



East Midlands & South Yorkshire

**Congenital Anomalies Register**

One of The Infant Mortality & Morbidity Studies

## **Congenital Anomalies in Births 2002 to 2006**

## Background information

- These tables summarise congenital anomalies reported in pregnancies which ended between January 1<sup>st</sup> 2002 and December 31<sup>st</sup> 2006 inclusive in the East Midlands and South Yorkshire region.
- In 2006, the geography of the area covered by EMSYCAR changed substantially for a second time. The 39 PCTs, which had formed three separate SHAs and part of a fourth, and which had constituted the EMSYCAR area since 2002, were re-organised. Six of the original 39 remained unchanged; the rest were reformed into nine larger PCTs. Please see Map for clarification.
- The data presented here follows the boundaries of the fifteen 'new' PCTs created from October 2006. Data from 2002-2005 has been allocated to the relevant 'new' PCT.
- North Derbyshire, comprising the earlier PCTs of Chesterfield, High Peaks and Dales and NE Derbyshire, is now part of Derbyshire County PCT. In previous years, these three PCTs accounted for almost exactly half of all births in the area now covered by the new PCT, and the number of births in 2006 has therefore been assumed to be 50% of the (new) Derbyshire County PCT total.
- The former PCT of Rushcliffe has now been subsumed into Nottinghamshire County Teaching PCT, and the number of births in the appropriate area in 2006 has also been estimated from 2002-2005 data, as this figure is no longer available separately.
- In September 2007, North East Lincs Primary care Trust was also reorganised, becoming North East Lincs Care Trust Plus, but its boundaries remain unchanged.
- 'New' PCTs which chose not to contribute to EMSYCAR from 2006 are not included in the tables presented here. No Congenital Anomaly data has therefore been sent from these areas to the National Congenital Anomaly System since 2006, and no surveillance of these areas has been undertaken, either at regional or national level, since that date. NCAS now divides its published data between areas covered by Congenital Anomaly registers, where reported rates are much higher and more accurate (and which includes those PCTs reported separately here) and areas of England which are not covered by registers (including the non-contributing PCTs in the EMSYCAR region.)

- There is no available data yet from the Office for National Statistics concerning the number of singleton and multiple births in the newly defined EMSYCAR region for 2006. EMSYCAR rates in Table 2 therefore cannot be calculated for this year.
- The BINOCAR Registers have continued to work with NCAS to refine the list of 'minor' anomalies for exclusion, to bring it into closer alignment with the EUROCAT list. The same working group has also addressed the issue of coding variability, both between different regional Registers, and between regional Registers and NCAS. All Registers have now adopted an agreed BINOCAR coding framework, which NCAS are using for all births from January 1<sup>st</sup> 2007. Some variations in reported anomaly rates in certain subgroups (particularly Musculoskeletal and Endocrine & Metabolic Disorders) is therefore to be expected from 2007 onwards.
- In preparing these tables, anomaly rates (expressed as a ratio per 10,000 births) have been preferred to exact numbers and birth figures. Individual PCTs are, of course, welcome to contact EMSYCAR to request greater detail for their own area. This will be provided wherever possible, although it should be noted that, according to national guidelines, the number of anomaly cases should always exceed a minimum of five in order that data confidentiality is not compromised and that there is no possibility of individual cases being identified. For small areas and/or rare anomalies, this criterion may frequently not be met.
- A more detailed background to EMSYCAR and its data collection methods may be found in previous Reports available from EMSYCAR, Dept. of Health Sciences, University of Leicester, 22-28 Princess Road West, Leicester, LE1 6TP, or by e-mailing [timms@leicester.ac.uk](mailto:timms@leicester.ac.uk) with a request.

## Data Summary

- The total number of births occurring in the EMSYCAR region has been rising steadily since 2001. Initially, this was due to the entry of Northamptonshire into EMSYCAR in 2002-3, but since then the birth rate has continued to increase. The 4.2% increase from 2005 to 2006, however, is rather larger than expected, and may be an over-count caused by PCT boundary changes. This possibility has been raised with ONS and is still under investigation by them.
- In any given year, about 2.4% of all births in the EMSYCAR region have serious, reportable anomalies. Slightly more males (2.6%) than females (1.9%) and more multiple (around 3%) than singleton (2.4%) births are affected. These well-recognised trends are again confirmed by the data presented here.
- The switch, in late October 2002, to electronic birth notifications, which contain no text field to indicate the nature of any anomaly suspected at delivery, resulted in an initial reduction in the number of cases reported to EMSYCAR. Together with the introduction of an enlarged list of 'minor and non-reportable anomalies' at about the same time, the total number of cases being reviewed annually by EMSYCAR (including those reported antenatally but which happily turn out to have no anomaly at delivery) fell by 13% between 2002 and 2004. However, numbers have risen steadily since then and are now around 2500 cases per annum.
- For the great majority of anomalies, trends have remained stable or show a slight decrease between 2002 and 2006, reflecting the time lag necessary for the more recently diagnosed anomalies to reach the Register. A few anomalies, however, appear to be increasing, chief among these being anencephaly (although spina bifida continues to decrease), clefts, gastroschisis and exomphalos. There is also some concern over cases of skeletal dysplasia reported from PCTs which are unfortunately not currently funding surveillance of their population by EMSYCAR.
- Despite the extra problems for EMSYCAR caused by reduced funding, the number of cases reported to the European Surveillance System, EUROCAT, has also increased steadily, from 1331 in 2002 to 1397 in 2006. This reflects the huge amount of work, both by the EMSYCAR team and notifiers in the many maternity units, devoted to tracking cases and obtaining outcome data.

