East Midlands & South Yorkshire
Congenital Anomalies Register
TIMMS
One of The Infant Mortality & Morbidity Studies

Congenital Anomalies in Births

2004 to 2008

Contents

Background information

- **Time period covered:** These tables summarise congenital anomalies reported in pregnancies which ended between January 1st 2004 and December 31st 2008 inclusive in the East Midlands and South Yorkshire region.

- **EMSYCAR Geography:** 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.

    - The data presented here follows the boundaries of the fourteen 'new' PCTs and one Care Trust Plus which postdate October 2006. Data from 2004-2005 has been allocated to the relevant 'new' PCT.

- **Regional Coverage:**. Between 2006-2009 a number of PCTs withdrew their funding for the Register.

    - However, the Register attempted to continue data collection throughout its whole area, in order not to compromise data quality for those who remained. Available data has been backdated in this present report to cover the 'missing' years for those PCTs which have subsequently rejoined. All PCTs have now agreed to provide financial support to EMSYCAR from 2009 onwards.

- **Surveillance:** No Congenital Anomaly data was sent to the National Congenital Anomaly System from PCTs which withdrew from the Register, and no surveillance of these areas was undertaken, either at regional or national level, between 2006 and 2009. Until the end of 2008, NCAS divided 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.)

    - A consultation document is currently out for comment from NCAS who have now discontinued all routine anomaly surveillance from the beginning of 2009 onwards. Consequently, EMSYCAR is the only resource available to perform this essential public health function for its resident population. Computer software provided through the European Surveillance Network (EUROCAT) will be used initially for those PCTs contributing to EMSYCAR. The British Isles Network of Congenital Anomaly Registers (BINOCAR) is working to provide a timely standardised surveillance method for all areas covered by a Congenital Anomalies Register.

- **'Minor' Anomalies** 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 have used for all births from January 1st 2007. Some variation in reported anomaly rates in certain subgroups (particularly Musculoskeletal and Endocrine & Metabolic Disorders) is therefore to be expected from 2007 onwards.

- **Table Format:** Anomaly rates are presented in the tables as a rate per 10,000 births. Individual PCTs requiring further information should 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 in any given cell 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.

    - Since 2006, the Office for National Statistics has published figures relating to the number of maternities resulting in multiple births, rather than the number of multiple births per se. EMSYCAR rates in Table 2 therefore cannot be calculated for these years.

- **Further Information:** A more detailed background to EMSYCAR and its data collection methods may be found in previous Reports available from EMSYCAR, Department of Health Sciences, University of Leicester, 22-28 Princess Road West, Leicester, LE1 6TP, or by emailing **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.

- 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.

- As a result of the introduction of the electronic birth notification form in October 2002, the total number of cases reviewed annually by EMSYCAR (including those antenatally reporting false positives) fell by 13% between 2002 and 2004. However, numbers have risen steadily since then and have regained their pre-2002 level of around 2500 cases per annum.

- Despite the 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 1575 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, 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**).

- An exception lies within the cardiovascular group of anomalies, where efforts to secure data from the **Regional Paediatric Cardiac Centre at Glenfield Hospital, Leicester** eventually resulted in success during 2008, and surgical and cardiology notifications are being backdated for the cohort of children born in the EMSYCAR region since 1997.

- This has resulted in **an overall rise of approximately 20% in the notified rates of cardiac anomalies** in this present Report. This is partly due to previously unknown cases being notified and also much improved diagnostic accuracy for cases already known to the register.

Ongoing EMSYCAR Activities

- **Audit and research activities** have continued using Register data. EMSYCAR has joined several European-wide research initiatives, including a review of the **Termination of Pregnancy for Fetal Anomaly,** and is also contributing to a number of UK projects. One of these is attempting to test the feasibility of collecting follow-up data from parents of two-year-old children born with diaphragmatic hernia. Another is investigating the antenatal diagnosis of **Schizencephaly.** EMSYCAR has also contributed to a **BINOCAR audit of Downs Syndrome** cases between 2003 and 2006; we lead an audit of exomphalos cases over the past 10 years and continue to participate with an investigation into the **rising incidence of gastroschisis.**

- Specific EMSYCAR research projects are investigating the appropriateness of treatment regimes for cases of **Sexual Differentiation** reported to the Register over a ten year period, and outcomes from antenatally detected cases of **AVSD.**

- Recent EMSYCAR data has been used by the **National Fetal Anomaly Screening Programme** in a review of antenatal diagnosis rates for selected congenital anomalies. This data was also presented to the RCOG TOPFA Working Party. Data has been utilised by the Paediatric Stoma Nurses Group UK, to update their supporting literature. Data from EMSYCAR, and other BINOCAR Registers, has also been utilised by the National Perinatal Epidemiology Unit in Oxford to validate data obtained from BAPS-CASS (the British Association of Paediatric Surgeons Congenital Anomalies Surveillance System). This has attempted to evaluate the success of the BAPS-CASS data collection methods.

- Other requests for data from the Register from local clinicians continue to be dealt with as appropriate. Regular data matching and cleaning is undertaken in conjunction with the North Trent Clinical Genetics Service, the National Down Syndrome Cytogenetic Register, together with local ultrasound , antenatal and fetal medicine units, mainly with a view to establishing antenatal detection rates. Training sessions have continued to be provided at the request of local clinicians.

- Professor Elizabeth Draper continues in her role as Chair of the British Isles Network of Congenital Anomaly Registers (BINOCAR). Dr Judith Budd continues as a member of the EUROCAT Coding Issues Group and BINOCAR Coding Committee. Both attended the EUROCAT Annual Register Leaders' Meeting in Bilbao in June 2009.

- In March 2009, Dr Judith Budd represented BINOCAR and EMSYCAR as a witness in the High Court action brought by parents of children with congenital anomalies born between 1986 and 1999 having links to the town of Corby in Northamptonshire. This issue has been a major focus for the Register since Northamptonshire joined EMSYCAR in 2002, and, since the judgement is now the subject of an appeal, will remain so.

Anomaly Clusters and Trends

- For the great majority of anomalies, trends have remained stable or show a slight decrease between 2003 and 2007, reflecting the time lag necessary for the more recently diagnosed anomalies to reach the Register. **A few anomalies, however, appear to be increasing, such as anencephaly (although spina bifida continues to decrease), clefts, gastroschisis and exomphalos**. These trends appear to be consistent with those appearing in other BINOCAR register areas, though they will be kept under review.

- There is also **some local concern over cases of skeletal dysplasia** reported from PCTs which unfortunately were not funding surveillance of their population by EMSYCAR during the relevant years. We have continued to monitor the situation and will be investigating this issue further.

- Routine surveillance of EMSYCAR data by EUROCAT highlighted **5 potential clusters in time** during the years 2003-2007.

- These were all investigated by EMSYCAR, with the following outcomes:

    - **32 cases of Hydrocephalus in the period September 2006 – January 2007**. One duplicate case had already been removed from the EMSYCAR database but not updated with EUROCAT. The suspected cluster therefore resolved.

    - **8 cases of Common Arterial Truncus in the period August 2005 – January 2006**. As above.

    - **8 cases of Transposition of the Great Arteries between January 2006 and February 2006.** Correct gestational ages of deliveries known to EMSYCAR had not been backdated with EUROCAT, which had used estimations. Once the appropriate amendments had been made, the suspected cluster resolved.

    - **14 cases of VSD in the period December 2005 – January 2007**. As with TGA.

    - **8 cases of cleft palate in May 2005**
        - All cases were verified
        - 5 occurred in close proximity around Town A. 2 others were in very close proximity in Town B (50 miles away). 1 further case occurred elsewhere in the EMSYCAR region.
        - Information provided by the local data notifiers indicated that the 2 cases in Town B were both known drug and alcohol abusers.
        - There was no such history for the other cases.
        - Local contacts believed that no local concerns were raised by the media, general public or health professionals.
        - There was no evidence of other or similar clusters elsewhere in the EMSYCAR region.

Regrettably, it was not possible to pursue any further investigations over this potential cluster since 7 of the 8 cases occurred in PCTs which had chosen to withdraw from EMSYCAR.

- EMSYCAR also investigated four anomalies displaying increased trends over the 2003 – 2007 period, which were identified by EUROCAT surveillance software. These were **Hypoplastic Left Heart Syndrome, Congenital Cystic Adenomatoid Malformation, Renal Dysplasia and Gastroschisis.**

    - **In each of the first three anomalies, the increased trend was artefactual**, as a result of cases occurring in earlier years not being notified to EMSYCAR in time for inclusion in the appropriate year's dataset to EUROCAT.

    - The **increasing trend demonstrated by gastroschisis** is real and already recognised by other BINOCAR Registries. A number of projects are in progress to investigate possible explanations.

