

Perinatal death rates

	1998	1999	2000	2001	2002	2003	2004
BBC	9.9	11.1	11.1	10.1	12.0	12.4	11.1
W Mids	9.5	10.2	9.8	9.2	10.2	10.3	9.6
E & W	8.2	8.2	8.1	7.9	8.3	8.5	8.1

Infant death rates

	1998	1999	2000	2001	2002	2003	2004*
BBC	7.5	8.0	7.7	7.5	7.8	8.9	7.0
W Mids	6.6	7.0	6.9	6.4	6.7	7.5	6.3
E & W	5.7	5.8	5.6	5.4	5.3	5.3	5.1

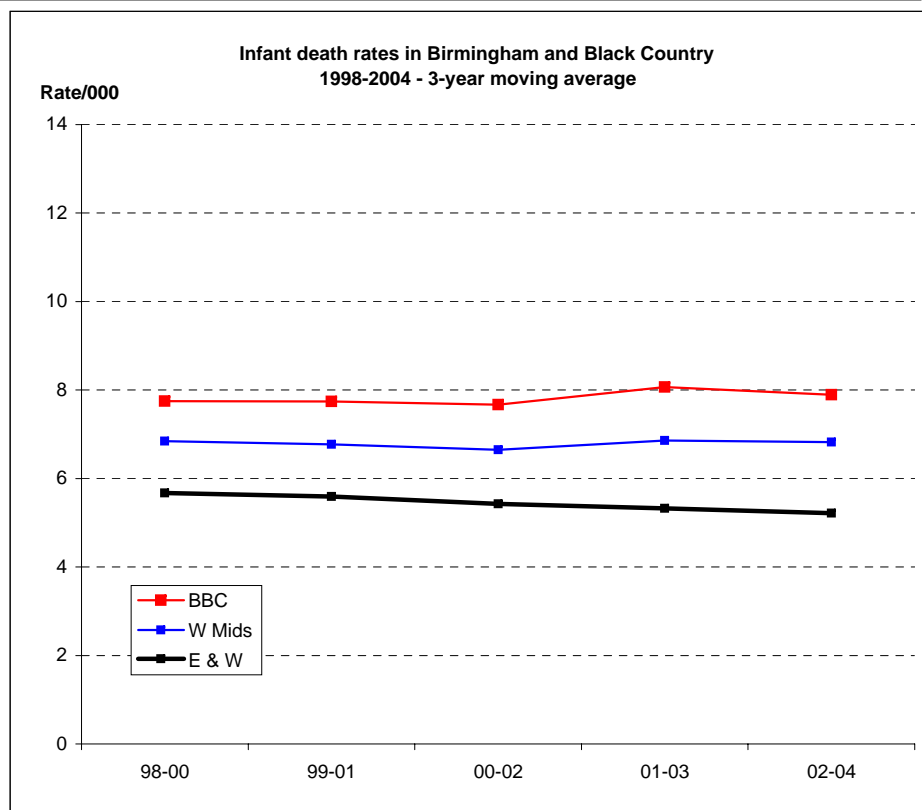
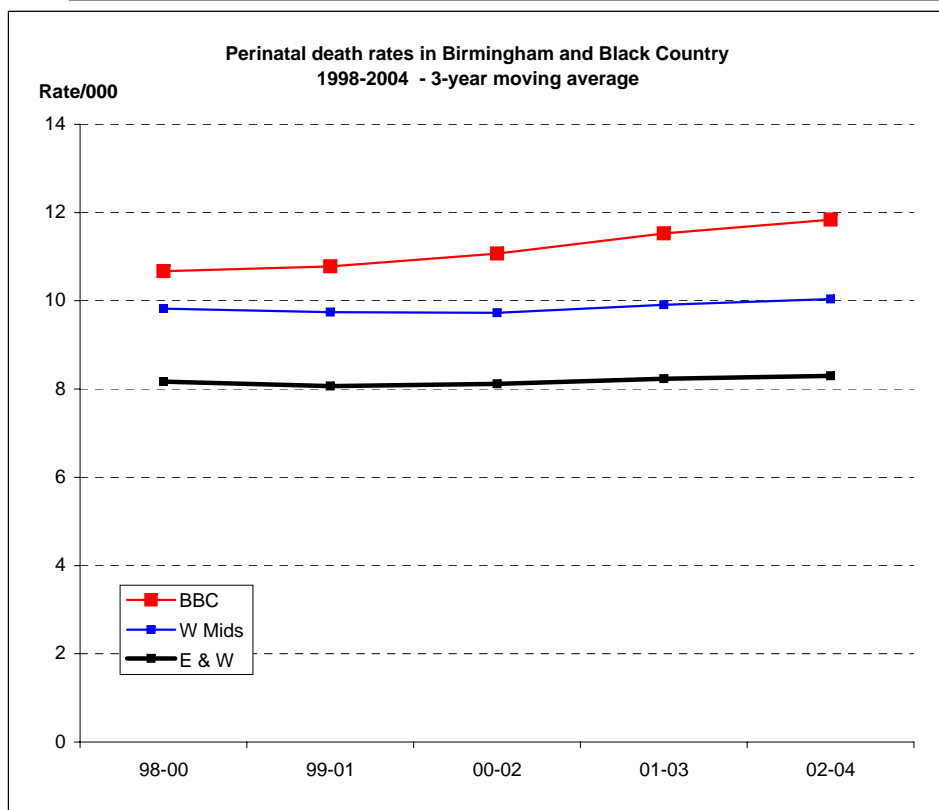
Perinatal death rates - 3-year moving average