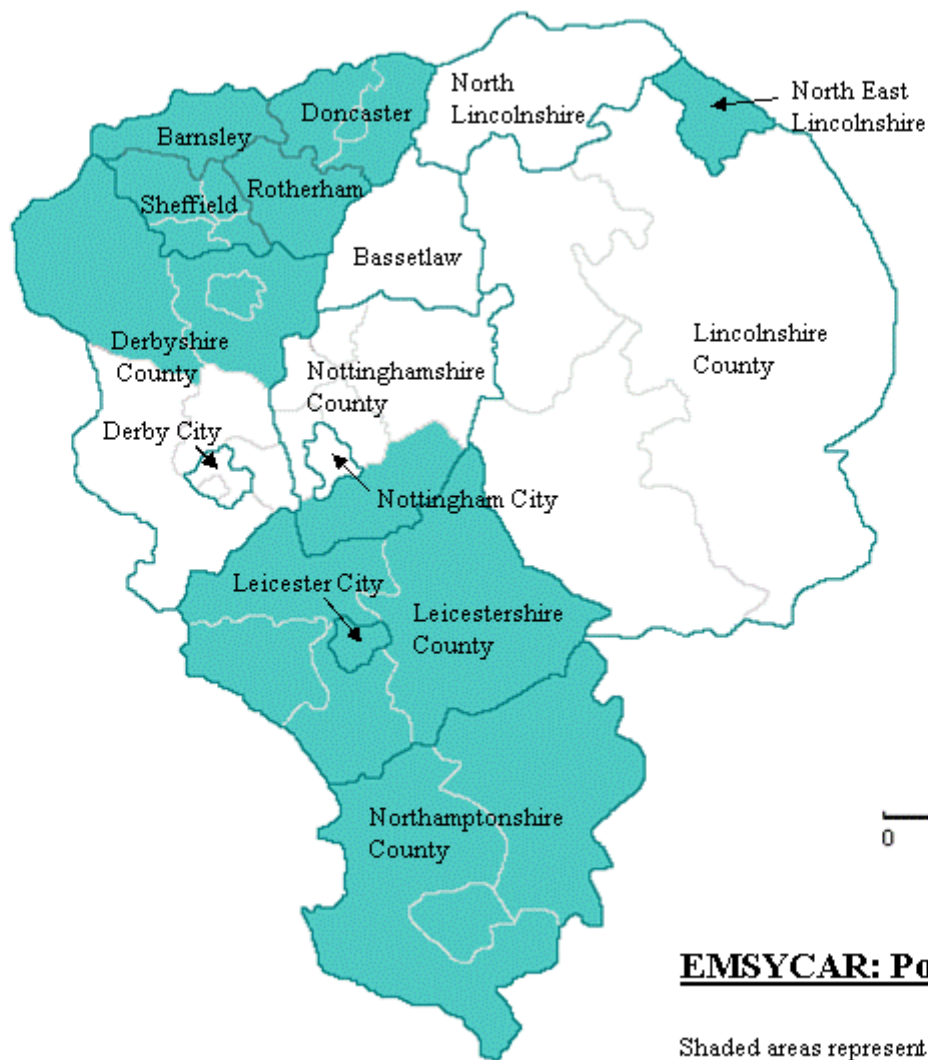
- While anomaly rates have historically varied between PCTs, with those in Sheffield being traditionally above average as a result of a very well developed local reporting system, and those in neighbouring Rotherham being much lower, Table 5 demonstrates that the rates for individual anomalies have largely remained stable for EMSYCAR as a whole. Comparison with rates reported elsewhere in Europe can easily be made from the EUROCAT website ([www.eurocat.ulster.ac.uk](http://www.eurocat.ulster.ac.uk)).
- Audit and research activities have continued using Register data. EMSYCAR has joined several European-wide research initiatives, and is also contributing to a UK project which is attempting to test the feasibility of collecting follow-up data from parents of two-year-old children born with diaphragmatic hernia. Other EMSYCAR research projects are investigating cases of Sexual Differentiation reported to the Register over a ten year period, and cases of AVSD.

## Description of Tables

- Table 1: Number and proportion of births with one (or more) confirmed congenital anomaly, by year of birth 1997 – 2006. Entire EMSYCAR region.
- Table 2: Number and proportion of births with one (or more) confirmed congenital anomaly, by plurality and year of birth 1997 – 2006. Entire EMSYCAR region.
- Table 3: Number and proportion of births with one (or more) confirmed congenital anomaly, by infant sex and year of birth 1997 – 2006. Entire EMSYCAR region.
- Table 4: Overall anomaly rates 2002 – 2006, by PCT.
- Table 5: Number and rates of selected congenital anomalies and congenital anomaly groups per 10,000 total live + still births, by year of birth 2002 – 2006. Entire EMSYCAR region.
- Table 6: Birth status of cases reported to EMSYCAR with one (or more) confirmed congenital anomaly, by year of delivery 2002 – 2006. Entire EMSYCAR region.
- Table 7: Trends in selected congenital anomalies 2002 – 2006
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  - Selected cardiovascular anomalies
  - Clefts
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- Table 8: 2002: Rates of selected anomaly groups by PCT
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## EMSYCAR PCT Structure 1997 – Present

Former DHA 1997-2002	Former PCT Name 2002-2006	Current PCT Name - Post-2006
<b>Leicestershire</b>	Charnwood & NW Leics	<b>Leicestershire County &amp; Rutland</b>
	Hinckley & Bosworth	
	Melton, Rutland & Harborough	
	South Leicester	
	Eastern Leicester	<b>Leicester City</b>
Leicester City West		
<b>Barnsley</b>	Barnsley	<b>Barnsley</b>
<b>Doncaster</b>	Doncaster Central	<b>Doncaster</b>
	Doncaster East	
	Doncaster West	
<b>Sheffield</b>	Sheffield North	<b>Sheffield</b>
	Sheffield South West	
	Sheffield West	
	Sheffield South East	
<b>Rotherham</b>	Rotherham	<b>Rotherham</b>
<b>South Derbyshire</b>	Central Derby	<b>Derby City</b>
	Greater Derby	
	Amber Valley	<b>Derbyshire County</b>
	Derbyshire Dales & S Derbyshire	
	Erewash	
<b>North Derbyshire</b>	Chesterfield	<b>Derbyshire County</b>
	High Peaks & Dales	
	North East Derbyshire	
<b>Nottinghamshire</b>	Nottingham City	<b>Nottingham City</b>
	Gedling	<b>Nottinghamshire County Teaching</b>
	Rushcliffe	
	Broxtowe & Hucknall	
<b>North Notts</b>	Mansfield	<b>Nottinghamshire County Teaching</b>
	Newark & Sherwood	
	Ashfield	
	Bassetlaw	<b>Bassetlaw</b>
<b>Lincolnshire</b>	East Lincolnshire	<b>Lincolnshire Teaching</b>
	Lincolnshire South West	
	West Lincolnshire	
<b>South Humber</b>	North Lincolnshire	<b>North Lincolnshire</b>
	North East Lincolnshire	<b>North East Lincolnshire</b>
<b>Northamptonshire</b>	Daventry & S Northants	<b>Northamptonshire Teaching</b>
	Northampton	
	Northamptonshire Heartlands	



**EMSYCAR: Post-2006 PCT Structure**

Shaded areas represent PCTs and parts of PCTs which funded the Register from 2006. PCT boundaries between 2002-2006 are shown in light grey.



**Table 1:** Number and proportion of births with one (or more) confirmed congenital anomaly, by year of birth 1997 – 2006.

Year	Total Births	Births with one or more confirmed, probable or suspected anomaly		Births with one or more confirmed, probable or suspected anomaly		Births with multiple confirmed or probable anomalies	
		n	Proportion %	n	Proportion %	n	Proportion %
<b>1997</b>	59,857	1,710	2.9	1,176	2.0	268	0.4
<b>1998</b>	59,509	1,741	2.9	1,233	2.1	254	0.4
<b>1999</b>	57,438	1,837	3.2	1,504	2.6	371	0.6
<b>2000</b>	55,541	1,757	3.2	1,576	2.8	411	0.7
<b>2001</b>	54,302	1,851	3.4	1,711	3.2	396	0.7
<b>2002</b>	54,601	1,829	3.3	1,735	3.2	378	0.7
<b>2003</b>	64,307	1,802	2.8	1,620	2.5	355	0.6
<b>2004</b>	66,346	1,708	2.6	1,590	2.4	364	0.5
<b>2005</b>	67,318	1,782	2.6	1,661	2.5	346	0.5
<b>2006</b>	70,153	1,836	2.6	1,713	2.4	375	0.5

**Table 2:** Number and proportion of births with one (or more) confirmed congenital anomaly, by plurality and year of birth 1997 – 2006.