Table 1: Number and proportion of births with one or more confirmed congenital anomaly, by year of birth 2004 – 2008

Year	Total Births	Births with one or more confirmed, probable or suspected anomaly		Births with one or more confirmed or probable anomaly		Births with multiple confirmed or probable anomalies	
		n	% (± 95% CI)	n	% (± 95% CI)	n	% (± 95% CI)
2004	**66,346**	1,629	2.5 (2.3 – 2.6)	1,520	2.3 (2.2 – 2.4)	387	0.6 (0.5 – 0.6)
2005	**67,318**	1,730	2.6 (2.5 – 2.7)	1,619	2.4 (2.3 – 2.5)	377	0.6 (0.5 – 0.6)
2006	**70,153**	1,821	2.6 (2.5 – 2.7)	1,711	2.4 (2.3 – 2.6)	409	0.6 (0.5 – 0.6)
2007	**72,549**	1,730	2.4 (2.3 – 2.5)	1,626	2.2 (2.1 – 2.4)	394	0.5 (0.5 – 0.6)
2008	**74,469**	1,511	2.0 (1.9 – 2.1)	1,408	1.9 (1.8 – 2.0)	371	0.5 (0.4 – 0.6)
TOTAL	**350,835**	8,421	2.4 (2.3 – 2.5)	7,884	2.3 (2.2 – 2.3)	1,938	0.6 (0.5 – 0.6)

Table 2: Number and proportion of births with one (or more) confirmed congenital anomaly, by plurality and year of birth 2004 – 2008

Year	Total Births	Singletons	Multiples	Singleton births - one or more anomaly		Multiple births - one or more anomaly	
				n	%	n	%
2004	**66,346**	64,446	1,900	1424	2.2	33	1.7
2005	**67,318**	65,401	1,917	1492	2.3	57	3.0
2006	**70,153**	NK	NK	1634	NK	53	NK
2007	**72,549**	NK	NK	1545	NK	69	NK
2008	**74,469**	NK	NK	1305	NK	59	NK
TOTAL	**350,835**	-	-	7400	-	271	-

***** Proportion of cases of unknown plurality under 0.1% per annum

Table 3: Number and proportion of births with one (or more) confirmed congenital anomaly, by infant sex and year of birth 2004 – 2008

Year	Total Births	Males	Females	Males with one or more anomaly		Females with one or more anomaly	
				n	%	n	%
2004	**66,346**	34,163	32,183	833	2.4	583	1.8
2005	**67,318**	34,509	32,809	878	2.5	620	1.9
2006	**70,153**	35,848	34,305	945	2.6	665	1.9
2007	**72,549**	37,273	35,276	907	2.4	574	1.6
2008	**74,469**	38,211	36,258	740	1.9	542	1.5
TOTAL	**350,835**	180,004	170,831	4,303	2.4	2,984	1.7

***** Proportion of cases of unknown sex varies between 0.1% and 0.2% per annum

Table 4: Birth status of cases reported to EMSYCAR with one (or more) confirmed congenital anomaly, by year of delivery 2004 – 2008

	Cases with confirmed/probable anomalies	TOP		Fetal Loss <=23+6 gest wks		Stillbirth >=24+0 gest wks		Live		Died	
		n	%	n	%	n	%	n	%	n	%
2004	1,520	283	18.6	30	2.0	32	2.1	1,111	73.1	64	4.2
2005	1,619	325	20.1	40	2.5	31	1.9	1,148	70.9	75	4.6
2006	1,711	325	19.0	32	1.8	45	2.6	1,219	71.2	90	5.3
2007	1,626	293	18.0	28	1.7	26	1.6	1,196	73.6	83	5.1
2008	1,408	271	19.3	38	2.7	26	2.1	1,028	73.1	44	3.1
TOTAL	**7,884**	**1497**	**19.0**	**168**	2.1	**160**	2.0	**5,702**	72.3	**356**	4.5

Table 5: Number and rates of selected congenital anomalies and congenital anomaly groups per 10,000 total births, by year of birth* * or end of pregnancy in cases of spontaneous loss or termination

	ICD-10	2004	2005	2006	2007	2008	TOTAL Rate (± 95% CI)
CENTRAL NERVOUS SYSTEM	Q000-Q079	166	181	155	172	133	**807**
		25.0	*26.9*	*22.1*	*23.7*	*17.9*	*23.0 (21.4; 24.6)*
All Neural Tube Defects	Q000-Q019	81	93	85	80	66	**405**
	& Q050-Q059	*12.2*	*13.8*	*12.1*	*11.0*	*8.9*	*11.5 (10.4; 12.7)*
Anencephaly	Q000-Q002	28	50	40	32	24	**174**
		4.2	*7.4*	*507*	*4.4*	*302*	*5.0 (4.3; 5.8)*
Encephalocele	Q010-Q019	8	10	11	12	10	**51**
		1.2	*1.5*	*1.6*	*1.7*	*1.3*	*1.5 (1.1; 1.9)*
Spina Bifida	Q050-Q059	49	35	35	40	36	**195**
		7.4	*5.2*	*5.0*	*5.5*	*4.8*	*5.6 (4.8; 6.4)*
Isolated Hydrocephalus	Q030-Q039	25	30	33	58	35	**181**
		3.8	*4.5*	*4.7*	*8.0*	*4.7*	*5.2 (4.4; 6.0)*
Microcephaly	Q020	14	9	$	*7*	*$*	***38***
		2.1	*1.3*	*$*	*1.0*	*$*	*1.1 (0.8; 1.5)*
Eye anomalies	Q100-Q159	21	15	10	11	12	**69**
		3.2	*2.2*	*1.4*	*1.5*	*1.6*	*2.0 (1.5; 2.5)*
Ear anomalies	Q160-Q179	$	7	$	$	$	**17**
		$	*1.0*	*$*	*$*	*$*	*0.5 (0.3; 0.8)*
CARDIOVASCULAR SYSTEM	Q200-Q269	363	335	402	359	293	**1752**
		54.7	*49.8*	*57.3*	*49.5*	*39.3*	*49.9 (47.6; 52.3)*
Ventricular septal defect	Q210	114	106	133	121	110	**584**
		17.2	*15.7*	*19.0*	*16.7*	*14.8*	*16.6 (15.3; 18.1)*

	ICD-10	2004	2005	2006	2007	2008	TOTAL Rate (± 95% CI)
CARDIOVASCULAR SYSTEM (cont'd)							
Atrial septal defect	Q211	69	49	49	29	21	**217**
		10.4	*7.3*	*7.0*	*4.0*	*2.8*	*6.2* ***(5.4; 7.1)***
Atrio-ventricular septal defect	Q212	33	16	20	29	17	**115**
		5.0	*2.4*	*2.9*	*4.0*	*2.3*	*3.3 (2.7; 3.9)*
Fallot's Tetralogy	Q213	26	24	18	23	28	**119**
		3.9	*3.6*	*2.6*	*3.2*	*3.8*	*3.4 (2.8; 4.1)*
Transposition of the great vessels	Q203	22	25	21	19	21	**108**
		3.3	*3.7*	*3.0*	*2.6*	*2.8*	*3.1 (2.5; 3.7)*
Hypoplastic left heart syndrome	Q234	24	26	36	26	13	**125**
		3.6	*3.9*	*5.1*	*3.6*	*1.7*	*3.6 (3.0; 4.2)*
Coarctation of the aorta	Q251	21	20	26	19	18	**104**
		3.2	*3.0*	*3.7*	*2.6*	*2.4*	*3.0 (2.4; 3.6)*
Patent Ductus Arteriosus	Q250	29	20	50	56	26	**181**
		4.4	*3.0*	*7.1*	*7.7*	*3.5*	*5.2 (4.4; 6.0)*
UROGENITAL SYSTEM	Q500-Q649	286	333	343	363	282	**1607**
		43.1	*49.5*	*48.9*	*50.0*	*37.9*	*45.8 (43.6; 48.1)*
Renal agenesis and hypoplasia	Q600-Q609	21	19	29	41	26	**136**
		3.2	*2.8*	*4.1*	*5.7*	*3.5*	*3.9 (3.3; 4.6)*
Bladder/urethral anomalies	Q640-Q649	32	29	25	25	35	**146**
		4.8	*4.3*	*3.6*	*3.4*	*4.7*	*4.2 (3.5; 4.9)*
Cystic kidneys	Q610-Q619	36	41	38	45	58	**218**
		5.4	*6.1*	*5.4*	*6.2*	*7.8*	*6.2 (5.4; 7.1)*
Hypospadias and congenital chordee	Q540-Q549	124	117	126	132	94	**593**
		18.7	*17.4*	*18.0*	*18.2*	*12.6*	*16.9 (15.6; 18.3)*
Hydronephrosis	Q620	67	94	89	107	60	**417**
		10.1	*14.0*	*12.7*	*14.7*	*8.1*	*11.9 (10.8; 13.1)*

