Tackling health inequalities in infant and maternal health outcomes

REPORT OF THE INFANT MORTALITY NATIONAL SUPPORT TEAM

December 2010

DH INFORMATION READER BOX

Policy	Estates
HR / Workforce	Commissioning
Management	IM & T
Planning /	Finance
Clinical	**Social Care / Partnership Working**

Document Purpose	Best Practice Guidance
Gateway Reference	15311
Title	Tackling Health Inequalities in Infant and Maternal Health Outcomes Report
Author	Infant Mortality National Support Team
Publication Date	16 Dec 2010
Target Audience	PCT CEs, NHS Trust CEs, Medical Directors, Directors of PH, Directors of Nursing, Local Authority CEs, PCT Chairs, Allied Health Professionals, GPs, Communications Leads, Directors of Children's SSs
Circulation List	
Description	Infant mortality is at an all-time low but important health inequalities remain in disadvantaged areas and groups. This report sets out the work of the Infant Mortality National Support Team (NST) in addressing these inequalities and improving infant and maternal health in disadvantaged areas
Cross Ref	Department of Health(2007). Review of Health Inequalities Target
Superseded Docs	N/A
Action Required	N/A
Timing	**N/A**
Contact Details	Infant Mortality National Support Team National Support Teams, Department of Health, Wellington House 133-135 Waterloo Road London SE1 8UG 0207-972-3724 www.doh.gov.uk
For Recipient's Use	

First published 16 December 2010

Published to DH website, in electronic PDF format only.

http://www.dh.gov.uk/publications

Tackling health inequalities in infant and maternal health outcomes

REPORT OF THE INFANT MORTALITY NATIONAL SUPPORT TEAM

Prepared by Dr Marilena Korkodilos, Dr Ray Earwicker, Marcia Perry

Contents

Acknowledgements

The Infant Mortality National Support Team Annual Report was supported by a number of teams and individuals within DH and across government. We gratefully acknowledge assistance from the following departments:

- Communities and Local Government (CLG)
- Department for Education (DfE)
- Joint DfE/Department for Work and Pensions/Her Majesty's Treasury Child Poverty Unit
- Office for National Statistics (ONS)

We are very grateful to the individuals and local areas who helped organise and participated in our visits.

Glossary

BME	Black and minority ethnic
BMI	Body mass index
CDOP	Child Death Overview Panel
CPAG	Child Poverty Action Group
CLG	Communities and Local Government
CHIMAT	Child and Maternal Health Observatory
CONI	Care of the Next Infant (Scheme)
CSR	Comprehensive Spending Review
DfE	Department for Children, Schools and Families
DH	Department of Health
ESOL	English for speakers of other languages
FIP	Family Intervention Project
FNP	Family Nurse Partnership
FSID	Foundation for the Study of Infant Deaths
IMNST	Infant Mortality National Support Team
IMR	Infant mortality rate
LSCB	Local Safeguarding Children Board
NCT	National Childbirth Trust
NHS	National Health Service
NICE	National Institute for Health and Clinical Excellence
NPEU	National Perinatal Epidemiology Unit
PCT	Primary Care Trust

R&M	Routine and manual
SCR	Serious Case Review
SHA	Strategic Health Authority
SRE	Sex and Relationships Education
SUDI	Sudden Unexpected Death in Infancy
NICE	National Institute for Health and Clinical Excellence

Foreword

by Anne Milton MP, Parliamentary Under Secretary for Public Health

Infant mortality is an internationally recognised measure of the health of a society. In England, the infant mortality rate has fallen by three-quarters since 1960 and is at its lowest ever level.

But, it is not all good news. Infant mortality rates are worse in disadvantaged groups and areas. Poor health outcomes – for example higher infant mortality rates – are often linked to social factors such as education, work, income and the environment. Lifestyle choices and the quality, availability and accessibility of services are also important, as Sir Michael Marmot's review makes clear.

We have set out our plans to address these issues in *Healthy Lives, Healthy People* – the public health white paper. We are determined to reduce inequalities in infant mortality, and improve outcomes in infant, maternal and child health. To help achieve this, we have announced an extra 4,200 health visitors, a refocus of Sure Start Children's Centres on the needs of disadvantaged families, and a doubling of the Family Nurse Partnership programme for vulnerable first-time mothers.

The infant mortality National Support Team (NST) seeks to improve health outcomes in disadvantaged areas, and reduce inequalities through visits and follow up. It works with local teams to help them develop clear action plans based on local needs. The NST brings together midwives, health visitors and GPs, Sure Start staff and early years professionals, and housing and social workers, and gives them the confidence to respond to the needs of their communities by sharing good practice.

This report shows how local services and communities are working together to develop a shared approach, building on the evidence of what works. The report draws out the key issues and the many lessons learnt from the NST visits. It underlines the importance of closer inter-agency working with local communities. Helping these local communities work with their local professionals is at the heart of the changes we are introducing to the NHS.

Tackling health inequalities in infant mortality – and in infant and maternal health – will not just improve health outcomes today but also lay the foundations for sustainable, long-term improvements in health. The good health and wellbeing of future generations underpins the improvements we want to see in the public's health today.

ANNE MILTON MP
Parliamentary Under-Secretary for Public Health

Executive Summary

1. Although infant mortality is at an all-time low and falling for all groups, there are unacceptable health inequalities across England. The Infant Mortality National Support Team (IMNST) was established in 2008 to help disadvantaged local areas address inequalities in infant mortality and improve infant and maternal health outcomes. This report draws together the learning from local visits and examples of good practice to encourage action on these issues in other local areas and communities.

2. The IMNST efforts to enable local action to tackle health inequalities fits with the Coalition government's principles of fairness and social justice and the growing recognition of the need to give every child the best start in life[1]. By working together with mothers, families and children, health and other professionals can help identify how to improve health of their communities and narrow the health inequalities.

Process

3. The IMNST provides direct support to partners through local visits. The visit team uses a systematic approach (through one-to-one interviews and small group discussions) to explore the local context, identify challenges, highlight strengths, make recommendations for delivery and provide tailored support to an area[2]. Typically:

    - small group discussions explore topics that the evidence base has shown an impact on the infant mortality gap or that are likely to have an impact on the gap. There are four core small group discussions on housing, maternal and infant nutrition, safeguarding and sudden unexpected deaths in infancy and reducing maternal smoking;

    - areas chose two more discussion groups according to their local priorities from a selection of ethnicity, immunisation, management of the feverish/unwell infant, access to maternity services and antenatal and neonatal screening, reducing teenage pregnancy and better supporting pregnant teenagers and substance misuse in pregnancy and care of vulnerable women;

    - local areas are signposted to resources to help develop strategies on child poverty that are provided by the Child Poverty Unit at the Department for Education;

    - a package of follow up support is agreed with each local area about six weeks after the visit and support is provided over the course of six months to a year.

[1] Marmot, M (2010) *Fair Society, Healthy Lives – Strategic Review of Health Inequalities in England post-2010*
[2] Public health NSTs were established in 2006 to provide tailored expert peer delivery support to health partnerships in England

Impact

4. Informal evaluations carried out at the end of each visit have shown that 91% of participants said that the IMNST visit provided the individual, partnership or organisation with a basis for further improvement.

5. A formal evaluation providing local areas with a template to self assess progress at 6-12 months has been introduced. Initial results from six visits have shown many positive outcomes as a result of an IMNST visit, including:

    - promoting action and improving partnership working between health, local authorities and other local bodies, for example the development of a local strategy to reduce infant mortality, including a focus on the links between health, housing and affordable homes;
    - specific service improvements, for example improving data collection and accuracy of immunisation uptake and working in partnership with other organisations (e.g. Sure Start Children's Centres) to improve immunisation uptake;
    - development of a balanced infant mortality scorecard to inform commissioning and performance management;
    - development of services in partnership with vulnerable groups, for example through promoting early antenatal booking among some BME groups;
    - development of genetics awareness training for local communities.

6. It is not possible to assess the impact of the IMNST on progress to reduce infant mortality because these data are measured on a three-year rolling average and are not yet available. However, overall NST visited areas show an increase in breastfeeding initiation and a decrease in smoking at delivery.

Key findings

7. The visit recommendations were analysed by a process of repeated review to identify key themes and messages.

8. The key strategic messages were:

    - strong local leadership is vital to an effective cross agency approach to improving maternity and early years services and reducing infant mortality;
    - clear governance arrangements will ensure local services work together to deliver reductions in infant mortality;
    - a balanced scorecard/database of risk factors for infant mortality indicators will strengthen local performance management and commissioning;
    - integrated commissioning will ensure a whole systems approach to tackling infant mortality and improving infant and maternal health;
    - a strategic lead will provide oversight of individual programmes, and needs to be backed by a strategic approach to workforce issues;
    - better understanding of the role and responsibilities of different agencies and staff will promote greater effectiveness and improved service delivery;
    - community engagement and understanding the preferences and needs of local population will help develop flexible, responsive, acceptable services for the use of those who need them.

9. Key messages from the small group discussions were:

    - closer working between health and housing agencies was crucial to reducing health inequalities in infant mortality;
    - the importance of promoting breastfeeding and raising the awareness of Healthy Start;

- the need for clear care pathways for the management of obese pregnant women and their partners in order to improve health outcomes;
- the importance of clear safeguarding pathways and information sharing protocols backed by training and staff support;
- the need to develop clear communication plans about risk factors for sudden unexpected deaths in infancy to reduce this risk;
- the need for clear referral pathways to stop smoking services and improved staff training;
- the importance of a coherent approach to reducing teenage pregnancies in disadvantaged groups and the provision of coordinated support for young mothers and fathers.

Conclusions

10. The key to reducing health inequalities in infant mortality, as set out in the Marmot Review: *Fair Society, Healthy Lives*, is to give priority to early years, including infant and maternal health. This is the best way of achieving a long-term sustainable reduction in health inequalities and (subject to there being any future strategies on infant mortality) it will require action across Government and other national and local organisations.

11. The IMNST has sought to help reduce health inequalities in infant mortality and improve maternal and infant health in disadvantaged areas through:

    - visits and tailored support to local areas with a focus on maternity and early years services;
    - improving partnership working between health, local authorities and other organisations;
    - promoting a shared understanding of the risk factors for infant mortality; signposting the evidence base for interventions and collecting and sharing best practice.

12. In discussing future health outcomes, the Secretary of State has made it clear that

    one of the critical measures of success must be a demonstrable reduction in health inequalities in local areas[3].

    Action on infant mortality and infant and maternal health will continue to be a key local issue if health inequalities are to be successful addressed.

[3] Lansley, A. (2010) *A new approach to public health* - speech to the Faculty of Public Health Annual Conference, 7 July 2010

1.0 Introduction

The Infant Mortality National Support Team (IMNST) started work at the end of 2008[4] to help disadvantaged local areas address inequalities in infant mortality and improve infant and maternal health outcomes. This report draws together the learning from local visits and examples of good practice to encourage action on these issues in other local areas and communities.

1.1 Infant deaths in England

'It's hard to put into words. It is really devastating. I wish my baby was here to hold, feed and look after. Instead I have empty arms and a box of ashes'[5].

Every year in England, about 3,000 babies die before their first birthday and many more are stillborn or have long-term disabilities. The death of a baby is a devastating experience for families and many of these deaths are preventable.

The main causes of infant deaths are immaturity related conditions (babies born less than 37 weeks gestation), congenital anomalies (conditions or malformations present before or at the time of birth) and sudden and unexpected death in infancy, normally occurring with the first eight months of life. Most causes of infant deaths show a socio-economic gradient[6].

The infant mortality rate is the rate of infant deaths – deaths under one year - measured against every 1,000 live births. It is a sensitive measure of the overall health of a population, providing an important measure of the well-being of infants, children and pregnant women. Currently the rate is 4.5 per 1,000 live births (2007-09 data) and although infant mortality in England is at an all-time low and falling, significant inequalities persist by socio-economic group, by area, by ethnicity and by age[7].