Year	Total Births	Singletons	Multiples	Singleton births - one or more anomaly n	Proportion %	Multiple births - one or more anomaly n	Proportion %	Births with unknown plurality with one or more anomaly n	Proportion %
<b>1997</b>	59,857	58,233	1,624	1,138	2.0	43	2.6	31	0.1
<b>1998</b>	59,509	57,764	1,745	1,144	2.0	42	2.4	47	0.1
<b>1999</b>	57,438	55,802	1,636	1,396	2.5	65	4.0	43	0.1
<b>2000</b>	55,541	53,947	1,594	1,516	2.8	47	2.9	13	0.0
<b>2001</b>	54,302	52,818	1,484	1,658	3.1	51	3.4	4	0.0
<b>2002</b>	54,601	52,874	1,727	1,666	3.2	69	4.0	0	0.0
<b>2003</b>	64,307	62,518	1,789	1,570	2.5	50	2.8	0	0.0
<b>2004</b>	66,346	64,446	1,900	1,551	2.4	39	2.1	0	0.0
<b>2005</b>	67,318	65,401	1,917	1,599	2.4	62	3.2	0	0.0
<b>2006</b>	70,153	NK	NK	1,663	NK	50	NK	0	0.0

**Table 3:** Number and proportion of births with one (or more) confirmed congenital anomaly, by infant sex and year of birth 1997 – 2006.

Year	Total Births	Males	Females	Males with one or more anomaly n	Proportion %	Females with one or more anomaly n	Proportion %	Unknown sex with one or more anomaly n	Proportion %
<b>1997</b>	59,857	30,550	29,307	636	2.1	502	1.7	38	0.1
<b>1998</b>	59,509	30,558	28,951	683	2.2	487	1.7	63	0.1
<b>1999</b>	57,438	29,403	28,035	826	2.8	618	2.2	60	0.1
<b>2000</b>	55,541	28,340	27,201	880	3.1	619	2.3	77	0.1
<b>2001</b>	54,302	28,026	26,276	951	3.4	692	2.6	70	0.1
<b>2002</b>	54,601	28,070	26,531	972	3.5	707	2.7	56	0.1
<b>2003</b>	64,307	32,941	31,366	870	2.6	658	2.1	92	0.1
<b>2004</b>	66,346	34,163	32,183	887	2.6	596	1.9	107	0.2
<b>2005</b>	67,318	34,509	32,809	915	2.7	623	1.9	123	0.2
<b>2006</b>	70,153	35,848	34,305	946	2.6	662	1.9	105	0.1

**Table 4:** Overall anomaly rates 2002 – 2006, by PCT.

Current PCT Name	2002	2003	2004	2005	2006
<b>Barnsley</b>	259.6	272.2	216.3	226.4	170.2
<b>Doncaster</b>	265.2	286.5	220.7	187.7	286.7
<b>Sheffield</b>	428.1	446.7	415.7	364.5	403.5
<b>Rotherham</b>	265.2	183.2	173.2	197.5	152.8
<b>North East Lincolnshire</b>	424.0	315.5	224.8	276.5	295.5
<b>Leicester City</b>	453.6	276.5	358.1	365.0	375.8
<b>Leicestershire County &amp; Rutland</b>	417.0	277.8	249.5	296.9	281.9
<b>Northamptonshire Teaching</b>	N/A	165.4	195.2	159.3	175.9
<b><i>North Derbyshire*</i></b>	206.1	208.3	239.2	219.4	146.9
<b><i>Rushcliffe**</i></b>	284.6	240.3	159.3	192.8	243.5

**Table 5:** Number and rates of selected congenital anomalies and congenital anomaly groups per 10,000 total live + still births, by year of birth 2002 – 2006.

	ICD-10	2002	2003	2004	2005	2006	TOTAL
<b>CENTRAL NERVOUS SYSTEM</b>	Q000-Q079	165	145	166	179	154	<b>809</b>
		30.2	22.5	25.0	26.6	22.0	25.1
<b>All Neural Tube Defects</b>	Q000-Q019	79	67	80	93	84	<b>403</b>
	& Q050-Q059	14.5	10.4	12.1	13.8	12.0	12.5
<b>Anencephaly</b>	Q000-Q002	22	30	27	52	39	<b>170</b>
		4.0	4.7	4.1	7.7	5.6	5.3
<b>Encephalocele</b>	Q010-Q019	15	5	8	10	11	<b>49</b>
		2.7	0.8	1.2	1.5	1.6	1.5
<b>Spina Bifida</b>	Q050-Q059	45	34	49	36	35	<b>199</b>
		8.2	5.3	7.4	5.3	5.0	6.2
<b>Isolated Hydrocephalus</b>	Q030-Q039	28	22	25	30	32	<b>137</b>
		5.1	3.4	3.8	4.5	4.6	4.2
<b>Microcephaly</b>	Q020	14	13	13	5	5	<b>50</b>
		2.6	2.0	2.0	0.7	0.7	1.5
<b>Eye anomalies</b>	Q100-Q159	29	10	26	14	12	<b>91</b>
		5.3	1.6	3.9	2.1	1.7	2.8
<b>Ear anomalies</b>	Q160-Q179	29	31	17	25	29	<b>131</b>
		5.3	4.8	2.6	3.7	4.1	4.1
<b>CARDIOVASCULAR SYSTEM</b>	Q200-Q269	284	261	264	243	285	<b>1337</b>
		52.0	40.6	39.8	36.1	40.6	41.4
<b>Ventricular septal defect</b>	Q210	101	94	88	83	105	<b>471</b>
		18.5	14.6	13.3	12.3	15.0	14.6
<b>Atrial septal defect</b>	Q211	30	33	50	37	50	<b>200</b>
		5.5	5.1	7.5	5.5	7.1	6.2
<b>Atrio-ventricular septal defect</b>	Q212	13	19	27	11	17	<b>87</b>
		2.4	3.0	4.1	1.6	2.4	2.7
<b>Falot's Tetralogy</b>	Q213	20	15	14	14	11	<b>74</b>
		3.7	2.3	2.1	2.1	1.6	2.3
<b>Transposition of the great vessels</b>	Q203	17	13	16	16	14	<b>76</b>
		3.1	2.0	2.4	2.4	2.0	2.4

<b>CARDIOVASCULAR SYSTEM (ctd.)</b>							
	<b>ICD-10</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>TOTAL</b>
<b>Hypoplastic left heart syndrome</b>	Q234	14	25	22	27	30	<b>118</b>
		2.6	3.9	3.3	4.0	4.3	3.7
<b>Coarctation of the aorta</b>	Q251	18	10	11	10	10	<b>59</b>
		3.3	1.6	1.7	1.5	1.4	1.8
<b>Patent Ductus Arteriosus</b>	Q250	24	23	26	13	23	<b>109</b>
		4.4	3.6	3.9	1.9	3.3	3.4
<b>Other cardiovascular defects</b>	Q271-Q289	*	*	*	*	*	<b>10</b>
		*	*	*	*	*	0.3
<b>UROGENITAL SYSTEM</b>	Q500-Q649	366	338	326	359	362	<b>1751</b>
		67.0	52.6	49.1	53.3	51.6	54.3
<b>Renal agenesis and hypoplasia</b>	Q600-Q609	26	26	22	19	29	<b>122</b>
		4.8	4.0	3.3	2.8	4.1	3.8
<b>Bladder/urethral anomalies</b>	Q640-Q649	21	26	31	26	25	<b>129</b>
		3.8	4.0	4.7	3.9	3.6	4.0
<b>Cystic kidneys</b>	Q610-Q619	42	42	36	41	38	<b>199</b>
		7.7	6.5	5.4	6.1	5.4	6.2
<b>Hypospadias and congenital chordee</b>	Q540-Q549	122	101	124	115	124	<b>586</b>
		22.3	15.7	18.7	17.1	17.7	18.2
<b>Hydronephrosis</b>	Q620	95	104	67	94	89	<b>449</b>
		17.4	16.2	10.1	14.0	12.7	13.9
<b>Undescended testicles - unilateral</b>	Q531	27	13	16	16	9	<b>81</b>
		4.9	2.0	2.4	2.4	1.3	2.5
<b>Undescended testicles - bilateral</b>	Q532	21	11	22	9	10	<b>73</b>
		3.8	1.7	3.3	1.3	1.4	2.3
<b>GASTRO-INTESTINAL SYSTEM</b>	Q350-Q459	164	179	197	186	203	<b>929</b>
		30.0	27.8	29.7	27.6	28.9	28.8
<b>All clefts</b>	Q350-Q379	87	76	93	101	104	<b>461</b>
		15.9	11.8	14.0	15.0	14.8	14.3
<b>Cleft palate only</b>	Q35	35	21	30	38	32	<b>156</b>
		6.4	3.3	4.5	5.6	4.6	4.8
<b>Cleft lip only</b>	Q36	17	22	24	22	25	<b>110</b>
		3.1	3.4	3.6	3.3	3.6	3.4