	ICD-10	2004	2005	2006	2007	2008	TOTAL Rate (± 95% CI)
GASTRO-INTESTINAL SYSTEM	Q350-Q459	186	173	196	173	176	**904**
		28.0	*25.7*	*27.9*	*23.8*	*23.6*	*25.8 (24.1; 27.5)*
All clefts	Q350-Q379	94	103	104	97	111	**509**
		14.2	*15.3*	*14.8*	*13.4*	*14.9*	*14.5 (13.3; 15.8)*
Cleft palate only	Q35	31	37	31	29	38	**166**
		4.7	*5.5*	*4.4*	*4.0*	*5.1*	*4.7 (4.0; 5.5)*
Cleft lip only	Q36	24	20	24	24	25	**117**
		3.6	*3.0*	*3.4*	*3.3*	*3.4*	*3.3 (2.8; 4.0)*
Cleft lip & palate	Q37	39	46	49	44	49	**227**
		5.9	*6.8*	*7.0*	*6.1*	*6.6*	*6.5 (5.7; 7.4)*
Atresia/stenosis small intestine	Q410-Q419	17	10	22	16	12	**77**
		2.6	*1.5*	*3.1*	*2.2*	*1.6*	*2.2 (1.7; 2.7)*
Atresia/stenosis large intestine	Q420-Q429	23	17	26	18	23	**107**
		3.5	*2.5*	*3.7*	*2.5*	*3.1*	*3.0 (2.5; 3.7)*
Other intestine	Q430-Q439	23	23	26	14	20	**106**
		3.5	*3.4*	*3.7*	*1.9*	*2.7*	*3.0 (2.5; 3.7)*
Tracheo-Oesophageal fistula	Q390-Q393	24	17	22	18	13	**94**
		3.6	*2.5*	*3.1*	*2.5*	*1.7*	*2.7 (2.2; 3.3)*
MUSCULOSKELETAL SYSTEM	Q650-Q799, Q180-Q189,	341	368	444	431	405	**1989**
	Q380-Q389	*51.4*	*54.7*	*63.3*	*59.4*	*54.4*	*56.7 (54.2; 59.2)*
Limb reductions	Q710-Q739	51	50	61	49	43	**254**
		7.7	*7.4*	*8.7*	*6.8*	*5.8*	*7.2 (6.4; 8.2)*
Polydactyly	Q690-Q699	62	77	74	68	69	**350**
		9.3	*11.4*	*10.5*	*9.4*	*9.3*	*10.0 (9.0; 11.1)*
Syndactyly	Q700-Q709	53	56	48	48	38	**243**
		8.0	*8.3*	*6.8*	*6.6*	*5.1*	***6.9*** *(6.1; 7.9)*
All Talipes (incl.postural)	Q700-Q709	137	136	124	122	118	**637**
		20.6	*20.2*	*17.7*	*16.8*	*15.8*	*18.2 (16.8; 19.6)*

	ICD-10	2004	2005	2006	2007	2008	TOTAL Rate (± 95% CI)
MUSCOLOSKELETAL SYSTEM CONT'D							
Congenital dislocated hips	Q650-Q652	$	$	$	8	$	**27**
		$	*$*	*$*	*1.1*	*$*	*0.8 (0.5; 1.1)*
Congenital Diaphragmatic Hernia	Q790	27	25	24	19	19	**114**
		4.1	*3.7*	*3.4*	*2.6*	*2.6*	*3.2 (2.7; 3.9)*
Gastroschisis	Q793	38	33	43	35	39	**188**
		5.7	*4.9*	*6.1*	*4.8*	*5.2*	*5.4 (4.6; 6.2)*
Exomphalos	Q792	24	25	30	34	32	**145**
		3.6	*3.7*	*4.3*	*4.7*	*4.3*	*4.1 (3.5; 4.0)*
RESPIRATORY SYSTEM	Q300-Q349	26	27	31	35	27	**146**
		3.9	*4.0*	*4.4*	*4.8*	*3.6*	*4.2 (3.5; 4.9)*
CHROMOSOMAL ANOMALIES	Q900-Q999	266	287	253	217	228	**1251**
		40.1	*42.6*	*36.1*	*29.9*	*30.6*	*35.7 (33.7; 37.7)*
Trisomy 21*	Q900-Q909	149	155	131	114	119	**668**
		22.5	*23.0*	*18.7*	*15.7*	*16.0*	*19.0 (17.6; 20.5)*
Trisomy 18*	Q910-Q913	30	34	38	27	39	**168**
		4.5	*5.1*	*5.4*	*3.7*	*5.2*	*4.8 (4.1; 5.6)*
Trisomy 13*	Q914-Q917	8	13	19	19	15	**74**
		1.2	*1.9*	*2.7*	*2.6*	*2.0*	*2.1 (1.7; 2.6)*
Turner's Syndrome*	Q960-Q969	22	22	17	12	25	**98**
		3.3	*3.3*	*2.4*	*1.7*	*3.4*	*2.8 (2.3; 3.4)*
All other chromosomes (excluding * above)	Q920-Q959	59	64	48	46	30	**247**
	&Q970-Q999	*8.9*	*9.5*	*6.8*	*6.3*	*4.0*	*7.0 (6.2; 8.0)*
SYNDROMES AFFECTING MULTIPLE SYSTEMS	Q870-Q879	23	25	29	27	13	**117**
		3.5	*3.7*	*4.1*	*3.7*	*1.7*	*3.3 (2.8; 4.0)*

	ICD-10	2004	2005	2006	2007	2008	TOTAL Rate (± 95% CI)
ENDOCRINE & METABOLIC DISORDERS* **Endocrine Disorders**	E000 – E359	27	40	26	$	$	**103**
		4.1	*5.9*	*3.7*	*$*	*$*	*2.9 (2.4; 3.6)*
Metabolic Disorders	E700 – E900	42	43	40	17	7	**149**
		6.3	*6.4*	*5.7*	*2.3*	*0.9*	*4.2 (3.6; 5.0)*
SKIN & INTEGUMENT	Q800 - Q849	8	15	20	28	39	**110**
		1.2	*2.2*	*2.9*	*3.9*	*5.2*	*3.1 (2.6; 3.8)*
OTHER ANOMALIES	Q851-Q859; Q860-Q869; Q890-Q899; D550; D573; D66, D821.	19	28	32	25	11	**115**
		2.9	*4.2*	*4.6*	*3.4*	*1.5*	*3.3 (2.7; 3.9)*

*** Data no longer routinely received from Neonatal screening**

$ Data withheld for reasons of confidentiality

Table 6: Anomalies by Birth Status 2004 – 2008

	TOP %	Fetal Loss %	Stillbirth %	Livebirth %
All EMSYCAR cases	**19.0**	**2.1**	**2.0**	**76.8**
All Neural Tube Defects	**74.4**	**2.0**	**2.5**	**20.9**
Anencephaly	85.1	2.9	2.3	9.8
Encephalocele	68.6	3.9	5.9	21.6
Spina Bifida	66.3	1.0	2.6	29.6
All Cardiovascular	**12.1**	**1.1**	**2.5**	**84.4**
VSD	8.0	0.3	1.4	90.1
ASD (excl. PFO)	2.5	1.1	0.4	96.1
TGA	6.5	0.0	0.9	92.6
Hypoplastic left Heart	41.6	0.8	4.0	53.6
Tetralogy of Fallot	12.6	1.7	1.7	84.0
AVSD	20.9	0.0	6.1	73.0
Co-arctation	1.0	1.0	1.0	97.1
All Respiratory	**17.8**	**2.1**	**6.8**	**73.3**
CCAM	4.3	0.0	2.1	93.6
All Gastro-intestinal	**10.0**	**2.0**	**2.3**	**86.7**
TOF +/- OA	6.5	0.0	3.2	90.3
Cleft Palate	3.6	0.0	1.2	95.2
Cleft Lip	17.9	0.0	3.4	78.6
Cleft Lip & Palate	14.5	1.3	2.6	81.5

Table 6 cont'd.

	TOP %	Fetal Loss %	Stillbirth %	Livebirth %
All Urogenital	**8.2**	**1.2**	**1.6**	**89.0**
Renal Agenesis	36.8	1.5	5.1	56.6
Cystic Kidneys	18.3	1.4	3.2	77.1
Hydronephrosis	2.2	0.7	0.2	96.9
All Musculoskeletal	**15.2**	**2.5**	**2.3**	**80.0**
Limb Reductions	22.8	3.1	3.1	70.9
Diaphragmatic Hernia	20.2	1.8	6.1	71.9
Gastroschisis	6.4	3.7	1.6	88.3
Exomphalos	47.6	14.5	2.1	35.9
All Syndromes	**21.4**	**3.4**	**6.0**	**69.2**
All Chromosome	**50.5**	**4.9**	**2.7**	**41.9**
Trisomy 21	47.5	2.2	0.7	49.6
Trisomy 18	70.8	7.7	6.0	15.5
Trisomy 13	74.3	8.1	4.1	13.5
45X	59.2	16.3	3.1	21.4

