

Reducing inequalities in infant mortality in Leeds

Dr Sharon Yellin
Consultant in Public Health
Medicine
NHS Leeds
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Why infant mortality?

INFANT MORTALITY:

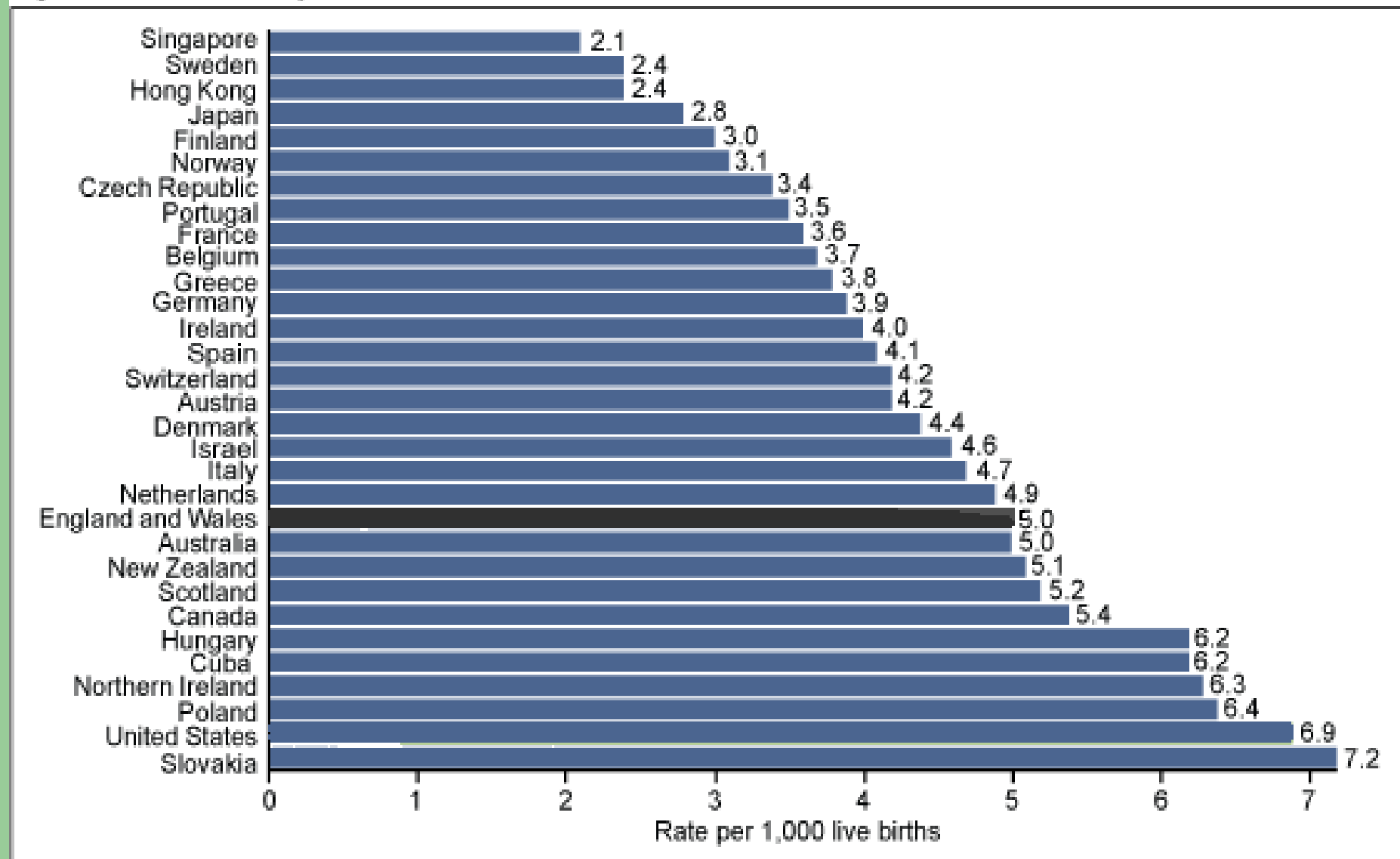
The numbers of deaths of children aged under one year per 1000 live births

