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Dear Colleague

PERINATAL & INFANT MORTALITY SURVEY 2008/9 – ARDEN

This report relates to the newly formed **Arden Cluster and its constituent PCTs**. It provides an update of mortality rates to 2009 for stillbirths and neonatal deaths, and to 2008 for infant deaths. PCT cohorts are defined here according to postcode.

Method

The regional information is based on the WM Perinatal Death Notifications (PDNs) which the Perinatal Institute receives from its network of co-ordinators in West Midlands units. The information may sometimes differ from the last ONS Vital Statistics, because our data includes late ascertained cases which are notified to the PI on an ongoing basis. We have also implemented cross checks with the WM Safeguarding Children's Boards.

This report includes

- birth rate trend in Arden, West Midlands (WM) and England & Wales (E&W);
- a short description of C & W demographics based on PEER 09/10;
- numbers, rates and 3year moving averages for
 - stillbirths (from 24 weeks)
 - early neonatal deaths (birth to age 7 days)
 - perinatal deaths (stillbirths and early neonatal deaths)
 - neonatal deaths (birth to age 28 days)
 - infant deaths (birth to 12 months)

Although these categories overlap, the data are presented for ease of reference and comparison with other reports. Unlike previous national reports, we continue presenting trends by 3 year moving averages, as year-on-year variation may often falsely identify outliers.

As in previous years, we also present 'corrected' rates, whereby we exclude congenital anomalies and pre-viable births, to allow more useful comparisons between PCTs with different populations.

For stillbirths and infant deaths, we have undertaken the following additional analyses:

1. mortality rates plotted against deprivation index of the birth population: this allows each PCTs mortality rate to be seen within the context of the level of deprivation within its population;
2. analysis of stillbirths and infant deaths within major classification groups, to assess the main contributing causes.

Findings

1. Births

- a. As the graph shows, birth trends in Arden and WM follow the national trend. The number of births have been increasing in recent years, but appear to have reached a plateau in 2009.
- b. In the table, several comparative maternity demographics are presented for Arden and the rest of WM. Mothers in Arden tend to be older, have less social deprivation, lower smoking rates and lower obesity rates than the rest of the region; their babies are also less likely to have intrauterine growth restriction or be born prematurely.

2. Stillbirth trends

Arden crude and corrected stillbirth rates are lower than the WM, and also lower than the national average, although the confidence intervals are wide and overlapping.

3. **Stillbirths and Deprivation:** This analysis, for crude and corrected figures, shows that PCT stillbirth rates are at the lower end or below the expected range, adjusted for each PCT's respective IMD score.
4. **Stillbirth classification groups:** trends are presented for the main groups but analysis is limited because of small numbers. Deaths associated with intrauterine growth restriction (IUGR) represent the largest category. Compared to the rest of the West Midlands, rates are lower in each of the main categories.

5. Infant deaths – trends

- a. Arden infant death rates are similar to those in E&W and below those of WM. There is variation between Coventry and Warwickshire, however the differences are not statistically significant because of wide confidence intervals. Corrected rates (after exclusion of congenital anomalies and preivable births) are also shown.

6. **Infant deaths and deprivation:** as for stillbirths, this analysis shows that the infant mortality rates for each of the PCT's, after adjustment for their respective IMD scores, are at the lower end or below the prediction line.

7. **Infant death classification groups** – as elsewhere, the largest categories are pulmonary immaturity and congenital anomalies. There was an apparent drop in deaths associated with pulmonary immaturity until 2008. In comparison with the rest of the West Midlands, there are fewer deaths in most main categories - with the exception of SUDI (sudden unexpected deaths in infancy), due to 8 cases reported in Coventry during the last triennium.

Sections 8 & 9 show rates for subgroups of infant deaths (**early neonatal and neonatal**). In Section 10, rates for **perinatal deaths** are presented, with similar comparisons for crude and corrected rates.

Further analyses are currently being undertaken and will be reported in the coming weeks, including a more thorough analysis of subgroups of the WM maternity population.

Comments and suggestions for our reports are always welcome, and specific analyses continue to be available on request (www.pi.nhs.uk/data).

With sincere regards



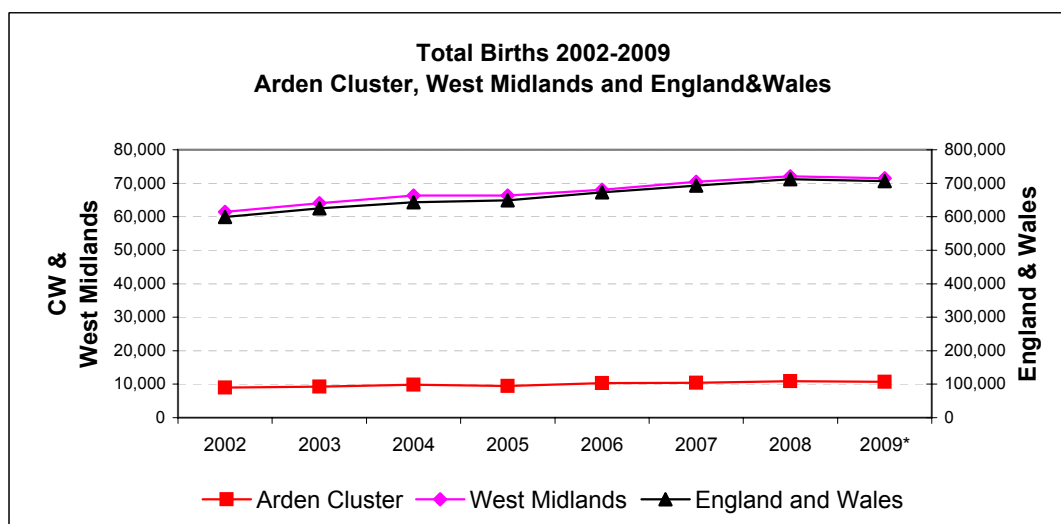
Professor Jason Gardosi
Director, West Midlands Perinatal Institute

1. Births: Arden, West Midlands and England & Wales 2002-2009

Source: ONS

	2002	2003	2004	2005	2006	2007	2008	2009*
England and Wales	599,279	624,816	643,026	649,094	672,966	693,356	712,328	706,248
West Midlands	61,417	64,079	66,285	66,351	68,063	70,476	72,110	71,452
Arden Cluster	8,953	9,230	9,799	9,498	10,301	10,382	10,903	10,705
Coventry	3,632	3,820	4,004	3,887	4,239	4,389	4,644	4,678
Warwickshire	5,321	5,410	5,795	5,611	6,062	5,993	6,259	6,027