Table 7: Anomalies by Maternal Age 2004 – 2008

Maternal Age	<20 %	20-24 %	25-29 %	30-34 %	35-39 %	>40 %	% Age not known*
All Births EMSYCAR area	**8.2**	**21.4**	**26.7**	**26.4**	**14.4**	**2.9**	**0.0**
All EMSYCAR cases	**9.0**	**20.7**	**24.5**	**24.0**	**16.4**	**5.5**	**2.7**
All Neural Tube Defects	11.4	24.8	25.6	23.1	12.2	3.0	**0.5**
Anencephaly	13.9	24.9	20.8	23.1	14.5	2.9	
Encephalocele	11.8	21.6	39.2	15.7	3.9	7.8	
Spina Bifida	10.8	25.3	26.8	23.2	11.3	2.6	
All Cardiovascular	**7.6**	**19.2**	**26.5**	**24.8**	**17.2**	**4.7**	**11.1**
VSD	6.3	18.4	26.8	25.4	16.7	6.4	
ASD (excl. PFO)	8.4	21.2	29.6	22.3	13.4	5.0	
TGA	11.7	13.8	27.7	30.9	12.8	3.2	
HLH	8.5	19.5	33.1	27.1	10.2	1.7	
Tetralogy of Fallot	5.7	14.2	27.4	28.3	21.7	2.8	
AVSD	9.9	19.8	18.9	24.3	18.9	8.1	
Co-arctation	8.0	19.3	17.0	30.7	15.9	9.1	
All Respiratory	**10.3**	**24.0**	**26.0**	**23.3**	**14.4**	**2.1**	**0.0**
CCAM	12.8	34.0	25.5	12.8	12.8	2.1	
All Gastro-Intestinal	**8.8**	**21.2**	**27.3**	**25.6**	**12.7**	**4.4**	**0.3**
TOF +/- OA	6.6	7.7	34.1	29.7	14.3	7.7	
Cleft Palate	4.2	19.3	30.1	30.1	13.3	3.0	
Cleft Lip	5.1	27.4	23.9	24.8	12.8	6.0	
Cleft Lip + Palate	11.9	22.0	28.2	24.2	10.6	3.1	

Table 7 cont'd.

Maternal Age	<20 %	20-24 %	25-29 %	30-34 %	35-39 %	>40 %	% Age not known
All Gastro-Intestinal	**8.8**	**21.2**	**27.3**	**25.6**	**12.7**	**4.4**	**0.3**
TOF +/- OA	6.6	7.7	34.1	29.7	14.3	7.7	
Cleft Palate	4.2	19.3	30.1	30.1	13.3	3.0	
Cleft Lip	5.1	27.4	23.9	24.8	12.8	6.0	
Cleft Lip + Palate	11.9	22.0	28.2	24.2	10.6	3.1	
All Urogenital	**9.1**	**23.3**	**25.8**	**24.3**	**14.5**	**3.0**	**0.1**
Renal Agenesis	14.7	27.9	19.9	20.6	14.0	2.9	
Cystic kidneys	8.3	24.3	28.9	23.9	13.3	1.4	
Hydronephrosis	9.1	24.9	23.5	24.7	14.1	3.6	
All Musculoskeletal	**11.6**	**21.1**	**25.6**	**23.4**	**15.1**	**3.2**	**0.1**
Limb Reductions	12.2	18.5	25.6	27.2	12.6	3.9	
Diaphragmatic Hernia	9.6	14.9	28.1	22.8	22.8	1.8	
Gastroschisis	41.0	29.8	18.6	7.4	2.1	1.1	
Exomphalos	8.3	17.9	19.3	23.4	24.1	6.9	
All Syndromes	**9.7**	**22.1**	**23.0**	**23.0**	**19.5**	**2.7**	**3.4**
All Chromosome	**5.1**	**10.4**	**14.2**	**22.1**	**30.1**	**18.1**	**0.8**
Trisomy 21	2.7	8.1	10.5	19.3	36.6	22.7	
Trisomy 18	6.0	9.6	11.4	19.2	31.7	22.2	
Trisomy 13	4.1	5.4	14.9	28.4	29.7	17.6	
45X	16.7	18.8	20.8	27.1	13.5	3.1	

***** The % of cases with unknown maternal age is higher among those anomaly groups which tend to be diagnosed later in the neonatal or post-neonatal period and/or where paediatrics/paediatric surgery is the only or chief source of anomaly notification

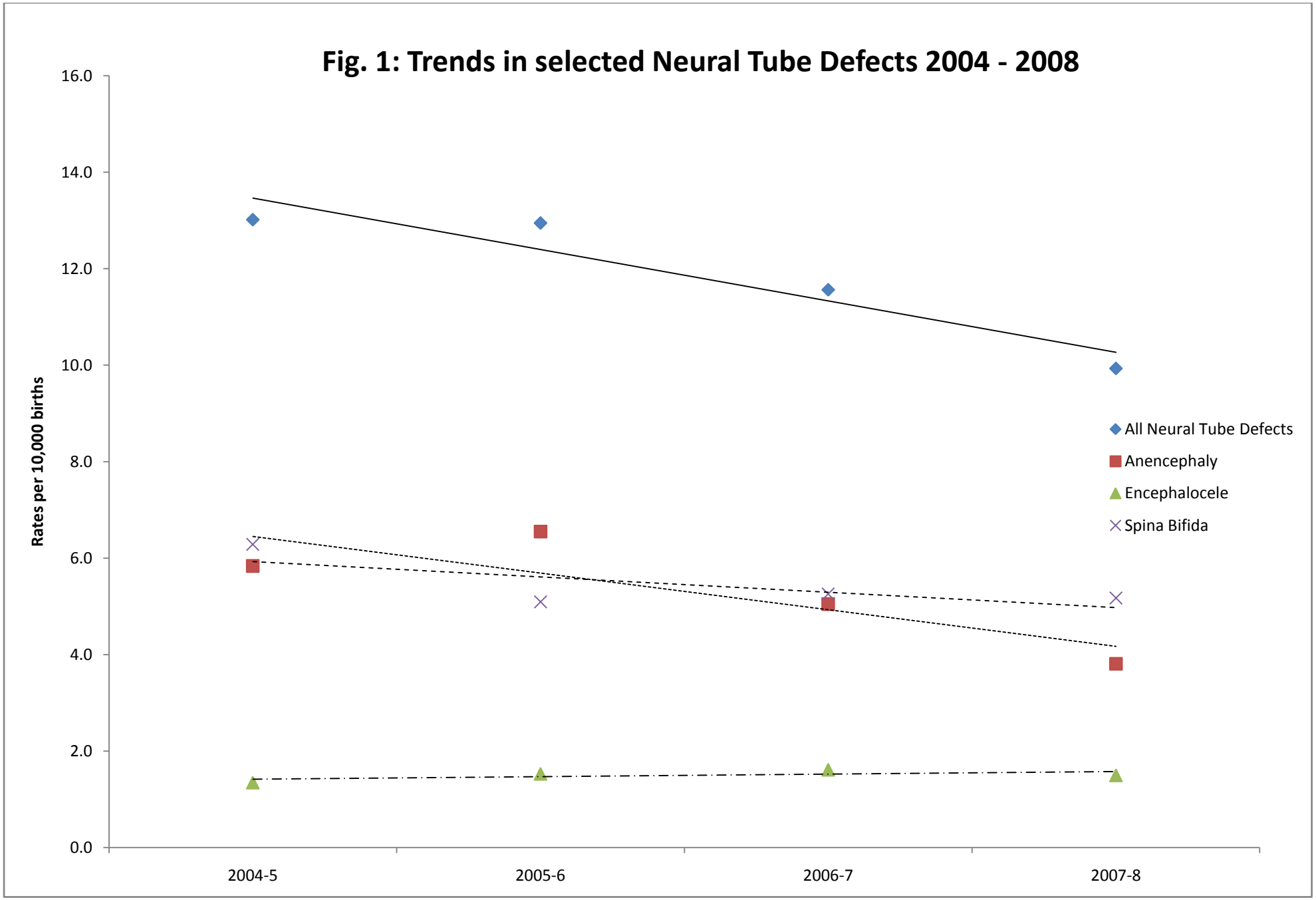
Fig. 1: Trends in selected Neural Tube Defects 2004 - 2008
Rates per 10,000 births
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2004-5
2005-6
2006-7
2007-8
All Neural Tube Defects
Anencephaly
Encephalocele
Spina Bifida

