

Department of Health Information and Research

National Obstetric Information System (NOIS)

Annual Report 2007

Executive Summary

Introduction:

The National Obstetric Information System (NOIS) was launched in the beginning of 1999 and now covers all deliveries taking place on the islands of Malta and Gozo. The following summary outlines some of the data relating to deliveries and infant/fetal births reported to the Registry in 2007 while also presenting some trends in data over the years.

Further information and comprehensive Annual Reports on the national deliveries and infant/fetal births may be found on our website <http://www.sahha.gov.mt/pages.aspx?page=46>

Summary Statistics and Comparative Trends

There were a total of 3853 deliveries in 2007 with a total of 3898 births. Of the registered deliveries 3575 occurred in Malta while 278 occurred in Gozo. Below is a table outlining the number of deliveries and total births (which include both live and still births) from 1999 to 2007.

Table 1: Number of deliveries and total births on the Maltese Islands 1999-2007

Year	Deliveries	Total Births*
1999	4311	4382
2000	4311	4377
2001	3918	3955
2002	3873	3927
2003	3995	4054
2004	3838	3902
2005	3804	3865
2006	3822	3891
2007	3853	3898

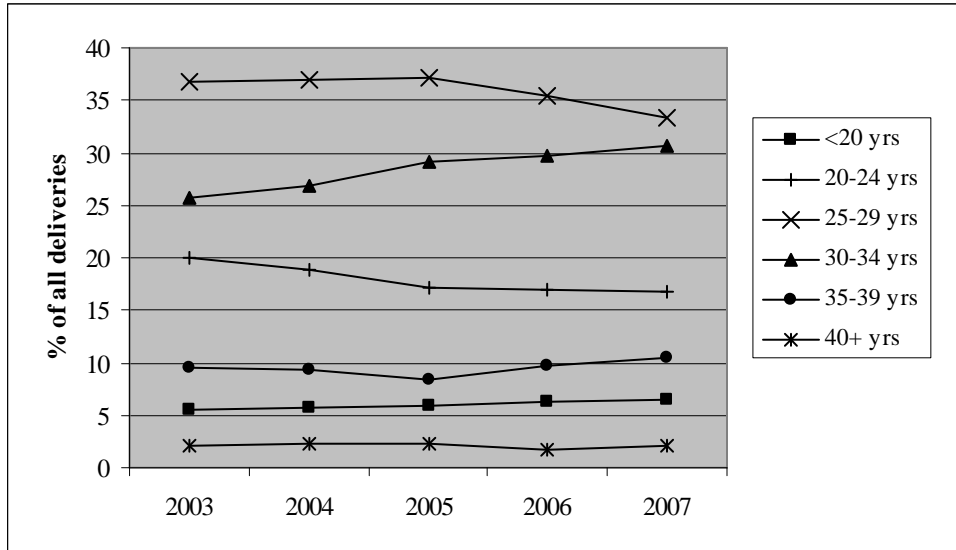
*Total births include both live and still births and exceed the number of deliveries because of multiple birth pregnancies (twins, triplets etc)

There has been an overall decrease in number of births over the past 9 years.

As usually seen there were more male infants/fetuses delivered than female in 2007. Of the total births, 53% (2063) were male while 47% (1835) were female. This ratio has remained relatively consistent over the years.

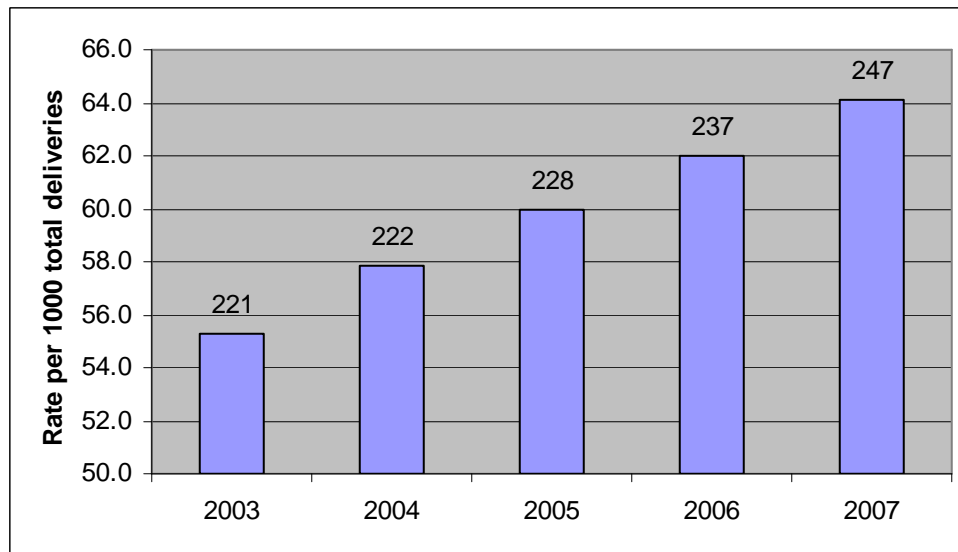
The maternal age group with the highest percentage of deliveries (>30%) has consistently been the 25 – 29 year age group. However retrospective analysis of data from 2003 to the present shows that the percentage of deliveries falling within the 25-29 year age group is steadily declining while the rate of deliveries in the older age groups 30-34 and 35-39 is steadily increasing as seen in the figure below. In fact the most frequent maternal age at delivery in 2003 was 28 years while in 2007 this was 30 years. There were no reported maternal deaths between 2003 and 2007.