	98-00	99-01	00-02	01-03	02-04
BBC	10.7	10.8	11.1	11.5	11.8
W Mids	9.8	9.7	9.7	9.9	10.0
E & W	8.2	8.1	8.1	8.2	8.3

Infant death rates - 3-year moving average

	98-00	99-01	00-02	01-03	02-04
BBC	7.7	7.7	7.7	8.1	7.9
W Mids	6.8	6.8	6.7	6.9	6.8
E & W	5.7	5.6	5.4	5.3	5.2

**Comment.** These graphs show perinatal and infant mortality rates. Over the period, the BBC has seen a statistically significant rise in perinatal mortality ( $p < 0.01$ , linear trend analysis). There are no significant trends in infant mortality which contrasts with E&W as a whole, which has shown a steady decline over the period ( $p < 0.01$ )



\* Postneonatal (and therefore infant) deaths are not necessarily complete for 2004 due to difficulties with validation of ascertainment.  
Data sources: PDN; ONS (E&W only)

Stillbirth rates

	1998	1999	2000	2001	2002	2003	2004
BBC	5.7	6.8	6.4	6.2	7.5	7.6	6.8
W Mids	5.6	6.4	5.7	5.6	6.4	6.1	5.8
E & W	5.3	5.3	5.2	5.3	5.6	5.7	5.5

Early neonatal death rates

	1998	1999	2000	2001	2002	2003	2004
BBC	4.2	4.4	4.7	3.9	4.5	4.9	4.3
W Mids	3.9	3.8	4.1	3.6	3.8	4.2	3.9
E & W	2.9	2.9	2.9	2.7	2.7	2.8	2.7

