



Down Syndrome in Malta

Down syndrome was first described by the English physician John Langdon Down in 1866. This is a chromosomal condition which occurs when an individual is born with a full or partial extra copy of chromosome 21; the condition is thus also known as **Trisomy 21**.

Down Syndrome is the most common chromosomal defect encountered globally and it is stated to occur at a rate of approximately 1 in 700 births¹. The risk of having a baby with Down Syndrome is known to increase with maternal age, however since most deliveries occur to younger mothers most babies with Down Syndrome are born to mothers under 35 years of age.²

Although individuals with Down syndrome have an increased risk for certain medical conditions such as congenital heart defects, respiratory and hearing problems and thyroid conditions, many of these conditions are now treatable, therefore enabling most people with Down syndrome to lead healthy, fulfilling lives. It is currently estimated that people with Down Syndrome enjoy a life expectancy of over 50 years with a relatively good quality of life and active involvement in school, society and the work force.³

In Malta, over the 20 year period 1993 – 2012 a total of 166 babies with Down Syndrome were registered with the Malta Congenital Anomalies Register, an average of 8 births per year. The rate has fluctuated around 19.34/10,000 births with no significant changing trends seen.

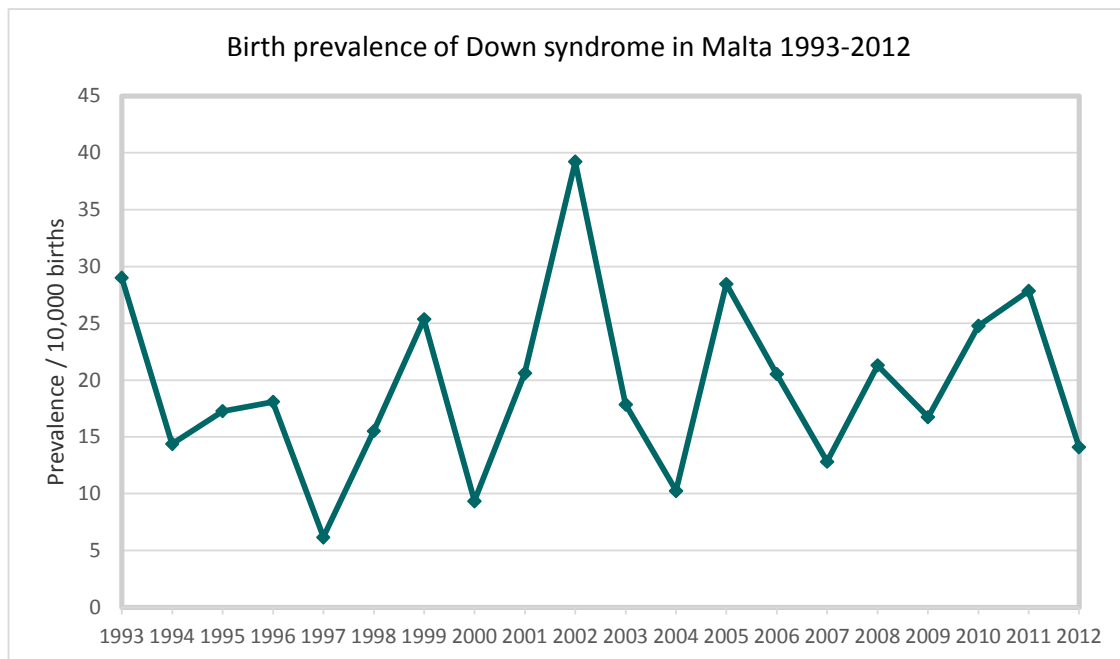


Figure 1 – Trends in total birth prevalence of Down syndrome in Malta 1993-2012

*Data obtained from the Malta Congenital Anomalies Register, DHIR

The rate of occurrence by maternal age in Malta, with the increasing prevalence in older age groups, is shown in the figure below. A total of 69 cases were born to mothers under 35 years of age while 97 were born to mothers 35 years and older.