The evidence in the Marmot Review: *Fair Society, Healthy Lives* showed that socially graded inequalities are present prenatally and increase through early childhood, and that maternal health has significant influence on foetal and early brain development. Deprivation, births outside marriage, non-white ethnicity of the infant, maternal age under the age of 20 were independently associated with an increased risk of infant mortality. The review concluded that

One quarter of all deaths under the age of one would potentially be avoided if all births had the same level of risk as those to women with the lowest level of deprivation[8]*.*

[4] Department of Health (2008) *Health Inequalities: Progress and Next Steps*
[5] Stillbirth and Neonatal Death Charity (2009) *Saving Babies' Lives Report 2009*
[6] Oakley L, Manochie N, Doyle P et al. Multivariate analysis of infant deaths in England and Wales in 2005-06, with a focus on socio-economic status and deprivation *Health Statistics Quarterly* 2009;42:22-39
[7] This 2007-09 data is based on infant deaths successfully linked to their birth records. ONS/ Department of Health (2010) Mortality Monitoring Bulletin for infant mortality inequalities
[8] Marmot, M (2010), *Fair Society, Healthy Lives: Strategic Review of Health Inequalities in England Post-2010,*p. 60

1.2 A National Support Team for Infant Mortality

The principles of fairness and social justice is at the heart of the Coalition's approach to public health and health inequalities. This approach includes an explicit commitment to improve access to preventative healthcare for those in disadvantaged areas to help tackle health inequalities[9]. Equally, health inequalities in infant mortality and life expectancy contribute to the all-age all cause mortality indicators in the revised NHS Operating Framework (2010/11)**.** Infant mortality is a candidate health outcome in the NHS white paper outcomes framework[10], and action on the early years features strongly in the recently published public health white paper[11].

The work of the IMNST supports this agenda by promoting the implementation of evidence-based good practice at local level and encouraging partnership working in local communities as part of the effort to improve infant and maternal health outcomes and reduce health inequalities in disadvantaged groups and areas.

During the early years of the decade, the infant mortality gap between disadvantaged groups and the whole population widened. A cross government, cross agency review of health inequalities in infant mortality was undertaken, which gained a clear understanding of the local delivery challenges and identified interventions that would help narrow the infant mortality gap[12]. It noted that health inequalities in infant mortality can not be dealt with by the NHS alone, but required a combined response taking account the wider determinants of health. It was followed by the publication of a good practice implementation plan[13] and a commitment to establish an IMNST focusing on the 43 local areas that would have the biggest impact on the infant mortality gap.

Fair Society, Healthy Lives (2010, the Marmot review) observed that the NSTs were a model for promoting speedy dissemination of good practice and supporting local areas where awareness or expertise was lacking[14]. It also made action on the early years its first priority by giving every child the best start in life.

1.3 Progress on reducing health inequalities in infant mortality

There were 9,537 infant deaths in England and Wales in the period 2007-09, corresponding to a rate of 4.5 deaths per 1,000 live births, the lowest three-year average rate ever recorded[15]. For births registered jointly by both parents (i.e. excluding sole registered births, for which socio-economic group cannot be assigned), there were 8,698 infant deaths, a rate of 4.4 deaths per 1,000 live births. Out of these deaths, 42% (3,650) were in the routine and manual (R&M) group, giving a rate of 5.0 deaths per 1,000 live births in this group.

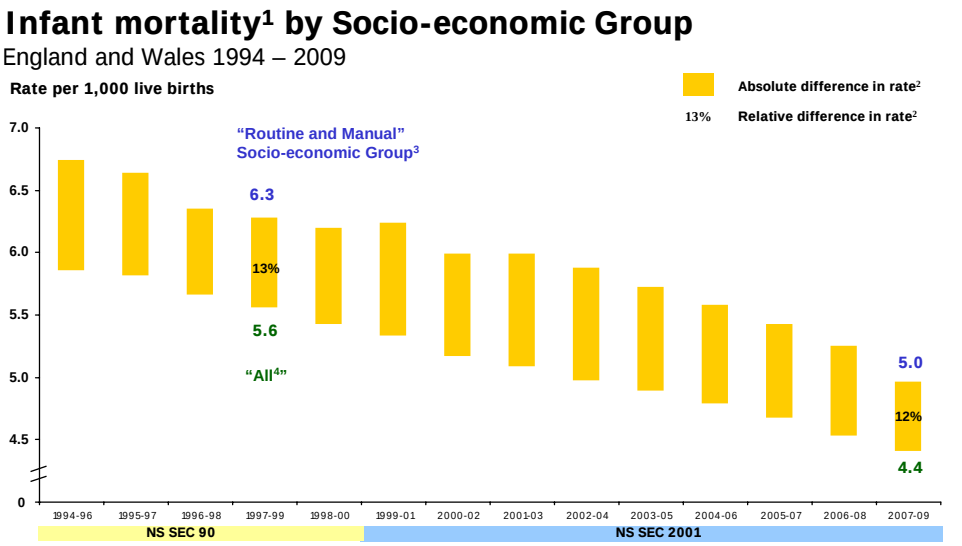
Progress is measured using three-year rolling averages to provide a more stable and reliable guide to underlying trends. These results show that the infant mortality gap is slightly narrower than in the late 1990s, having initially widened in the intervening years. The infant mortality rate

[9] HM Government (2010) *The Coalition: Our Programme for Government*
[10] Department of Health (2010) *Liberating the NHS – Transparency in outcomes - a framework for the NHS*
[11] Department of Health (2010) *Healthy Lives Healthy People: Our Strategy for Public Health in England*
[12] Department of Health (2007) *Review of the Health Inequalities Infant Mortality PSA Target*
[13] Department of Health (2007) *Implementation Plan for Reducing Health Inequalities in Infant Mortality: A Good Practice Guide*
[14] Marmot M (2010) *Fair Society, Healthy Lives: Strategic Review of Health Inequalities in England Post 2010, page 153*
[15] These figures are based on infant deaths that have been linked to corresponding birth records (covering 98 per cent of infant deaths in 2007-09). Figures for 2007-09 are provisional. ONS/ Department of Health (2010) *Mortality monitoring Bulletin for infant mortality and inequalities to 2009*

in the R&M group in 2007-09 was 12% higher than the average for all groups with an assigned socio-economic group, compared to 13% higher ten years earlier (1997-99) [16]. The R&M group rate was 16% higher than the average in 2006-08 and 2005-07 and 19% higher in 2002-04 and 2001-03, the widest gap since 1997-99.

Figure 1 shows the change in the infant mortality gap from 1994-96 to 2007-09.

Figure 1. Infant mortality rates in England and Wales from 1994 to 2009



[1] Based on infant deaths successfully linked to their birth records.

[2] Absolute difference in rate calculated as "rate in routine and manual group" minus "rate for all" . Relative difference in rate calculated as ("rate in routine and manual group" minus "rate for all")/ "rate for all" expressed as a percentage (%)

[3] NS-SEC based on father's occupation at death registration. Based on births inside marriage and joint registrations outside marriage. Figures for live births are a 10 per cent sample coded for father's occupation.

[4] "All" relates to births inside marriage and joint registrations outside marriage, not including "social class not specified" for 1995 and 1999. Sole registrations and unlinked deaths are excluded. Information on the father's occupation is not collected for births outside marriage if the father does not attend the registration of the baby's birth.

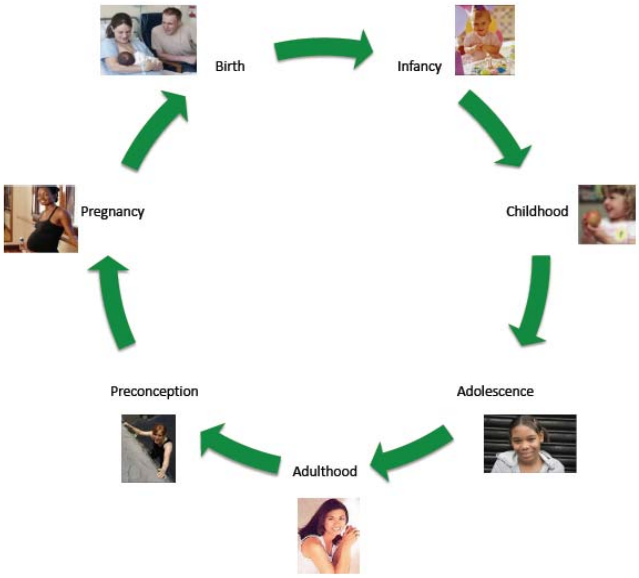
Source: Office for National Statistics

1.4 Evidence based interventions that will help narrow the gap

Reducing health inequalities in infant mortality requires a combination of health interventions and actions on the wider social determinants of health by the NHS, local authorities and voluntary organisations, charities and social enterprises. These interventions must start before birth. Giving every child the best start in life through interventions to reduce health inequalities in infant mortality is central to reducing health inequalities across the life course.

[16] Department of Health (2009), *Tackling Health Inequalities: 10 Years On*

Figure 2: Intergenerational effects of infant mortality



The infant mortality review and implementation plan modelled a number of evidence based interventions that would have an impact on the 2002-04 infant mortality gap between the R&M group and the population as a whole. These were:

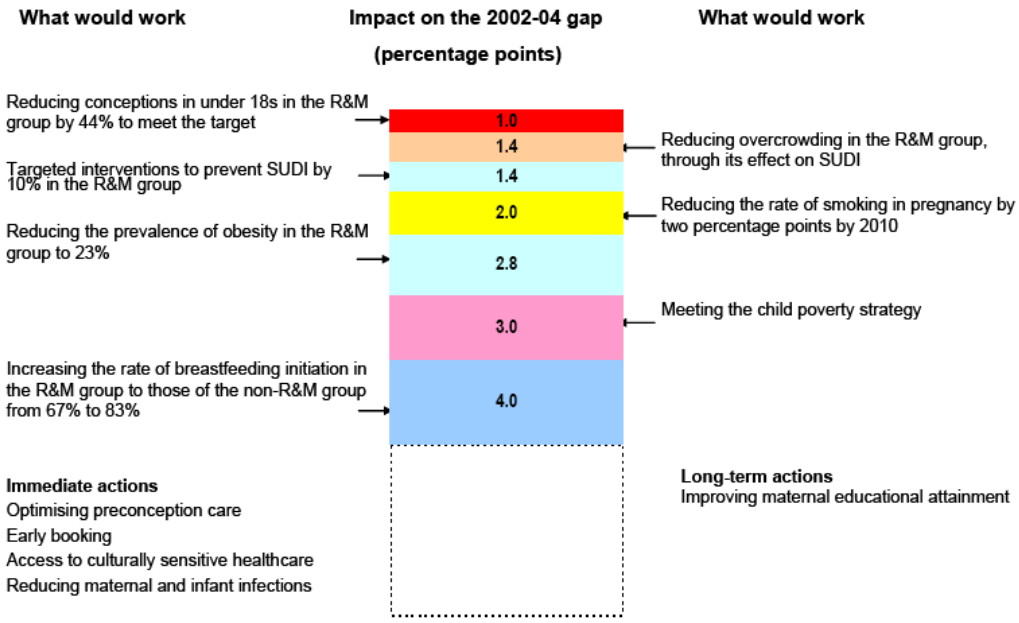
- reducing child poverty – to halve the number of children in relative low-income households between 1998-99 and 2010-11, on the way to eradicating child poverty by 2020 – would contribute three percentage points;
- reducing the prevalence of obesity in the R&M group by 23% to the current levels in the population as a whole – 2.8 percentage points;
- reducing smoking in pregnancy in the R&M group from 23% to 15% - two percentage points;
- improving housing and reducing overcrowding – 1.4 percentage points,
- reducing sudden unexpected deaths in infancy (SUDI) by persuading one in 10 women in the R&M group to avoid sharing a bed with their baby or putting their baby to sleep prone (on its front) – 1.4 percentage points;
- achieving the former teenage pregnancy strategy's target to halve the under 18 conception rate between 1998 and 2010 – one percentage point.

Breastfeeding was subsequently identified as a key factor:

- increasing the rate of breastfeeding initiation in the R&M group to those of the non-R&M group from 67% to 83% - would contribute four percentage points.

