DEPARTMENT OF HEALTH INFORMATION AND RESEARCH

Congenital Anomalies in Malta

Congenital anomalies, also commonly referred to as birth defects, include structural defects (congenital malformations, deformations, disruptions and dysplasias) and chromosomal abnormalities.[1] Congenital anomalies are a major cause of fetal, neonatal and infant mortality and are among the top causes of potential years of life lost.[2] Furthermore, children who survive may suffer lifelong disabilities imposing a high burden to the affected individual, their family and the community.

Major congenital anomalies occur at the rate of 3% of all births or one in every 33 babies born. In Malta, an infant with one or more major birth defects is born every 3 days. In Malta, over the 10 year period 2003-2012, birth defects have led to 104 infant deaths, accounting for 43.5% of all infant deaths.

To increase awareness of birth defects, an International World Birth Defects Day will be celebrated for the first time on March 3rd 2015 and every year thereafter.

Although several congenital anomalies have no known cause, we know today that several exposures such as certain medications and alcohol may lead to certain birth defects. Methods of primary prevention are available, these include: maintaining healthy nutrition, preconception folic acid supplementation, control of maternal infections and chronic conditions such as obesity, diabetes and epilepsy.[3]

It is important to have accurate, reliable surveillance systems for congenital anomalies in order to provide epidemiological information, plan health service requirements, monitor for teratogenic exposures and to assess effectiveness of prevention.

The Malta Congenital Anomalies Registry collects information on all babies born with one or more major congenital anomalies on the islands of Malta and Gozo. All diagnoses made until one year of age are included in this Register.

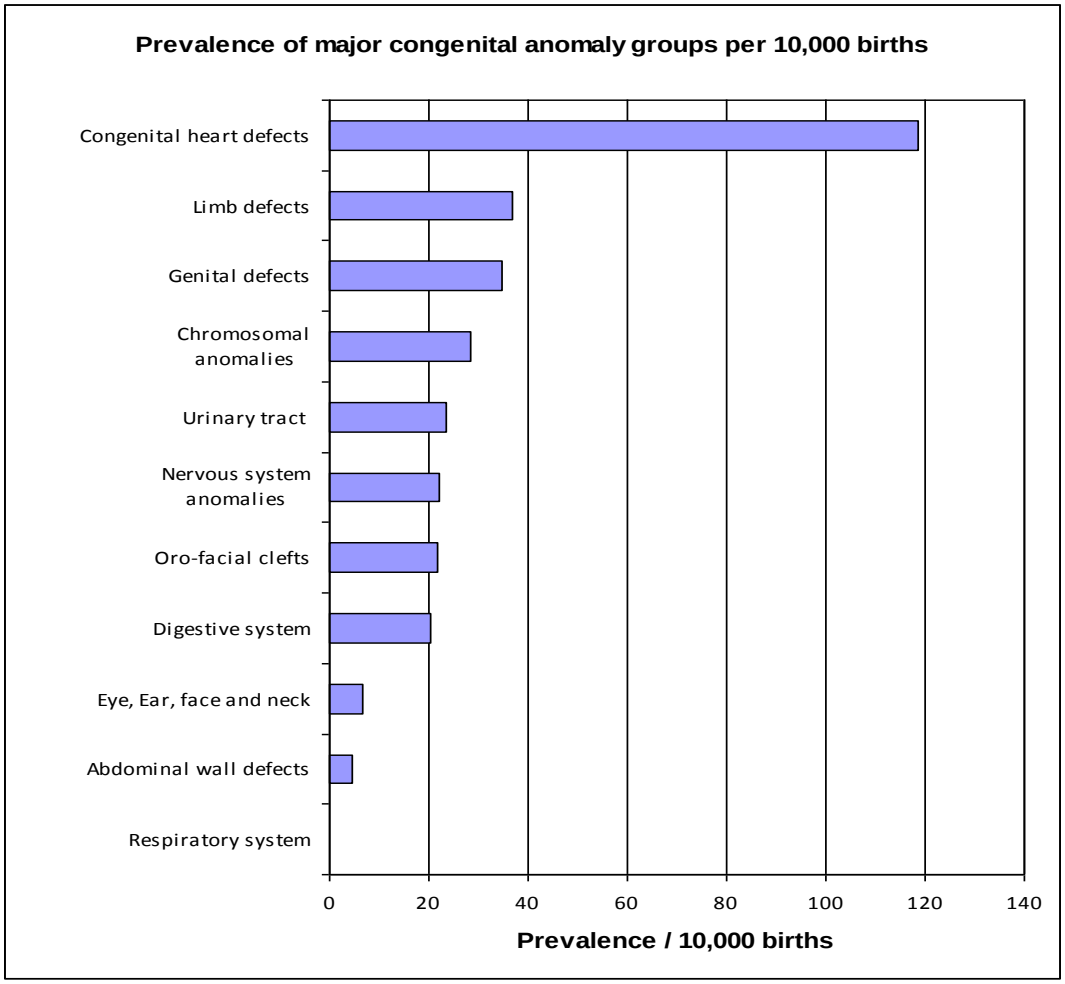
Over the 10 year period 2003-2012 there was a total of 1,184 babies registered with major anomalies. Each baby may have one or more anomalies. Table 1 gives the number and prevalence of selected major anomalies by organ system.