- Sensitive indicator of a broad range of factors affecting children's health
- "Tip of the iceberg" of child health problems
- Important health problem

INTERNATIONAL IM RATES: COMPARISON BETWEEN SELECTED COUNTRIES 2005-10

| RANK | COUNTRY | IM RATE /1000 LIVE BIRTHS |
|------|----------------------|---------------------------|
| 1 | Iceland | 2.9 |
| 3 | Japan | 3.2 |
| 5 | Norway | 3.3 |
| 12 | France | 4.2 |
| 14 | Germany | 4.3 |
| 22 | England | 4.8 |
| 23 | Canada | 4.8 |
| 33 | USA | 6.3 |
| 48 | United Arab Emirates | 8.2 |
| 58 | Thailand | 10.6 |
| 71 | Argentina | 13.4 |
| 81 | Russia | 16.1 |
| 103 | China | 23.0 |
| 115 | Egypt | 29.3 |
| 130 | South Africa | 44.8 |
| 194 | Afghanistan | 157.0 |
| 195 | Sierra Leone | 160.3 |

Figure 1. Infant mortality rates, selected countries, 2005



SOURCE: Health, United States, 2008.

INFANT MORTALITY RATES 2008-2010 FOR LEEDS, YORKSHIRE & HUMBER, AND ENGLAND & WALES

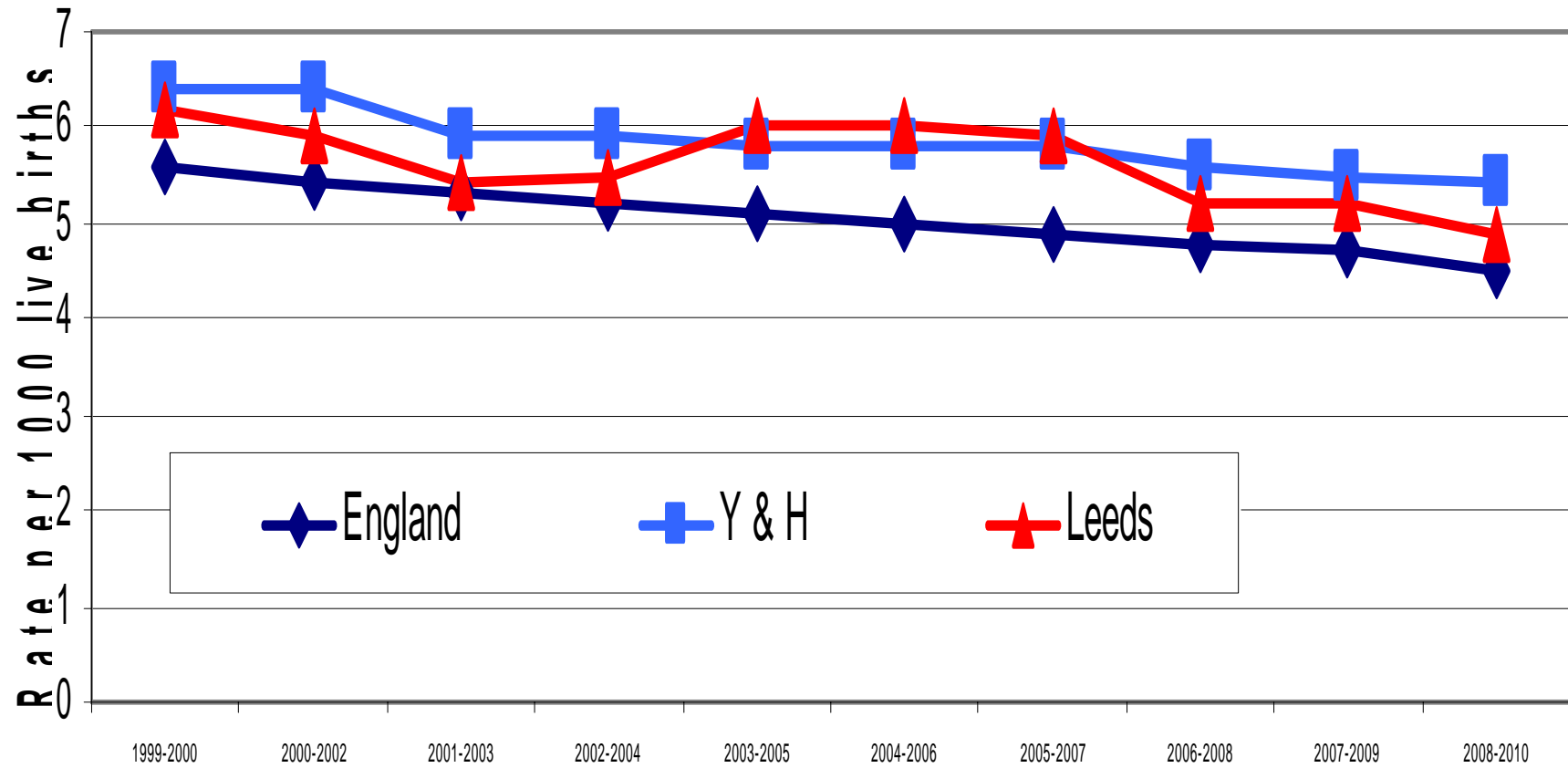
Source: NCHOD

| | Rate per 1000 live births | LCI | UCI |
|---------------------------------|---------------------------|-----|-----|
| ENGLAND & WALES | 4.5 | 4.5 | 4.6 |
| YORKSHIRE AND THE HUMBER | 5.4 | 5.0 | 5.7 |
| LEEDS PCT | 4.9 | 4.2 | 5.7 |

46 Leeds babies aged under 1 year died in 2010

**Leeds rate is not statistically significantly higher than
England & Wales**

INFANT MORTALITY TRENDS FOR LEEDS, YORKSHIRE & HUMBER, ENGLAND 1999-2010



National statistics and ethnicity

- Caribbean and Pakistani babies are more than twice as likely to die before age one than White British or Bangladeshi babies
- For Caribbean babies, in part due to higher prevalence of pre-term delivery
- For Pakistani babies, in part due to higher prevalence of congenital anomalies