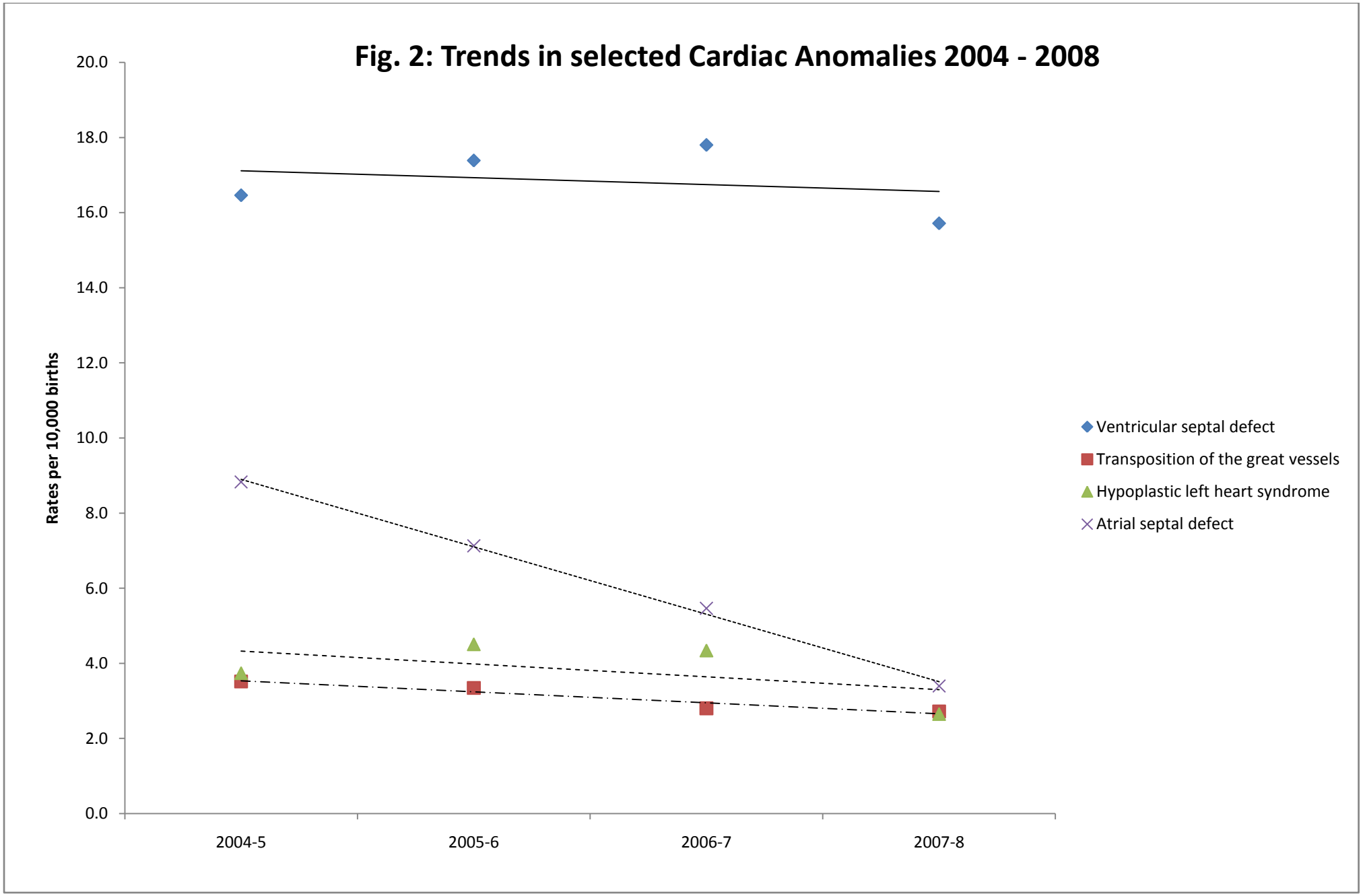
Fig. 2: Trends in selected Cardiac Anomalies 2004 - 2008
Rates per 10,000 births
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2004-5
2005-6
2006-7
2007-8
Ventricular septal defect
Transposition of the great vessels
Hypoplastic left heart syndrome
Atrial septal defect

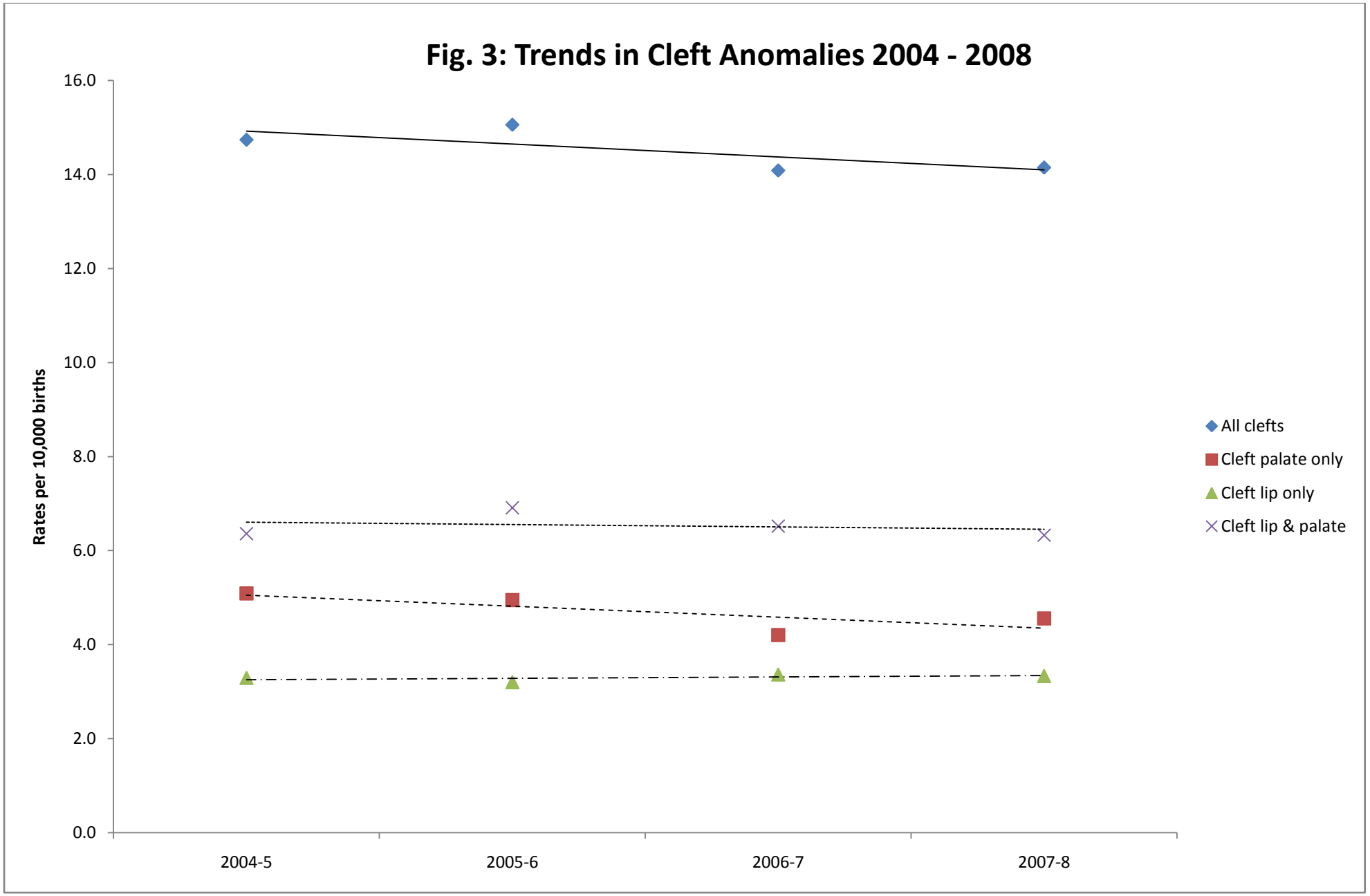
Fig. 3: Trends in Cleft Anomalies 2004 - 2008
Rates per 10,000 births
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2004-5
2005-6
2006-7
2007-8
All clefts
Cleft palate only
Cleft lip only
Cleft lip & palate