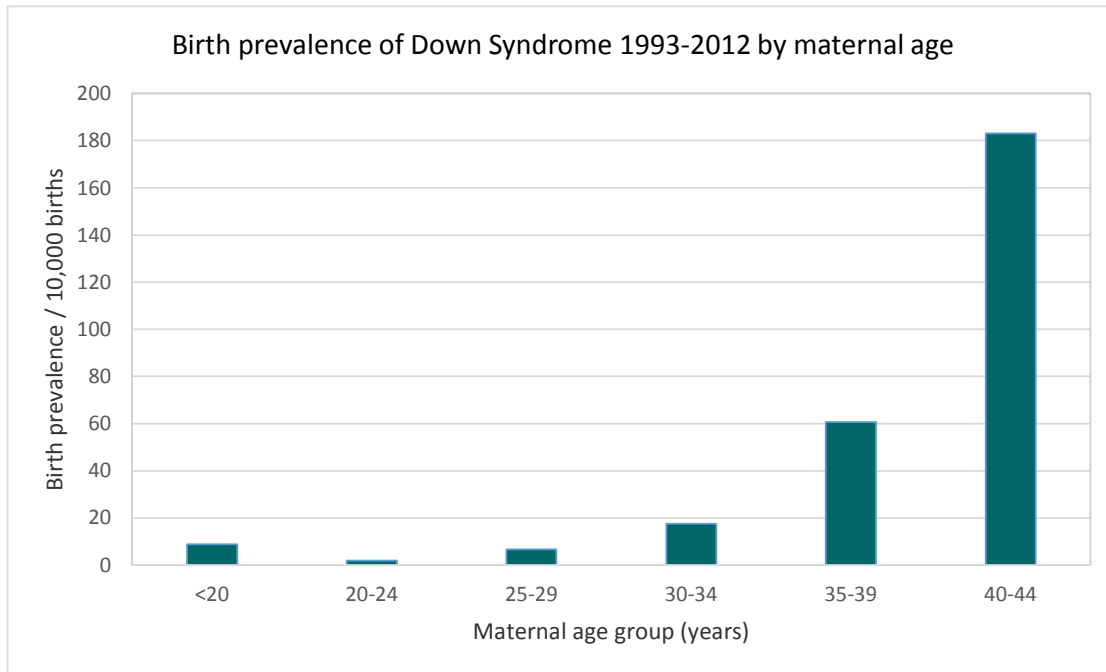


Figure 2: Birth prevalence of Down syndrome in Malta 1993-2012 by maternal age.

Data taken from the Malta Congenital Anomalies Register, DHIR.

The overall rate of occurrence of Down syndrome (including both fetal deaths and livebirths) in Malta compares well to that of other European countries as seen in Figure 3 below. However, the rate of *live births* born with Down Syndrome is comparatively high when compared to most other EU countries and comparable to those reported from Ireland and Poland where termination of pregnancy for fetal anomaly is also not practiced (Figure 4).

This poses specific social and public health challenges to engage these individuals in an active, fulfilling and productive life within the Maltese Community.

Further data is available from:

https://ehealth.gov.mt/HealthPortal/chief_medical_officer/healthinfor_research/registries/birth_defects.aspx