* Provisional, live births only



Data: PEER 2009/10

	Arden Cluster	Rest of West Midlands	West Midlands Total		Arden Cluster	Rest of West Midlands	West Midlands Total
Submissions:	5,140	43,359	48,499	Submissions:	5,140	43,359	48,499
Deprivation - IMD Quintile				Maternal Age			
1 (least)	16.8%	6.9%	8.0%	< 16	0.1%	0.2%	0.2%
2	23.0%	10.2%	11.5%	< 18	1.7%	2.0%	2.0%
3	21.4%	15.2%	15.9%	< 20	6.7%	7.4%	7.4%
4	22.1%	20.2%	20.4%	20 - 24	19.1%	23.5%	23.0%
5 (most)	16.6%	47.5%	44.2%	25 - 29	27.6%	29.4%	29.2%
Ethnic Origin				30 - 34	27.0%	24.0%	24.3%
African	3.0%	3.6%	3.5%	35 - 39	16.1%	12.8%	13.1%
African Caribbean	0.5%	2.5%	2.3%	35+	19.6%	15.7%	16.1%
British European	78.1%	65.7%	67.0%	40+	3.5%	2.9%	3.0%
Eastern European	4.1%	2.7%	2.9%	Body Mass Index			
Middle Eastern	0.6%	1.3%	1.3%	< 18.5	3.3%	3.4%	3.3%
South Asian	7.0%	18.9%	17.6%	18.5 - 24.9	52.4%	47.5%	48.0%
Bangladeshi	0.5%	2.3%	2.1%	25 - 29.9	26.6%	28.4%	28.2%
Indian	4.8%	5.1%	5.0%	30 - 34.9	11.4%	13.0%	12.8%
Pakistani	1.7%	11.5%	10.4%	35 - 39.9	4.4%	5.3%	5.2%
Other/Mixed	6.7%	5.3%	5.5%	30+	17.7%	20.8%	20.4%
Smoking				35+	6.3%	7.8%	7.6%
At booking	18.5%	19.4%	19.3%	40+	1.9%	2.5%	2.4%
Late in pregnancy	13.0%	14.1%	14.0%	Prematurity			
Ceased During Pregnancy	20.6%	26.3%	25.9%	< 37 Weeks	5.2%	6.9%	6.7%
IUGR (<10th cust.cent.)	12.0%	14.5%	14.2%	< 34 Weeks	1.5%	2.2%	2.1%

2 A: Stillbirths 2002-2009

West Midlands

Numbers

	2002	2003	2004	2005	2006	2007	2008	2009
England and Wales*	3365	3565	3517	3473	3590	3585	3617	
West Midlands	391	395	383	403	392	398	416	414
Arden Cluster	44	39	43	46	52	41	46	48
Coventry	22	18	17	16	21	17	28	18
Warwickshire	22	21	26	30	31	24	18	30

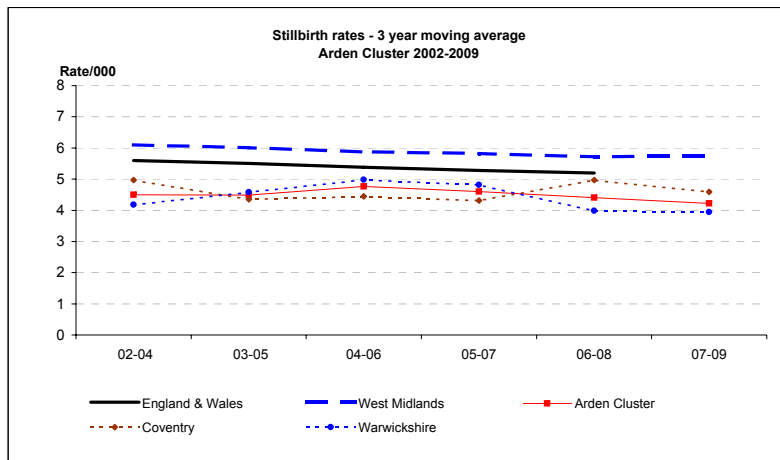
Rate/1,000

	2002	2003	2004	2005	2006	2007	2008	2009	2009 CI
England and Wales*	5.6	5.7	5.5	5.4	5.3	5.2	5.1		
West Midlands	6.4	6.2	5.8	6.1	5.8	5.6	5.8	5.8	5.3 - 6.4
Arden Cluster	4.9	4.2	4.4	4.8	5.0	3.9	4.2	4.5	3.4 - 5.9
Coventry	6.1	4.7	4.2	4.1	5.0	3.9	6.0	3.8	2.4 - 6.1
Warwickshire	4.1	3.9	4.5	5.3	5.1	4.0	2.9	5.0	3.5 - 7.1

3 year moving averages

	02-04	03-05	04-06	05-07	06-08	07-09
England & Wales	5.6	5.5	5.4	5.3	5.2	
West Midlands	6.1	6.0	5.9	5.8	5.7	5.7
Arden Cluster	4.5	4.5	4.8	4.6	4.4	4.2
Coventry	5.0	4.4	4.5	4.3	5.0	4.6
Warwickshire	4.2	4.6	5.0	4.8	4.0	3.9

*ONS



2 B: Stillbirths 2002-2009 - CORRECTED

(Excluding major congenital anomalies)

Numbers

	2002	2003	2004	2005	2006	2007	2008	2009
West Midlands	282	284	279	311	268	284	290	259
Arden Cluster	30	30	32	33	31	31	36	30
Coventry	17	15	13	12	14	15	25	10
Warwickshire	13	15	19	21	17	16	11	20

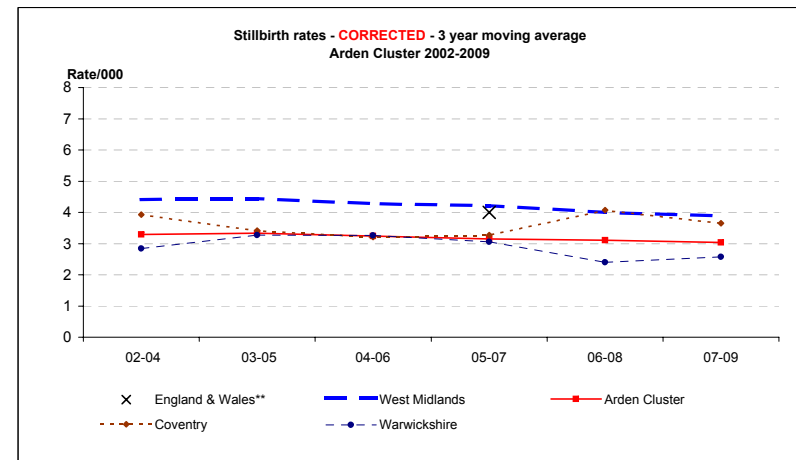
Rate/1,000

	2002	2003	2004	2005	2006	2007	2008	2009	2009 CI
England and Wales**				4.1	4.1	3.9			
West Midlands	4.6	4.4	4.2	4.7	3.9	4.0	4.0	3.6	3.2 - 4.1
Arden Cluster	3.4	3.3	3.3	3.5	3.0	3.0	3.3	2.8	2.0 - 4.0
Coventry	4.7	3.9	3.2	3.1	3.3	3.4	5.4	2.1	1.2 - 3.9
Warwickshire	2.4	2.8	3.3	3.7	2.8	2.7	1.8	3.3	2.1 - 5.1