<b>GASTRO-INTESTINAL SYSTEM (ctd.)</b>							
	<b>ICD-10</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>TOTAL</b>
<b>Cleft lip &amp; palate</b>	Q37	35	32	39	42	49	<b>197</b>
		6.4	5.0	5.9	6.2	7.0	6.1
<b>Atresia/stenosis small intestine</b>	Q410-Q419	12	11	17	10	22	<b>72</b>
		2.2	1.7	2.6	1.5	3.1	2.2
<b>Atresia/stenosis large intestine</b>	Q420-Q429	20	28	23	17	25	<b>113</b>
		3.7	4.4	3.5	2.5	3.6	3.5
<b>Other intestine</b>	Q430-Q439	22	38	24	24	26	<b>134</b>
		4.0	5.9	3.6	3.6	3.7	4.2
<b>Tracheo-Oesophageal fistula</b>	Q390-Q393	15	11	22	17	22	<b>87</b>
		2.7	1.7	3.3	2.5	3.1	2.7
<b>MUSCULOSKELETAL SYSTEM</b>	Q650-Q799, Q180-Q189,	627	503	459	478	542	<b>2609</b>
	Q380-Q389	114.8	78.2	69.2	71.0	77.3	80.8
<b>Limb reductions</b>	Q710-Q739	65	48	51	49	61	<b>274</b>
		11.9	7.5	7.7	7.3	8.7	8.5
<b>Polydactyly</b>	Q690-Q699	78	74	62	77	73	<b>364</b>
		14.3	11.5	9.3	11.4	10.4	11.3
<b>Syndactyly</b>	Q700-Q709	53	59	53	57	46	<b>268</b>
		9.7	9.2	8.0	8.5	6.6	8.3
<b>All Talipes (incl.postural)</b>	Q660-Q669	300	147	137	136	142	<b>862</b>
		54.9	22.9	20.6	20.2	20.2	26.7
<b>Congenital dislocated hips</b>	Q650-Q652	11	*	5	5	*	<b>28</b>
		2.0	*	0.8	0.7	*	0.9
<b>Congenital Diaphragmatic Hernia</b>	Q790	20	20	27	25	24	<b>116</b>
		3.7	3.1	4.1	3.7	3.4	3.6
<b>Gastroschisis</b>	Q793	29	24	38	32	43	<b>166</b>
		5.3	3.7	5.7	4.8	6.1	5.1
<b>Exomphalos</b>	Q792	26	21	24	24	30	<b>125</b>
		4.8	3.3	3.6	3.6	4.3	3.9
<b>RESPIRATORY SYSTEM</b>	Q300-Q349	25	25	27	28	30	<b>135</b>
		4.6	3.9	4.1	4.2	4.3	4.2

	ICD-10	2002	2003	2004	2005	2006	TOTAL	
<b>CHROMOSOMAL ANOMALIES</b>	Q900-Q999	218	248	267	285	248	<b>1266</b>	
		39.9	38.6	40.2	42.3	35.4	39.2	
<b>Trisomy 21*</b>	Q900-Q909	99	130	150	155	131	<b>665</b>	
		18.1	20.2	22.6	23.0	18.7	20.6	
<b>Trisomy 18*</b>	Q910-Q913	29	39	30	34	37	<b>169</b>	
		5.3	6.1	4.5	5.1	5.3	5.2	
<b>Trisomy 13*</b>	Q914-Q917	16	15	8	13	19	<b>71</b>	
		2.9	2.3	1.2	1.9	2.7	2.2	
<b>Turner's Syndrome*</b>	Q960-Q969	21	12	22	22	17	<b>94</b>	
		3.8	1.9	3.3	3.3	2.4	2.9	
<b>All other chromosomes (excluding * above)</b>	Q920-Q959	53	52	59	62	44	<b>270</b>	
	&Q970-Q999	9.7	8.1	8.9	9.2	6.3	8.4	
<b>SYNDROMES AFFECTING MULTIPLE SYSTEMS</b>	Q870-Q879	34	20	22	21	27	<b>124</b>	
		6.2	3.1	3.3	3.1	3.8	3.8	
<b>ENDOCRINE &amp; METABOLIC DISORDERS</b>	D66, D821, E230-E699,	9	17	24	26	19	<b>95</b>	
	E701-E799, E888, E889	1.6	2.6	3.6	3.9	2.7	2.9	
<b>OTHER ANOMALIES</b>	<b>Hypothyroidism</b>	E031-E039	34	20	23	31	22	<b>130</b>
		6.2	3.1	3.5	4.6	3.1	4.0	
	<b>Cystic Fibrosis</b>	E840-E849	21	22	18	20	25	<b>106</b>
		3.8	3.4	2.7	3.0	3.6	3.3	
	<b>Phenylketonuria</b>	E700	*	*	*	*	*	<b>21</b>
		*	*	*	*	*	0.7	
	<b>Other anomalies</b>	Q851-Q859; Q890-Q899;	25	16	16	13	23	<b>93</b>
		D550; D573	4.6	2.5	2.4	1.9	3.3	2.9
<b>SKIN &amp; INTEGUMENT</b>	Q800 - Q849	9	9	8	15	19	<b>60</b>	
		1.6	1.4	1.2	2.2	2.7	1.9	