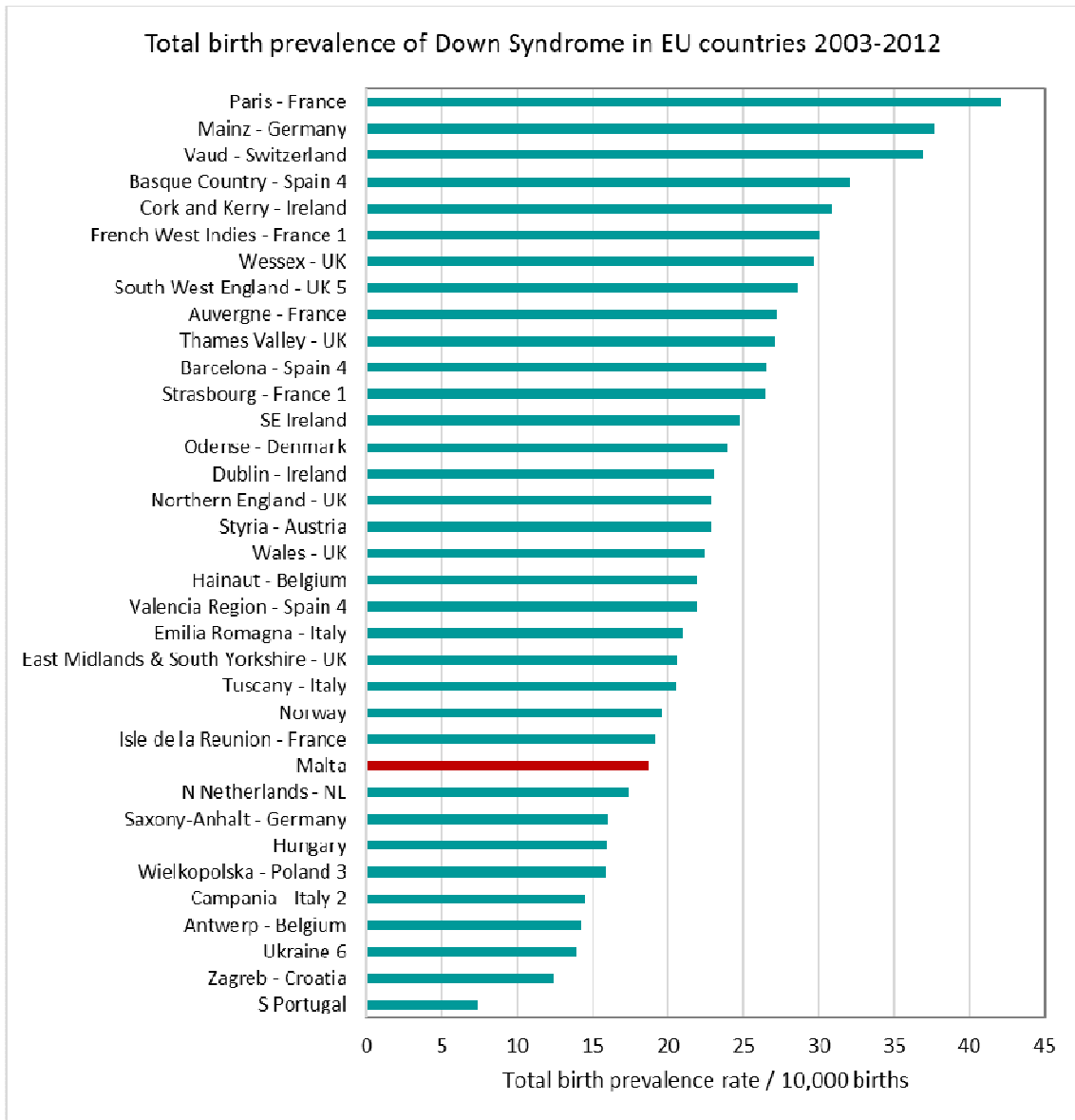


Figure 3 – Total birth prevalence of Down syndrome in EU countries 2003-2012
 Data from EUROCAT <http://www.eurocat-network.eu/accessprevalencedata/prevalencetables>