3 year moving averages

	02-04	03-05	04-06	05-07	06-08	07-09
England & Wales**				4.0		
West Midlands	4.4	4.4	4.3	4.2	4.0	3.9
Arden Cluster	3.3	3.3	3.2	3.1	3.1	3.0
Coventry	3.9	3.4	3.2	3.3	4.1	3.6
Warwickshire	2.8	3.3	3.3	3.1	2.4	2.6

**CEMACH



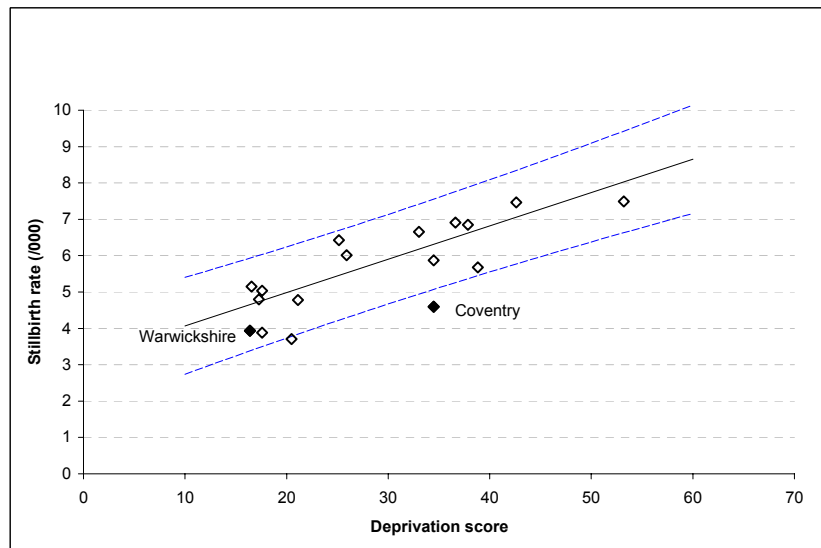
x = England & Wales 3 y adjusted average from CEMACH

3. Stillbirths and Deprivation, Arden PCTs

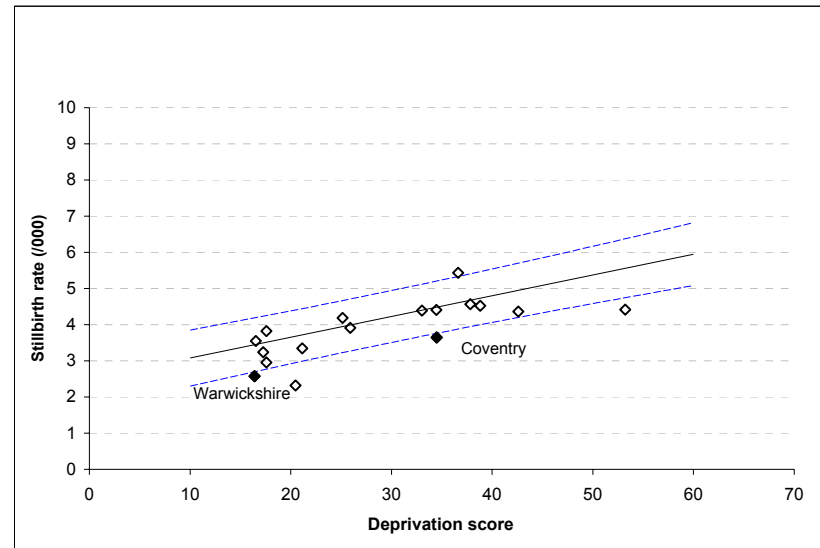
Graphs show stillbirth rates for the last triennium (2007-9) for Arden PCTs, plotted against each PCT's respective deprivation score (IMD 2007).

Regression line with 90% prediction intervals (based on 2002-2009 data) are also shown

A. Crude rates



B. Corrected rates - after excluding major congenital anomalies



4. Stillbirths in Arden Cluster, 2002 -2009: Classification in main groups

Groups based on ReCoDe classification

	2002	2003	2004	2005	2006	2007	2008	2009
Births	8953	9230	9799	9498	10301	10382	10903	10705