The national inequalities target

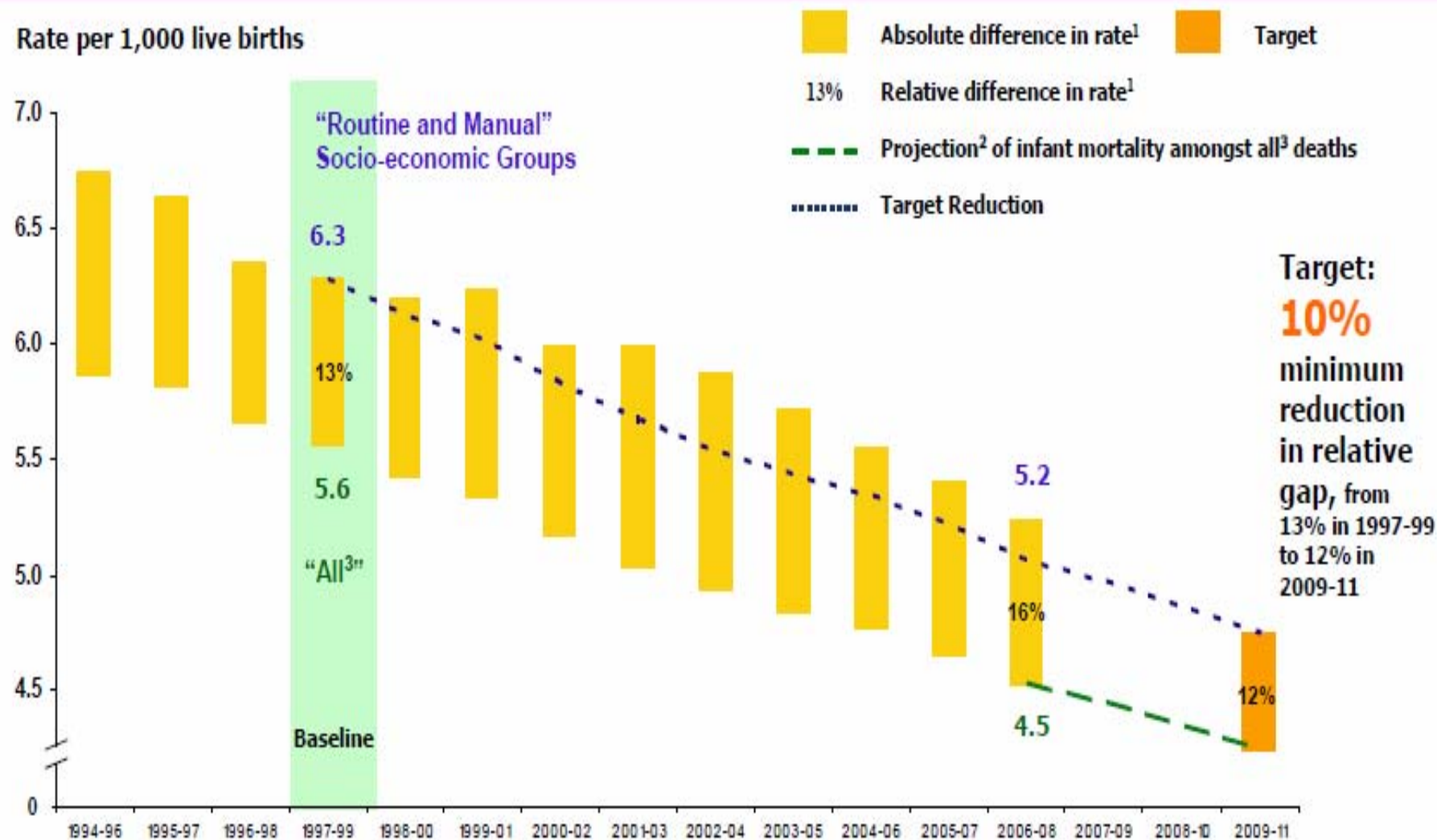
- Starting with children under one year, by 2010 to reduce by at least 10% the gap in mortality between the routine and manual group and the population as a whole. The baseline is 1997-9.
- Routine and manual group includes lower supervisory and technical, semi-routine and routine occupations eg porters, cleaners, bar staff, waiters, sales assistants, catering assistants, train drivers, call centre workers, electricians and sewing machinists

Infant mortality by Socio-economic Group

England and Wales 1994 – 2008 and target and projection¹ for the year '2010'