Table 1: Number of cases and prevalence of the major anomaly groups 2003-2012

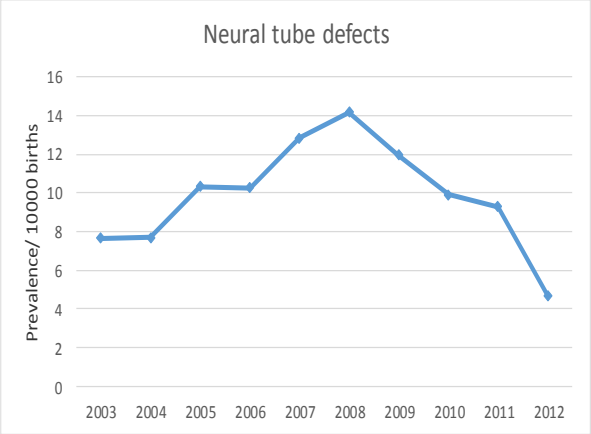
	2003-2012 (total births: 40,493)	
	Number of cases	**Prevalence/10,000 births**
Nervous system defects	89	21.98
Eye, Ear, face and neck	27	6.67
Congenital heart defects	480	118.54
Respiratory system	2	0.49
Oro-facial clefts	88	21.73
Digestive system	82	20.25
Abdominal wall defects	18	4.45
Urinary system	95	23.46
Genital system	141	34.82
Limb defects	149	36.80
Chromosomal defects	115	28.40

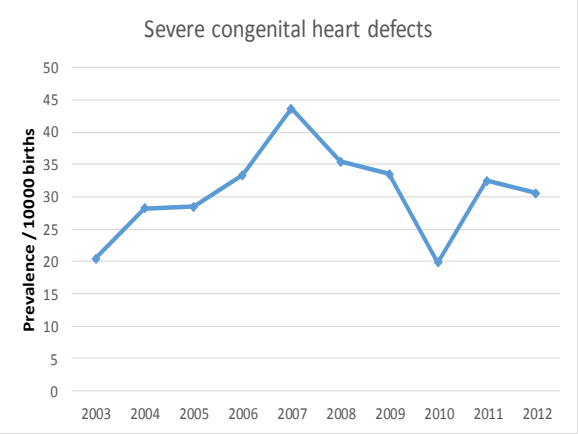
The most common congenital anomalies encountered are congenital heart defects, followed by limb defects and genital defects. Figure 2 below shows the congenital anomaly groups by decreasing occurrence.