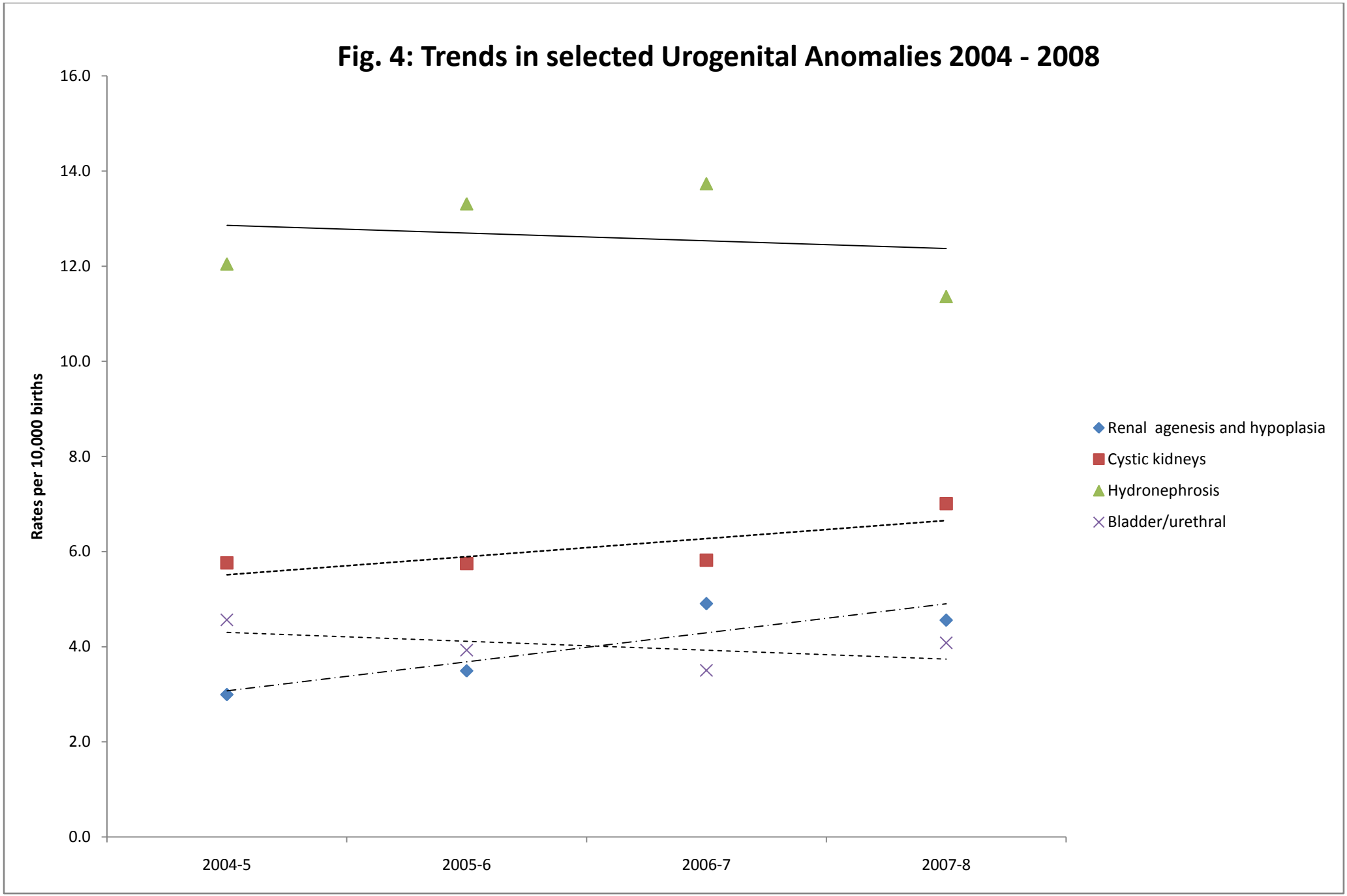
Fig. 4: Trends in selected Urogenital Anomalies 2004 - 2008
Rates per 10,000 births
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
2004-5
2005-6
2006-7
2007-8
Renal agenesis and hypoplasia
Cystic kidneys
Hydronephrosis
Bladder/urethral

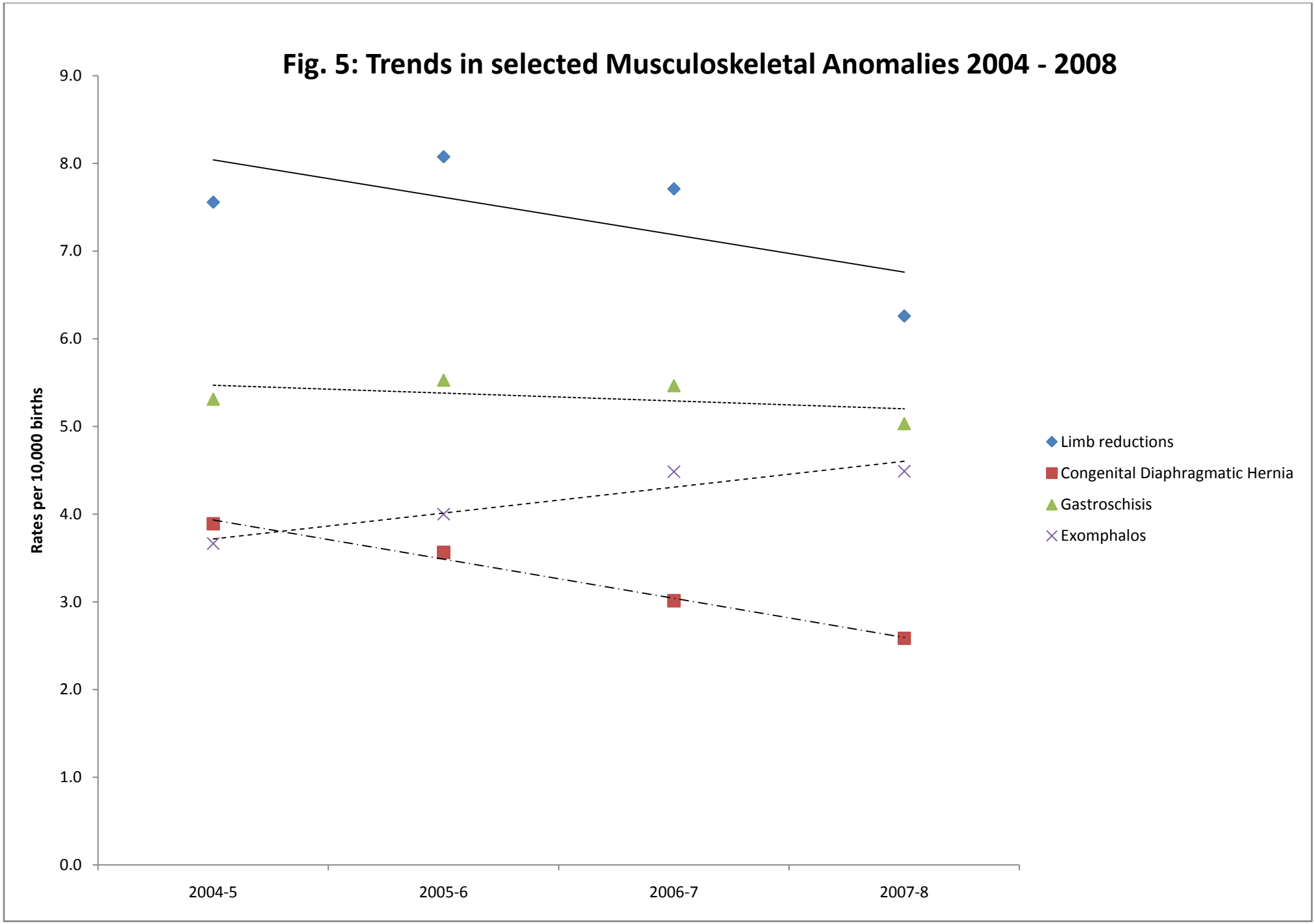
Fig. 5: Trends in selected Musculoskeletal Anomalies 2004 - 2008
Rates per 10,000 births
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
2004-5
2005-6
2006-7
2007-8
Limb reductions
Congenital Diaphragmatic Hernia
Gastroschisis
Exomphalos

