

## Executive Summary

The National Obstetric Information System (NOIS) has compiled and analysed data pertaining to all deliveries occurring in Malta and Gozo since 1999. Around 4000 records are created annually, by completing a dedicated form detailing medically relevant information for each delivery. Data collected is published in the NOIS Annual Reports.

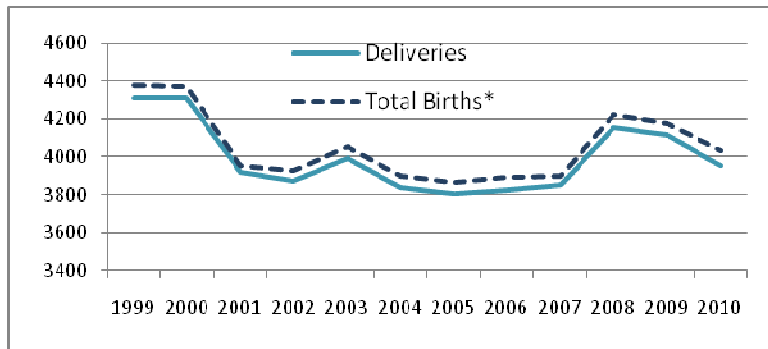
This is the twelfth year that comprehensive national data on deliveries and births has been gathered. This information, placed in the context of evolving trends over the years, has served to monitor the dynamics of occurrences and outcomes related to deliveries, and this year's data will be useful in the continued surveillance and understanding of local patterns. It will, furthermore, continue to serve as a resource for health providers, researchers and policy makers.

As in previous years, the document provides an array of facts and trends in a concise and accessible format. The section below outlines some of this data. *The full report is available online at [https://ehealth.gov.mt/HealthPortal/strategy\\_policy/healthinfor\\_research/registries/births.aspx](https://ehealth.gov.mt/HealthPortal/strategy_policy/healthinfor_research/registries/births.aspx)*

## Key Facts

A total of 4,036 births were reported in 2010, down from 4,180 in 2009. Of these, 4,018 (99.6%) were live births while 18 were still births; in 2009 there were 4,180 total births including 4,152 live (99.3%) births. The total number of births has shown fluctuations over the past decade, with a steady overall decreasing trend since 1999. Hospital remains the main location of births in Malta.

### Deliveries and Total Births\* 1999-2010



\*Total births include all reported live and still births

Migration in EU-27 member states from EU and Non-EU countries has been high in recent years<sup>1</sup>. Non-Maltese national mothers constituted 9.2% of all deliveries in 2010, up from 4.5% in 1999. The majority (71.3%) of deliveries occurred to mothers reported as married, 24.6% occurred to women reported as single mothers (never married) while 4.1% were widowed, separated or divorced.

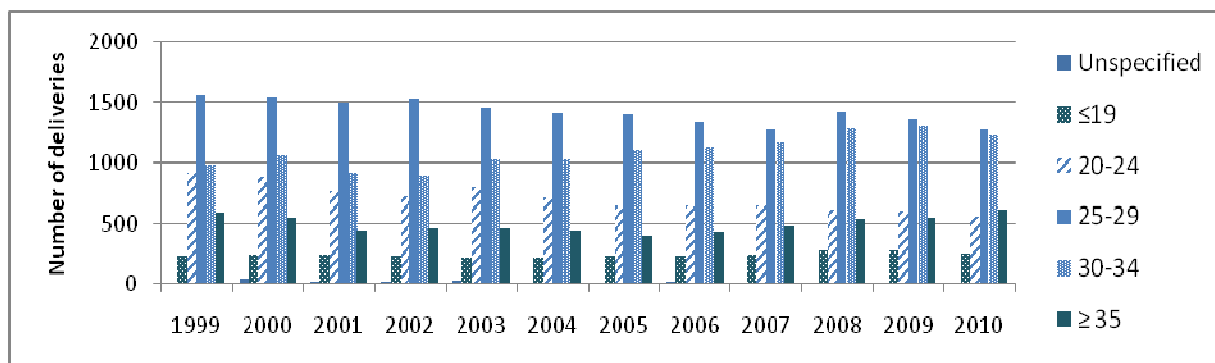
- **3,952** recorded deliveries on the Maltese islands in 2010
- **4,036** total births, of which **4,018** (99.6%) were live births
- **74** twin and **6** triplet deliveries in 2010.
- A progressive increase of multiple births throughout the past decade

Gender distribution of infants born bore no surprises, with slightly more males (51.2%) than females (48.8%).