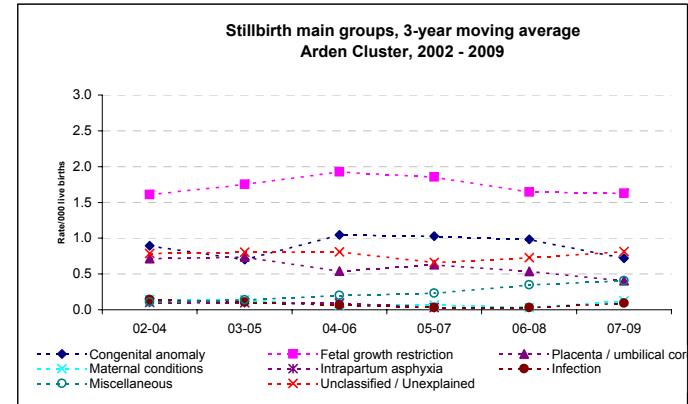
MAIN GROUPS

Numbers

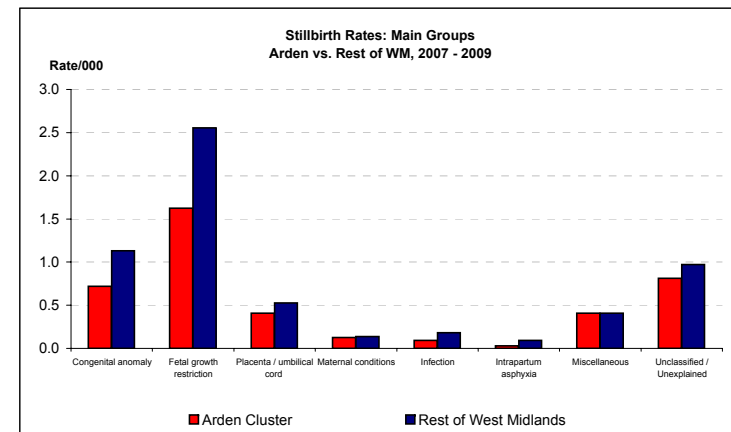
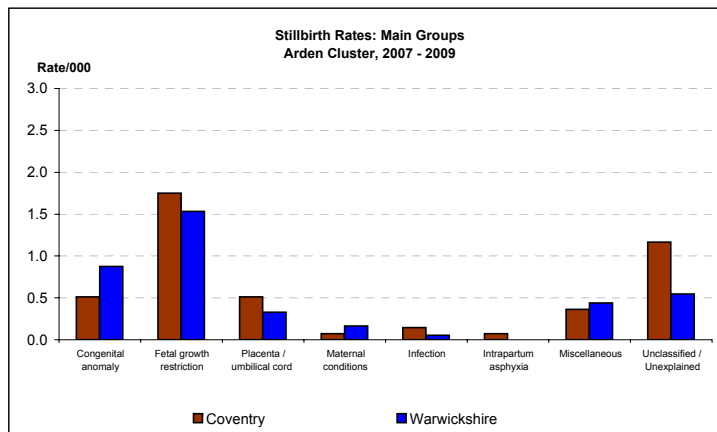
Congenital anomaly	11	6	8	6	17	8	6	9
Fetal growth restriction	19	10	16	24	17	15	20	17
Placenta/Umbilical chord	5	10	5	6	5	8	4	1
Maternal conditions	2	2	0	2	0	0	1	3
Infection	1	1	2	0	0	1	0	2
Intrapartum asphyxia	0	2	1	0	2	1	0	0
Miscellaneous	0	1	2	1	3	3	5	5
Unclassified / Unexplained	6	7	9	7	8	5	10	11

3-year moving averages

	02-04	03-05	04-06	05-07	06-08	07-09
Congenital anomaly	0.9	0.7	1.0	1.0	1.0	0.7
Fetal growth restriction	1.6	1.8	1.9	1.9	1.6	1.6
Placenta / umbilical cord	0.7	0.7	0.5	0.6	0.5	0.4
Maternal conditions	0.1	0.1	0.1	0.1	0.0	0.1
Infection	0.1	0.1	0.1	0.0	0.0	0.1
Intrapartum asphyxia	0.1	0.1	0.1	0.1	0.1	0.0
Miscellaneous	0.1	0.1	0.2	0.2	0.3	0.4
Unclassified / Unexplained	0.8	0.8	0.8	0.7	0.7	0.8



Births 2007-9	Coventry 13,711		Warwickshire 18,279		Arden Cluster 31,990		Rest of West Midlands 182,048	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Congenital anomaly	7	0.5	16	0.9	23	0.7	206	1.1
Fetal growth restriction	24	1.8	28	1.5	52	1.6	465	2.6
Placenta / umbilical cord	7	0.5	6	0.3	13	0.4	96	0.5
Maternal conditions	1	0.1	3	0.2	4	0.1	25	0.1
Infection	2	0.1	1	0.1	3	0.1	33	0.2
Intrapartum asphyxia	1	0.1	0	0.0	1	0.0	17	0.1
Miscellaneous	5	0.4	8	0.4	13	0.4	74	0.4
Unclassified / Unexplained	16	1.2	10	0.5	26	0.8	177	1.0



5 A: Infant Deaths 2002-2008

Numbers

	2002	2003	2004	2005	2006	2007	2008
England and Wales*	3144	3274	3234	3217	3329	3309	3369
West Midlands	407	476	419	423	407	421	456
Arden Cluster	45	53	65	40	33	48	61
Coventry	31	25	34	19	14	24	35
Warwickshire	14	28	31	21	19	24	26

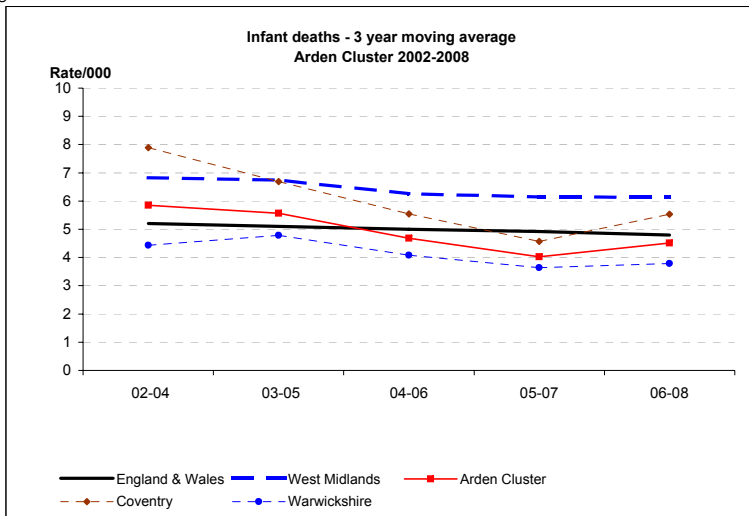
Rate/1,000

	2002	2003	2004	2005	2006	2007	2008	2008 CI
England and Wales*	5.3	5.3	5.1	5.0	5.0	4.8	4.8	4.6 - 4.9
West Midlands	6.7	7.5	6.4	6.4	6.0	6.0	6.4	5.8 - 7.0
Arden Cluster	5.1	5.8	6.7	4.2	3.2	4.6	5.6	4.4 - 7.2
Coventry	8.6	6.6	8.5	4.9	3.3	5.5	7.6	5.5 - 10.5
Warwickshire	2.6	5.2	5.4	3.8	3.2	4.0	4.2	2.8 - 6.1

Infant death rates - 3 year moving average - PDN

	02-04	03-05	04-06	05-07	06-08
England & Wales	5.2	5.1	5.0	4.9	4.8
West Midlands	6.8	6.7	6.3	6.1	6.1
Arden Cluster	5.9	5.6	4.7	4.0	4.5
Coventry	7.9	6.7	5.5	4.6	5.5
Warwickshire	4.4	4.8	4.1	3.6	3.8

*ONS



5 B: Infant deaths 2002-2008 - CORRECTED

Corrected = excluding major congenital anomalies, <22 weeks gestation and <500g birthweight