The combined and full effect of these actions would narrow the infant mortality gap between these groups by 15.6%

Figure 3. Identifiable actions to reduce the 2002 – 04 infant mortality gap

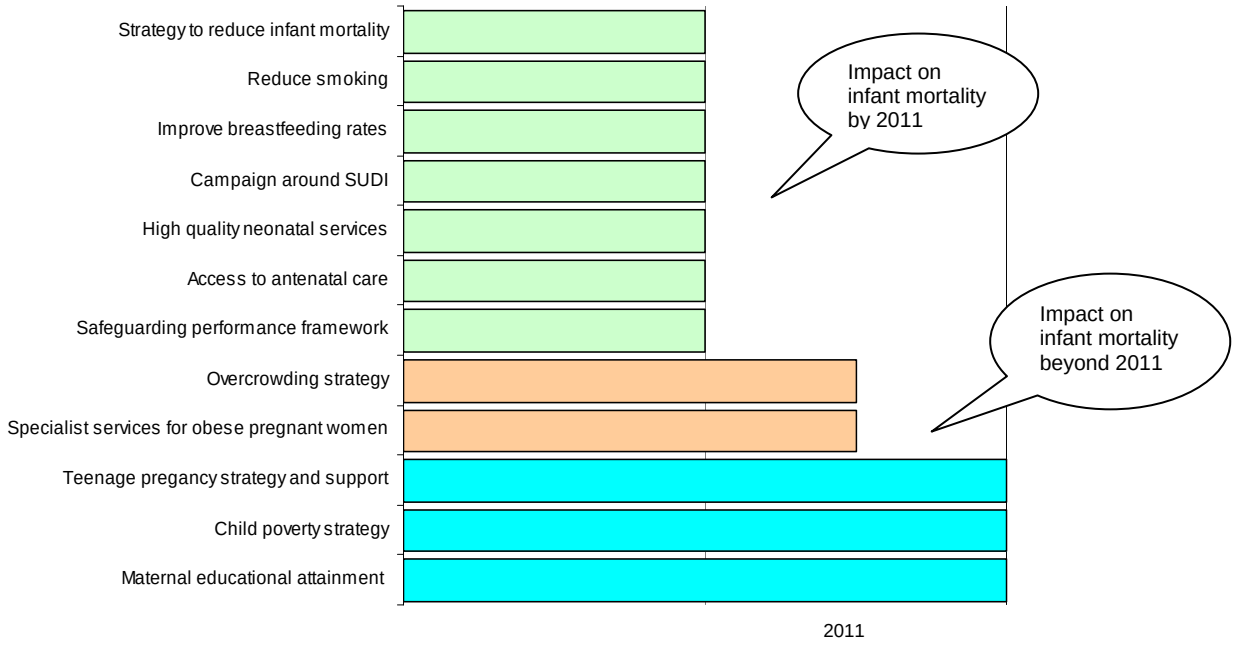


The review concluded that other interventions, such as ensuring early access to antenatal care (early booking), effective use of high quality healthcare and improving maternal educational attainment, were also likely to have an impact on the gap although there was insufficient evidence to quantify this effect.

These interventions would also have an impact on other disadvantaged groups with high IM rates, including sole registered births and other groups outside the standard occupational classification.

The timescale for these and other interventions to have an impact on the gap varies and an estimated timescale is shown in Figure 4.

Figure 4. Timescale to achieve change



1.5 The role of the Infant Mortality National Support Team

Public health NSTs were established in 2006 to provide tailored expert peer delivery support to health partnerships in England.

The IMNST's role is to:

- help areas with the highest burden of infant mortality in the R&M group to help narrow the gap (Annex 1);
- help areas reduce infant mortality in other disadvantaged populations e.g. teenage parents, single parents, Black and Minority Ethnic (BME) groups, and among the homeless and unemployed;
- improve infant, maternal and child health outcomes in disadvantaged groups and areas ;
- gather and disseminate examples of good practice.

The NST process provides direct support for partners through local visits. IMNST visits normally last four days and consist of one-to-one interviews and small group discussions that provide challenge and support in a number of areas around maternity and early years services. Over the course of each visit the NST speaks with a wide range of key local partners to build a picture of maternal and children's services, including:

- Chief Executives of PCTs, local authorities and hospital trusts;
- Directors of Public Health and Directors of Children's Services;
- Chairs of Local Safeguarding Children Boards (LSCBs);
- management and frontline staff from hospital trusts and Sure Start Children's Centres;
- Chairs of Maternity Services Liaison Committees.

Reducing health inequalities in infant mortality and improving infant and maternal health outcomes will arise from the cumulative impact of a range of activities rather than from any one individual activity, and through coherent delivery systems and governance arrangements. The visit team uses a systematic approach to explore the local context, identify challenges, highlight strengths, make recommendations for delivery and provide tailored support to an area.

Typically, small group discussions explore topics that the evidence base has shown an impact on the infant mortality gap or that are likely to have an impact on the gap (Figure 2). There are four core small group discussions on:

- housing;
- maternal and infant nutrition;
- safeguarding and SUDI;
- reducing maternal smoking.

Areas chose two more discussion groups according to their local priorities from a selection of:

- ethnicity;
- immunisation;
- management of the feverish/unwell infant;
- access to maternity services and antenatal and neonatal screening;
- reducing teenage pregnancy and better supporting pregnant teenagers;
- substance misuse in pregnancy and care of vulnerable women.

Due to the cross cutting nature of the challenge these small group discussions link to wider factors across the social determinants of health and other national priorities.

Local areas are signposted to resources to help develop strategies on child poverty that are provided by the Child Poverty Unit at the Department for Education.

A package of follow up support is agreed with each local area about six weeks after the visit and support is provided over the course of six months to a year.

1.6 The impact of the Infant Mortality National Support Team

'Very focussed effective method to identify overview and opportunities for joint working and improvement. Good challenge' (Head of Housing Services).

Informal evaluations carried out at the end of each visit have shown that 91% of participants said that the IMNST visit provided the individual, partnership or organisation with a basis for further improvement.

A formal evaluation providing local areas with a template to self assess progress at 6-12 months has been introduced. Initial results from six visits have shown many positive outcomes as a result of an IMNST visit, including:

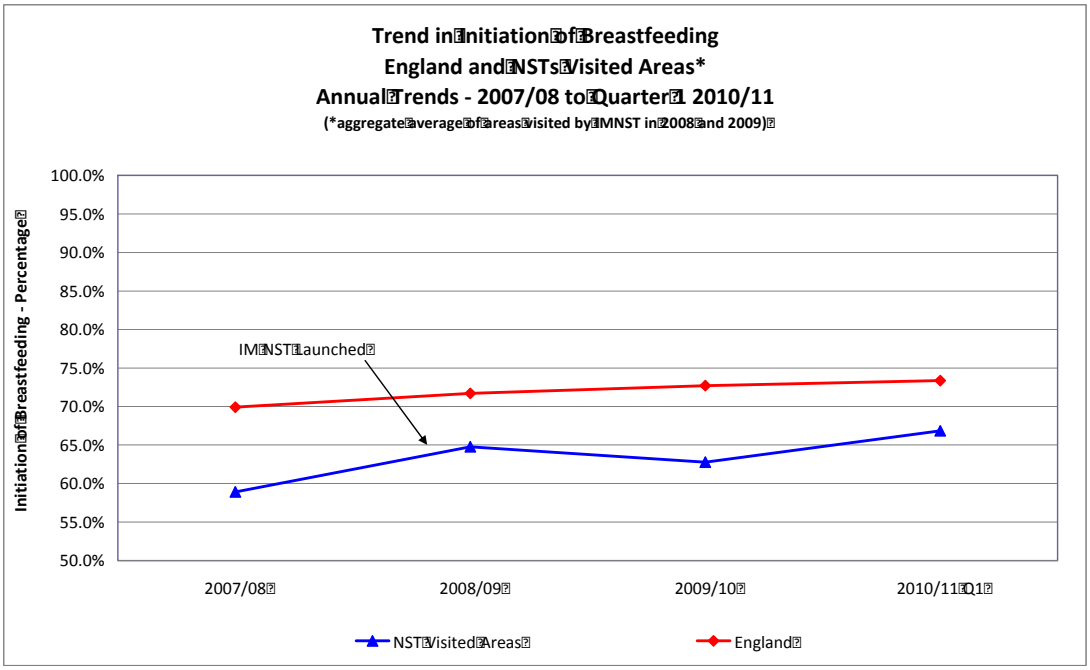
- promoting action and improving partnership working between health, local authorities and other local bodies for example, the development of a local strategy to reduce infant mortality, including a focus on the links between health, housing and affordable homes;
- specific service improvements, for example improving data collection and accuracy of immunisation uptake and working in partnership with other organisations (e.g. Sure Start Children's Centres) to improve immunisation uptake;
- development of a balanced infant mortality scorecard to inform commissioning and performance management;
- development of services in partnership with vulnerable groups, for example through promoting early antenatal booking among some BME groups;
- improved engagement with local communities for example through promoting early antenatal booking among some BME groups and developing maternity services in partnership with the local maternity service and vulnerable groups;
- development of genetics awareness training for local communities.

It is not possible to assess the impact of the IMNST on progress to reduce infant mortality because these data are measured on a three-year rolling average and are not yet fully available. However, overall, NST visited areas show an increase in breastfeeding initiation and a decrease in smoking at delivery.

Figure 5 and 6 illustrates the aggregate average rate for the 15 visited areas, along with the average for England as a whole.

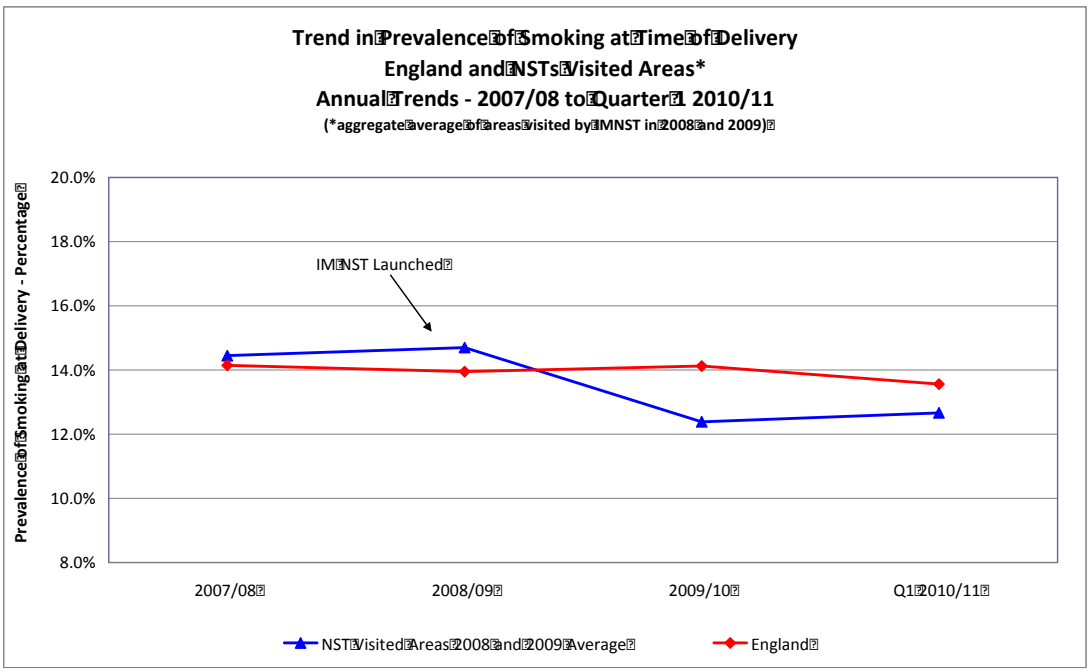
Trends in breastfeeding initiation rates in NST visited areas show an increase of 2.1 percentage points from 64.8% in 2008/09 to 66.8% as at Q1 2010/11. This compare with increase of 1.6 percentage points across England as a whole, from 71.7% at Q3 2008/09 to 73.4% at Q1 2010/11.

Figure 5: Trends in Breastfeeding Initiation Rates England and NST Visited Areas from 2007/08 to 2009/10 Q4



In England smoking at delivery rates decreased by 0.4 percentage points from 14.0% in 2008/09 to 13.6% in 2010/11 Q1. The average for those areas that have had an IMNST visit has decreased by two percentage points from 14.7% in 2008/09 to 12.7% in 2009/10 Q1.

Figure 6: Trends in Smoking at Delivery England and NST Visited Areas from 2008/09 to 2009/10 Q1



2.0 Key findings identified by the Infant Mortality National Support Team

This section highlights the key issues and themes identified from the IMNST visits and the recommendations for effective local action and partnership. The recommendations were analysed by a process of repeated review to identify themes that emerged.

STRATEGIC APPROACHES TO REDUCING HEALTH INEQUALITIES IN INFANT MORTALITY

2.1 Recommendations from Infant Mortality NST visits Team

311 recommendations were made (median 22 per area) as a result of these visits and they are categorised in detail in Table 1.

The key messages from the visits were:

- strong local leadership is vital to an effective cross agency approach to improving maternity and early years services and reducing infant mortality;
- clear governance arrangements will ensure local services work together to deliver reductions in infant mortality;
- a balanced scorecard/database of risk factors for infant mortality indicators will strengthen local performance management and commissioning;
- integrated commissioning will ensure a whole systems approach to tackling infant mortality and improving infant and maternal health;
- a strategic lead will provide oversight of individual programmes, and needs to be backed by a strategic approach to workforce issues;
- better understanding of the role and responsibilities of different agencies and staff will promote greater effectiveness and improved service delivery;
- community engagement and understanding the preferences and needs of local population will help develop flexible, responsive, acceptable services for the use of those who need them.