\* Numbers suppressed: fewer than 5 per cell

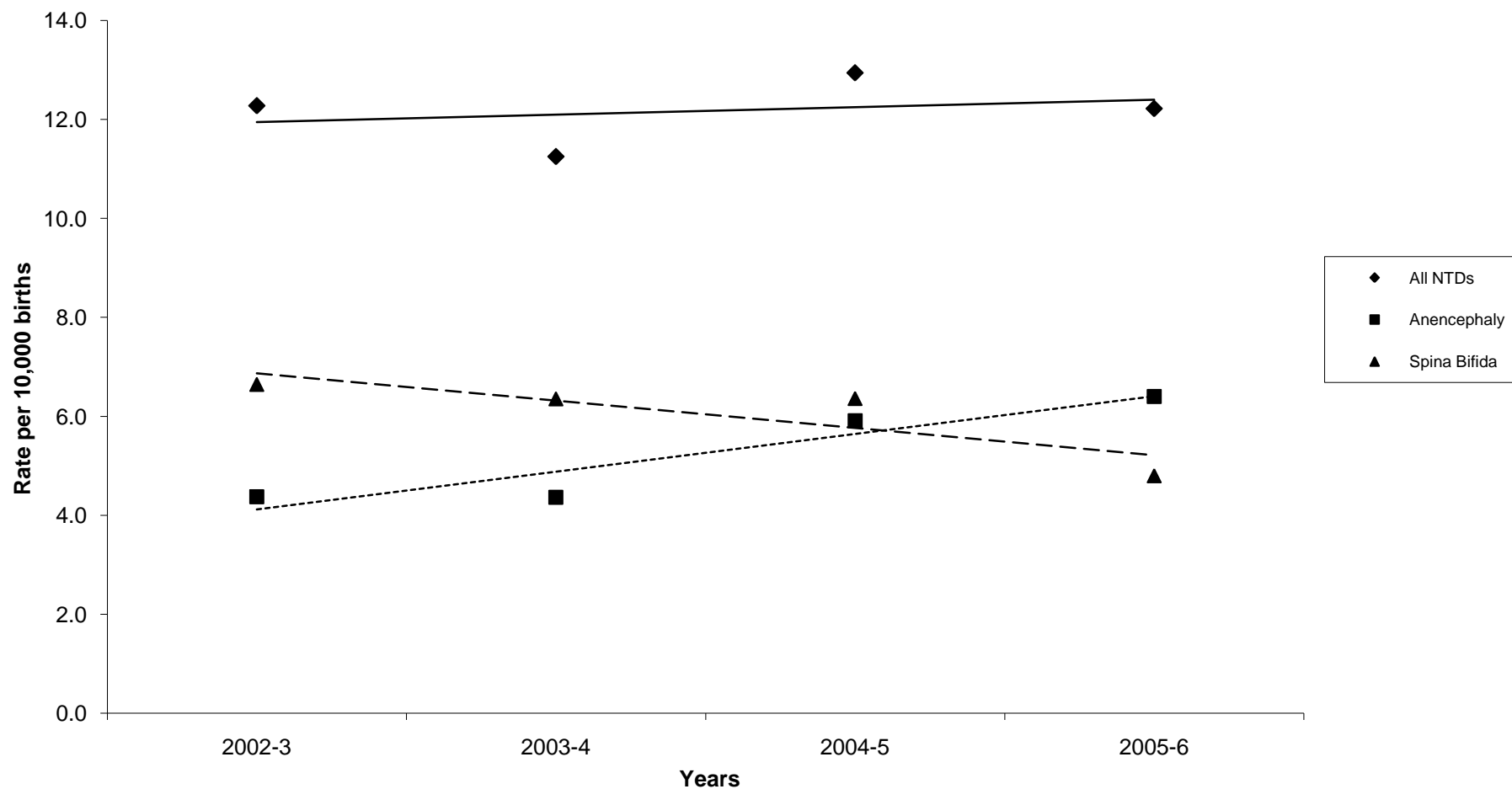


**Table 6:** Birth status of cases reported to EMSYCAR with one (or more) confirmed congenital anomaly, by year of delivery 2002 – 2006.

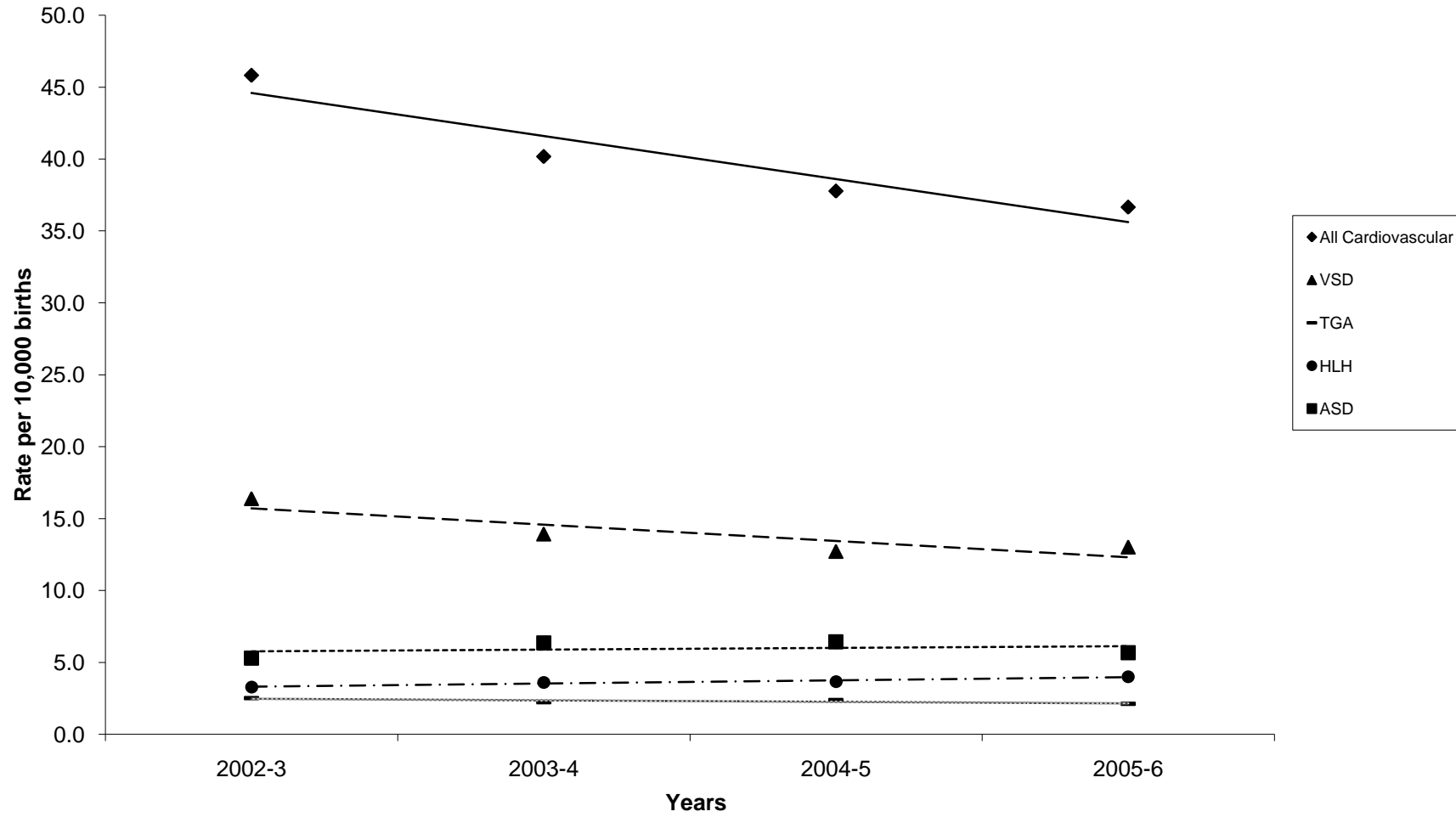
	Cases with confirmed/probable anomalies	TOP		Fetal Loss <=23+6 gest weeks		Stillbirth >=24+0 gest weeks		Liveborn		Live but died	
	n	n	%	n	%	n	%	n	%	n	%
<b>2002</b>	1735	234	13.5	43	2.5	55	3.2	1306	75.3	97	5.6
<b>2003</b>	1620	292	18.0	35	2.2	44	2.7	1181	72.9	68	4.2
<b>2004</b>	1590	282	17.7	33	2.1	35	2.2	1181	74.3	59	3.7
<b>2005</b>	1661	326	19.6	41	2.5	31	1.9	1192	71.8	71	4.3
<b>2006</b>	1713	321	18.7	32	1.9	45	2.6	1241	72.4	74	4.3
<b>Total</b>	<b>8319</b>	<b>1455</b>	<b>17.5</b>	<b>184</b>	<b>2.2</b>	<b>210</b>	<b>2.5</b>	<b>6101</b>	<b>73.3</b>	<b>369</b>	<b>4.4</b>