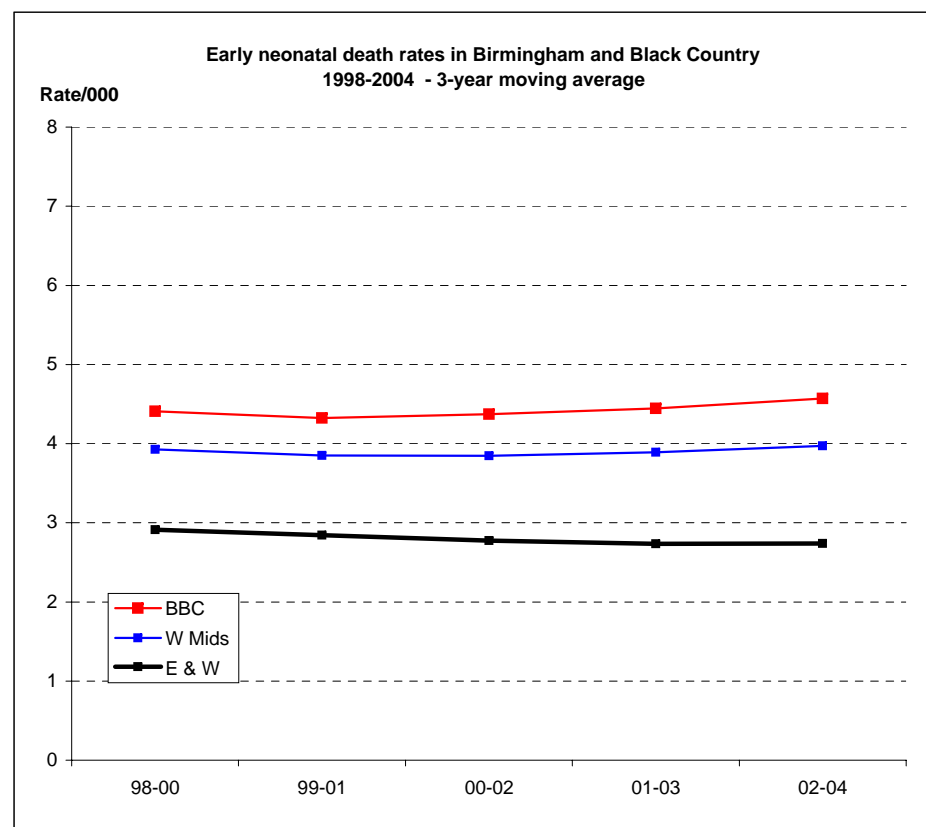
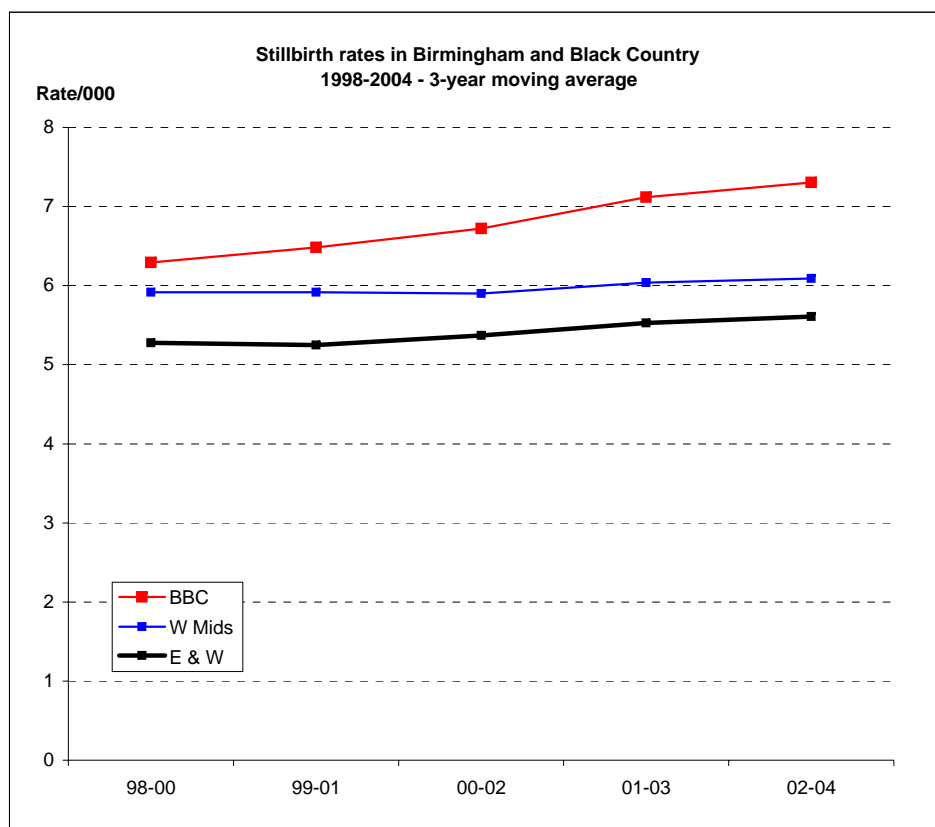
Stillbirth rates - 3-year moving average