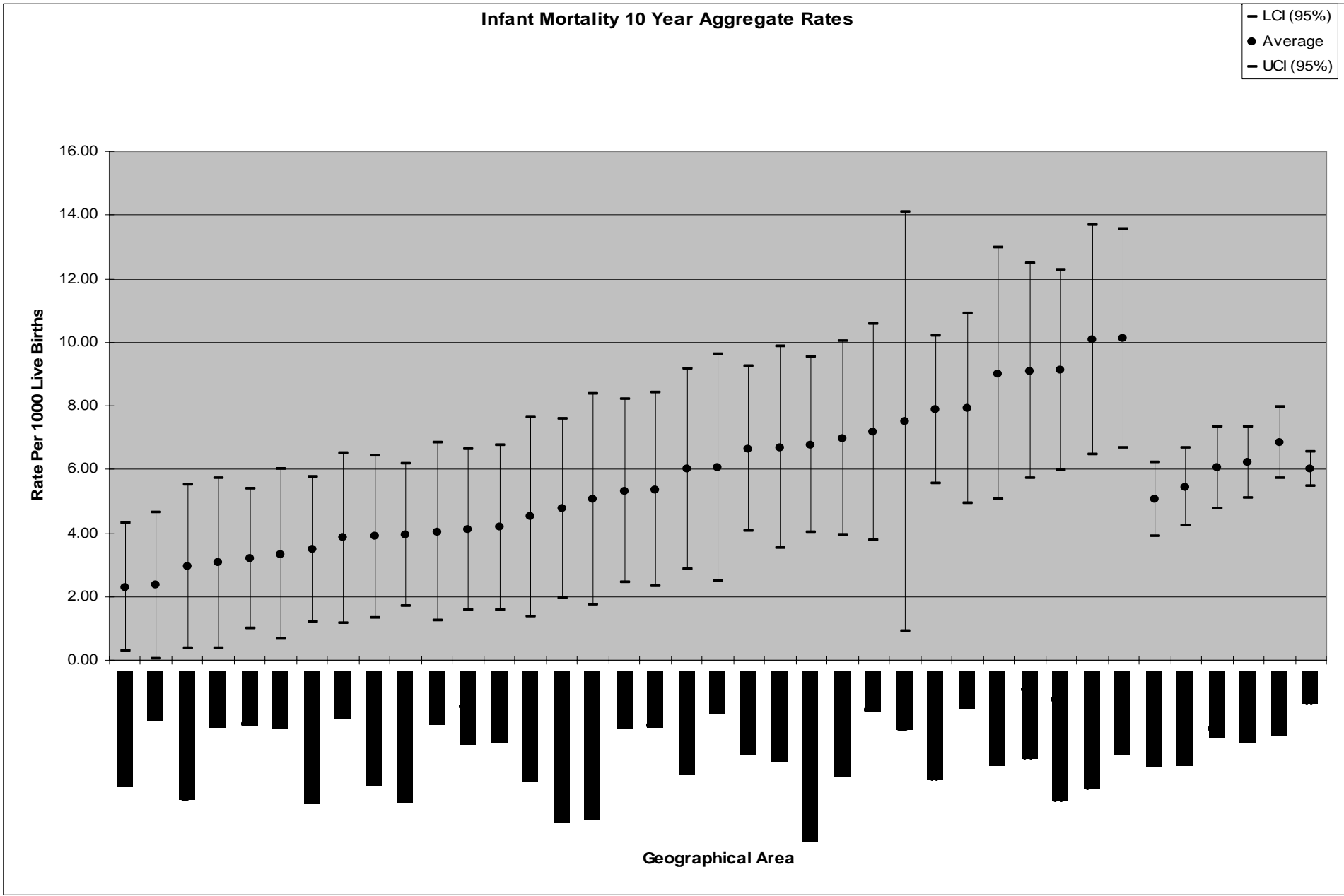
Rate per 1,000 live births



