

Perinatal death rates

	1998	1999	2000	2001	2002	2003	2004
WMS	9.3	8.9	8.2	7.1	8.7	7.3	7.9
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

Perinatal death rates - 3-year moving average

	98-00	99-01	00-02	01-03	02-04
WMS	8.8	8.1	8.0	7.7	8.0
W Mids	9.8	9.7	9.7	9.9	10.0
E & W	8.2	8.1	8.1	8.2	8.3

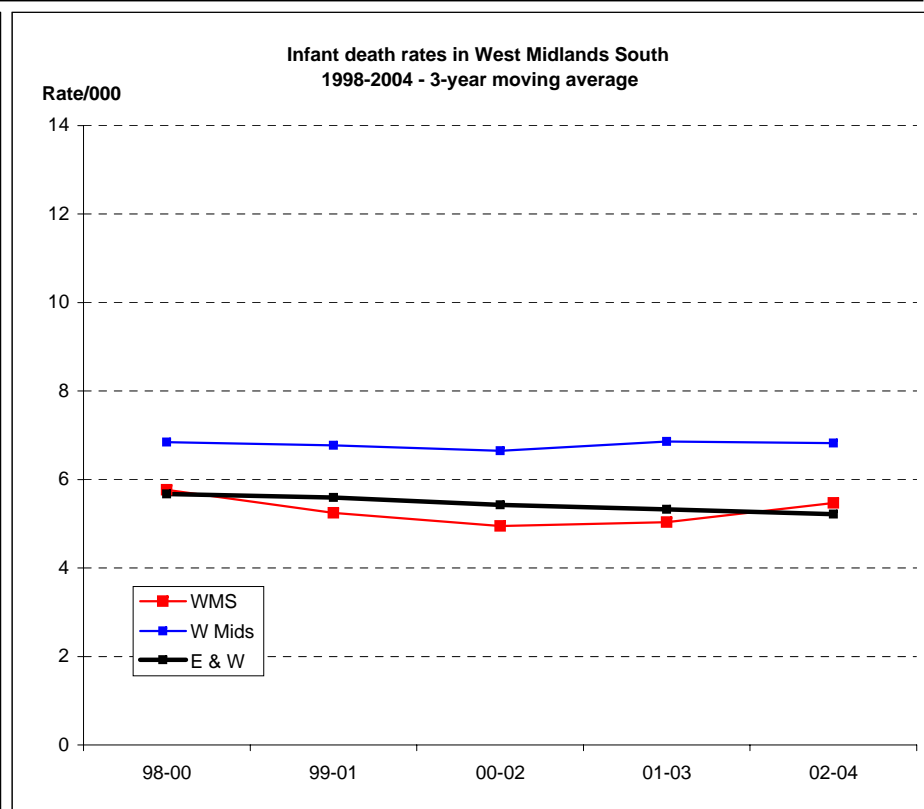
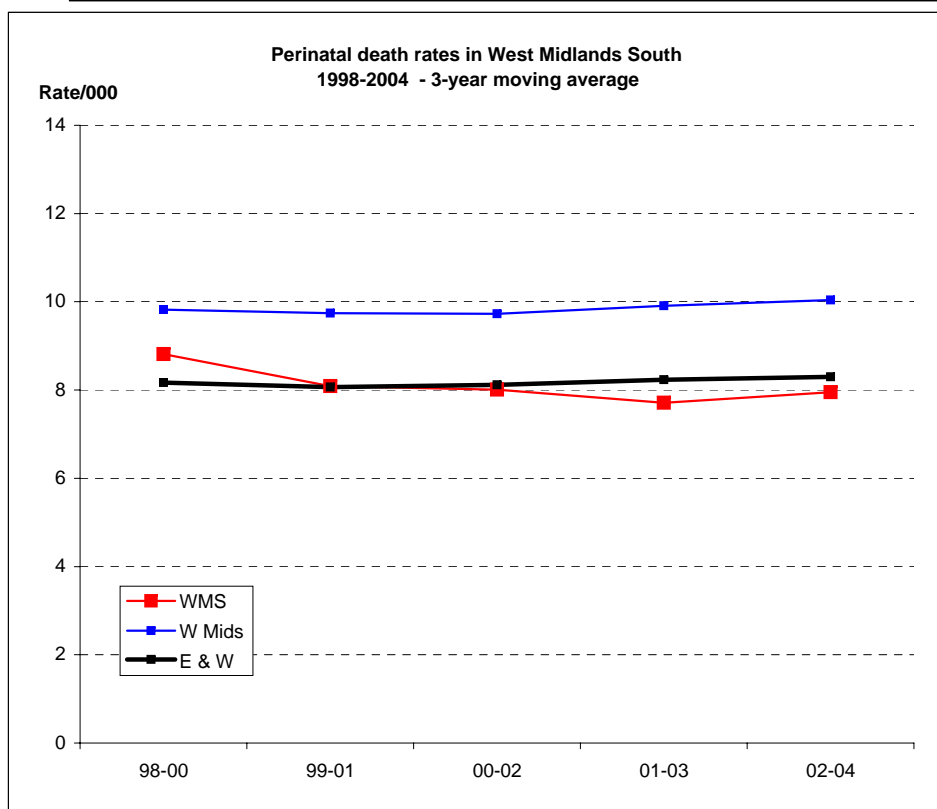
Infant death rates