**Table 7:** Trends in selected congenital anomalies 2002 – 2006

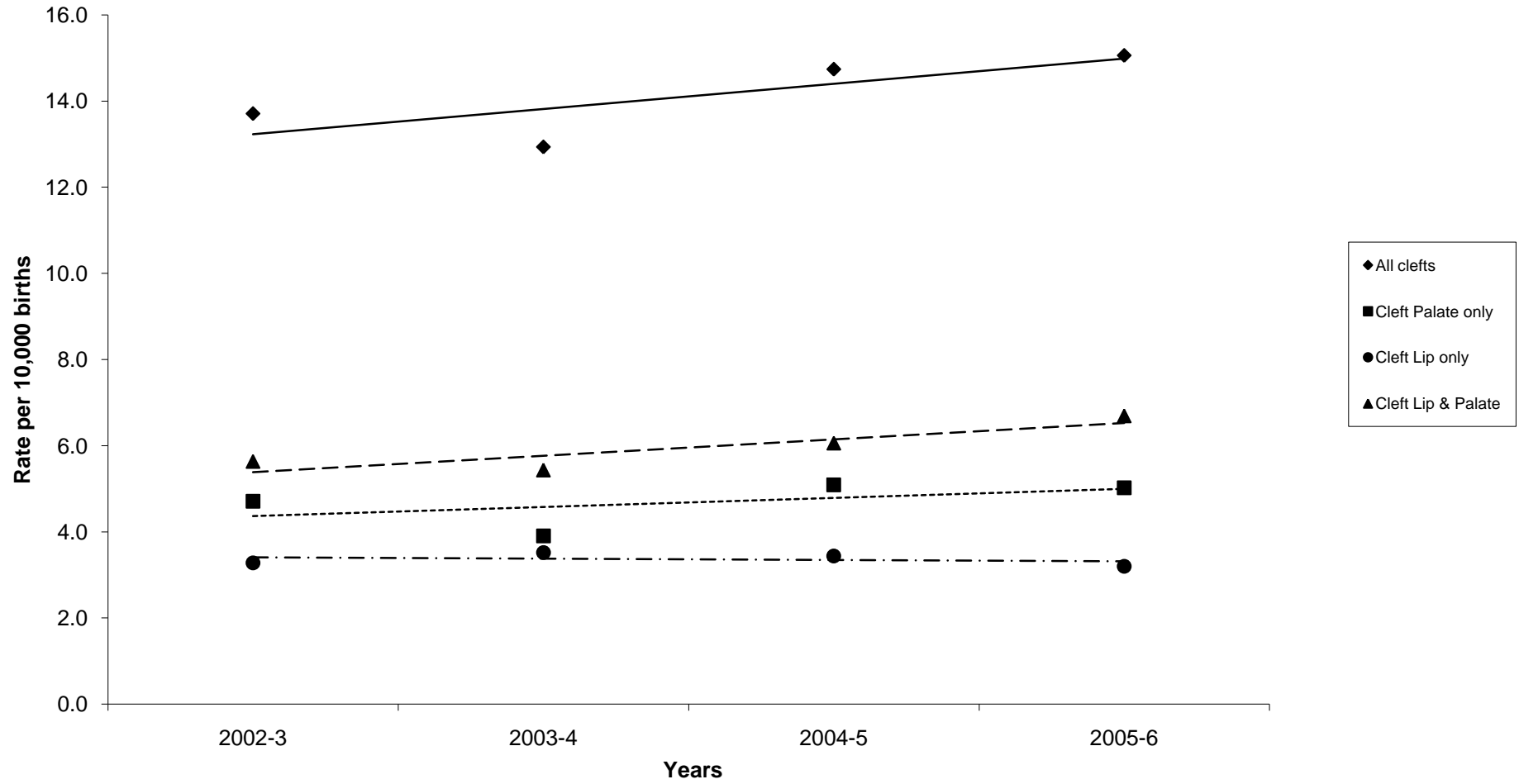
### Neural Tube Defects



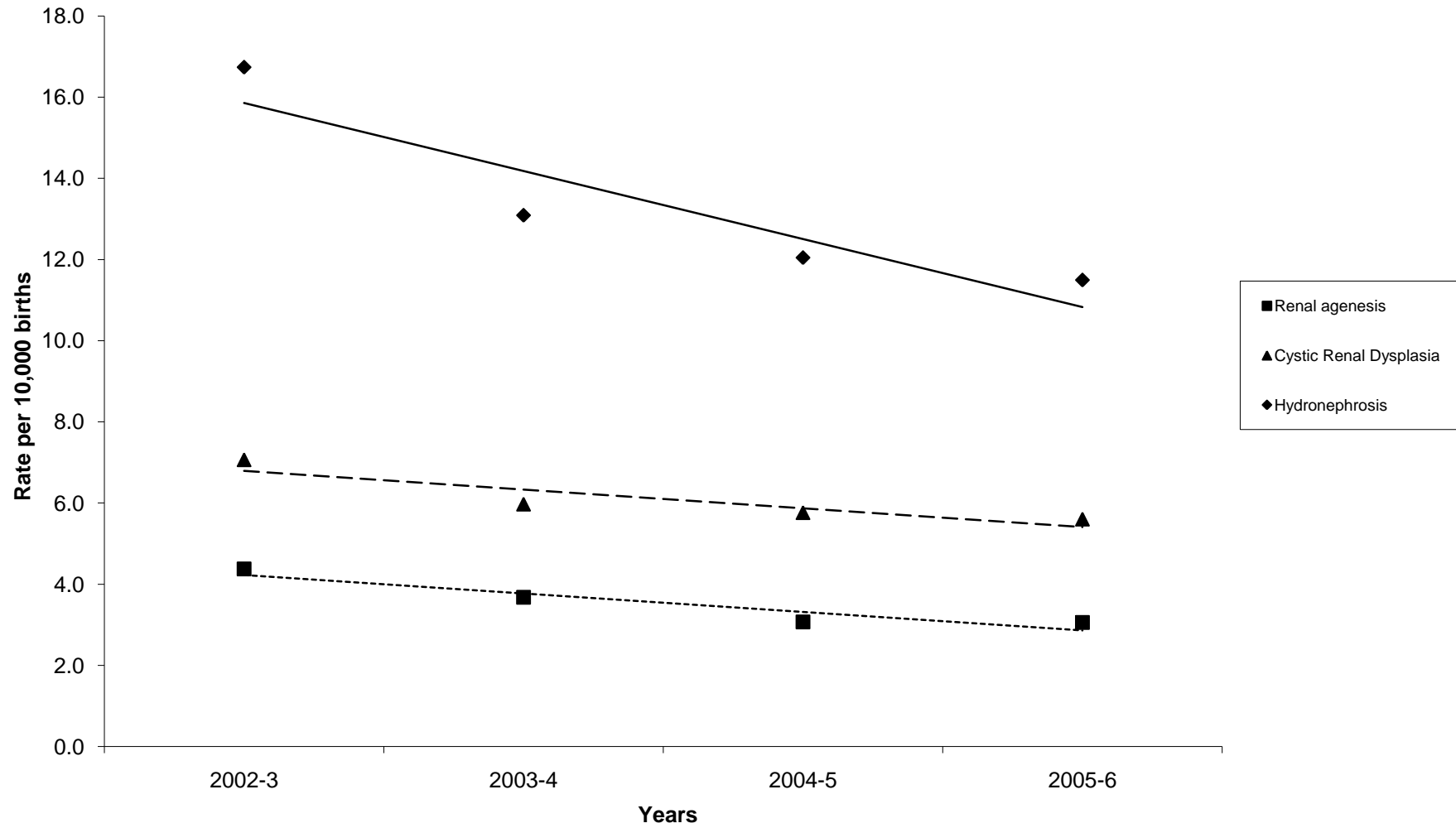
# Selected Cardiovascular Anomalies



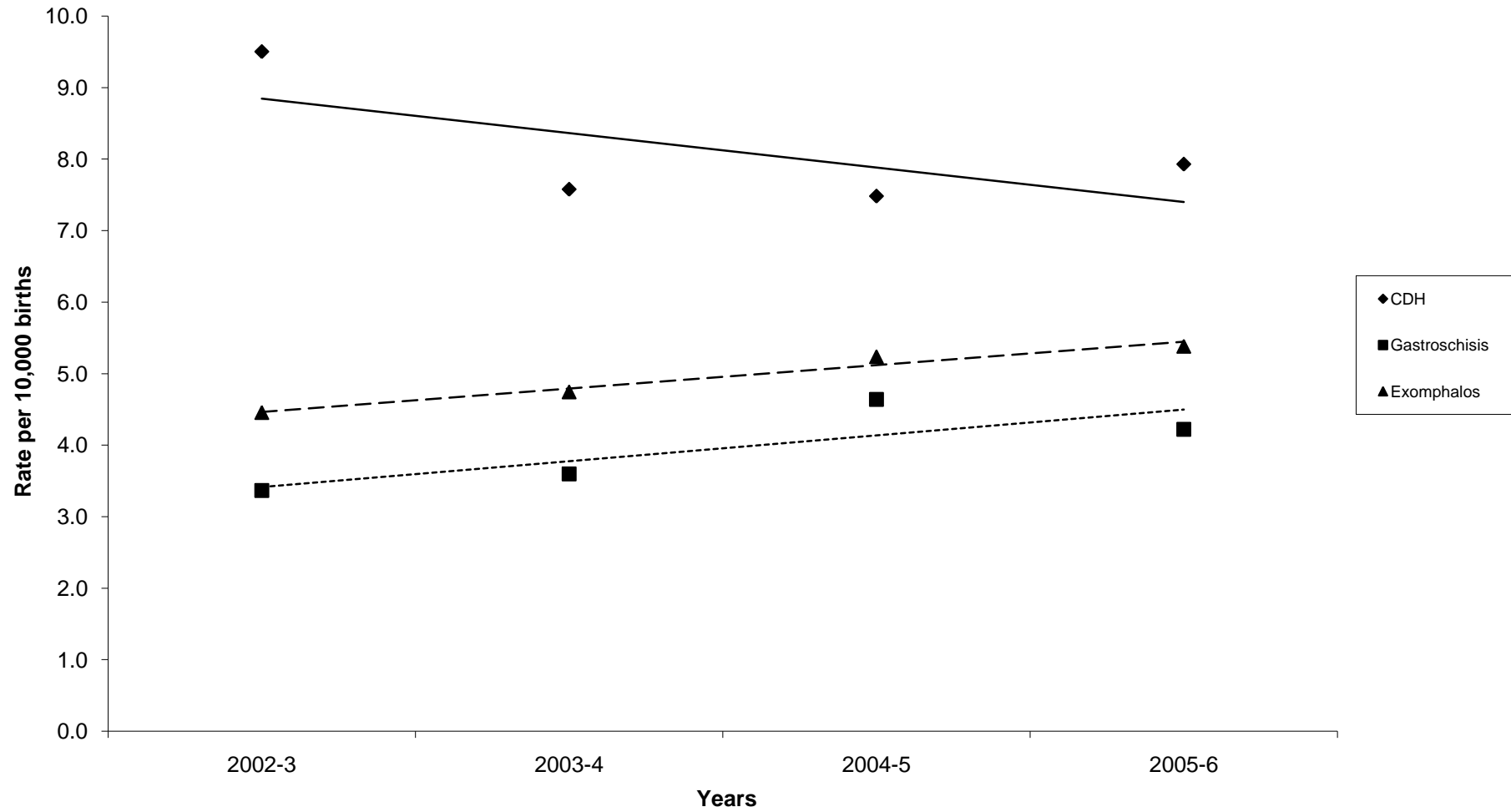
# All clefts



## Selected Urogenital Anomalies



# Selected Musculoskeletal Anomalies



# Selected Chromosomal Anomalies

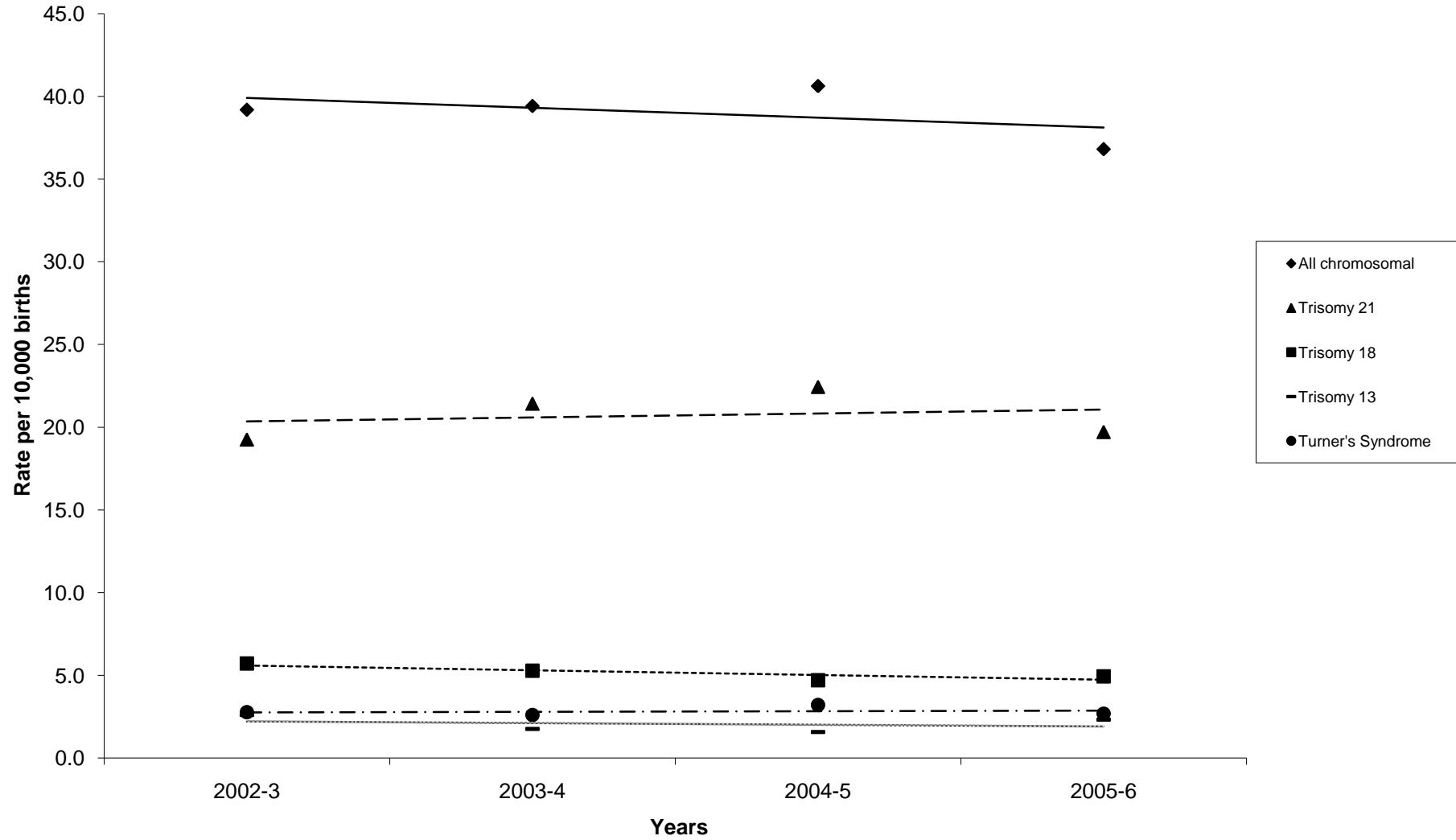


Table 8: 2002: Rates of selected anomaly groups by PCT

2002	Barnsley	Doncaster	Sheffield	Rotherham	NE Lincs	Leicester City	Leicester County	Northants County	North Derbys	Rushcliffe
Central Nervous System	34.0	35.1	41.4	36.3	17.7	36.2	27.3	N/A	14.7	38.0
Eye, ear	4.3	3.2	5.4	7.3	17.7	16.9	16.7	N/A	5.9	0.0
Cardiovascular	42.6	16.0	152.9	32.7	23.6	48.3	39.4	N/A	53.0	9.5
Urogenital	63.8	47.9	91.7	58.1	117.8	125.5	112.2	N/A	32.4	28.5
Gastro-intestinal	25.5	19.2	28.8	21.8	17.7	26.5	31.8	N/A	35.3	19.0
Musculo-skeletal	80.9	127.8	95.3	90.8	194.3	209.9	174.4	N/A	61.8	132.8
Respiratory	8.5	3.2	7.2	3.6	11.8	7.2	6.1	N/A	0.0	0.0
Chromosomal	25.5	19.2	52.2	40.0	17.7	38.6	48.5	N/A	32.4	19.0
Syndromes	4.3	0.0	14.4	0.0	5.9	4.8	4.5	N/A	5.9	19.0



Table 9: 2003: Rates of selected anomaly groups by PCT

2003	Barnsley	Doncaster	Sheffield	Rotherham	NE Lincs	Leicester City	Leicester County	Northants County	North Derbys	Rushcliffe