- **51.2%** of infants/fetuses male
- **255** deliveries to teenage mothers
- **29 years** - average maternal age at delivery
- **365 (9.2%)** mothers of non-Maltese nationality

<sup>1</sup> Eurostat Demography Report 2010. Available <http://epp.eurostat.ec.europa.eu/portal/page/portal/population/documents/Tab/report.pdf>. [Accessed 10/05/2011].

### Number of Deliveries by Maternal Age Group 1999-2010

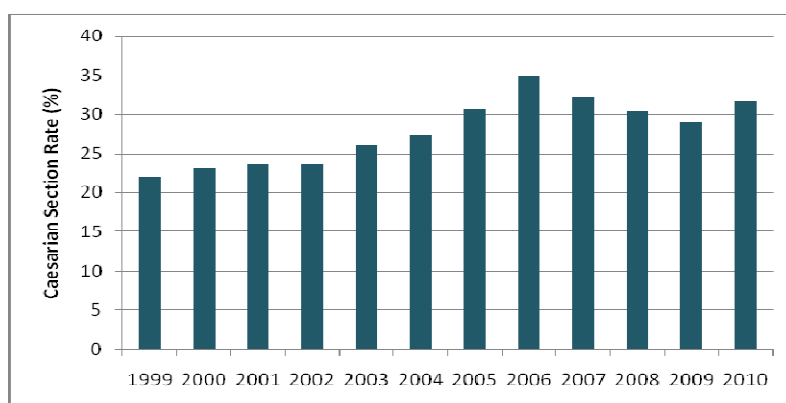


The highest number of deliveries by maternal age group remained within the 25-29 year group. Deliveries to teenage women totaled 255 in 2010, a slight decrease from the 276 and 277 seen in 2008 and 2009 respectively, though still higher than the figures for 1999-2007.

Maternal level of education has been linked to certain pregnancy outcomes.<sup>2</sup> In 2010, data related to educational level was successfully gathered for 74% of mothers. Of these 2921 mothers for whom educational level was recorded, 1047 (35.8%) were reported as having reached tertiary education, while 1864 (63.8%) had completed secondary education. 325 of the 3952 mothers (8.2%) reported having smoked during pregnancy, and 17 (0.4%) were reported as drug addicts.

Obstetric-specific pathological conditions occurring during pregnancy are recorded at the Registry. Gestational diabetes and hypertension are major concerns in pregnancy and are managed with diligent monitoring, regular review and treatment when necessary. In 2010, gestational diabetes was recorded in 159 women, with an additional 7 women reported to have had Type I Diabetes before the pregnancy and 2 with Type II Diabetes. 198 mothers were recorded as having gestational hypertension.

### Rate of Caesarean Section as a Percentage of all Deliveries 1999-2010



Of the 3952 deliveries, 1252 were carried out by Caesarean section, 31.7% of the total. The figure above shows the Caesarean Section rate over the past 12 years. An increasing rate of Caesarean section in several countries has been noted in recent years, with this rate varying considerably between countries<sup>3,4,5</sup>.