	1998	1999	2000	2001	2002	2003	2004*
WMS	6.4	5.7	5.2	4.8	4.9	5.4	6.1
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

Infant death rates - 3-year moving average

	98-00	99-01	00-02	01-03	02-04
WMS	5.8	5.2	4.9	5.0	5.5
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. Stillbirth rates appear generally to be on the decline ($p=0.09$, linear trend test) but not significantly so. Early neonatal mortality dropped significantly from 1998 to 2002 ($p=0.02$) but is now increasing ($p=0.03$).



* 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
WMS	5.2	5.6	5.3	4.5	5.3	4.3	4.3
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

Stillbirth rates - 3-year moving average

	98-00	99-01	00-02	01-03	02-04
WMS	5.4	5.1	5.0	4.7	4.6
W Mids	5.9	5.9	5.9	6.0	6.1
E & W	5.3	5.2	5.4	5.5	5.6

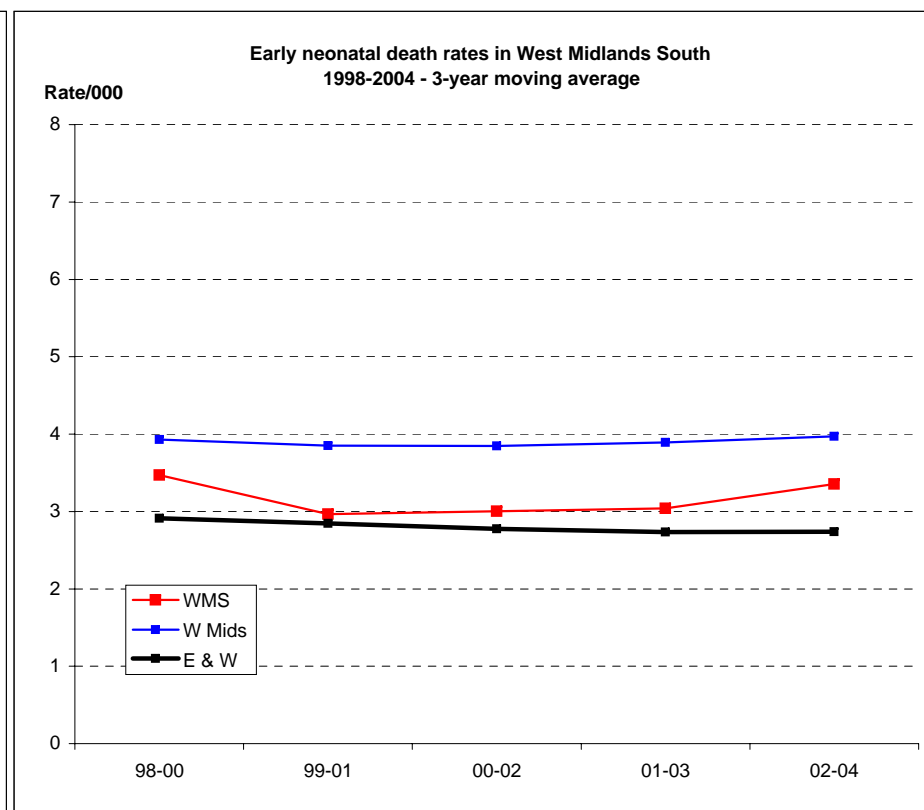
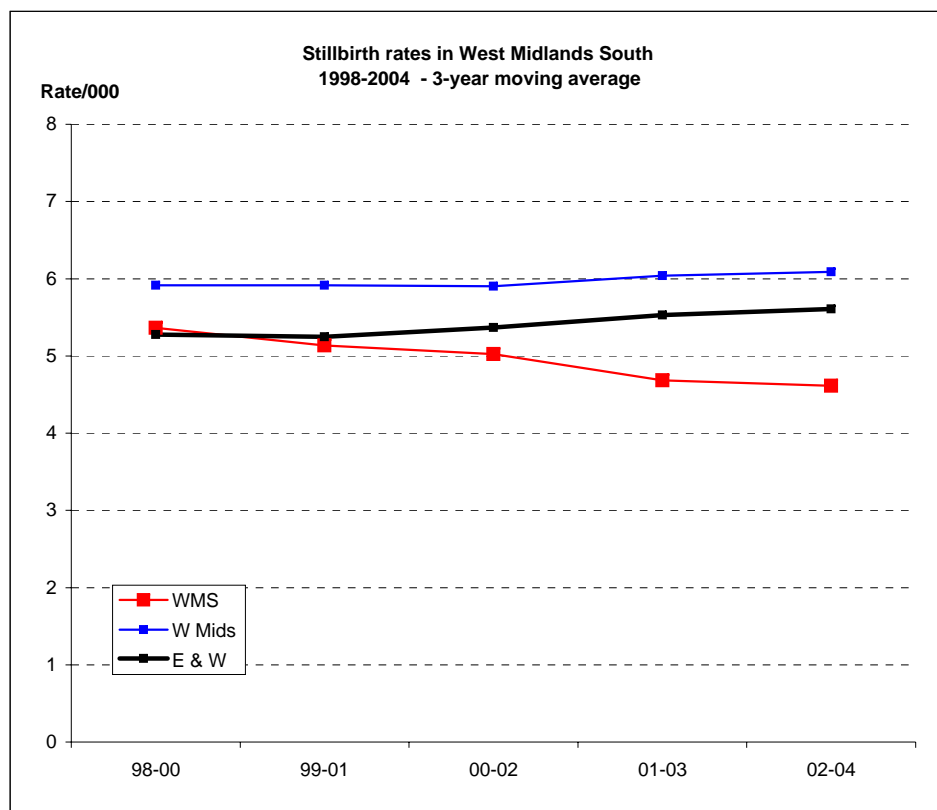
Early neonatal death rates