Central Nervous System	28.9	33.2	48.9	34.6	22.5	18.1	21.7	17.8	16.7	27.7
Eye, ear	16.5	0.0	6.7	0.0	5.6	11.3	10.1	1.4	2.8	9.2
Cardiovascular	57.7	24.1	138.2	27.7	50.7	31.7	27.5	16.4	19.4	18.5
Urogenital	53.6	84.4	72.5	20.7	56.3	63.5	73.8	53.3	44.4	46.2
Gastro-intestinal	45.4	42.2	21.9	48.4	56.3	22.7	23.2	15.0	58.3	18.5
Musculo-skeletal	94.8	99.5	87.7	20.7	90.1	106.5	86.8	51.9	88.9	73.9
Respiratory	8.2	3.0	8.4	0.0	0.0	15.9	4.3	1.4	2.8	9.2
Chromosomal	37.1	21.1	70.8	41.5	28.2	36.3	49.2	19.1	38.9	73.9
Syndromes	4.1	0.0	11.8	6.9	0.0	2.3	1.4	2.7	2.8	0.0

Table 10: 2004: Rates of selected anomaly groups by PCT

2004	Barnsley	Doncaster	Sheffield	Rotherham	NE Lincs	Leicester City	Leicester County	Northants County	North Derbys	Rushcliffe
Central Nervous System	23.6	37.7	38.8	13.6	20.9	38.5	8.6	37.7	23.9	17.7
Eye, ear	3.9	0.0	16.2	17.0	5.2	15.9	2.9	4.0	2.7	8.8
Cardiovascular	35.4	17.4	155.3	51.0	41.8	38.5	27.2	35.0	26.6	8.8
Urogenital	39.3	61.0	63.1	37.4	36.6	117.9	50.2	36.3	58.5	70.8
Gastro-intestinal	55.1	29.0	35.6	40.8	47.0	34.0	31.6	25.6	34.5	8.8
Musculo-skeletal	43.3	58.1	71.2	44.2	83.6	97.5	94.7	60.6	63.8	70.8
Respiratory	15.7	2.9	0.0	0.0	0.0	4.5	4.3	1.3	2.7	0.0
Chromosomal	23.6	17.4	58.2	37.4	20.9	49.9	61.7	32.3	37.2	17.7
Syndromes	3.9	0.0	6.5	6.8	5.2	2.3	1.4	1.3	10.6	0.0

Table 11: 2005: Rates of selected anomaly groups by PCT