	98-00	99-01	00-02	01-03	02-04
BBC	6.3	6.5	6.7	7.1	7.3
W Mids	5.9	5.9	5.9	6.0	6.1
E & W	5.3	5.2	5.4	5.5	5.6

Early neonatal death rates - 3-year moving average

	98-00	99-01	00-02	01-03	02-04
BBC	4.4	4.3	4.4	4.4	4.6
W Mids	3.9	3.9	3.8	3.9	4.0
E & W	2.9	2.8	2.8	2.7	2.7

**Comment.** Here the perinatal rates are analysed separately for stillbirths and early neonatal deaths. The graphs show that the increase in perinatal mortality rates has been mainly due to a rise in stillbirth rates ( $p=0.01$ ). The apparent small rise in neonatal rates has no statistical significance ( $p=0.25$ ).

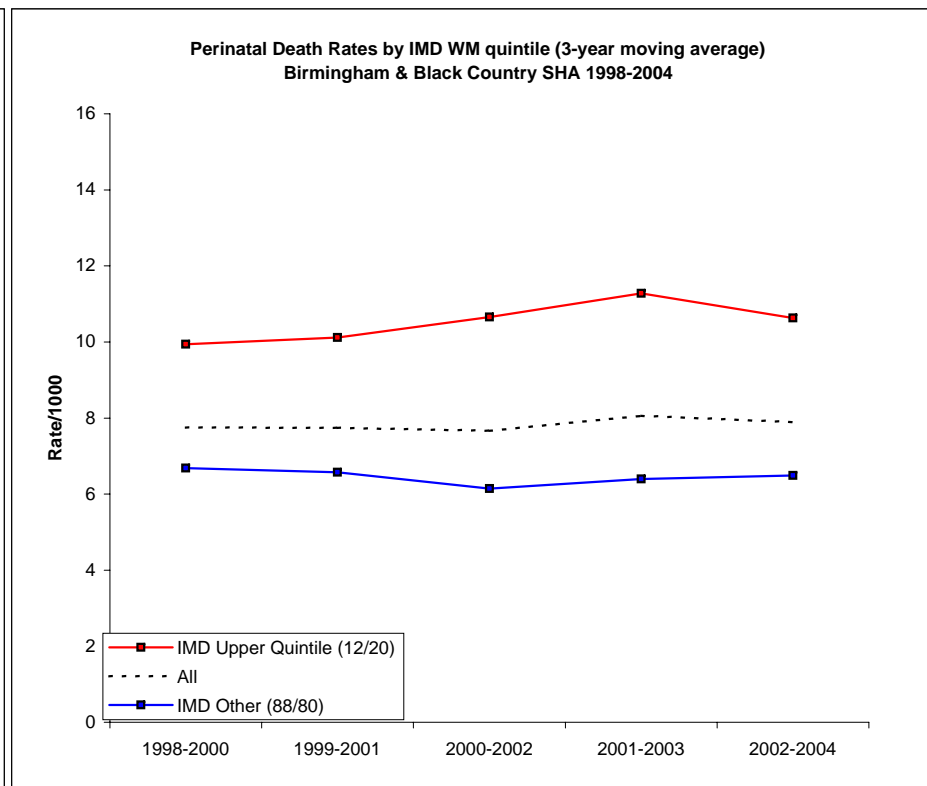
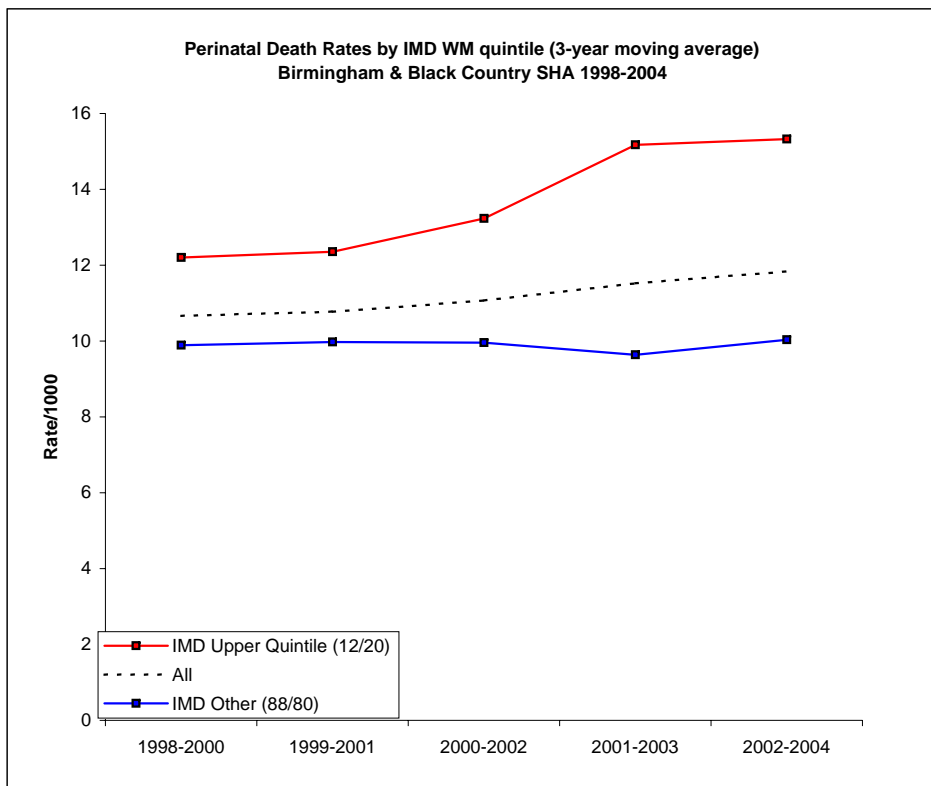