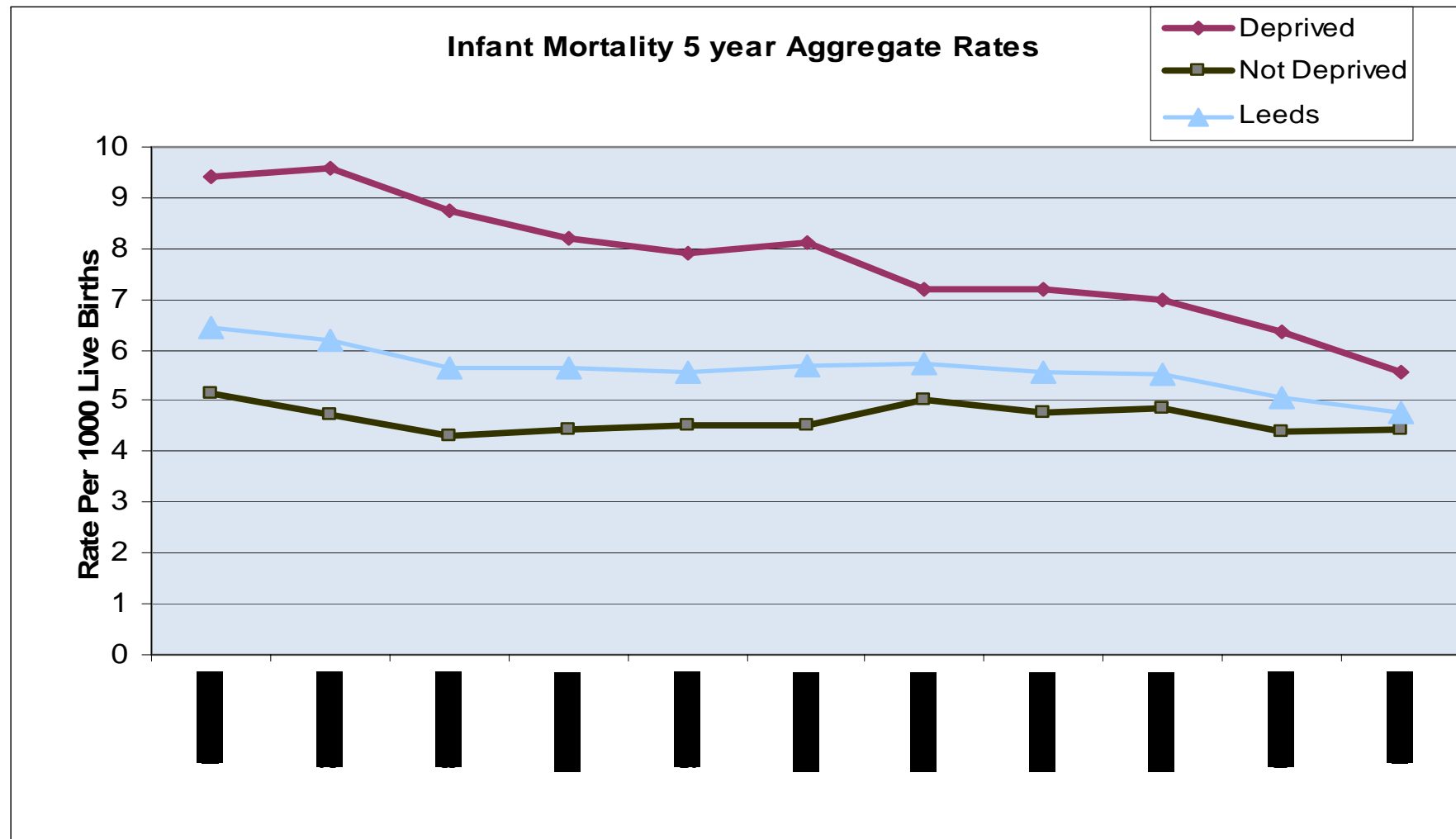
What can we say about inequalities between different parts of Leeds?