Table 1. Strategic recommendations identified by the Infant Mortality NST

Category	Number of comments (%)
Public health intelligence to inform planning, commissioning and performance management	**68 (21.9)**
- Develop a database or scorecard of infant mortality indicators	16
- Use social marketing to understand the needs of vulnerable groups	15
- Review and improve data availability and quality	14
- Review information sharing protocols	11
- Carry out an audit of infant deaths	6
- Carry out needs assessment of disadvantaged groups	6
Systematic strategic approaches to reducing infant mortality jointly developed by NHS, local authorities and the third sector	**44 (14.1)**
- Develop a vision	11
- Develop a strategy or action plan	15
- Mainstream work taking into account other plans or national priorities	8
- Partnership working	5
- Task and finish group to develop the strategy or action plan	5
Performance management and governance arrangements	**43 (13.8)**
Improve understanding of across the health and social care system of the factors that contribute to infant mortality and of the part organisations could play in addressing these	**39 (12.5)**
- Develop internal and external communication strategy	15
- Increase understanding of risk factors for infant mortality	13
- Identify strategic champions	6
- Make tackling infant mortality everyone's business	5
Workforce planning and integration of services	**31 (10.0)**
- Develop a workforce strategy that addresses workforce configuration and skill mix	15
- Identify a / review the capacity of the strategic lead for reducing infant mortality	10
- Integrating services and the potential of Sure Start Children's Centres	6
Working with communities	**27 (8.7)**
- Utilise voluntary organisations and Maternity Service Liaison Committees	14
- Develop a strategic approach to community engagement	13
Use of commissioning to reduce infant mortality	**26 (8.4)**
- Inform commissioning through needs assessment and commissioning frameworks	9
- Develop and review maternity service specifications	9
- Joint commissioning	8
Other	**33 (10.6)**
Total	**311 (100)**

2.2 Case studies

The Women of Childbearing Age (WoCBA) programme: Using social marketing to develop services for disadvantaged communities in Kirklees

Infant mortality rates in Kirklees (7.1 per 1,000 in 2004-06) are among the highest in England. A report to analyse the cause of infant deaths from 2002-05 in north Kirklees highlighted the need to support healthy personal behaviours, this led to the development of the Women of Childbearing Age (WoCBA) programme (age up to 44 years) in 2008.

The aims of the programme are to:

- **reduce the number of women smoking** through stop smoking groups in antenatal settings, smoking advisers based in Sure Start Children's Centres and fast track referral for all pregnant women;
- **reduce the number of women drinking** at harmful and hazardous levels through alcohol screening and brief intervention training focussing on WoCBA as the target group;
- **increase physical activity in pregnant women** through physical activity programmes for pregnant women and dance classes for teenagers;
- **improve the diet of pregnant women** through implementing the Healthy Start Scheme and provision of cook and eat schemes using a 'manifesto' outlining women's needs.

Service user insight is a guiding force in the operation of the programme and its partnership approach across organisations. Resources and activities are focused on women in defined settings such as Sure Start Children's Centres, schools, colleges, NHS frontline staff and workplaces. Appropriate training has been developed to increase awareness and skills to support behavioural change in WoCBA amongst professionals and practitioners, using consistent health messages delivered in an effective way and signposting as appropriate. New services have been commissioned to provide a holistic approach to women's needs identified through local evidence. Three planned pilots of dance classes, tailored cooking sessions and a 'young' pregnancy town centre 'café' will commence shortly.

WOCBA is now placed as a high priority group in other relevant programmes and organisations with shared agendas and an independent evaluation of the pilots is being commissioned.

Contact: Rachel Spencer, Senior Public Health Manager NHS Kirklees (Rachel.Spencer@kirklees.nhs.uk)

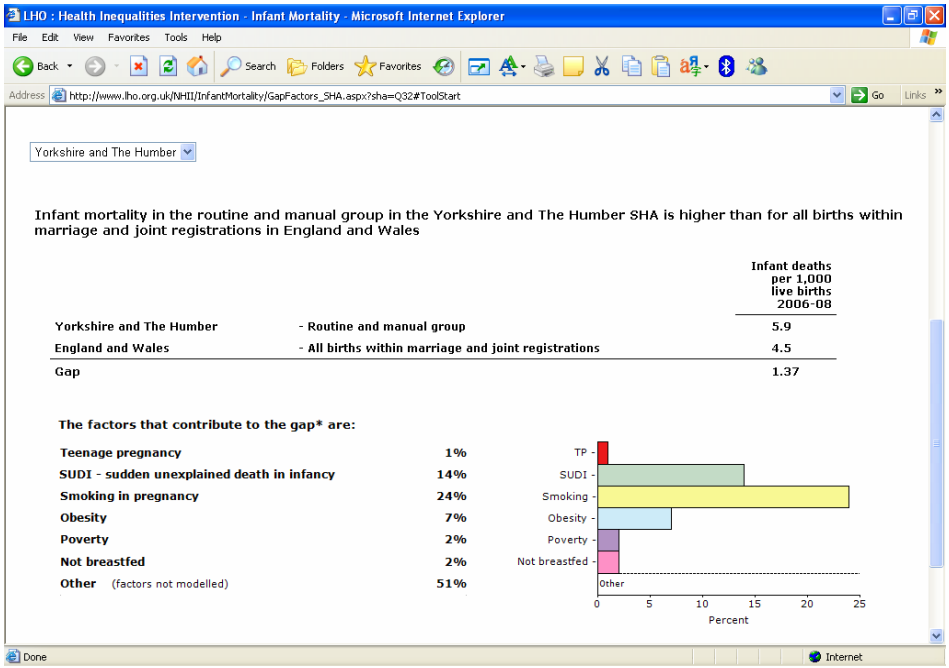
2.3 Useful resources

A number of resources are available to health public health practitioners, commissioners, providers, local authorities and voluntary organisations tackle health inequalities in infant mortality and improve infant and maternal health. These include:

- The **National Perinatal Epidemiology Unit** (NPEU) was commissioned by the Department of Health to strengthen the evidence base for interventions to reduce infant mortality and narrow the health inequalities gap. The project focussed on health service and public health interventions, which could be implemented in the context of the NHS. Key outputs include:
  - an evidence map of the systematic literature review;
  - a systematic review of the effectiveness of antenatal care programmes to reduce infant mortality and its major causes in socially disadvantaged and vulnerable women;
  - a systematic review of the effectiveness of interventions to increase the early initiation of antenatal care in socially disadvantaged and vulnerable women;
  - a serried of briefing papers, including an overview of the trends and context of infant mortality in England and Wales, understanding the variations in infant mortality rates between different ethnic groups in England and Wales and the contribution of congenital anomalies to infant mortality.

The outputs from this programme are available for download from the NPEU: www.npeu.ox.ac.uk/infant-mortality.

- The **London Health Observatory** has published an Infant Mortality Intervention Tool that contains data for Strategic Health Authorities in England and for those local authorities with high numbers of infant deaths in the R&M group. The tool is available at: www.lho.org.uk/LHO_Topics/Analytic_Tools/InfantMortalityTool2010.aspx.



- The **Child and Maternal Health Observatory** (ChiMat) has a number of online tools that can help local areas collate data and inform needs assessment and capacity planning (www.chimat.org.uk). These include:
  - local infant mortality profiles;
  - self assessment matrix for infant mortality;
  - local child health profiles, which provide a summary of key health indicators designed to help local councils and NHS decide where to target resources to tackle health inequalities in their local area;
  - commissioning self-assessment benchmarking tools for maternity and child health services.

- The **National Institute of for Health and Clinical Excellence (NICE)** publishes guidance on a range of topics that relate to tackling health inequalities in the early years. These are available at www.nice.org.uk.

ETHNICITY

2.4 Background

The infant mortality gap is greater among women in some BME groups. Infant mortality rates in babies of mothers born in Pakistan and the Caribbean are twice the national average, in part due to a higher prevalence of congenital anomalies and preterm births respectively[17]. The association between ethnicity and infant mortality is complex and is associated with deprivation, physiological, behavioural and cultural factors[18]:

- compared with children in households in which the head of the household is white, children in BME households are much more likely to be in the lowest income quintile[19];
- women from BME groups generally have later and poorer access to maternity services during pregnancy[20];
- congenital anomalies are more common in communities that favour consanguinity (cousins marrying) such as Pakistani communities. However, most babies born to consanguineous marriages thrive well and quantifying the impact of consanguinity on infant mortality is complex due to the confounding of economic disadvantage[21].

2.5 Recommendations from Infant Mortality NST visits

Although small group discussions were not held in all local areas, recommendations were made on ethnicity in all bar one area. Sixty one recommendations were identified, these are categorised in Table 2. Improving access to services emerged as a key recommendation.

[17] Department of Health (2007*). Review of the Health Inequalities Infant Mortality PSA Target*.
[18] Gray R, Headley J, Oakley L et al. National Perinatal Epidemiology Unit (2009) *Inequalities in Infant Mortality Project Briefing Paper 3. Towards an Understanding of Variations in Infant Mortality Rates between Different Ethnic Groups in England and Wales*
[19] Department of Health (2007) *Implementation Plan for Reducing Health Inequalities in Infant Mortality: A Good Practice Guide*
[20] Gray R, Headley J, Oakley L et al. National Perinatal Epidemiology Unit (2009) *Inequalities in Infant Mortality Project Briefing Paper 3. Towards an Understanding of Variations in Infant Mortality Rates between Different Ethnic Groups in England and Wales*
[21] Bradford District Infant Mortality Commission (2006). *Bradford District Infant Mortality Commission Summary Report*. Bradford Vision

Table 2. Ethnicity recommendations identified by the Infant Mortality NST (2008-2009)

Category	Number of comments (%)
Improve access to services	**16 (26.2)**
- Use of social marketing to understand the preferences and needs of BME communities	5
- Health equity audit to improve access to services	4
- Partnership working with the third sector	4
- Strategy to address the needs of BME communities	3
Improve communication	**11 (18.0)**
- Review of interpreting services	8
- Increase the number of English for Speakers of Other Languages (ESOL) classes	3
Understand the impact of congenital anomalies on population health and develop genetics education programmes	**10 (16.4)**
Improve the quality of data collected about ethnicity	**6 (9.8)**
Staff training (data collection, support initiatives)	**5 (8.2)**
Other	**13 (21.3)**
Total	**61 (100)**

The IMNST visits highlighted the importance of developing a clear strategy to support the needs of BME groups using opportunities to carry out basic market research to identify preferences for service delivery and to understand why some people/groups do not engage with services.

Good communication between providers and families is essential to enable people to make informed decisions. The IMNST found that access to interpreting services was variable in some areas, with staff being unable to convey health information or reporting the use of family members to do so. Interpreting services and other formats e.g. pictorial guides, DVDs) need to be specified and commissioned to meet the needs of local populations.

The visits also identified the need to evaluate the impact of congenital anomalies in relation to consanguinity and develop genetics education programmes to enable people to make informed choices.

2.6 Case studies

Improving access to antenatal care in Leeds: The Haamla service

'I learnt a lot about babies and pregnancy. Many Asian women don't know what to do or understand this is a good way to learn' (First time mum).

'Haamla' is an Urdu/Arabic word meaning pregnant woman. The Haamla service, based in the obstetric department of St James's University Hospital works within the maternity wards and the local community. It was established in 1994 as a project to support Asian women during their maternity care period. The service has since grown into one that provides help and support to women from many BME groups, including refugee and asylum seekers.It targets those who are likely to be missed and those not accessing any services. This is achieved by providing women with social support through befriending and advocacy during their antenatal/postnatal care periods. Weekly antenatal groups are run in the community informing women through interpreters of various topics relating to pregnancy. This antenatal support service empowers and informs pregnant women to make informed choices. Haamla complements the work of health professionals in hospital and in the community by working collaboratively with community midwives, offering one-to-one support and information, so women are informed about their choices and how to access services.

The Haamla service aims to:

- anticipate and respond to the health needs of vulnerable groups by supporting women during pregnancy and birth;
- empower and inform women of choices available during pregnancy and birth;
- increase breastfeeding rates in these specific groups;
- educate, inform and support all pregnant women from BME communities including asylum seekers and refugees to help increase early and appropriate access to maternity services;
- provide antenatal education to vulnerable women with language barriers, and provide a sensitive, culturally appropriate service to meet their individual needs and their families;
- offer advocacy and support to women (in hospital and in community settings) to provide awareness and knowledge of the maternity services in Leeds;
- meet language, cultural, religious and individual needs for isolated and vulnerable women;
- ensure the best possible maternal and child health outcomes, and positive experiences for these women, and their families.