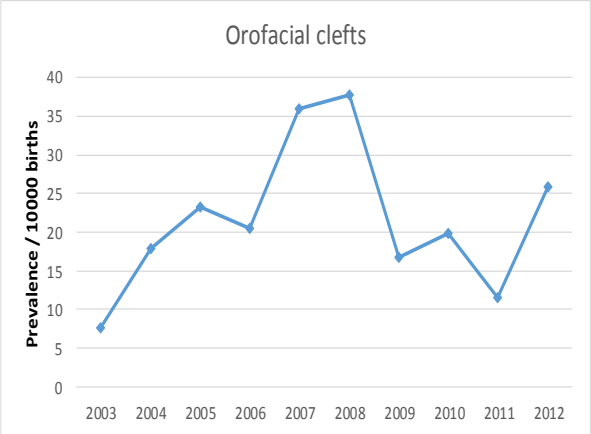
Figure 2: Prevalence of major congenital anomaly groups 2003-2012

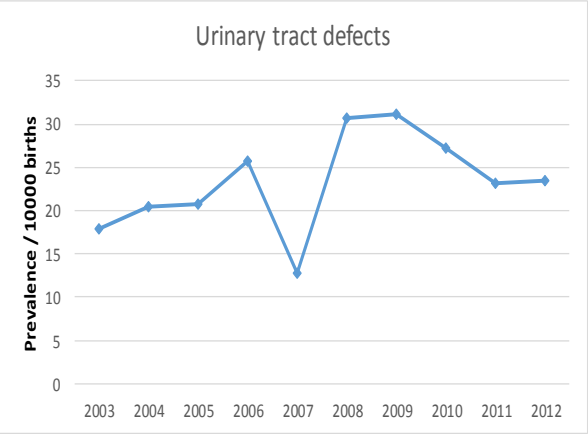


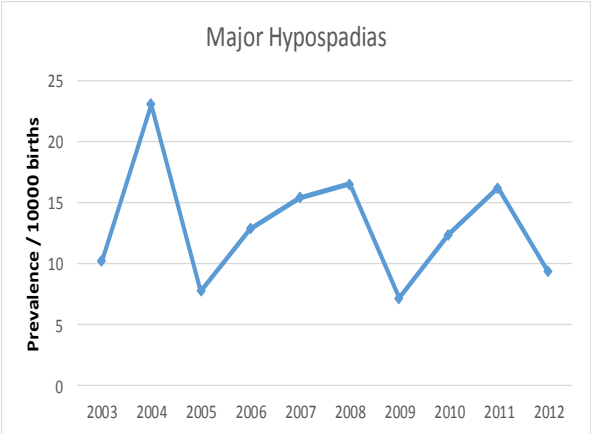
The figures below show the trends in prevalence of specific major anomalies from 2003 to 2012.

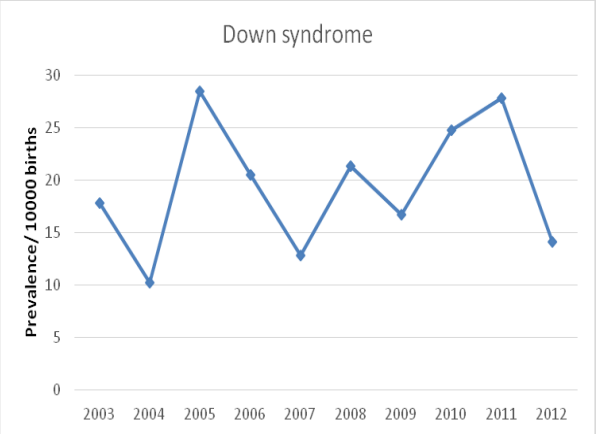












*Major hypospadias includes penile, penoscrotal and perineal hypospadias.

Further detailed breakdown of anomalies is available from:
https://ehealth.gov.mt/HealthPortal/chief_medical_officer/healthinfor_research/registries/birth_defects.aspx

References

[1] EUROCAT website [online] Available from: http://www.eurocat-network.eu/aboutus/whatiseurocat/whatiseurocat. Accessed 14 January 2015.

[2] CDC. Years of potential life lost. [online] Available from: http://webappa.cdc.gov/sasweb/ncipc/ypll10.html. Accessed 14 January, 2015.

[3] Taruscio, D., Arriola, L., Baldi, F., Barisic, I., Bermejo-Sánchez, E., Bianchi, F et al. (2014). European Recommendations for Primary Prevention of Congenital Anomalies: A Joined Effort of EUROCAT and EUROPLAN Projects to Facilitate Inclusion of This Topic in the National Rare Disease Plans. *Public Health Genomics*, *17*(2), 115-123.

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March, 2015