	1998	1999	2000	2001	2002	2003	2004
WMS	4.2	3.3	2.9	2.7	3.4	3.1	3.6
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

Early neonatal death rates - 3-year moving average

	98-00	99-01	00-02	01-03	02-04
WMS	3.5	3.0	3.0	3.0	3.4
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. Stillbirth rates have been declining ($p=0.08$, linear trend analysis) and are now significantly below both the West Midlands and E&W rates. Early neonatal mortality reduced until 2001 ($p=0.02$) and now appears to be increasing ($p=0.15$).

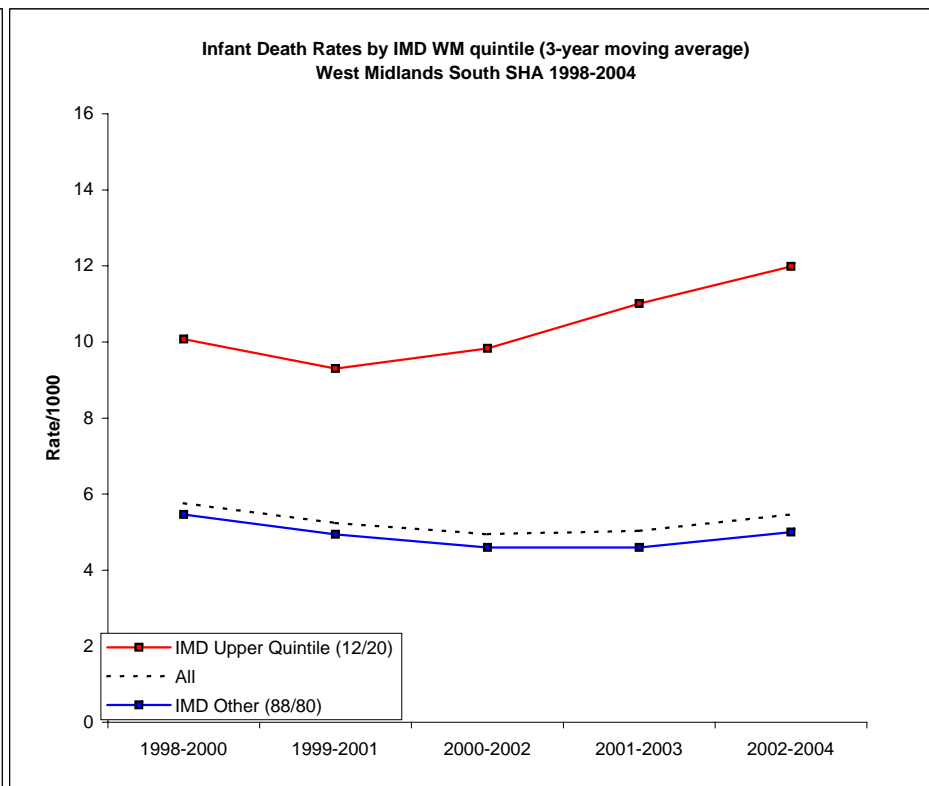
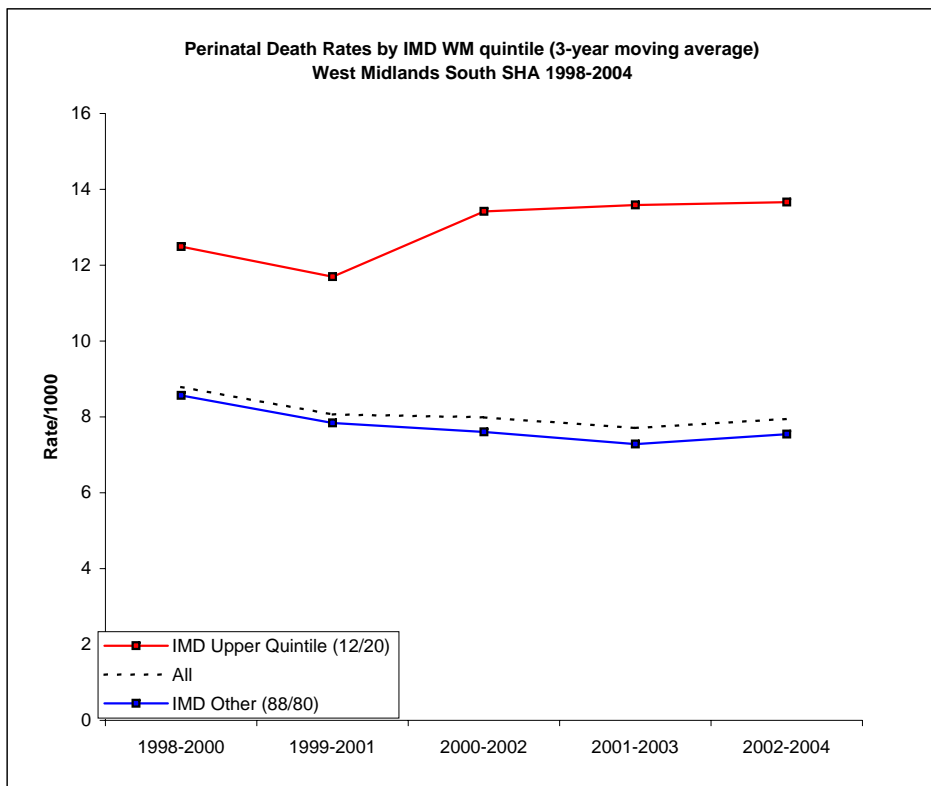


Perinatal death rates (3-year moving average)

	IMD Upper Quintile (12/20)	All	IMD Other (88/80)
1998-2000	12.5	8.8	8.6
1999-2001	11.7	8.1	7.8
2000-2002	13.4	8.0	7.6
2001-2003	13.6	7.7	7.3
2002-2004	13.7	8.0	7.5

Infant death rates (3-year moving average)

	IMD Upper Quintile (12/20)	All	IMD Other (88/80)
1998-2000	10.1	5.8	5.5
1999-2001	9.3	5.2	4.9
2000-2002	9.8	4.9	4.6
2001-2003	11.0	5.0	4.6
2002-2004	12.0	5.5	5.0



