Health Organisation (ND) The World Health Organisation's infant feeding recommendation (online) Available at <u>http://www.who.int/nutrition/topics/infantfeeding_recommendation/en/index.html</u>