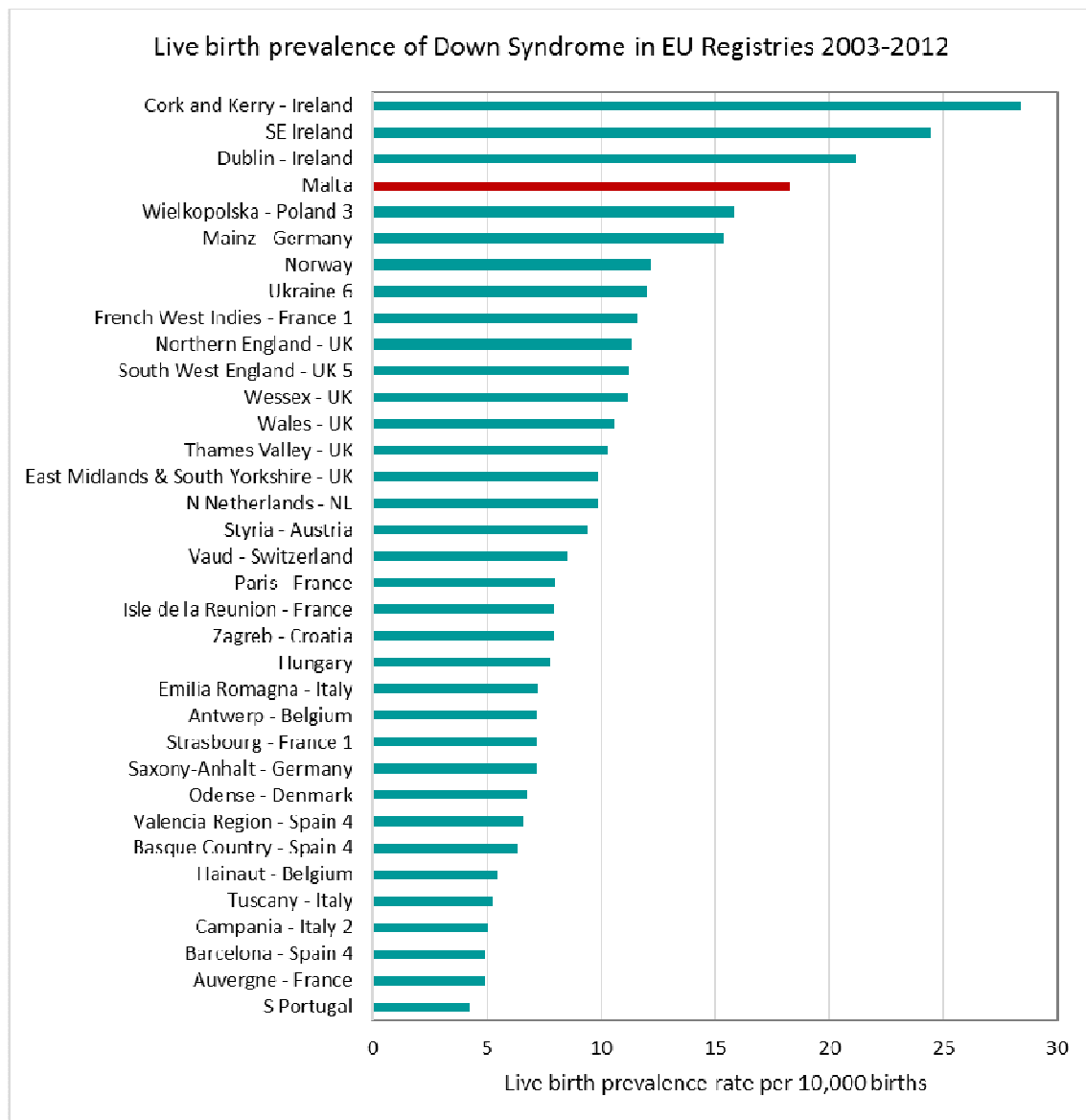


Figure 4 – Live birth prevalence of Down syndrome in EU countries 2003-2012

Data from EUROCAT <http://www.eurocat-network.eu/accessprevalencedata/prevalencetables>

References

¹ CDC, Division of Birth defects and Developmental Disabilities (2014) Data and Statistics- Occurrence of Down Syndrome. [online] Available from: <http://www.cdc.gov/ncbddd/birthdefects/downsyndrome/data.html> Accessed 06 March, 2015

² Loane, M., Morris, J. K., Addor, M. C., Arriola, L., Budd, J., Doray, B., ... & Dolk, H. (2013). Twenty-year trends in the prevalence of Down syndrome and other trisomies in Europe: impact of maternal age and prenatal screening. *European Journal of Human Genetics*, 21(1), 27-33.

³ Brown, R., Taylor, J., & Matthews, B. (2001). Quality of life - Ageing and Down syndrome. *Down Syndrome Research and Practice*, 6(3), 111-116.

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