Comments

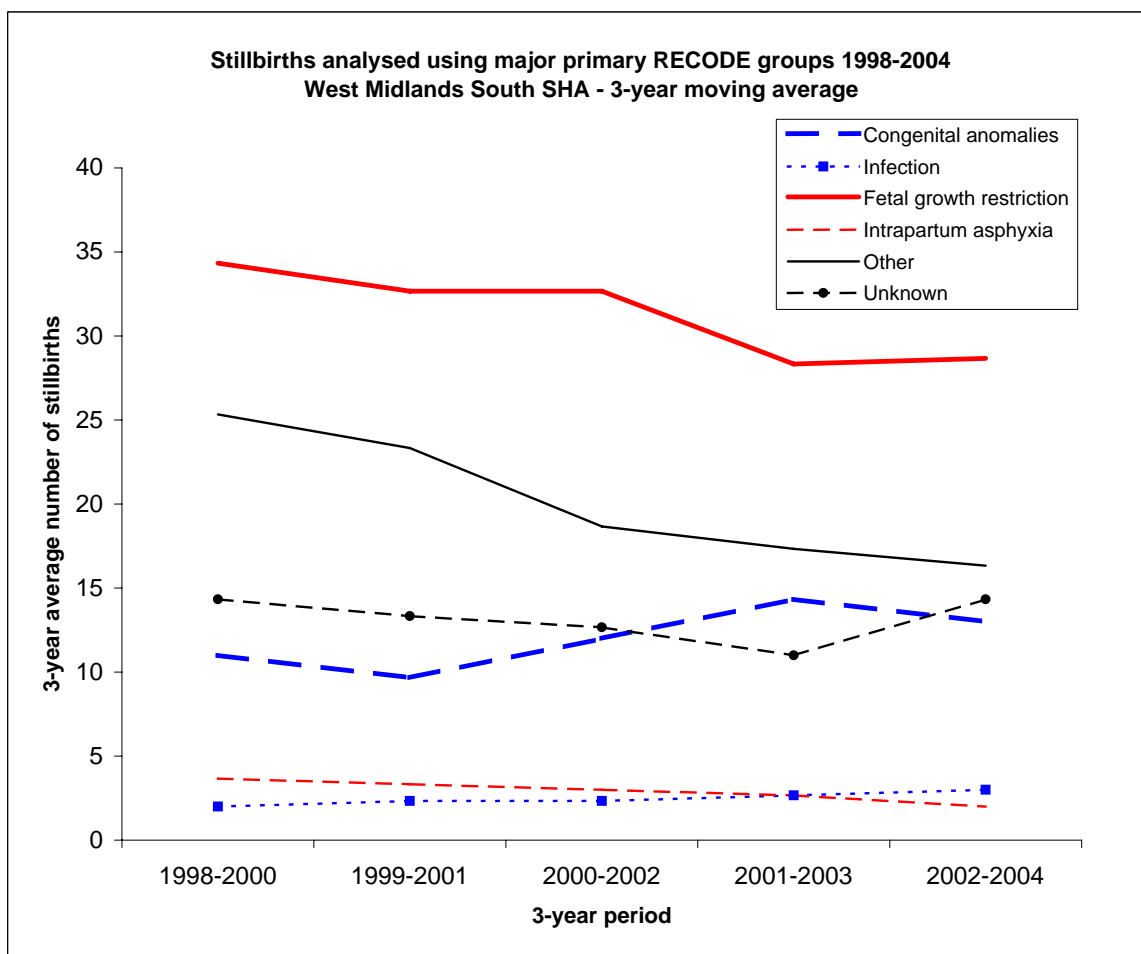
Differences between IMD12/20 and IMD88/80 for both perinatal and infant showed a significant increase ($p < 0.01$) over the whole period. The infant IMD12/20 rate showed a significant increase ($p < 0.01$) over the last 4 periods.