Fig. 6: Trends in selected Chromosome Anomalies 2004 - 2008

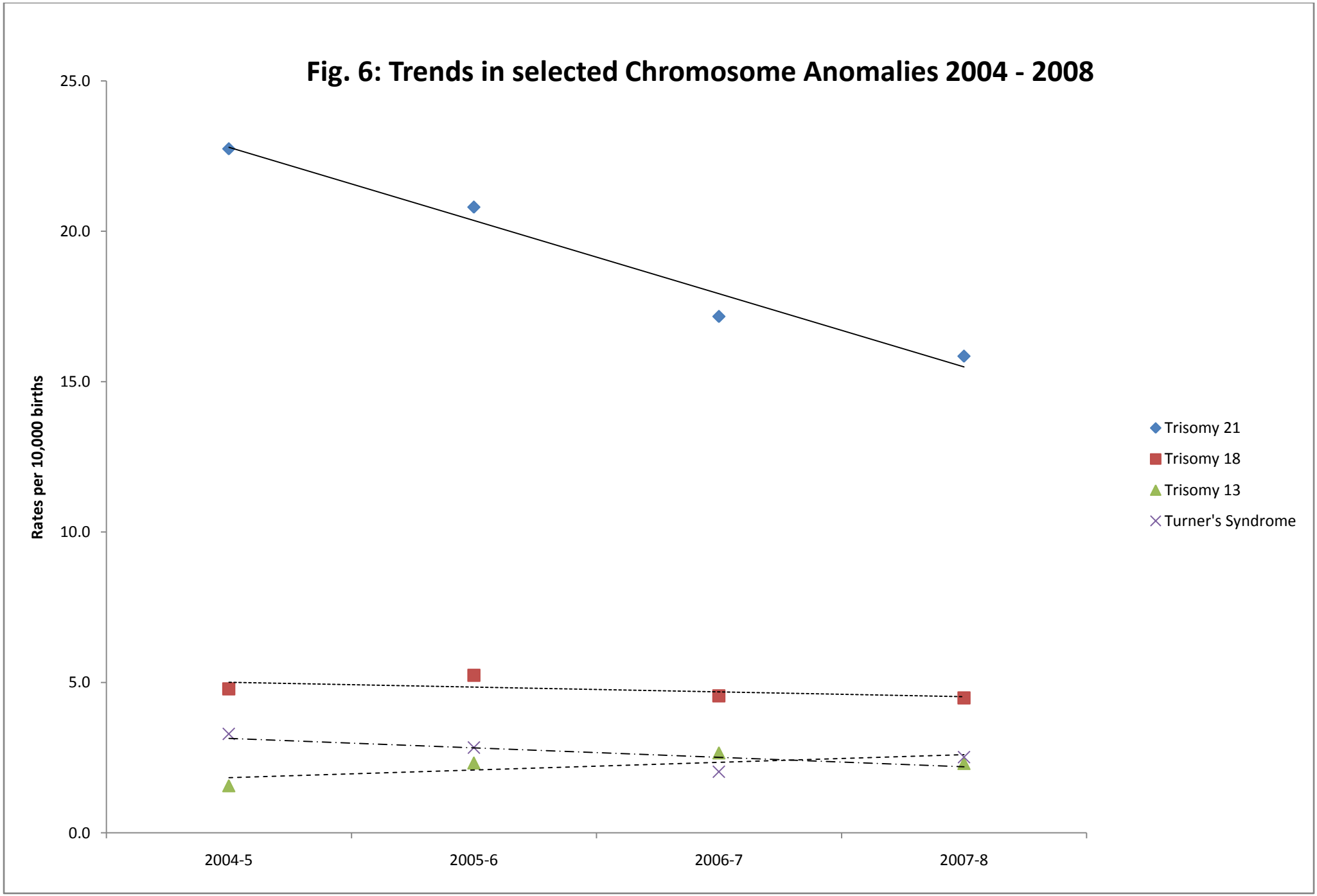

Table 8: Barnsley PCT: Rates* of selected anomaly groups 2004 – 2008

* Per 10,000 births

Barnsley	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	23.6	47.7	10.9	36.1	39.4	31.4	(22.6; 42.2)
Eye, ear	Q100 – Q179	0.0	4.0	0.0	0.0	0.0	0.7	(0.01; 4.2)
Cardiovascular	Q200 – Q269	35.4	23.8	29.0	21.7	17.9	25.4	(17.6; 35.5)
Urogenital	Q500 – Q649	39.3	31.8	36.2	21.7	28.7	31.4	(22.6; 42.4)
Gastro-intestinal	Q350 – Q459	43.3	23.8	25.4	25.3	28.7	29.2	(20.7; 39.8)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	15.7	59.6	47.1	65.1	46.6	47.1	(36.2; 60.2)
Respiratory	Q300 – Q349	15.7	4.0	0.0	3.6	7.2	6.0	(2.6; 11.8)
Chromosomal	Q900 – Q999	23.6	31.8	25.4	21.7	39.4	28.4	(20.1; 39.0)
Syndromes	Q870 – Q879	3.9	0.0	0.0	3.6	0.0	1.5	(0.2; 5.4)

Table 9: Bassetlaw PCT: Rates* of selected anomaly groups 2004 – 2008

* Per 10,000 births

Bassetlaw	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	8.8	17.8	51.4	16.0	16.6	22.1	(11.8; 38.8)
Eye, ear	Q100 – Q179	0.0	8.9	0.0	0.0	0.0	1.7	(0.04; 9.5)
Cardiovascular	Q200 – Q269	52.8	8.9	34.3	8.0	49.8	30.6	(18.1; 48.3)
Urogenital	Q500 – Q649	17.6	35.6	25.7	8.0	8.3	18.7	(9.3; 33.4)
Gastro-intestinal	Q350 – Q459	8.8	26.7	17.1	63.8	41.5	32.3	(19.4; 50.4)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	61.6	35.6	51.4	39.9	33.2	44.2	(28.9; 64.7)
Respiratory	Q300 – Q349	8.8	0.0	8.6	0.0	8.3	5.1	(1.1; 14.9)
Chromosomal	Q900 – Q999	17.6	8.9	25.7	31.9	41.5	25.5	(14.3; 42.0)
Syndromes	Q870 – Q879	0.0	0.0	0.0	8.0	8.3	3.4	(0.4; 12.3)

Table 10: Derby City PCT: Rates* of selected anomaly groups 2004 - 2008

* Per 10,000 births

Derby City	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	26.5	19.9	15.2	14.9	0.0	14.7	(9.4; 21.9)
Eye, ear	Q100 –Q179	3.3	3.3	0.0	0.0	0.0	1.2	(0.1; 4.4)
Cardiovascular	Q200 – Q269	53.0	36.6	60.8	53.7	24.7	45.4	(35.6; 57.0)
Urogenital	Q500 – Q649	36.4	73.1	42.6	38.8	33.0	44.1	(34.5; 55.6)
Gastro-intestinal	Q350 – Q459	26.5	33.2	21.3	20.9	24.7	25.1	(18.0; 34.1)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	62.9	46.5	100.4	53.7	57.7	64.4	(52.7; 77.9)
Respiratory	Q300 – Q349	6.6	0.0	3.0	3.0	5.5	3.7	(1.4; 8.0)
Chromosomal	Q900 – Q999	29.8	26.6	21.3	17.9	35.7	264	(19.1; 35.5)
Syndromes	Q870 – Q879	0.0	3.3	6.1	0.0	0.0	1.8	(0.4; 5.4)

Table 11: Derbyshire County PCT: Rates* of selected anomaly groups 2004 - 2008

* Per 10,000 births

Derbyshire County	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	26.9	23.9	15.7	18.1	16.3	20.1	(15.9; 25.1)
Eye, ear	Q100 –Q179	1.3	2.7	0.0	1.3	1.3	1.3	(0.4; 3.0)
Cardiovascular	Q200 – Q269	39.0	39.8	40.7	33.5	25.1	35.5	(29.8; 42.0)
Urogenital	Q500 – Q649	45.8	39.8	30.2	50.3	15.1	36.0	(30.3; 42.6)
Gastro-intestinal	Q350 – Q459	29.6	22.5	24.9	14.2	21.4	22.5	(18.0; 27.8)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	47.1	45.1	55.1	38.7	37.7	44.6	(38.2; 51.9)
Respiratory	Q300 – Q349	2.7	2.7	0.0	1.3	2.5	1.8	(0.7; 3.8)
Chromosomal	Q900 – Q999	52.5	53.1	26.2	27.1	18.9	35.2	(29.6; 41.7)
Syndromes	Q870 – Q879	6.7	0.0	3.9	1.3	1.3	2.6	(1.3; 4.8)

Table 12: Doncaster PCT: Rates* of selected anomaly groups 2004 – 2008

* Per 10,000 births

Doncaster	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	37.7	19.6	30.3	21.6	20.9	25.9	(19.0; 34.4)
Eye, ear	Q100 –Q179	0.0	0.0	0.0	0.0	0.0	0.0	(0.0; 0.0)
Cardiovascular	Q200 – Q269	17.4	16.8	30.3	16.2	20.9	20.4	(14.3; 28.1)
Urogenital	Q500 – Q649	46.5	36.4	46.9	37.9	34.0	40.2	(31.5; 50.5)
Gastro-intestinal	Q350 – Q459	26.1	30.8	66.2	35.2	23.5	36.3	(28.1; 46.2)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	46.5	53.2	66.2	54.1	60.1	56.2	(45.9; 68.1)
Respiratory	Q300 – Q349	2.9	5.6	5.5	0.0	5.2	3.9	(1.5; 7.9)
Chromosomal	Q900 – Q999	17.4	16.8	24.8	16.2	34.0	22.0	(15.7; 30.0)
Syndromes	Q870 – Q879	0.0	2.8	0.0	2.7	0.0	1.1	(0.1; 4.0)

Table 13: Leicester City PCT: Rates* of selected anomaly groups 2004 – 2008

* Per 10,000 births

Leicester City	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	37.1	28.1	29.2	35.5	28.8	31.7	(25.0; 39.6)
Eye, ear	Q100 –Q179	6.6	6.5	0.0	5.9	5.8	4.9	(2.6; 8.6)
Cardiovascular	Q200 – Q269	76.4	84.2	58.5	59.2	42.2	63.4	(53.8; 74.2)
Urogenital	Q500 – Q649	89.5	69.1	112.7	80.9	78.6	86.1	(74.9; 98.5)
Gastro-intestinal	Q350 – Q459	32.8	32.4	20.9	27.6	40.3	30.9	(24.3; 38.7)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	56.8	82.1	114.8	67.1	61.4	76.2	(65.6; 87.9)
Respiratory	Q300 – Q349	4.4	10.8	6.3	5.9	3.8	6.2	(3.5; 10.2)
Chromosomal	Q900 – Q999	48.0	69.1	39.7	41.5	38.4	47.0	(38.7; 56.4)
Syndromes	Q870 – Q879	2.2	8.6	4.2	0.0	5.8	4.1	(2.0; 7.6)

Table 14: Leicestershire County & Rutland PCT: Rates* of selected anomaly groups 2004 – 2008

* Per 10,000 births

Leicestershire County & Rutland	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	8.6	19.9	24.0	20.8	22.2	19.1	(14.9; 24.2)
Eye, ear	Q100 –Q179	2.9	4.3	5.6	4.2	1.4	3.7	(1.9; 6.3)
Cardiovascular	Q200 – Q269	48.8	55.4	70.5	42.9	34.6	50.3	(43.3; 58.3)
Urogenital	Q500 – Q649	41.6	81.0	73.3	81.6	52.6	66.1	(57.9; 75.1)
Gastro-intestinal	Q350 – Q459	31.6	32.7	28.2	36.0	23.5	30.1	(24.7; 36.3)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	66.0	58.2	59.2	77.5	62.3	64.7	(56.6; 73.6)
Respiratory	Q300 – Q349	4.3	4.3	5.6	8.3	4.2	5.3	(3.2; 8.3)
Chromosomal	Q900 – Q999	60.2	48.3	67.7	49.8	54.0	56.0	(48.5; 64.3)
Syndromes	Q870 – Q879	1.4	8.5	4.2	2.8	0.0	3.7	(1.7; 5.9)