The service is regularly evaluated by the use of an evaluation form where feedback is received from service users and other partner organisations This has shown increased breastfeeding rates and reduced postnatal depression in women who have used the service. The Haamla service was the winner of the NCT (National Childbirth Trust) award for developing inclusive services for disadvantaged groups and communities in July 2010.

Contact details: Shaista Khan, St James's Hospital, Leeds (Shaista.Khan@leedsth.nhs.uk)

Developing Genetics Services for Families in Birmingham: The Enhanced Genetics Service Project

Infant mortality rates in Birmingham are amongst the highest in England. Genetic disorders are known to contribute towards the high perinatal and infant mortality rates in Birmingham and are particularly common in the children of couples who have married within the family. Raising awareness of genetics and the genetics service within the community is necessary in order to enable families to take full advantage of new developments in diagnostic tests and potential treatments.

The Enhanced Genetic Services Project (EGSP) is based in the Clinical Genetics Unit at Birmingham Women's Healthcare NHS Foundation Trust. It is a three year initiative started in December 2009 and aims to improve awareness of and access to genetic services by BME groups in Birmingham, particularly the Pakistani Community through:

- reviewing and re-contacting families already known to paediatricians and the clinical genetics service to update them with new relevant information and offer new services and treatments where appropriate. This will be supported by the development of new molecular diagnostic services within the West Midlands Regional Genetics Laboratory;
- providing training for non-genetic health care professionals to recognise families that may be at risk of inherited disorders and know how to refer appropriately;
- working closely with the community and extended family members of affected individuals to improve their understanding of hereditary conditions and help them access new services/developments;
- offering a screening programme for inherited blood disorders in three GP practices in the Heart of Birmingham Teaching PCT.

An external evaluation of the project by the Foundation for Genomic and Population Health based in Cambridge is being carried. Outcome measures include:

- understanding of genetic disorders and options available throughout affected families;
- understanding of genetics of health professionals;
- mortality and morbidity due to genetic disorders in those communities that are most affected.

Contact details: Yasar Eltaf, Project Manager, Enhanced Genetics Service Programme, Birmingham Women's NHS Foundation Trust (Yasar.Eltaf@bwhct.nhs.uk)

HOUSING

2.7 Background

Poor housing conditions such as overcrowding and living in temporary accommodation can have a devastating impact on families and their health and well-being. Communities and Local Government (CLG) is the lead department and works with DH on this issue.

Overcrowding appears to have an impact on mortality through its effect on SUDI, although the mechanisms are unknown. Reducing overcrowding in the R&M group may reduce the IM gap by 1.4 percentage points through reducing SUDI and will have an impact on other disadvantaged groups.

The *Overcrowding Action Plan*[22] supports housing providers develop a range of housing options and advice services to assist those households worst affected by overcrowding.

2.8 Recommendations from Infant Mortality NST visits

Small group discussions were carried out in 13 of the 15 local areas. 73 recommendations were identified, these are categorised in Table 3. Closer working between health and housing agencies was seen as crucial.

Table 3. Housing recommendations identified by the Infant Mortality NST

Category	Number of comments (%)
Closer working between housing and health services	11 (15.1)
Communication of the relationship between housing and infant mortality	10 (13.7)
Provision of support for pregnant teenagers	8 (11.0)
Training housing support officers to signpost families to support resources	7 (9.6)
Develop a strategy to tackle overcrowding	6 (8.2)
Engagement with the private sector to assure the quality of homes	5 (5.5)
Communication between agencies	5 (6.8)
Improve living conditions	4 (5.5)
Engagement with Registered Social Landlords	4 (5.5)
Other	13 (17.8)
Total	**73 (100)**

Reducing health inequalities in infant mortality will require effective partnership at a local level across health, local authorities and the third sector to develop tailored services that meet the needs of local populations.

Although the health impacts of housing are established and well known, the IMNST visits highlighted the importance of integrated working and communication between housing and health to ensure that appropriate advice and services are available to families who need it.

The visits highlighted the need for the delivery of seamless, young-person response to the needs of pregnant teenagers. Recent guidance about provision of accommodation of 16 and 17 year olds who may be homeless and/or require accommodation, including 16 and 17 year old teenage parents [23] highlights the importance of accommodation that gives them the holistic support they require to meet their individual needs and improves health outcomes.

[22] Communities and Local Government (2007) Tackling Overcrowding: An Action Plan
[23] Communities and Local Government (2010) *Provision of Accommodation for 16 and 17 year old young people who may be*

The visits highlighted the importance of improving the quality of housing and tackling overcrowding by working with Registered Social Landlords and the private sector. Local authorities have a statutory responsibility for improving housing conditions and need to work in partnership with housing authorities and others to do so.

2.9 Case studies

Tackling Overcrowding Pathfinder Programme

2010-11 is the third and final year of the Tackling Overcrowding Pathfinder Programme, which aims to tackle overcrowding and make better use of housing stock.

CLG continues to support all Pathfinders in delivering a programme. Pathfinder funding was offered based on the levels of overcrowding in each authority, outputs and outcomes to date and future action plans and activities. A key area this year is to work in partnership with other Social Landlords to maximise the opportunities to reduce overcrowding and make better use of housing stock.

Process and Criteria
Pathfinders were asked to work toward the achievement of a series of clear objectives, outputs and outcomes that included:

- A reduction of overcrowded households in the social housing sector (priority being those households who are severely overcrowded by the bedroom standard) by:
  1. housing options visits to overcrowded social tenants;
  2. use of the private rented sector;
  3. an effective allocation framework.

  Pathfinders were expected to set a local target to deliver a reduction in the number of severely overcrowding households within the social sector and at the same time a target based on options visits to overcrowded households (priority being severely overcrowded)

- Making best use of stock by:
  1. a reduction of households under-occupying in the social housing sector;
  2. an effective allocation framework - maximising the use of chain lets from under-occupation voids .

  Pathfinders were expected to set a local target to increase the number of under-occupation moves completed in 2010-11.

- Maximising opportunities for the above in partnership with local Social Landlords.

2.10 Useful resources

CLG has published a number of documents about tackling overcrowding, including **Tackling Overcrowding in England: Self-Assessment for Local Authorities (2008)**, which helps Local Authorities develop housing strategies with clear aims to tackle overcrowding.

homeless and/or require accommodation

The Greater London Authority produced an Action Plan to tackle overcrowding in London. The plan includes many examples of good practice and is available at http://www.london.gov.uk/publication/london-overcrowding-action-plan

OPTIMISING MATERNAL AND INFANT NUTRITION

2.11 Background

Optimising maternal nutrition preconceptually, throughout pregnancy and in the postnatal period is essential for maternal and infant health. Maternal obesity is now considered one of the most commonly occurring risk factors seen in obstetric practice and is associated with increased rates of maternal and perinatal mortality[24]. After birth, breastfeeding has clear health gains for both mother and baby, reducing the risk of infant mortality and improving life chances, health and well being.

2.12 Recommendations from Infant Mortality NST visits

94 recommendations were identified, these are categorised in Table 4. The importance of promoting breastfeeding, raising awareness of Healthy Start and clear care pathways for obese pregnant women were identified as key challenges.

Table 4. Nutrition recommendations identified by the Infant Mortality NST

Category	Number of comments (%)
Breastfeeding	**25 (26.6)**
- Improve data collection around breastfeeding	11
- Commit to Baby Friendly	9
- Explore range of models to support breastfeeding	5
Communication	**21 (22.3)**
- Promote Healthy Start	9
- Use social marketing approaches to ensure messages about nutrition and lifestyle reach vulnerable families	4
- Engage BME and other vulnerable groups	3
- Develop the role of Sure Start Children's Centres in promoting healthy eating	5
Care pathways	**16 (17.0)**
- Develop a care pathway for overweight and obese pregnant women	13
- Audit the prevalence of rickets and develop care pathways to address this	3
Develop an overarching nutrition strategy	**11 (11.7)**
Staff training	**6 (6.4)**
Other	**17 (18.1)**
Total	**94 (100)**

The IMNST visits highlighted the importance of services to support breastfeeding and collect prevalence data, engagement with vulnerable families around optimising nutrition and the need for care pathways for overweight and obese pregnant women. In addition, there was a need to pull together the different strands of work around nutrition into an overarching strategy, which was shared with all agencies involved.

Breastfeeding has been consistently supported as a way of optimising infant health, including through initiatives to promote breastfeeding initiation and continuation in groups less likely to do so. Nevertheless, inequalities in breastfeeding remain. The Infant Feeding Survey found that the prevalence and duration of exclusive breastfeeding was higher at all ages among mothers from managerial and professional groups compared to other social groups[25]. More recent evidence

[24] Fitzsimmons K, Modder J and Greer I. Obesity in pregnancy: Risks and management *Obstetric Medicine* 2009;2: 52-62
[25] Information Centre (2007) *Infant Feeding Survey 2005*

suggests that as well as improved health outcomes investment in strategies to promote longer breastfeeding duration and exclusivity may be cost-effective. [26]

The Healthy Start scheme provides vouchers for pregnant women and those with children younger than four to spend on milk, fruit and vegetables, as well as health advice. Women who receive certain benefits or are pregnant and aged under 18 qualify for the vouchers. The scheme also provides vitamin supplements including folic acid to all pregnant and breastfeeding mothers. Health care professionals have a role in advising women and families about Healthy Start and encouraging anyone who might be eligible to apply for the scheme. The visits identified uncertainties about the uptake of Healthy Start in some areas, particularly about access to vitamins, and the need to raise awareness amongst professionals and families about access to the scheme. More information is available at www.healthystart.nhs.uk/index.html

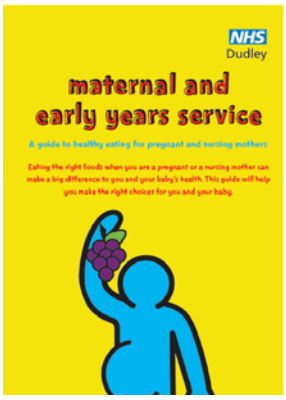
The NST visits highlighted the need for clear care pathways for the management of obese pregnant women and their partners in order to improve health outcomes. In March 2010, the Royal College of Obstetrics and Gynaecologists and the Centre for Maternal and Child Enquiries published evidence based guidelines for the management of women with obesity in pregnancy[27]. Local areas should be encouraged to implement these guidelines.

[26] Bartick M, Reinhold A. The Burden of Suboptimal Breastfeeding in the United States: A Pediatric Cost Analysis *Pediatrics* 2010;125:e1048–e1056

[27] Royal College of Obstetricians and Gynaecologists, Centre for Maternal and Child Enquiries (2010) *Management of Women with Obesity in Pregnancy*

2.13 Case studies

Maternal and Early Years Service: Improving Outcomes for Obese Pregnant Women in Dudley



The Maternal & Early Years Service (MAEYS) is a health improvement service aimed at obese mothers (BMI over 30). Initially funded by West Midlands SHA, the Investing for Health Project, the service is now mainstreamed in NHS Dudley. Advisors provide one to one or group support services for women who are obese to promote and support appropriate weight gain during pregnancy (7-10kg), healthy eating and physical activity and also breastfeeding and delayed weaning. Advisors also offer Stop Smoking support for the women and other family members in the household and weight loss post pregnancy for both the woman and their partner.

The service is in addition to maternity and health visiting services and aims to tackle inequalities and reduce the likelihood of: the child growing up to be obese; risks in pregnancy; and likelihood of obesity for future pregnancies.

Clients are referred to the service by a health professional. Initial contact with client is made via phone. Clients are taken through a two phase process following initial assessment and unlimited appointments are offered to ensure tailored support, to meet individual needs.

Initial assessment	To establish eligibility for service
Phase 1 - Pregnancy	To agree goals for lifestyle change relating to (1) healthy eating (2) physical activity. Motivate and support changes. To prepare for breastfeeding.
Phase 2 - Postnatal	To agree and review goals for lifestyle change, relating to (1) healthy eating, (2) physical activity (3) breastfeeding and weaning, (4) family wellbeing. Motivate and support change

Key benefits at an individual level are; minimal weight gain in pregnancy and healthy weight loss following birth; increased knowledge of health messages to enable informed decision making; increased activity levels pre and post birth;improved cooking and food preparation skills; increased confidence; improved parenting skills; healthy weight of child at sign off.