Perinatal death rates (3-year moving average)

	IMD Upper Quintile (12/20)	All	IMD Other (88/80)
1998-2000	12.2	10.7	9.9
1999-2001	12.4	10.8	10.0
2000-2002	13.2	11.1	10.0
2001-2003	15.2	11.5	9.6
2002-2004	15.3	11.8	10.0

Infant death rates (3-year moving average)

	IMD Upper Quintile (12/20)	All	IMD Other (88/80)
1998-2000	9.9	7.7	6.7
1999-2001	10.1	7.7	6.6
2000-2002	10.7	7.7	6.1
2001-2003	11.3	8.1	6.4
2002-2004	10.6	7.9	6.5



**Comments**

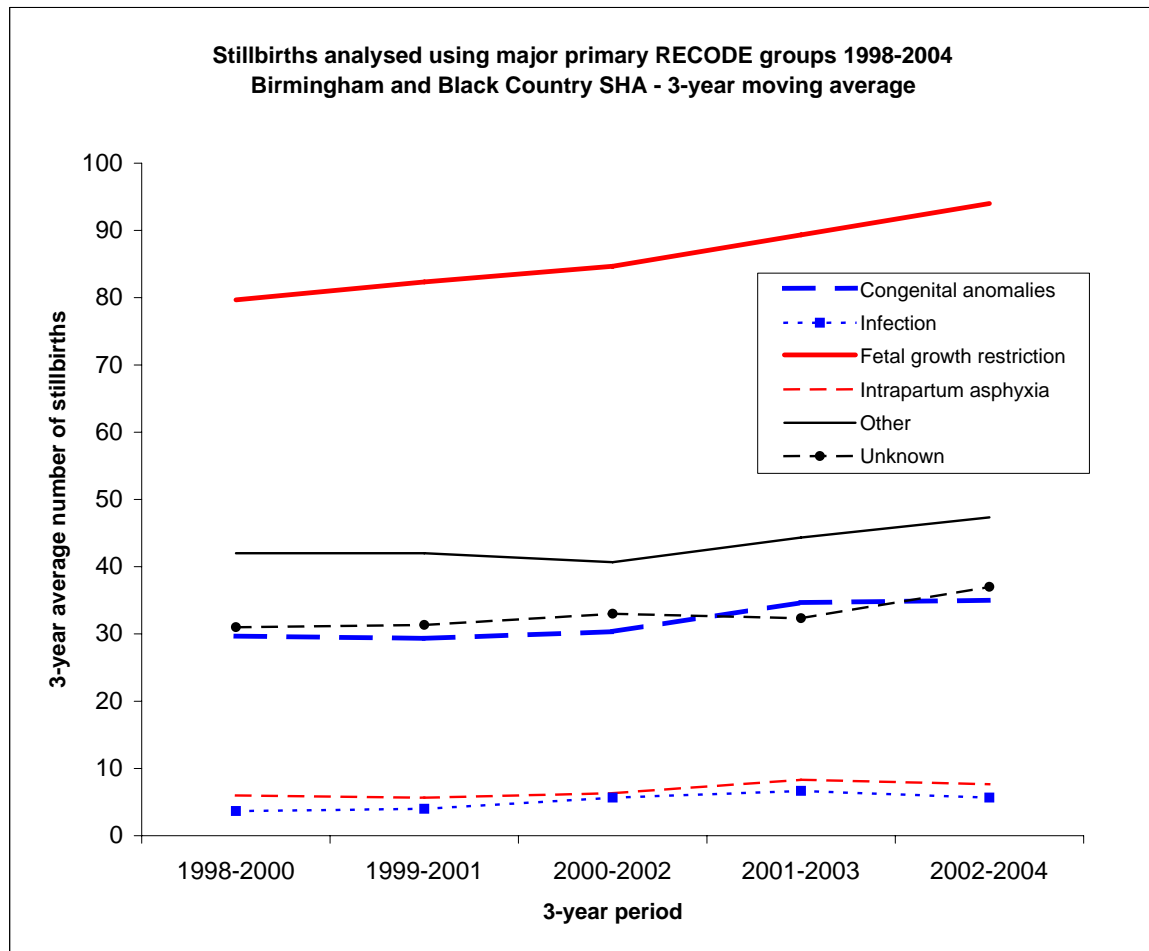
Perinatally, both the IMD12/20 rate and the difference between IMD12/20 and IMD88/80 have increased ( $p < 0.01$  for both, linear trend test) over the period. The difference in the infant IMD12/20 and IMD88/80 has also significantly increased over the period ( $p < 0.01$ ).

**Notes**

1. IMD = Index of Multiple Deprivation (2004), a measure based on 7 sub domains (income, employment, health, education, housing, environment and crime), with larger values being more deprived.
2. The IMD upper quintile (or IMD 12/20) describes the 12% most deprived SOAs with 20% of all births in the West Midlands (WM). IMD Other (or IMD 88/80) takes account of the remaining 88% of SOAs having 80% of all WM births.
3. 'All' rates are independent of SOA IMD scores.