Numbers

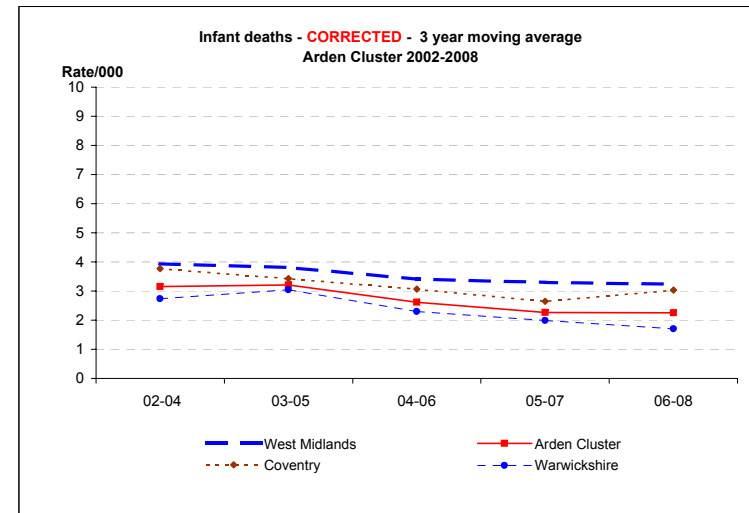
	2002	2003	2004	2005	2006	2007	2008
West Midlands	238	275	236	235	209	228	239
Arden Cluster	20	35	33	23	21	24	26
Coventry	13	14	16	10	11	12	17
Warwickshire	7	21	17	13	10	12	9

Rate/1,000

	2002	2003	2004	2005	2006	2007	2008	2008 CI
West Midlands	3.9	4.3	3.6	3.6	3.1	3.3	3.3	2.9 - 3.8
Arden Cluster	2.2	3.8	3.4	2.4	2.0	2.3	2.4	1.6 - 3.5
Coventry	3.6	3.7	4.0	2.6	2.6	2.7	3.7	2.3 - 5.9
Warwickshire	1.3	3.9	2.9	2.3	1.7	2.0	1.4	0.8 - 2.7

3 year moving averages

	02-04	03-05	04-06	05-07	06-08
West Midlands	3.9	3.8	3.4	3.3	3.2
Arden Cluster	3.2	3.2	2.6	2.3	2.3
Coventry	3.8	3.4	3.1	2.6	3.0
Warwickshire	2.7	3.0	2.3	2.0	1.7

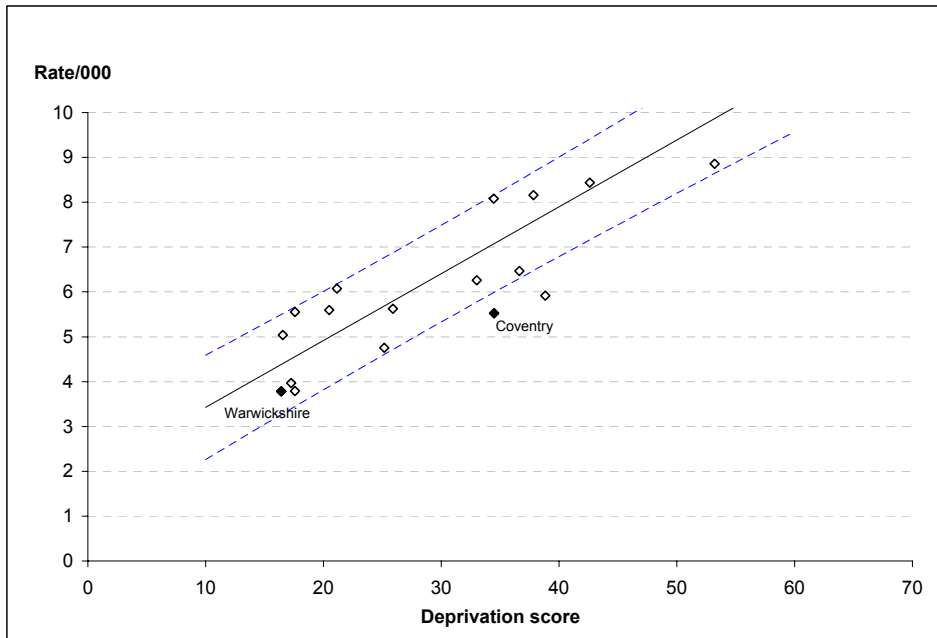


6. Infant deaths and Deprivation, Arden PCTs

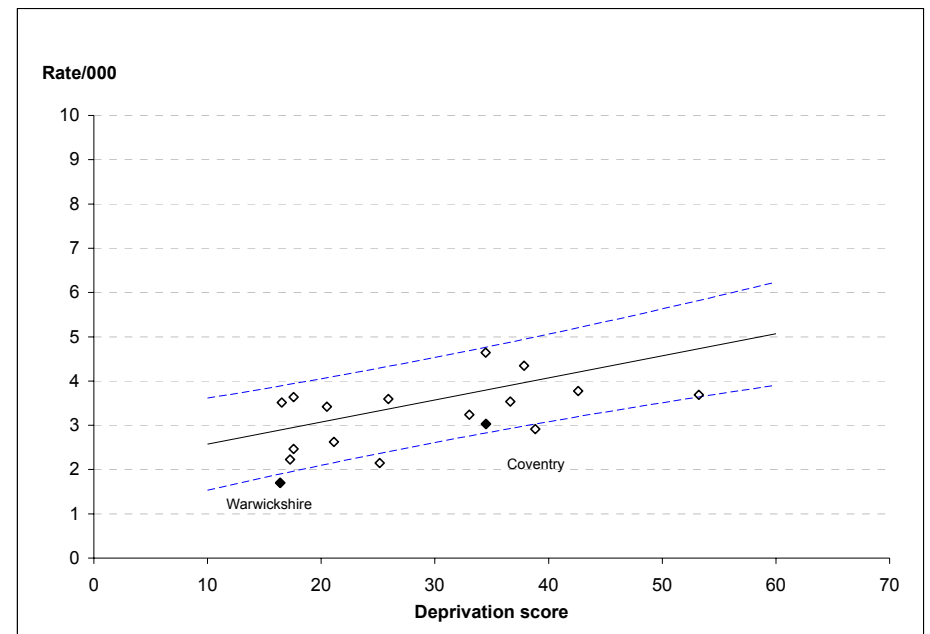
Graphs show infant deaths for the last available triennium (2006-8) for Arden PCTs, plotted against each PCT's respective deprivation score (IMD 2007).