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

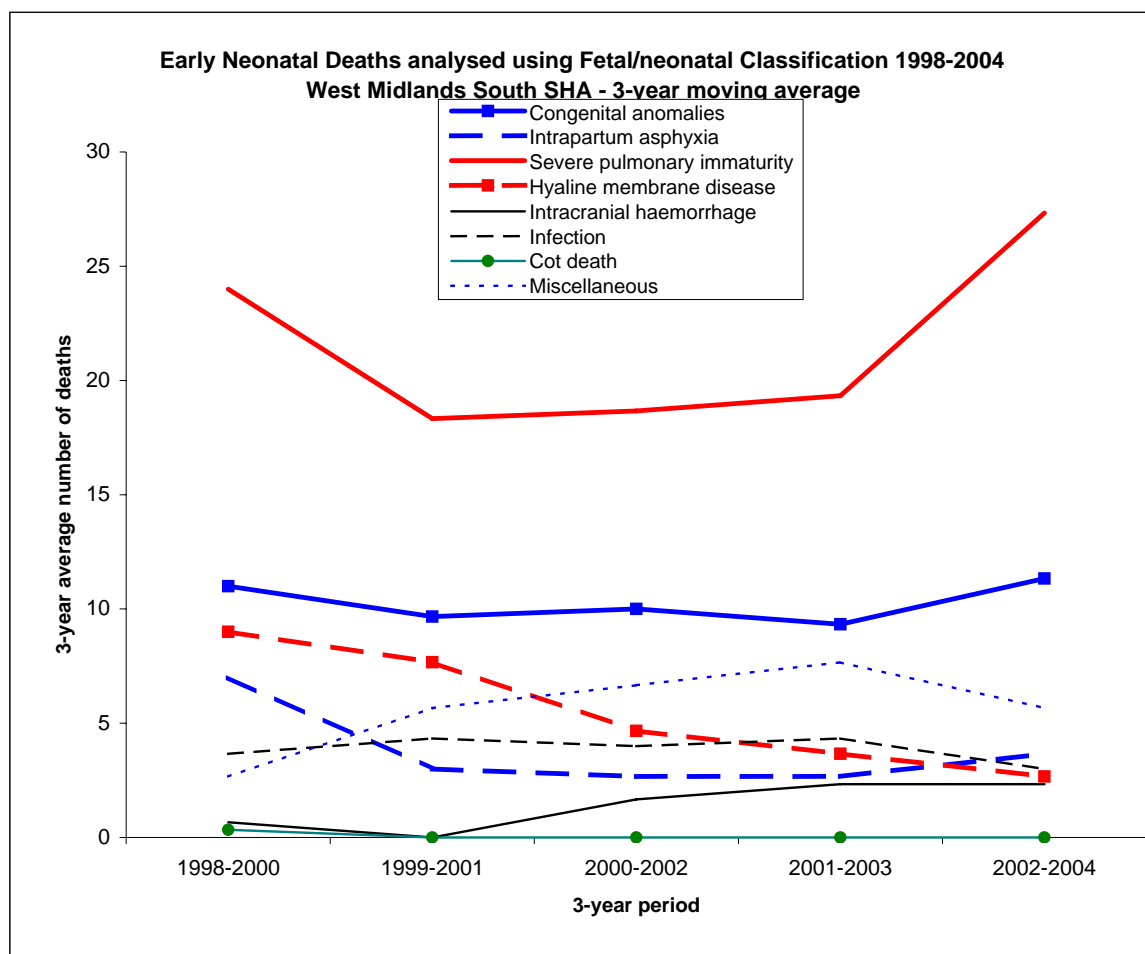
PDN (deaths), ONS (births) and ODPM (IMD score)



Stillbirths analysed using major primary RECODE groups 1998-2004
West Midlands South SHA - Numbers of deaths

Major primary RECODE groups	1998	1999	2000	2001	2002	2003	2004	Total
Congenital anomalies	17	8	8	13	15	15	9	85
Infection	2	3	1	3	3	2	4	18
Fetal growth restriction	33	36	34	28	36	21	29	217
Intrapartum asphyxia	4	3	4	3	2	3	1	20
Other	22	30	24	16	16	20	13	141
Unknown	12	16	15	9	14	10	19	95
Total	90	96	86	72	86	71	75	576

Data source: PDN



Early Neonatal Deaths analysed using Fetal/neonatal Classification 1998-2004
West Midlands South SHA - Numbers of deaths

Major Fetal/Neonatal Classification groups	1998	1999	2000	2001	2002	2003	2004	Total
Congenital anomalies	14	10	9	10	11	7	16	77
Intrapartum asphyxia	14	3	4	2	2	4	5	34
Severe pulmonary immaturity	28	22	22	11	23	24	35	165
Hyaline membrane disease	8	13	6	4	4	3	1	39
Intracranial haemorrhage	2	0	0	0	5	2	0	9
Infection	3	4	4	5	3	5	1	25
Cot death	1	0	0	0	0	0	0	1
Miscellaneous	2	3	3	11	6	6	5	36
Total	72	55	48	43	54	51	63	386

Data source: PDN