Key benefits at the population level; breastfeeding initiation and continuation rates; compliance rates; percentage weight loss; reduced risk level of obesity linked complications in pregnancy and birth; slow down in the year on year rise in obesity at reception.

An evaluation of the pilot phase (September 2009–June 2010) found that 1155 women were referred across the six pilot sites in the West Midlands; the average weight gain in pregnancy was 7kg.

Contact: Sally Cornfield – Weight Management Pathways Programme Manager NHS Dudley (Sally.Cornfield@dudley.nhs.uk)

Improving breastfeeding initiation and continuation in Calderdale

A third of breastfeeding mothers experience problems in hospital or the early weeks. These mainly concern difficulties with attachment or failure to feed, painful breasts/nipples and unsatisfied babies. These problems may be resolved by timely referral to an experienced practitioner.

NHS Calderdale and Calderdale and Huddersfield NHS Foundation Trust hold Breastfeeding Support Groups and in 2008 developed and implemented guidelines, which enable practitioners to assess and refer mothers to a Lactation Consultant at Calderdale or Huddersfield Baby Café.

The guidelines are utilised by all midwives and health visitors and all staff and peer supporters running Breastfeeding Support Groups. Women experiencing breastfeeding challenges have a timely referral to see a Lactation Consultant at Baby Café. When the problem is resolved they are referred back to the Breastfeeding Support Group.

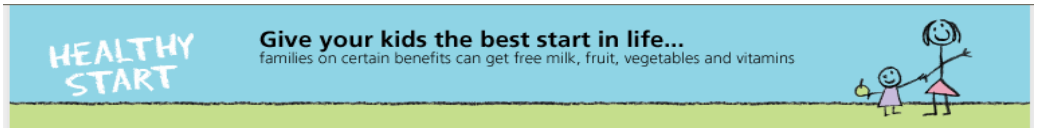
The process, flow chart and traffic light system are included in mandatory staff Breastfeeding Training and Peer Support training to disseminate information to all health professionals, breastfeeding support staff and volunteers. All mothers attending Calderdale Baby Café are asked to complete and return a written evaluation form. This provides quantitative and qualitative data on their experience.

Evaluations of the Café have demonstrated that it is an effective way to deliver support and care to a large number of clients, that it is instrumental in helping many women to breastfeed for longer and that it helps women establish important relationships and access other services appropriately. The most recent evaluation found that approximately 30% of all breastfeeding mothers in Calderdale visit the Café at least once. Between 2002 and 2009, breastfeeding initiation rates increased by 10 percentage points and breastfeeding continuation rates have increased by six percentage points.

Contact: Marilyn Rogers, Infant Feeding Advisor, Calderdale and Huddersfield NHS Foundation Trust (marilyn.ROGERS@cht.nhs.uk)

2.14 Useful resources

www.healthystart.nhs.uk/index.html



Best Beginnings have produced a DVD encouraging mothers to breastfeed This free DVD is available to all healthcare professionals to give to pregnant women and has the following additional languages Polish, Bengali, Urdu and Somali.
The DVD can be ordered at www.orderline.dh.gov.uk and quote the following code: 286873 Tel: 0300 123 1002

In July 2010 NICE published guidelines on dietary interventions and physical activity interventions for weight management before, during and after pregnancy. The six recommendations are based on approaches that have been proven to effective for the whole population. They include advice on:

- how to help women with a BMI of 30 or more to lose weight before and after pregnancy – and how to help them eat healthily and keep physically active during pregnancy;
- how to help all pregnant women eat healthily and keep physically active;
- the role of community-based services;
- the professional skills needed to achieve the above.

The guidelines are available at http://guidance.nice.org.uk/PH27/Guidance/pdf/English

SAFEGUARDING AND SUDDEN UNEXPECTED DEATHS IN INFANCY

2.15 Background

Keeping children from harm is a demanding task requiring very high levels of professional dedication and skill. Getting safeguarding practice right needs a clear focus and to be a central to children's services overall.

Local Safeguarding Children Boards (LSCB) are required to review the deaths of all children who are normally resident in their area. The key objectives of reviewing all child deaths are learning, improvement and change in order to improve the health, safety and well being of children and to reduce the incidence of preventable child deaths.

Chapter 7 of Working Together to Safeguard Children (2010) sets out the processes to be followed when a child dies unexpectedly. This includes the unexpected deaths of babies and infants.

The sudden and unexpected death of an infant is one of the most traumatic and sad events that can happen to a parent. A number of factors contribute to SUDI, including preterm and low birthweight, sleeping in non-supine (on the front or side) positions and unintentional suffocation due to bed sharing with an infant.

2.16 Recommendations from Infant Mortality NST visits

113 recommendations were identified during the small group discussions. These are categorised in Table 5. These recommendations highlighted the importance of clear safeguarding pathways backed by staff training and support and the need to develop clear communication plans about the risk factors for SUDI.

Table 5. Safeguarding and Sudden Unexpected Deaths in Infancy recommendations identified by the Infant Mortality NST

Category	Number of comments (%)
Procedures and care pathways	**34 (30.1)**
- Implement, embed and review the Common Assessment Framework	7
- Develop a system to identify all children with safeguarding concerns who present at Accident and Emergency	6
- Review the referral and assessment systems where children are at risk of harm due to domestic violence, adult substance misuse or mental illness	6
- Endorsement of the review of resources and/or processes	4
- The need to prioritise pre birth assessments for and identification of vulnerable women	4
- Endorsement of embedding safeguarding into all contracts/ administration processes	3
- Clarify arrangements for children who fall just below child protection threshold	2
- Review the arrangements for referring children to Child and Adolescent Mental Health Services	2
Staff training and support	**25 (22.1)**
- Review and systematic approaches to training and clinical supervision	17
- The need for emotional support for staff	3
- Involve adult services in safeguarding training	3
- Understand the influence of maternal risk factors as part of Child Death Overview Panel	2
SUDI	**13 (11.5)**
- Develop a strategy around SUDI risk factors	11
- The need for a Care of the Next Infant (CONI) scheme	2
Communication	
- Review communication and information sharing processes	7
- Staff recruitment and communication about staff changes	4
Develop a bereavement care pathway	**11 (9.7)**
Other	**19 (16.8)**
Total	**113 (100)**

The IMNST visits highlighted the:

- commitment of local areas to ensuring that the right services are in place and staff are adequately trained to support vulnerable children and families;
- role of Serious Case Reviews (SCR) and Child Death Overview Panels (CDOP) to capture and disseminate learning;
- good practice in some areas around ensuring that information is shared appropriately amongst key partners and the importance of readily available policies and procedures;
- good practice in responding to SUDI and prevention services in place for families for subsequent babies.

The recommendations made at the visits were directed to further improve the quality of safeguarding arrangements and provision of support to enable areas to do so. Key recommendations highlighted:

- the need to review training and clinical supervision arrangements - although inter-agency training was identified as a strength, some staffing groups were unable to attend mandatory

safeguarding training and in some areas clinical supervision was inadequate for community staff facing significant challenges;

- the need to identify potentially preventable infant deaths secondary to unintentional asphyxia to sharing a bed or sleeping with a baby elsewhere e.g. sofa. The death of a baby is a devastating loss to a family and areas need to develop clear communication processes about risk factors for SUDI to reduce this risk.

The care that parents receive around the time of losing a baby has a huge impact on their perception of what happened and their ability to cope. Although the visits highlighted good practice in relation to bereavement support midwives, there was inconsistent support for families whose baby or child had died and most areas did not have bereavement care pathways in place to offer this support.

Lord Laming highlighted the importance of good practice in communication and information sharing within and between each local service to keep children safe[28]. As good practice the IMNST recommends that information sharing protocols and processes are regularly reviewed to ensure that they continue to be effective. The visits identified that some areas had difficulties in identifying children who had known safeguarding concerns attending Accident and Emergency departments and the need to identify these children to ensure that they are kept safe.

Domestic violence is an important safeguarding issue for mothers and children: more than 14% of maternal deaths occur in women who have told their health professional they are in an abusive relationship and in over 50% of known domestic violence cases children are directly abused[29]. In some areas, referrals around domestic violence cases have increased substantially and the visits identified a need to review these referral and assessment processes to address any gaps in current service provision.

[28] Department for Children Schools and Families (2009) *The Protection of Children in England: A Progress Report.* London: The Stationary Office

[29] Confidential Enquiry into Maternal and Child Health (2007): *Saving Mothers Lives: Reviewing Maternal Deaths to Make Motherhood Safer: 2003 - 2005*

2.17 Case studies

Reducing Sudden Unexpected Deaths in Infancy: Give Me Room To Breathe programme Lancashire

Lancashire has one of the highest numbers of SUDI than England (between September 2008 and September 2009 there were 30 SUDI). The Give Me Room to Breathe programme was developed in 2008 following the successful Health Awareness Project for Pendle Infants.

A multiagency group was formed with representatives including health (PCTs), local authority (Sure Start Children's Centres, Children's Integrated Services), the police and marketing professionals to develop this pan Lancashire campaign. It aims are to raise awareness and promote discussion about safer sleeping for infants to reduce infant mortality across the County.

Funding was secured from Sure Start Early Years and Childcare Service, Sure Start Children's Centres, Lancashire Constabulary, local PCTs and the Local Safeguarding Children Board (LSCB).

A new image and promotional materials were developed and signed off by the LSCB and in early December 2008, three launch events took place across the County in the hotspot areas of Pendle, Preston and the North of the County. Media adverts were broadcast over a six week period and materials such as bibs, changing mats, forehead and room thermometers, leaflets, posters and beer mats were distributed across the County. Training was agreed for multi-agency staff to enable targeted work to take place and for them to cascade information to other staff and monitoring and evaluation of the campaign was initiated. All products include risk factors agreed nationally by the Foundation for the Study of Infant Deaths (FSID) as being the key messages that parents need to be made aware of to help reduce the risk of their child dying.

An external evaluation undertaken as part of the campaign highlighted that:

- parents and other members of the community are more aware of the safer sleeping messages and are willing to look at changing their practice in the future;.
- following training professionals have said that they are now more confident in giving consistent advice to parents and carers as a result of the training sessions delivered to a range of multi agency staff as part of the campaign.

Following the first year of data collection, cosleeping was identified as a factor in SUDI deaths and the campaign has been further developed to include the question *'Where does your baby sleep?'* in order to target this area of concern.

The Give Me Room to Breathe campaign received a national award in the 'Parenting' section of the Children and Young People Now Awards for 2009.

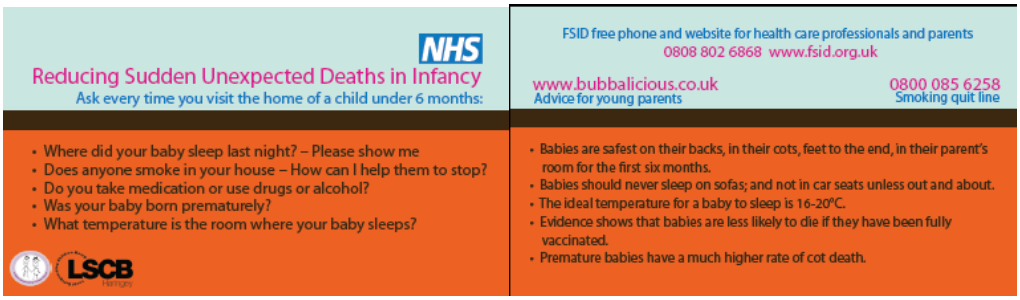
Contact: Tina Woods, Lead Nurse for Sudden Unexpected Deaths in Childhood (Tina.Woods@centrallancashire.nhs.uk, Tina.Woods@lancashire.pnn.police.uk)

Reducing Sudden Unexpected Deaths in Infancy: Development of Prompt Cards for Professionals in Enfield and Haringey

In Haringey, from 2006-2008, there were six SUDI out of a total of 65 deaths. A joint training event aimed at local professionals was held at the North Middlesex hospital to address these deaths and following advice from the Child Death Overview Panels in both Enfield and Haringey. “Dying for a cot – the myth of cot deaths” aimed to highlight key evidence and prevention messages regarding SUDI and to launch an information card aimed at professionals who visit families at home including midwives, health visitors, social workers, family support workers, outreach workers, housing staff and the police among others. The credit card sized information cards prompt professionals to ask the following questions:

- Where did your baby sleep last night? - Please show me
- Does anyone smoke in your house - How can I help them to stop?
- Do you take medication or use drugs or alcohol?
- Was your baby born prematurely?
- What temperature is the room where your baby sleeps?