Regression line with 90% prediction intervals (based on 2002-2008 data) are also shown

a. Crude rates



B. Corrected rates (after excluding major congenital anomalies and neonatal deaths <22 weeks and/or <500g)



7. Infant Deaths in Arden, 2002-2008: main groups

Groups based on Fetal/Neonatal/Infant classification

	2002	2003	2004	2005	2006	2007	2008
Live Births	8909	9191	9756	9452	10249	10341	10857

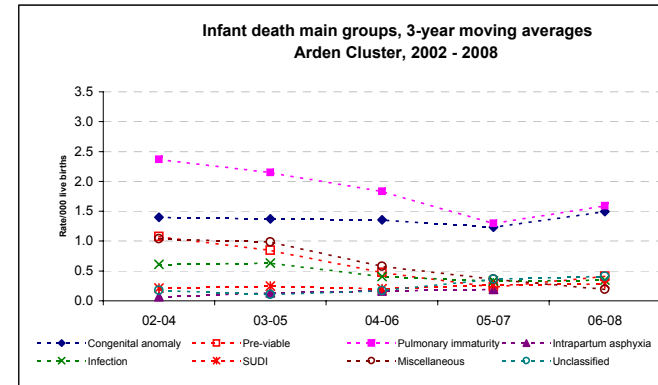
MAIN GROUPS

Numbers

Congenital anomaly	13	7	19	13	8	16	23
Pre-viable	10	10	10	4	0	3	10
Pulmonary immaturity	18	20	28	13	13	13	24
Intrapartum asphyxia	0	0	1	1	2	2	2
Infection	3	10	4	4	4	2	5
SUDI	2	2	2	3	1	4	4
Miscellaneous	7	13	9	6	2	3	1
Unclassified	2	1	2	0	3	8	2

3-year moving averages

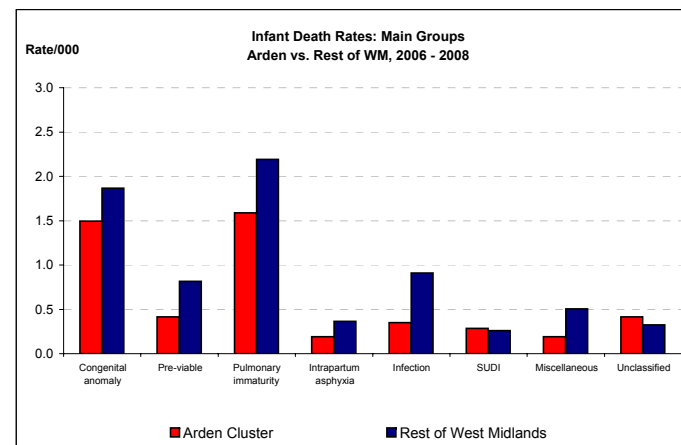
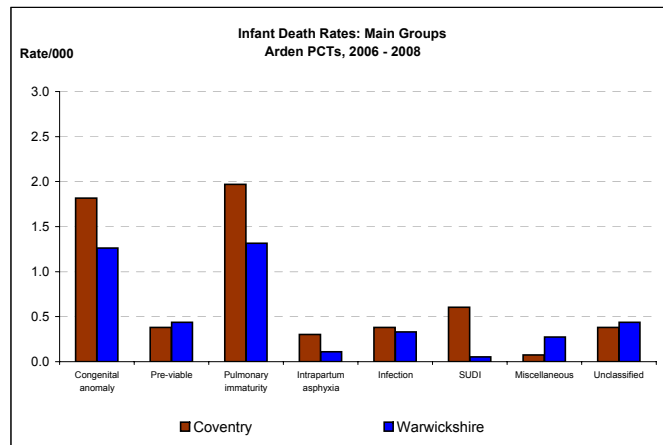
	02-04	03-05	04-06	05-07	06-08
Congenital anomaly	1.4	1.4	1.4	1.2	1.5
Pre-viable	1.1	0.8	0.5	0.2	0.4
Pulmonary immaturity	2.4	2.1	1.8	1.3	1.6
Intrapartum asphyxia	0.0	0.1	0.1	0.2	0.2
Infection	0.6	0.6	0.4	0.3	0.3
SUDI	0.2	0.2	0.2	0.3	0.3
Miscellaneous	1.0	1.0	0.6	0.4	0.2
Unclassified	0.2	0.1	0.2	0.4	0.4



	Coventry	Warwickshire	Arden Cluster	Rest of West Midlands
Live Births 2006-8	13206	18241	31447	177996

MAIN GROUPS - 2006-8

	No.	Rate	No.	Rate	No.	Rate	No.	Rate
Congenital anomaly	24	1.8	23	1.3	47	1.5	332	1.9
Pre-viable	5	0.4	8	0.4	13	0.4	145	0.8
Pulmonary immaturity	26	2.0	24	1.3	50	1.6	390	2.2
Intrapartum asphyxia	4	0.3	2	0.1	6	0.2	65	0.4
Infection	5	0.4	6	0.3	11	0.3	162	0.9
SUDI	8	0.6	1	0.1	9	0.3	46	0.3
Miscellaneous	1	0.1	5	0.3	6	0.2	90	0.5
Unclassified	5	0.4	8	0.4	13	0.4	58	0.3



8 A: Early Neonatal deaths 2002-2009

Early neonatal = birth to age 7 days

Numbers

	2002	2003	2004	2005	2006	2007	2008	2009
England and Wales*	1628	1726	1714	1681	1750	1762	1763	
West Midlands	234	266	255	270	245	268	258	246
Arden Cluster	34	30	36	26	21	26	38	37
Coventry	24	16	21	12	7	10	19	22
Warwickshire	10	14	15	14	14	16	19	15

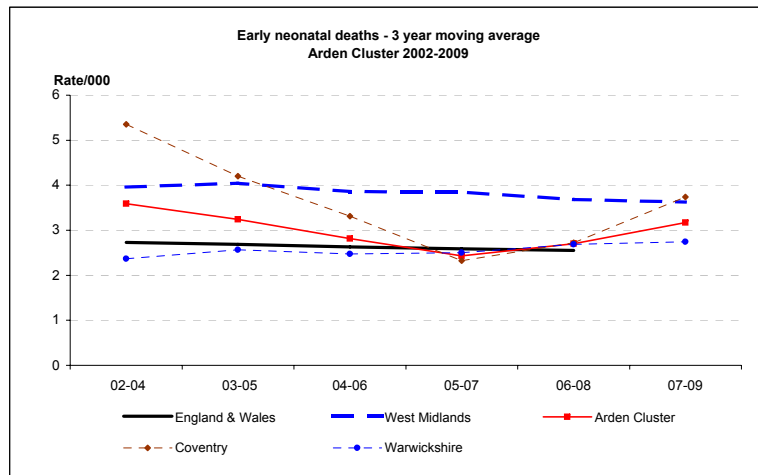
Rate/1,000

	2002	2003	2004	2005	2006	2007	2008	2009	2009 CI
England and Wales*	2.7	2.8	2.7	2.6	2.6	2.6	2.5		
West Midlands	3.8	4.2	3.9	4.1	3.6	3.8	3.6	3.5	3.1 - 3.9
Arden Cluster	3.8	3.3	3.7	2.8	2.0	2.5	3.5	3.5	2.5 - 4.8
Coventry	6.6	4.2	5.3	3.1	1.7	2.3	4.1	4.7	3.1 - 7.1
Warwickshire	1.9	2.6	2.6	2.5	2.3	2.7	3.0	2.5	1.5 - 4.1