**Sources**

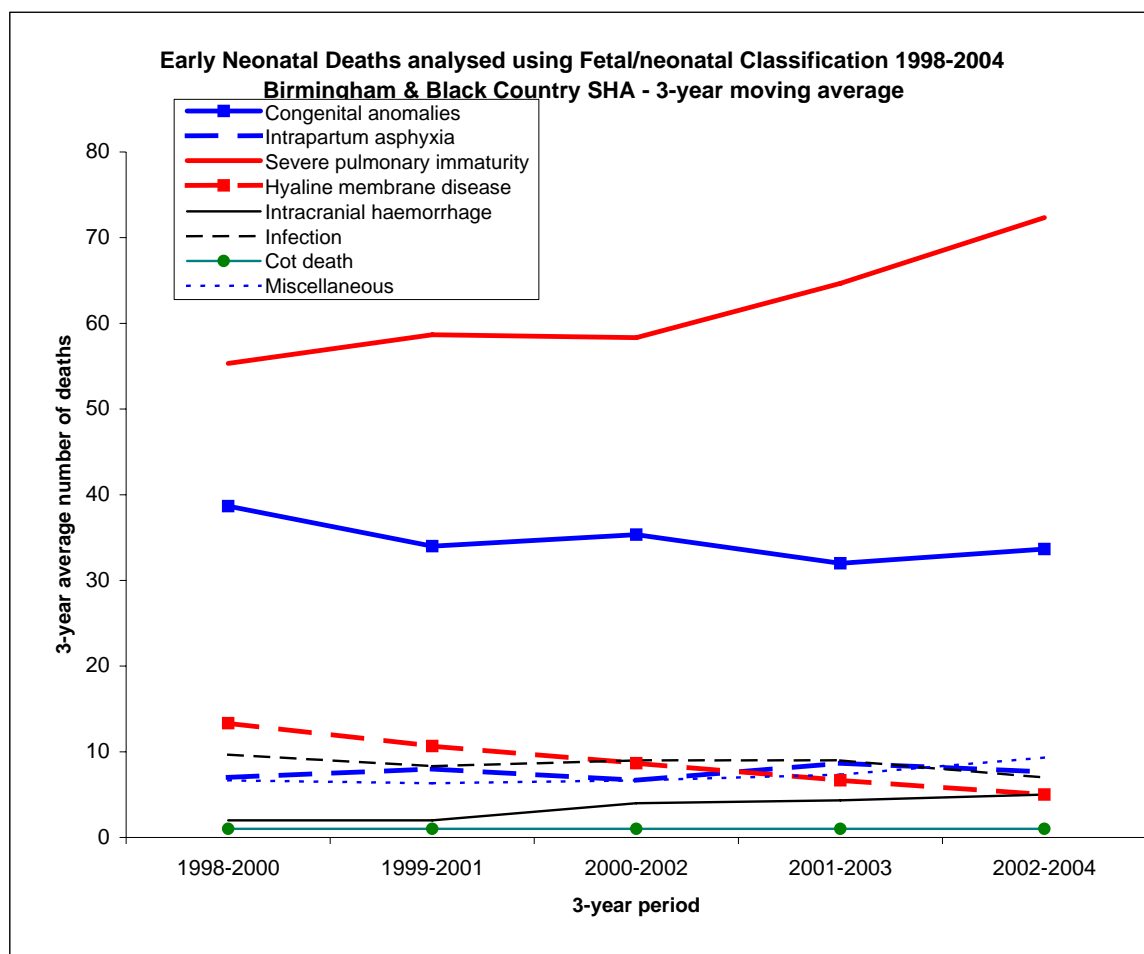
PDN (deaths), ONS (births) and ODPM (IMD score)



**Stillbirths analysed using major primary RECODE groups 1998-2004**  
 Birmingham and Black Country SHA - Number of deaths

Major primary RECODE groups	1998	1999	2000	2001	2002	2003	2004	Total
Congenital anomalies	32	35	22	31	38	35	32	225
Infection	5	3	3	6	8	6	3	34
Fetal growth restriction	73	84	82	81	91	96	95	602
Intrapartum asphyxia	7	6	5	6	8	11	4	47
Other	37	45	44	37	41	55	46	305
Unknown	23	34	36	24	39	34	39	229
<b>Total</b>	<b>177</b>	<b>207</b>	<b>192</b>	<b>185</b>	<b>225</b>	<b>237</b>	<b>219</b>	<b>1442</b>

Data source: PDN



**Early Neonatal Deaths analysed using Fetal/neonatal Classification 1998-2004**  
 Birmingham & Black Country SHA - Number of deaths

Major Fetal/Neonatal Classification groups	1998	1999	2000	2001	2002	2003	2004	Total
Congenital anomalies	40	35	41	26	39	31	31	243
Intrapartum asphyxia	8	9	4	11	5	10	8	55
Severe pulmonary immaturity	45	59	62	55	58	81	78	438
Hyaline membrane disease	14	13	13	6	7	7	1	61
Intracranial haemorrhage	1	1	4	1	7	5	3	22
Infection	14	9	6	10	11	6	4	60
Cot death	1	0	2	1	0	2	1	7
Miscellaneous	7	6	7	6	7	9	12	54
<b>Total</b>	<b>130</b>	<b>132</b>	<b>139</b>	<b>116</b>	<b>134</b>	<b>151</b>	<b>138</b>	<b>940</b>

Data source: PDN