- Statistical problems
- Small numbers
- Difficult to compare different areas within Leeds – confidence intervals are wide

INFANT MORTALITY BY WARD: 10 YEAR AGGREGATED DATA



A local target: To reduce IM rate in “deprived Leeds” to 5.5 per 1000 live births by 2013 (baseline 2008-10)



Infant Mortality 3 year Aggregate Rates

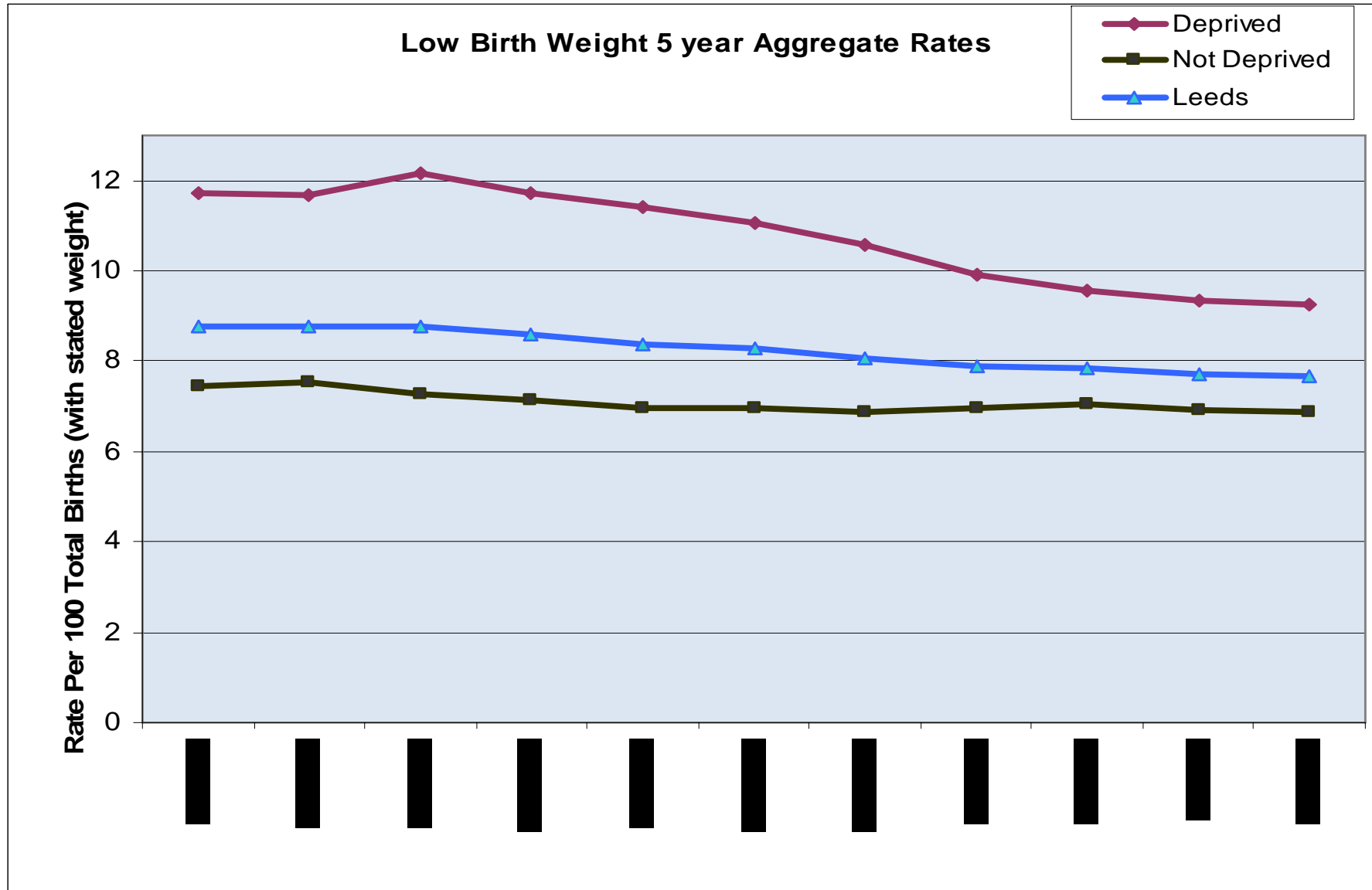
- ◆ Deprived
- Not Deprived
- ▲ Leeds
- National Leeds Stats.

Rate Per 1000 Live Births

10
9
8
7
6
5
4
3
2
1
0



Low birthweight rate: number of babies weighing under 2500g as a percentage of total births



Low Birthweight

- Closely linked with infant mortality
- Two thirds of infant deaths are among LBW babies
- Similar risk factors to infant mortality: congenital anomaly, multiple pregnancy, socio-economic deprivation, teenage pregnancy, older motherhood, poor nutrition, alcohol & drug use during pregnancy, smoking during pregnancy

The Leeds Infant Mortality Programme

- Based on the “Scarf” diagram – evidence based interventions published in national implementation plan.
- Assisted by NST visit January 2009
- Targeted into areas of greatest need
- “Demonstration sites” in Chapeltown and Beeston Hill

Identifiable actions to reduce the gap in infant mortality

Adapted from: Implementation Plan for Reducing Health Inequalities in Infant Mortality:
A Good Practice Guide (DH 2007)

Reducing conceptions in <18 years in R&M group by 44% to meet the 2010 target

1.0

Targeted interventions to prevent sudden unexpected infant death by 10% in the R&M group

1.4

1.4

Reducing the prevalence of obesity in the R&M group to 23%

2.0

2.8

3.0

Immediate actions

- Optimising pre-conception care
- Early booking
- Access to culturally sensitive healthcare
- Reducing infant and maternal infections