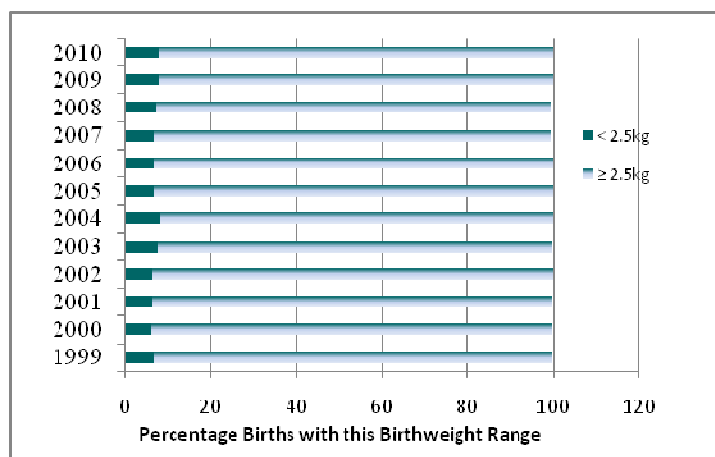
<sup>2</sup> W.J. Millar, J. Chen, 1998, Maternal Education and Risk Factors for Small-for-Gestational-Age Birth, Health Rep. 1998 Autumn, Health Statistics Division, Statistics Canada, Ottawa.

<sup>3</sup> European Perinatal Health Report. 2008. (Data from 2004). Available [www.europeristat.com](http://www.europeristat.com). Accessed 10/05/2011.

<sup>4</sup> Notzon et al, 1987, Comparisons of national caesarean section rate.

<sup>5</sup> Betran et al, 2007, Rates of caesarean section: analysis of global, regional and national estimates

### Distribution of Birthweight - low birth weight (<2.5kg) vs birth weight ≥2.5kg - 1999-2010



Gestation and birthweight have a bearing on the type of medical problems likely to be encountered in the neonatal period.<sup>6</sup> In Malta, most infants and fetuses delivered in 2010 weighed between 2.5 and 3.5 kg at birth. The majority of births were at Term, i.e. between 37 and 41 weeks' gestation, constituting 92.3% of births; 7.5% were born premature, which includes 1% of babies (41 in total) born at less than 32 weeks.

Exclusive breast feeding is recommended by the WHO as the optimal nutritional source for infants and should be continued for six months.<sup>7</sup> The NICE Guidelines on postnatal care outline the ways in which the mother should be taught and encouraged to breastfeed.<sup>8</sup> Breastfeeding is still the method of choice for most mothers as recorded at discharge from hospital, with 2263 babies being exclusively breastfed at the time of leaving hospital. This data does not, however, record the persistence with the feeding method beyond this time.

74 twin deliveries and 6 triplet deliveries were registered in 2010, accounting for 2% of the total number of deliveries. Of the total 164 multiple infants born, 2 were stillbirths and a further 1 died in the early neonatal period.

### Number of twin, triplet/quadruplet babies born 1999-2010

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Twins</b>	126	128	70	100	106	100	110	126	80	132	124	148
<b>Triplets/Quadruplets</b>	12	3	3	6	9	20	9	9	7	12	9	16
<b>% of births which were multiple</b>	3.1	3.0	1.8	2.7	2.8	3.1	3.1	3.5	2.2	3.4	3.2	4.1

The fetal mortality rate for fetuses 500g and over stood at 4.0 per thousand total births for 2010, while the neonatal death rate was 4.5/1000 livebirths. 16 early and 2 late neonatal deaths were recorded. Of these, 9 were preterm; 11 weighed less than 2.5 kg at birth.

In 2008, an apparent rise in fetal mortality was thought to be partially attributable to improved data collection systems and reporting of small fetuses of 22-24 weeks gestation. The annex of the Annual Report compares statistics of this and other events to those for EU countries.

- **1252** deliveries carried out by Caesarean section – 32% of all deliveries.
- Majority of babies weigh between **2.5 and 3.5 kg** at birth
- **37 – 40 weeks** gestation 'Term' – the most common time at which births occur
- Breast feeding remains the most popular choice at discharge

<sup>6</sup> Lissauer, Clayden, 2007, Illustrated Textbook of Paediatrics, 3e, Mosby.

<sup>7</sup> <http://www.who.int/features/qa/21/en/index.html>

<sup>8</sup> CG37 Postnatal Care: NICE Guideline