3 year moving averages

	02-04	03-05	04-06	05-07	06-08	07-09
England & Wales	2.7	2.7	2.6	2.6	2.6	
West Midlands	4.0	4.0	3.9	3.8	3.7	3.6
Arden Cluster	3.6	3.2	2.8	2.4	2.7	3.2
Coventry	5.4	4.2	3.3	2.3	2.7	3.7
Warwickshire	2.4	2.6	2.5	2.5	2.7	2.7

*ONS



8 B: Early Neonatal Deaths 2002-2009 - CORRECTED

Corrected = excluding major congenital anomalies, <22 weeks gestation and <500g birthweight

Numbers

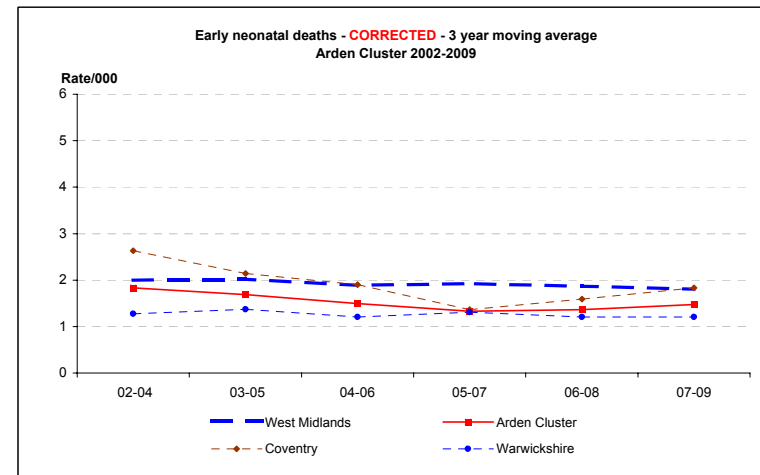
	2002	2003	2004	2005	2006	2007	2008	2009
West Midlands	118	134	129	131	117	144	130	110
Arden Cluster	16	18	17	13	14	13	16	18
Coventry	10	9	11	5	7	5	9	11
Warwickshire	6	9	6	8	7	8	7	7

Rate/1,000

	2002	2003	2004	2005	2006	2007	2008	2009	2009 CI
West Midlands	1.9	2.1	2.0	2.0	1.7	2.1	1.8	1.5	1.3 - 1.9
Arden Cluster	1.8	2.0	1.7	1.4	1.4	1.3	1.5	1.7	1.1 - 2.7
Coventry	2.8	2.4	2.8	1.3	1.7	1.1	1.9	2.4	1.3 - 4.2
Warwickshire	1.1	1.7	1.0	1.4	1.2	1.3	1.1	1.2	0.6 - 2.4

3 year moving averages

	02-04	03-05	04-06	05-07	06-08	07-09
West Midlands	2.0	2.0	1.9	1.9	1.9	1.8
Arden Cluster	1.8	1.7	1.5	1.3	1.4	1.5
Coventry	2.6	2.1	1.9	1.4	1.6	1.8
Warwickshire	1.3	1.4	1.2	1.3	1.2	1.2



9 A: Neonatal deaths 2002-2009

Neonatal = birth to age 28 days

Numbers

	2002	2003	2004	2005	2006	2007	2008	2009
England and Wales*	2129	2234	2223	2205	2331	2269	2299	
West Midlands	294	329	314	327	316	316	321	321
Arden Cluster	36	36	49	34	29	34	43	45
Coventry	26	17	27	16	12	16	22	25
Warwickshire	10	19	22	18	17	18	21	20

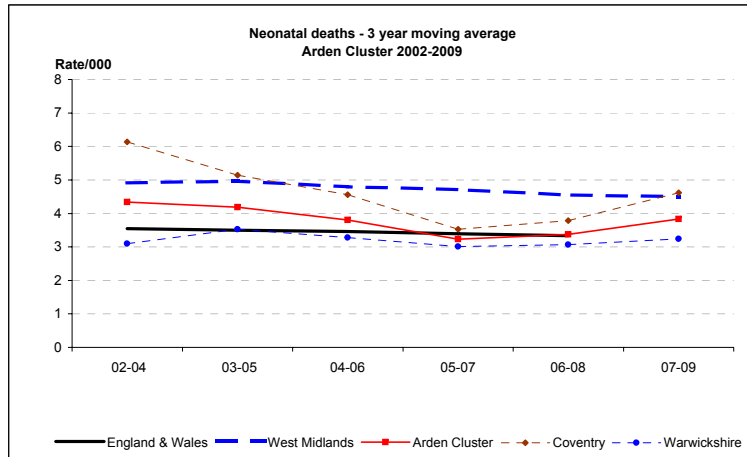
Rate/1,000

	2002	2003	2004	2005	2006	2007	2008	2009	2009 CI
England and Wales*	3.6	3.6	3.5	3.4	3.5	3.3	3.2		
West Midlands	4.8	5.2	4.8	5.0	4.7	4.5	4.5	4.5	4.1 - 5.0
Arden Cluster	4.0	3.9	5.0	3.6	2.8	3.3	4.0	4.2	3.2 - 5.6
Coventry	7.2	4.5	6.8	4.1	2.8	3.7	4.8	5.4	3.6 - 7.9
Warwickshire	1.9	3.5	3.8	3.2	2.8	3.0	3.4	3.3	2.2 - 5.1

3 year moving averages

	02-04	03-05	04-06	05-07	06-08	07-09
England & Wales	3.5	3.5	3.5	3.4	3.3	
West Midlands	4.9	5.0	4.8	4.7	4.6	4.5
Arden Cluster	4.3	4.2	3.8	3.2	3.4	3.8
Coventry	6.1	5.1	4.6	3.5	3.8	4.6
Warwickshire	3.1	3.5	3.3	3.0	3.1	3.2

*ONS



9 B: Neonatal Deaths 2002-2009 - CORRECTED

Corrected = excluding major congenital anomalies, <22 weeks gestation and <500g birthweight

Numbers

	2002	2003	2004	2005	2006	2007	2008	2009
West Midlands	157	176	166	172	168	172	168	149
Arden Cluster	16	23	25	19	20	16	16	22
Coventry	10	10	13	8	10	8	9	12
Warwickshire	6	13	12	11	10	8	7	10