The reverse of the cards promote relevant national and local helplines together with the following best practice evidence to reduce SUDI. Training events have been held in February and June 2010. The prompt cards have been very well received by local professionals and an evaluation of this work to assess the impact of the cards is planned.



Contact: Sheena Carr, Senior Public Health Strategist, NHS Haringey (Sheena.Carr@haringey.nhs.uk)

2.18 Useful resources

The **Department for Education** has the following resources available to support the child death reviewing processes:

- Working Together to Safeguard Children – Chapter 7, available to download at: http://publications.education.gov.uk/default.aspx?PageFunction=productdetails&PageMode=publications&ProductId=DCSF-00305-2010

- Why Jason Died DVD, which illustrate the roles and responsibilities of those responding to unexpected deaths within the context of the LSCBs responsibilities. The DVD can be ordered from Prolog (0845 60 222 60) free of charge please quote WHYJASONDIED.

- Multi agency training materials, To obtain copies please call Prolog on 0845 60 222 60 and quote reference 00764-2008DVD-EN - 'Responding when a child dies'.

- Preventing childhood deaths: A study of 'Early Starter' Child Death Overview Panels (CDOPs) in England, copies can be obtained from Prolog, quoting reference DCSF-RR036.

Further resources can be found at:
http://www.dcsf.gov.uk/everychildmatters/safeguardingandsocialcare/safeguardingchildren/childdeathreviewprocedures/childdeathreviewprocess/

The **Foundation for the Study of Infant Deaths** has produced:

- a DVD and microsite for teenage parents around SUDI risk factors. The DVD is available to download at http://fsid.org.uk/Page.aspx?pid=384;

- The Child Death Review. A Guide for Parents and Carers booklet, which describes what happens in the child death review and provides information about organisations that offer support. The leaflet is available at http://fsid.org.uk/Page.aspx?pid=759

REDUCING MATERNAL SMOKING

2.19 Background

Smoking in pregnancy is a major risk factor for both mother and baby. Babies born to mothers who smoke during pregnancy are more likely to die during the first weeks of life than babies of mothers who do not smoke: smoking in pregnancy increases infant mortality by about 40%.

Smoking in pregnancy is 50% higher in women in the R&M group than the population as a whole and nearly three times higher among mothers under 20 compared with rates for all pregnant women.

Reducing smoking in pregnancy is central to any strategy to tackle infant mortality and reduce health inequalities. Smoking cessation interventions in pregnancy have been shown to be effective in significantly increasing quitting rates and may be cost effective for the NHS.[30]

2.20 Recommendations from Infant Mortality NST visits

101 recommendations were identified, these are categorised in Table 6. The issues most frequently raised were around clear referral pathways to stop smoking services and improved staff training.

Table 6. Reducing maternal smoking recommendations identified by the Infant Mortality NST

Category	Number of comments (%)
Care pathways	**29 (28.7)**
- Clinical pathways for referral into stop smoking services	10
- Routine carbon monoxide monitoring and opt out pathway	6
- Review access to Nicotine Replacement Therapy and consider a Patient Group Directive	6
- Use Sure Start Children's Centres to deliver stop smoking services	4
- Opportunities within Smoke Free Homes	3
Staffing	**20 (19.8)**
- Staff training	15
- Staff capacity	3
- Champions to promote stop smoking	2
Developing user insights	**11 (10.9)**
- Social marketing to understand barriers to access and preferences	7
- Health equity audit	4
Commissioning	**11 (10.9)**
Strategic approach to reducing smoking	**4 (4.0)**
Other	**19 (18.8)**
Total	**101 (100)**

The IMNST visits highlighted the importance of:

- developing a strategy to support women and their partners to reduce smoking during pregnancy and in the postnatal period;
- appropriate care pathways for referral into stop smoking services

[30] National Institute of Health and Clinical Excellence (2010) *Quitting Smoking in Pregnancy and Following Childbirth: Guidance*

- formalising opportunities and training all practitioners to embed stop smoking support in the antenatal and postnatal period;
- using social marketing to develop services tailored to the needs of vulnerable groups;
- embedding stop smoking services within community settings for example, Sure Start Children's Centres and community pharmacies;
- using commissioning as a lever to develop, fund and review stop smoking services, particularly to disadvantaged groups.

Smoking during pregnancy accounts for about a third of the difference in infant deaths between the most and least deprived groups in the population. [31]. Smoking may increase the risk of infant death antenatally, through its effects on the developing fetus (e.g. smoking is a risk factor for prematurity) and postnatally (e.g. smoking is a risk factor for SUDI). Parental smoking may also exert intergenerational effects, as children exposed to tobacco are more likely to become smokers in adulthood[32].

The impact of reducing exposure to tobacco smoke may make one the biggest contributions to reducing infant mortality in the short term. Continuing to develop innovative and targeted services in the antenatal and postnatal period is essential to help reduce inequalities in infant mortality.

2.21 Case studies

Dudley Smoke Free Homes programme

Dudley Smoke Free Homes campaign evolved in 2004 from an idea to utilise free information materials and resources from the Department of Health. The aim of the resource was to raise awareness of the dangers of second hand smoke and its impact on babies and young children. This was supported by media coverage.

A multi-professional working group including midwives, health visitors, fire service, Sure Start Children's Centres and neonatal unit, was set up and produced a framework to target best use of resources in relation to key stages of child development along an intervention pathway from antenatal care to pre-school health checks. The group used the framework to raise the dangers of second hand smoke with parents and carers. The idea was to stimulate action from parents and families in a supportive non-confrontational way.

The framework was integrated into existing health checks where face to face contact was a requirement, for example at birth or nine month health checks. Smoke Free Homes has now been active for six years maintaining its original framework. The resources have been evaluated and updated over time. An evaluation showed that 38% of primary and secondary pupils reported smoking in the home by parents/carers in 2008, this compares to 48% in 2004.

Contact: Amanda Parkes: NHS Dudley Stop Smoking Service (amanda.parkes@dudley.nhs.uk)

[31] Gray R, Bonellie S, Chalmers J et al. Contribution of smoking during pregnancy to inequalities in stillbirth and infant death in Scotland 1994-2003:retrospective population based study using hospital maternity records BMJ 2009;339:b3754
[32] Royal College of Physicians (2010) *Passive Smoking and Children*

Newham Stop Smoking Service for pregnant women

NHS Newham and Newham University Hospital NHS Trust launched the Pregnancy Stop Smoking Service 'Make Another Positive Decision' in December 2007.

The concept was thought to be an effective message to attract and motivate pregnant mums who smoke, after receiving that positive pregnancy test result. Posters and referral cards were displayed at various places in the Newham University Hospital NHS Trust. The midwifery team were motivated and trained to give a brief intervention to a pregnant woman. The Pregnancy Stop Smoking specialist works with the various midwifery teams to enable them to refer pregnant women who would like to stop smoking. The maternity booking centre and antenatal clinics were identified as potential areas to book in clients to the see the specialist advisor.

The service was piloted and updated to make it as beneficial and accessible as possible for the target population. It has also been altered for front line staff who see pregnant women on a daily basis. It is now a very effective model to target this population and is achieving a respectable quit rate, whilst continuously striving towards improving the pregnancy service as a whole

Since 2007, the service has helped increase the number of pregnant women giving up smoking. It has received over 600 referrals from midwives in Newham and achieved a quit rate of 59% (2008-2009).

Contact: Meghna Vithlani (meghna.vithlani@newhampct.nhs.uk)

SMOKEFREE NHS Newham

2.22 Useful resources

The Royal College of Physicians Tobacco Topic Advisory Group (March 2010) report on Passive Smoking and Children contains an important section on the effects of maternal active and passive smoking on fetal and reproductive health. The report is available at www.rcplondon.ac.uk/professional-Issues/Public-Health/Documents/Preface-to-passive-smoking-and-children-March-2010.pdf

NICE has produced a number of written guidance on smoking during pregnancy to support professionals and commissioners. 'How to stop smoking in pregnancy and following childbirth and Smoking Cessation Services in Primary, Pharmacy and Local Authority and Workplaces, particularly for manual working groups, pregnant women and hard to reach communities. NICE is also publishing commissioning guidance and toolkit for smoking during pregnancy anticipated early 2011 (www.nice.org.uk).

The National Support Team for Tobacco Control has developed an integrated service framework tool to support commissioners and service managers in implementing locally robust interventions and services for smokers including pregnant women. The tool can be accessed from the following site: http://www.uknscc.org/2009_uknscc

NHS Stoke on Trent adopted a successful social marketing approach 'Quit for a new Life', developing tailored stop smoking services for pregnant women via local 'Me2 Clubs'. The programme was launched as one of the National Centre for Social Marketing's health learning demonstration sites. The report and further resources can be accessed from the following web link:
http://www.nsmcentre.org.uk/component/nsmccasestudy/?task=view&id=84&Itemid=42

REDUCING TEENAGE PREGNANCIES AND SUPPORTING PREGNANT TEENAGERS AND YOUNG FATHERS

2.23 Background

Health outcomes for babies born to teenage mothers are worse than for babies born to older mothers. In particular, infant mortality rates are 60% higher for teenage mothers than mothers aged 20–39 and there is a 25% greater likelihood of prematurity/low birthweight among teenage mothers compared with older mothers.

The main contributory factors to these poor health outcomes are: young mothers are more likely to attend late for antenatal care, to smoke to have poorer diets during pregnancy, and are less likely to breastfeed.

DfE is the lead department responsible for reducing teenage pregnancy working closely with DH.

Significantly reducing teenage pregnancy in the R&M group would contribute an estimated one percentage point of the 10% needed to narrow the gap. This would be achieved through reducing teenage pregnancies and providing better coordinated support for teenage mothers and young fathers, including the provision of contraception, particularly long acting methods to reduce second conceptions. Around one in five births conceived by under-18s are to young women who are already teenage mothers.

Engagement of all the key mainstream delivery partners – health, education, social services, youth support services and the voluntary sector – is essential to reduce teenage conceptions and improve support services for teenage parents. Long-term, raising the aspirations of teenage girls will help contribute to a sustainable reduction in teenage pregnancy.

2.24 Recommendations from Infant Mortality NST visits

Small group discussions were carried out in 12 of the 15 local areas. 70 recommendations were identified, these are categorised in Table 7. They highlighted the importance of a coherent approach to reducing teenage pregnancies in disadvantaged groups and the provision of coordinated support for young mothers and fathers.

Table 7. Reducing teenage pregnancies and supporting pregnant teenagers and young fathers recommendations identified by the Infant Mortality NST

Category	Number of comments (%)
Access to and assessment of teen friendly services	**8 (11.4)**
Communication and social marketing	**8 (11.4)**
- Develop a comprehensive communication plan	3
- Use social marketing to identify gaps and inform future service provision	3
- Develop service directories around prevention and support services	2
Development of multi agency care pathways (including for those at school and not at school)	**7 (10.0)**
Strengthen organisational and governance arrangements	**7 (10.0)**
Undertake housing needs assessments for teenage parents	**5 (7.1)**
Improve access to contraception services	**5 (7.1)**
Coordinate prevention and support services	**3 (4.3)**
Ensure stronger strategic links between teenage pregnancy and infant mortality strategies	**3 (4.3)**
Ensure consistency and raising standards across all school settings using Sex and Relationships Education (SRE) standards	**3 (4.3)**
Data collection and improving information sharing	**2 (2.9)**
Promote Healthy Start vouchers	**2 (2.9)**
Other	**17 (24.30**
Total	**70 (100)**

The IMNST visits highlighted the need to ensure that the key ingredients of a successful programme to reduce teenage pregnancies and support teenage mothers and their partners were in place including:

- provision of young people-focused contraception/sexual health services, trusted by teenagers and well known by professionals working with them;
- active engagement of the key mainstream delivery partners that have a role in reducing teenage conceptions;
- use of detailed, accurate, up-to-date national and local data for assessing need, planning, commissioning, and performance managing broad and targeted programmes;
- effective communication to improve partnership working, access to services and informed choice for young people, parents and communities
- strong delivery of sex and relationship education (SRE), by schools;
- targeted work with at-risk groups of children and in particular with children in care and care leavers;
- investment in community-based programmes that seek to engage hard-to-reach families (e.g. through Sure Start Children's Centres).

The Family Nurse Partnership (FNP) programme can also play a valuable role in supporting pregnant teenagers and young fathers, as well as improving outcomes in other areas including reducing maternal smoking, optimising maternal and infant nutrition and safeguarding. FNP is a preventive programme for vulnerable first time young mothers. It offers intensive and structured home visiting, delivered by specially trained nurses, from early pregnancy until the child is two. FNP has been tested in England since 2007 and there are now teams in 56 local authority/ PCT areas, including in eight of the 15 areas visited by the IMNST.