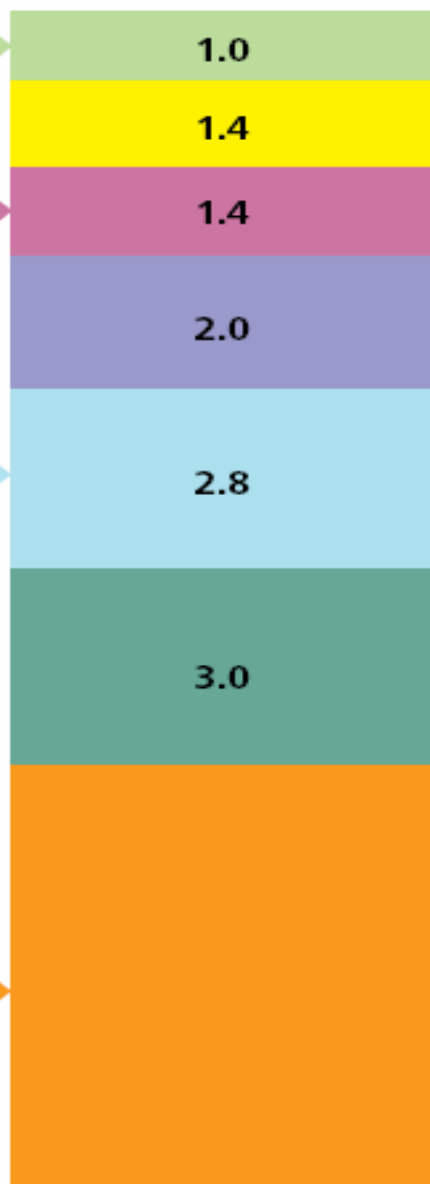
Long term actions

- Improving infant nutrition
- Improving maternal educational attainment

Reducing over-crowding in the R&M group, through its effect on sudden unexpected infant death

Reducing smoking in pregnancy rate by 2 percentage points by 2010

Meeting the child poverty strategy



Aspects of the Leeds IM Action Plan (1)

- **Breastfeeding**

67% initiation 47% maintenance

- Food4Life Action Plan
- Baby Friendly Initiative – community & hospital
- Social marketing work in South Leeds
- Peer support programmes

- **Maternity Services**

97% assessment by 12 weeks

- Health equity audit of early booking
- BME midwife
- Asylum seeker pathway, G&T pathway
- Caseload midwifery

Aspects of the Leeds IM Action Plan (2)

- **Screening**

99% uptake of Hepatitis B screening

- Combined Down's Syndrome screen Dec 2010
- Review of antenatal haemoglobinopathy screen
- Review of bloodspot pathways

- **Child Poverty**

- Leeds Strategic Outcomes Group established
- Child poverty needs assessment complete
- Strategy and implementation plan being developed

Aspects of the Leeds IM Action Plan (3)

- **Reducing obesity in women of child bearing age**
 - BMI data collection improved. 19% with BMI >30
 - Ministry of Food established
 - Dietetic post concerned with maternal obesity
 - Care pathway for overweight pregnant women developed and being implemented
- **Reducing smoking in pregnancy**

11-12% current smoking at delivery

 - Mandatory training for midwives, CO monitoring
 - Smoke Free Homes, SOS scheme, MLASS
 - Fresh Air Babies

Aspects of the Leeds IM Action Plan (4)

- **Sudden unexpected death in infancy**
 - Local health visiting policy reviewed
 - Social marketing work in target areas
 - Early Start Pathway to be developed
- **Reducing over-crowding**
 - Work in Demonstration Sites
 - Training for health staff, and for housing staff
 - Pathway for referral of teenage parents

Aspects of the Leeds IM Action Plan (5)

- **Reducing teenage conceptions and supporting teenage parents**

Rate 44.5 conceptions per 1000 women aged 15-17.
This is 12% reduction from baseline in 1998

- Wide ranging programme under TPP Board
- Teenage pregnancy maternity pathway
- Family Nurse Partnership expansion

- **Cousin marriage**

- Links with Bradford & Kirklees, event held May '12
- Influenced commissioning of Genetics services
- Training for frontline staff
- Social marketing project with Sheffield University

Demonstration Sites

- Small areas with high levels of need
- Chapeltown and Beeston Hill
- “Flood” the areas initiatives drawing on the evidence base of the Scarf diagram
- Positive evaluation
- Local work on all aspects: housing, poverty, DV, co-sleeping, maternity access, Smoke Free Homes, baby cafes, Healthy Start
- Currently exploring longer term sustainability of the sites

“Programme of Programmes”

Large programme areas

- Safeguarding
- Immunisation
- Teenage pregnancy and parenting
- Early Start Service and FNP

The IM Action Plan aims to add value over and above other ongoing programmes