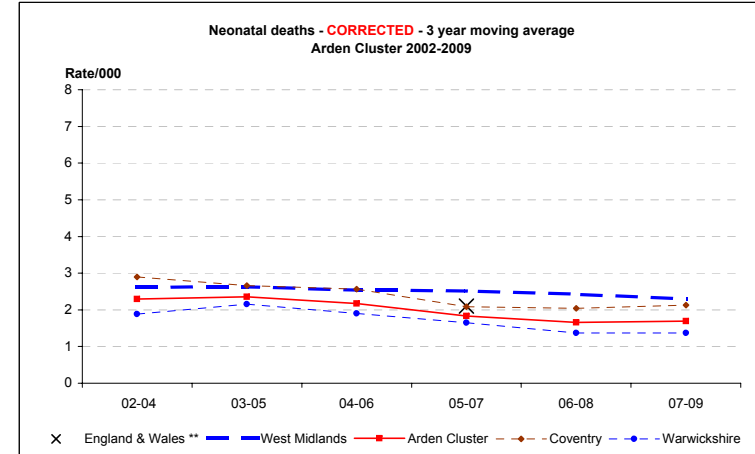
Rate/1,000

	2002	2003	2004	2005	2006	2007	2008	2009	2009 CI
England and Wales**				2.1	2.3	2.0			
West Midlands	2.6	2.8	2.5	2.6	2.5	2.5	2.3	2.1	1.8 - 2.5
Arden Cluster	1.8	2.5	2.6	2.0	2.0	1.5	1.5	2.1	1.4 - 3.1
Coventry	2.8	2.6	3.3	2.1	2.4	1.8	1.9	2.6	1.5 - 4.5
Warwickshire	1.1	2.4	2.1	2.0	1.7	1.3	1.1	1.7	0.9 - 3.1

3 year moving averages

	02-04	03-05	04-06	05-07	06-08	07-09
England & Wales**				2.1		
West Midlands	2.6	2.6	2.5	2.5	2.4	2.3
Arden Cluster	2.3	2.4	2.2	1.8	1.7	1.7
Coventry	2.9	2.7	2.6	2.1	2.0	2.1
Warwickshire	1.9	2.2	1.9	1.6	1.4	1.4

**CEMACH



x = England & Wales 3 y adjusted average from CEMACH

10 A: Perinatal Deaths 2002-2009

Perinatal = stillbirths and early neonatal deaths

Numbers

	2002	2003	2004	2005	2006	2007	2008	2009
England and Wales*	4993	5291	5231	5154	5340	5347	5380	
West Midlands	625	661	638	673	637	666	674	656
Arden Cluster	78	69	79	72	73	67	84	85
Coventry	46	34	38	28	28	27	47	40
Warwickshire	32	35	41	44	45	40	37	45

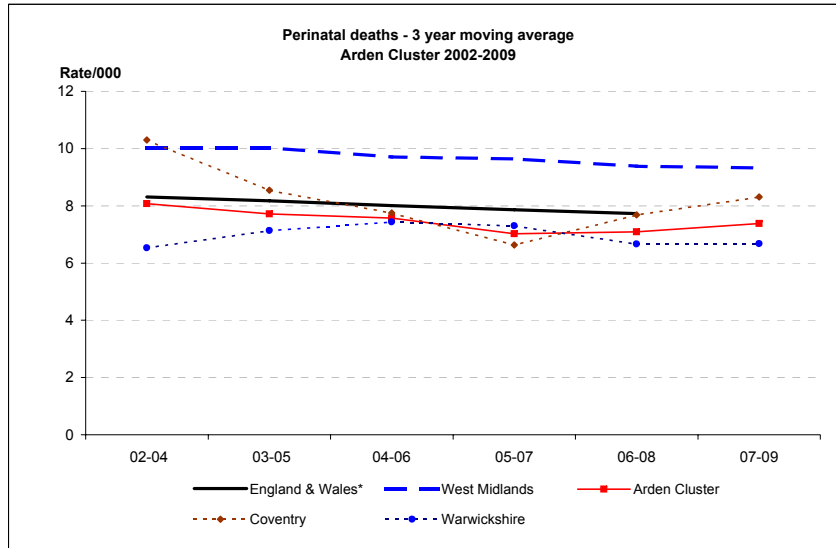
Rate/1,000

	2002	2003	2004	2005	2006	2007	2008	2009	2009 CI
England and Wales*	8.3	8.5	8.1	7.9	7.9	7.7	7.6		
West Midlands	10.2	10.3	9.6	10.1	9.4	9.5	9.3	9.2	8.5 - 9.9
Arden Cluster	8.7	7.5	8.1	7.6	7.1	6.5	7.7	7.9	6.4 - 9.8
Coventry	12.7	8.9	9.5	7.2	6.6	6.2	10.1	8.6	6.3 - 11.6
Warwickshire	6.0	6.5	7.1	7.8	7.4	6.7	5.9	7.5	5.6 - 10.0

3 year moving averages

	02-04	03-05	04-06	05-07	06-08	07-09
England & Wales*	8.3	8.2	8.0	7.9	7.7	
West Midlands	10.0	10.0	9.7	9.6	9.4	9.3
Arden Cluster	8.1	7.7	7.6	7.0	7.1	7.4
Coventry	10.3	8.5	7.7	6.6	7.7	8.3
Warwickshire	6.5	7.1	7.4	7.3	6.7	6.7

*ONS



10 B: Perinatal Deaths 2002-2009 - CORRECTED

Corrected = excluding major congenital anomalies, <22 weeks gestation and <500g birthweight

Numbers

	2002	2003	2004	2005	2006	2007	2008	2009
West Midlands	400	418	408	442	385	428	420	369
Arden Cluster	46	48	49	46	45	44	52	48
Coventry	27	24	24	17	21	20	34	21
Warwickshire	19	24	25	29	24	24	18	27

Rate/1,000

	2002	2003	2004	2005	2006	2007	2008	2009	2009 CI
West Midlands	6.5	6.5	6.2	6.7	5.7	6.1	5.8	5.2	4.7 - 5.7
Arden Cluster	5.1	5.2	5.0	4.8	4.4	4.2	4.8	4.5	3.4 - 5.9
Coventry	7.4	6.3	6.0	4.4	5.0	4.6	7.3	4.5	2.9 - 6.9
Warwickshire	3.6	4.4	4.3	5.2	4.0	4.0	2.9	4.5	3.1 - 6.5

3 year moving averages

	02-04	03-05	04-06	05-07	06-08	07-09
West Midlands	6.4	6.4	6.2	6.1	5.9	5.7
Arden Cluster	5.1	5.0	4.7	4.5	4.5	4.5
Coventry	6.5	5.6	5.1	4.6	5.7	5.5
Warwickshire	4.1	4.6	4.5	4.4	3.6	3.8