Table 15: Lincolnshire Teaching PCT: Rates* of selected anomaly groups 2004 – 2008

* Per 10,000 births

Lincolnshire Teaching PCT	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	16.9	20.8	13.1	25.0	10.3	17.1	(13.1; 22.0)
Eye, ear	Q100 –Q179	0.0	3.0	0.0	4.2	0.0	1.4	(0.5; 3.3)
Cardiovascular	Q200 – Q269	49.0	28.2	43.6	29.1	34.9	36.8	(30.1; 43.7)
Urogenital	Q500 – Q649	30.6	17.8	21.8	25.0	23.3	23.7	(18.8; 29.3)
Gastro-intestinal	Q350 – Q459	24.5	25.2	29.1	20.8	28.4	25.6	(20.6; 31.5)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	50.6	38.6	49.4	43.0	38.8	43.9	(37.2; 51.4)
Respiratory	Q300 – Q349	4.6	1.5	0.0	5.6	2.6	2.8	(1.4; 5.2)
Chromosomal	Q900 – Q999	41.4	41.5	37.8	31.9	27.1	35.6	(29.7; 42.4)
Syndromes	Q870 – Q879	3.1	1.5	1.5	1.4	0.0	1.4	(0.5; 3.3)

Table 16: North East Lincolnshire PCT: Rates* of selected anomaly groups 2004 – 2008

* Per 10,000 births

North East Lincolnshire	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	20.9	25.6	15.3	34.9	5.1	20.4	(12.5; 31.5)
Eye, ear	Q100 –Q179	5.2	5.1	0.0	5.0	5.1	4.1	(1.1; 10.4)
Cardiovascular	Q200 – Q269	41.8	15.4	20.4	44.9	55.6	35.7	(24.9; 50.0)
Urogenital	Q500 – Q649	20.9	30.7	50.9	44.9	45.5	38.7	(27.4; 53.1)
Gastro-intestinal	Q350 – Q459	31.4	30.7	61.1	44.9	55.6	44.8	(32.6; 60.2)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	62.7	81.9	76.4	79.8	30.3	66.2	(51.2; 84.4)
Respiratory	Q300 – Q349	0.0	0.0	0.0	10.0	10.1	4.1	(1.1; 10.4)
Chromosomal	Q900 – Q999	20.9	30.7	40.8	10.0	10.1	22.4	(14.1; 33.9)
Syndromes	Q870 – Q879	5.2	5.1	5.1	0.0	0.0	3.1	(0.6; 8.9)

Table 17: North Lincolnshire PCT: Rates* of selected anomaly groups 2004 – 2008

(* Per 10,000 births)

North Lincolnshire	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	17.9	34.1	11.0	16.2	10.7	17.9	(10.2; 29.0)
Eye, ear	Q100 –Q179	0.0	5.7	5.5	0.0	0.0	2.2	(0.3; 8.1)
Cardiovascular	Q200 – Q269	29.8	39.8	60.5	43.3	10.7	36.8	(25.4; 51.7)
Urogenital	Q500 – Q649	11.9	51.2	49.5	37.9	53.7	41.3	(29.1; 56.9)
Gastro-intestinal	Q350 – Q459	17.9	39.8	38.5	21.7	21.5	27.9	(18.1; 41.1)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	35.8	79.6	49.5	75.8	80.6	64.7	(49.2; 83.6)
Respiratory	Q300 – Q349	6.0	5.7	16.5	0.0	0.0	5.6	(1.8; 13.0)
Chromosomal	Q900 – Q999	23.8	22.8	5.5	16.2	32.2	20.1	(11.9; 31.7)
Syndromes	Q870 – Q879	11.9	5.7	11.0	10.8	0.0	7.8	(3.1; 16.1)

Table 18: Northamptonshire PCT: Rates* of selected anomaly groups 2004 – 2008

* Per 10,000 births

Northamptonshire	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	37.7	20.6	18.5	16.6	15.1	21.1	(17.0; 26.0)
Eye, ear	Q100 –Q179	1.3	0.0	1.2	0.0	2.2	0.9	(0.3; 2.4)
Cardiovascular	Q200 – Q269	45.8	33.4	42.8	21.0	15.1	30.8	(25.8; 36.6)
Urogenital	Q500 – Q649	33.7	28.3	39.4	34.3	21.6	31.3	(26.2; 37.1)
Gastro-intestinal	Q350 – Q459	24.2	16.7	16.2	17.7	7.5	16.1	(12.5; 20.4)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	40.4	39.8	44.0	45.4	28.0	39.4	(33.6; 45.8)
Respiratory	Q300 – Q349	1.3	2.6	4.6	3.3	2.2	2.8	(1.5; 5.0)
Chromosomal	Q900 – Q999	31.0	27.0	25.5	16.6	11.9	21.8	(17.6; 26.8)
Syndromes	Q870 – Q879	1.3	1.3	4.6	5.5	1.1	2.8	(1.5; 5.0)

Table 19: Nottinghamshire County PCT: Rates* of selected anomaly groups

2004 – 2008 * Per 10,000 births

Nottinghamshire County	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	20.0	30.9	19.5	21.8	14.5	21.1	(16.7; 26.5)
Eye, ear	Q100 –Q179	1.4	4.4	0.0	0.0	0.0	1.1	(0.3; 2.8)
Cardiovascular	Q200 – Q269	30.0	64.7	51.4	31.3	30.3	41.2	(34.8; 48.4)
Urogenital	Q500 – Q649	39.9	48.6	27.8	42.2	29.0	37.3	(31.2; 44.1)
Gastro-intestinal	Q350 – Q459	22.8	22.1	25.0	23.1	14.5	21.4	(16.9; 26.8)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	52.8	67.7	55.6	70.8	64.5	62.3	(54.4; 71.0)
Respiratory	Q300 – Q349	8.6	7.4	5.6	6.8	1.3	5.8	(3.6; 8.9)
Chromosomal	Q900 – Q999	32.8	58.8	43.1	46.3	34.2	42.8	(36.4; 50.2)
Syndromes	Q870 – Q879	2.9	4.4	1.4	1.4	1.3	2.2	(1.0; 4.4)

Table 20: Rotherham PCT: Rates* of selected anomaly groups 2004 – 2008

* Per 10,000 births

Rotherham	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	13.6	34.1	36.5	37.1	15.2	27.3	(19.7; 36.8)
Eye, ear	Q100 –Q179	13.6	3.4	0.0	3.1	0.0	3.9	(1.4; 8.5)
Cardiovascular	Q200 – Q269	51.0	37.5	26.6.	40.2	21.3	35.1	(26.3; 45.7)
Urogenital	Q500 – Q649	37.4	27.2	13.3	37.1	12.2	25.3	(18.0; 34.6)
Gastro-intestinal	Q350 – Q459	40.8	20.4	33.2	18.6	12.2	24.7	(17.5; 33.8)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	40.8	30.7	29.9	55.7	54.9	42.8	(33.2; 54.5)
Respiratory	Q300 – Q349	0.0	10.2	6.6	6.2	0.0	4.5	(1.8; 9.4)
Chromosomal	Q900 – Q999	37.4	30.7	26.6	9.3	18.3	24.0	(16.9; 33.1)
Syndromes	Q870 – Q879	6.8	3.4	6.6	15.5	6.1	7.8	(4.0; 13.6)

Table 21: Sheffield PCT: Rates* of selected anomaly groups 2004 – 2008

* Per 10,000 births

Sheffield	ICD-10 Code	2004	2005	2006	2007	2008	TOTAL	Rate (± 95% CI)
Central Nervous System	Q000 – Q079	38.8	30.9	29.8	33.1	31.4	32.8	(26.8; 39.7)
Eye, ear	Q100 –Q179	12.9	4.9	6.3	4.5	9.0	7.5	(4.8; 11.1)
Cardiovascular	Q200 – Q269	156.9	117.2	161.7	194.3	145.0	155.5	(142.2; 169.7)
Urogenital	Q500 – Q649	59.9	89.5	76.9	102.4	80.7	82.1	(72.5; 92.6)
Gastro-intestinal	Q350 – Q459	27.5	21.2	33.0	24.1	34.4	28.1	(22.6; 34.5)
Musculo-skeletal	Q180 – Q189 Q380 – Q389 Q650 – Q799	63.1	66.7	76.9	78.3	91.2	75.6	(66.4; 85.7)
Respiratory	Q300 – Q349	0.0	1.6	7.8	9.0	7.5	5.3	(3.1; 8.5)
Chromosomal	Q900 – Q999	58.2	57.0	44.0	40.7	38.9	47.5	(40.2; 55.6)
Syndromes	Q870 – Q879	6.5	1.6	9.4	9.0	4.5	6.2	(3.8; 9.6)