Extensive, rigorous US evidence shows significantly improved health and well being for disadvantaged young families, including improvements in antenatal health, reductions in children's injuries, neglect and abuse, improved parenting practices and behaviour, fewer

subsequent pregnancies and greater intervals between births and increases in fathers' involvement. Early evaluation of FNP in England points to high levels of engagement with hard to reach families, with around 87% of those offered the programme enrolling on it, and strong engagement with fathers. Early evidence also suggests improved rates of breastfeeding, reduced smoking during pregnancy and stronger mother child attachment and parent-child relationships.

2.25 Case studies

Supporting Pregnant Teenagers: An Integrated Care Pathway in Bolton

Bolton is a the 40th most deprived PCT in England (out of 152) and has higher teenage pregnancy rates than England 50.8 per 1,000 females aged 15-17 year old in 2008 compared to 40.4 per 1,000 females.

An integrated care pathway for pregnant teenagers and teenage parents was developed in 2009 in response to a fragmented service where some received more support than others depending on where they lived and what services were available locally. The service aims to:

- reduce second conceptions;
- provide a holistic integrated pathway for young people who are pregnant and may be vulnerable so they can be supported from the outset;
- help improve the poor outcomes for teenage parents and their babies.

Young pregnant woman are referred to the service, which includes booking choices, a specialist teenage antenatal clinic and a comprehensive social needs assessment to complement health assessment. There are also links to other services for on going support for example, health visiting, Sure Start Children's Centres and Further Education.

The service includes contraceptive plans and pathways to help reduce second conceptions and offers parenting education, which covers a range of parenting issues such as safe sleeping, healthy eating, alcohol and drug misuse, smoking cessation, domestic abuse and breastfeeding.

Dads are included in the services and see a worker on their own. Outreach is available for the most vulnerable.

The first year evaluation for May 2009 to May 2010 has not yet been completed. Initial results show:

- a slight decrease in smoking in pregnancy rates;
- there were no low birthweight babies born and all were full term (38-42 weeks);
- an increase in breastfeeding rates;
- a significant number of young mothers have returned to education.

The service users are currently completing surveys on the service.

Contact: Jayne Littler, Lead for Teenage Pregnancy and Sexual Health, NHS Bolton/Bolton Council (Jayne.Littler@bolton.gov.uk)

Supporting Young Fathers in Newcastle: Barnardo's Teenage Pregnancy Support Team

The Newcastle Teenage Pregnancy support team employs a young dad's worker who aims to provide a dedicated and holistic support package for young dads and dads to be addressing their needs.

This service aims to:

- provide every prospective father with an opportunity to discuss his own needs with the young dad's worker;
- provide every prospective father with the opportunity to speak to the midwife, the connexions worker and the teenage pregnancy advisor, either with or without his partner;
- signpost young dads to other appropriate health and social community resources such as children's centre's, education, vocational, employment and parenting.

A young fathers' worker attends the weekly multidisciplinary scan clinic for pregnant teenagers at the Royal Victoria Infirmary. The young couple initially see the Teenage Pregnancy midwife together and explore any concerns or issues, contraception is always discussed and a plan is put in place for contraception following the birth. Sexual health issues are also discussed both as a couple and separately. All young dads and young women are given free condoms and the offer of a Chlamydia screen.

The young dad to be then has time with the young father's worker to discuss his needs. A comprehensive assessment based on the Common Assessment Framework and the Every Child Matters Outcomes is undertaken by the young dad's worker who can highlight any work that he or the team can do to support the young man or signpost or refer him to other agencies as appropriate.

Young dad's have the opportunity for one to one support and group support in the form of The Young Dad's Group, which runs on a weekly basis. It involves speakers from other agencies giving information on housing, welfare rights, drug and alcohol issues, domestic violence, child care, parenting, contraception, healthy eating, smoking cessation and the effects of passive smoking on babies and young children.

Both young parents are encouraged to join the 'Being a Parent' course, which runs for 8-10 weeks. There are also antenatal and postnatal courses as well as one to one sessions.

Young people are involved in planning and identifying gaps in services. They have gone onto employment, education and university. Some of the young dad's have also gone on to be peer supporters for the new fathers.

The service was awarded 'YOU'RE WELCOME' from DH in 2010 and was the winner of the Parliamentary Awards for tailoring services to meet the needs of fathers in July 2010. The teenage pregnancy Team were awarded 2nd place in Team of the Year at the British Journal Midwifery Awards in June 2010.

Contact: Justina Hansom, Lead Midwife for Teenage Pregnancy (Justina.Hansom@nuth.nhs.uk)

The Family Nurse Partnership programme

Susan* is 17 years old. She grew up in a chaotic family with a single mother and seven siblings. She has limited literacy skills and difficulty in controlling her anger, especially in relation to professionals. She was in Local Authority care from age 14. Her two older sisters both had their children removed into foster care because of maltreatment. Susan had a social worker because of the risks to her and her child. Susan enrolled on the Family Nurse Partnership (FNP) programme when she was 8 weeks pregnant. She was angry, had very low self-esteem and felt rejected by her family. The strength-based approach and structured format of the FNP enabled the family nurse to engage Susan on the programme. She responded very positively, building a relationship with her family nurse that she had not managed to achieve with professionals before.

Using the programme methods and materials and her therapeutic skills the family nurse helped Susan explore the impact of her own parenting history and learn how to establish warm, emotionally available relationships so she could nurture her baby from the beginning. She was helped to change her behaviour, reducing smoking and improving her diet. The interactive parenting skills part of the programme and the role modelling by the family nurse showed her how to care well for her baby and she made sensory boxes ('play stimulate the senses'), and simple books for her daughter, understanding how she is her 'baby's first teacher'.

One of the hardest obstacles for Susan has been controlling her aggression, particularly in relation to professionals. The family nurse helped her to understand why she reacted to difficult situations with anger and gave her new techniques with she could practise with her family nurse. She is now able to stay in control in challenging situations.

Susan has now moved into her own flat. She has budgeted well and has a comfortable and immaculate home for her and her baby. She has excellent routines in place and makes home cooked food for both herself and her daughter. She has a 'no smoking' rule in the home and she has cut down to 3 a day. Susan is proud of what she has achieved and has no social care involvement for the first time in her life. She has set goals for her and her daughter's future and has enrolled on a literacy skills course. She wants her daughter to go to nursery, pre-school and enjoy learning. Susan talks about how the FNP has helped her to care for herself and her baby.

*Susan is not her real name

2.26 Useful resources

The new teenage parents social networking site launched by the Foundation for the Study of Infant Deaths for young mums and dads. It is highly interactive with blogs, forums, question and answer options covering the antenatal period through to infancy on any subject they choose. Peer support is central to the website philosophy. The website is www.bubbalicious.co.uk

The DfE and DH have jointly published a number of documents about improving maternity care for pregnant teenagers and their partners, including:

- **Getting Maternity Services Right for Pregnant Teenagers and Young Fathers** (revised edition 2009), which offers practical guidance on working with pregnant teenagers, young mothers and young fathers.
- **Teenage Parents: Who Cares?** (2008), best practice guidance which places renewed emphasis on multi-agency working in the commissioning and delivery of services.

These are available at www.education.gov.uk

CHILD POVERTY

2.27 Background

Child poverty has a significant impact on infant mortality; the child poverty unit estimates that a 10% difference in income corresponds to a 5% difference in infant mortality rates. The unit – based at DfE - has developed a number of resources to help local areas develop strategies to address child poverty and has led on a programme of pilots delivered in more than one in three Local Authorities to test a range of innovative approaches in tackling child poverty.

The aim is that information from the pilots will be used to inform the national child poverty strategy to be published next March and by local areas in producing their child poverty needs assessments and strategies.

2.28 Pilots

These pilots include:

Child Poverty Family Intervention Projects (FIPs)

To help families overcome entrenched problems (such as drug and alcohol dependency, domestic violence, poor parenting and poor mental health) known to contribute to intergenerational worklessness and poverty. Intensive support is provided by a dedicated key worker who supports and challenges family members to address problems and helps them get the specialist help that they need. Family members are then given support to enter employment and training programmes through close links with JobCentre Plus. Additional child poverty FIPs were set up in October 2008, and there are now 34 projects, which had supported 424 families by 2 June 2010.

An independent evaluation of FIPs aimed at tackling anti-social behaviour showed an ‘overwhelmingly positive’ impact amongst the first 1,000 families to complete interventions. Against a wide range of family problems known to be linked to child poverty reductions in debt, drug and alcohol misuse, mental health problems, truancy and poor behaviour and attendance at school.

Teenage Parent Supported Housing

The aim of this pilot is to test different approaches to enhance the housing support available to teenage parents in order to improve outcomes for them and their children including their readiness for taking on a permanent tenancy. This pilot has a strong focus on both improving parenting and engagement in learning and acquiring qualifications so that longterm benefit dependence is reduced. It focuses on a particularly needy group; parents aged 16 and 17 who cannot live with their own parents and need accommodation with high quality support. It actively engages with young fathers and the pilots involve either older buddies from the community or peer mentors working with the young parents.

For example, in Wandsworth, the pilot assists young parents to maintain healthier lifestyles with an emphasis on emotional wellbeing. It aims to improve their skills in sustaining accommodation by providing a modular training package alongside intensive one-to-one support for those at risk of losing their tenancies. It is being delivered by the Council's Children's Services and Housing Departments, working in close collaboration with health services, local housing associations, school and colleges.

The impact so far has been that young parents, often with chaotic life styles and not engaged in learning, report positive engagement with courses in job related skills such as IT, hair and beauty, mechanics and practical household skills such as cookery.

2.29 Useful resources

The Centre of Excellence and Outcomes in Children and Young People's Services provides a range of support to drive positive change in the delivery of children's services and ultimately outcomes for children, young people and their families. This includes resources on helping to develop local strategies to tackle child poverty, which are available at http://www.c4eo.org.uk/themes/poverty/default.aspx?themeid=7&accesstypeid=1

The Centre for Economic and Social Inclusion ('*Inclusion')* and the Child Poverty Action Group (*'CPAG')* have developed a child poverty toolkit to help local partners develop a local child poverty strategy. This is available at http://www.childpovertytoolkit.org.uk/

3.0 Conclusions

Although infant mortality is at an all-time low and falling for all groups, there are also unacceptable health inequalities across the country. The IMNST is playing its part in tackling these inequalities by focusing on disadvantaged local areas and providing a practical, evidence based way of working with local organisations and communities.

Narrowing the infant mortality gap is not an impossible task - as shown by the experience of other countries in EU 15 and elsewhere - but it is a major challenge**.** Although several countries have significantly lower IM rates than the average in England, this lower rate is often matched by the best performing groups and areas in England. For example, the IM rate in professional and managerial group in England - 3.3 per 1,000 live births (2008) - is similar to the national rate in Denmark. But, among sole registered babies in England it is two times and among some BME groups it is three times that rate.

There is much more to do in tackling these differences in outcomes. Infant mortality remains a key health outcome for infant and child health and is an internationally recognised measure of national health. A health inequalities focus exposes the differences across the country and across social and ethnic groups, and is an incentive to improved performance

The key to reducing health inequalities in infant mortality, as set out in the Marmot Review: *Fair Society, Healthy Lives*, is to give priority to early years, including infant and maternal health. This is the best way of achieving a long-term sustainable reduction in health inequalities. It will require action across Government and other national and local organisations through coherent delivery systems and governance arrangements.

The IMNST is playing its part in improving partnership working between health, local authorities and other local bodies, promoting a shared understanding of the factors shaping infant mortality and improved engagement with local communities. These are key outcomes from IMNST visits and the learning from these visits in reports - including this report - and other documents will spread the learning about what works locally to local groups and communities who are rising to the challenge of tackling health inequalities in infant mortality.

Annex: Local authority areas with 20 or more infant deaths in the routine and manual group from 2002 to 2004

Birmingham
Blackburn with Darwen
Bolton
Bradford
Brent
Bristol
Calderdale
Coventry
Croydon
Derby
Doncaster
Dudley
Ealing
East Riding of Yorkshire
Greenwich
Hackney
Haringey
Kingston upon Hull
Kirklees
Lambeth
Leeds
Leicester
Liverpool
Luton
Manchester
Medway Towns
Milton Keynes
Newham
Northampton
Nottingham
Oldham
Portsmouth
Preston
Rotherham
Sandwell
Sheffield
Southwark
Stoke-on-Trent
Sunderland
Tower Hamlets
Wakefield
Walsall
Wolverhampton