2005	Barnsley	Doncaster	Sheffield	Rotherham	NE Lincs	Leicester City	Leicester County	Northants County	North Derbys	Rushcliffe
Central Nervous System	47.7	19.6	29.3	34.1	25.6	28.1	19.9	20.6	29.1	9.2
Eye, ear	4.0	0.0	6.5	3.4	5.1	6.5	8.5	1.3	2.6	0.0
Cardiovascular	23.8	14.0	115.5	37.5	15.4	47.5	38.4	19.3	26.4	27.5
Urogenital	35.7	36.4	89.5	27.2	66.6	82.1	95.2	28.3	47.6	36.7
Gastro-intestinal	23.8	33.6	22.8	27.2	35.8	38.9	32.7	16.7	29.1	0.0
Musculo-skeletal	75.5	78.4	78.1	34.1	97.3	103.7	79.5	50.1	42.3	73.5
Respiratory	4.0	5.6	3.3	10.2	0.0	10.8	4.3	2.6	5.3	9.2
Chromosomal	31.8	16.8	58.6	30.7	30.7	67.0	45.5	25.7	55.5	91.8
Syndromes	0.0	2.8	1.6	3.4	0.0	6.5	5.7	1.3	0.0	9.2

Table 12: 2006: Rates of selected anomaly groups by PCT

2006	Barnsley	Doncaster	Sheffield	Rotherham	NE Lincs	Leicester City	Leicester County	Northants County	North Derbys	Rushcliffe
Central Nervous System	10.9	27.6	29.8	33.2	15.3	29.2	24.0	18.5	15.7	0.0
Eye, ear	7.2	0.0	7.8	0.0	5.1	14.6	11.3	3.5	10.5	0.0
Cardiovascular	29.0	27.6	158.6	26.6	20.4	25.1	28.2	26.6	26.2	17.4
Urogenital	39.8	30.3	73.8	13.3	76.4	121.1	83.2	39.4	21.0	17.4
Gastro-intestinal	25.4	71.7	36.1	29.9	56.0	23.0	29.6	16.2	21.0	17.4
Musculo-skeletal	50.7	88.2	76.9	29.9	86.6	154.5	87.4	45.1	47.2	95.7
Respiratory	0.0	5.5	7.8	6.6	0.0	6.3	5.6	3.5	0.0	8.7
Chromosomal	25.4	24.8	44.0	26.6	40.8	35.5	64.8	24.3	26.2	69.6
Syndromes	0.0	0.0	9.4	6.6	5.1	4.2	4.2	3.5	5.2	0.0