Fig 1: Variation in maternal age groups 2003 -2007



Focusing specifically on the teen age group <20 years there has been a steady increase in rate and number of teenage deliveries since 2003 as shown below:

Fig. 2: Rate of teenage deliveries (<20 years) by year and actual values

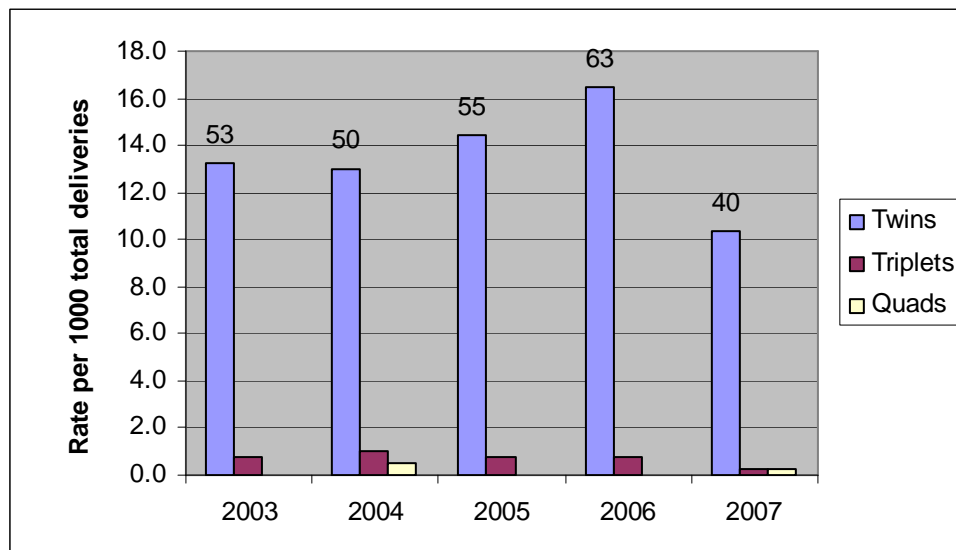


Column labels refer to the actual number of teenage deliveries

Of the total number of deliveries in 2007, 91% (3511) occurred to women of Maltese nationality while 8% (308) were non-Maltese. This is the highest percentage of deliveries amongst non-Maltese nationals in the past 5 years.

In 2007 there were a total of 3811 (98.9%) singleton deliveries, 40 twin deliveries, 1 triplet and 1 quadruplet delivery. Singleton delivery rates remained relatively the same as in the previous 5 years. Figure 3 below compares frequencies of multiple births across the past five years from 2003 to 2007.

Fig. 3: Rate of multiple deliveries by year



Column labels refer to the actual number of twin deliveries

Of the total infant/fetal births for 2007, 63% (2458) were delivered as a vertex delivery, 33% (1287) by emergency or elective Caesarean Section and 4% (153) by assisted vaginal delivery (includes forceps, ventouse and breech). This year saw a decrease in Caesarean Section delivery rate (32.3%) when compared with 2006 where 34.8% of deliveries were by Caesarean Section.

The number of live births in 2007 was 3886 which accounts for 99.7 % of the total births. The remaining 12 births were reported as stillbirths. A review of the fetal and neonatal mortality indicators from 1999 – 2007 shows an overall reduction in mortality rates per 1000 births. The table below gives the fetal and neonatal mortality rates for infants / fetuses over a 9 year period.

Table 2: Fetal and Neonatal mortality rates for infants / fetuses of birthweight 500g or more

Year	Fetal mortality rate Rate/1000 total births	Neonatal mortality rate Rate/1000 live births
1999	6.2	4.8
2000	3.6	5.3
2001	5.1	3.0
2002	5.1	5.1
2003	3.9	5.0
2004	3.8	4.4
2005	2.1	4.4
2006	2.6	2.3
2007	2.8	4.4

Annex I of the full Annual Report gives some selected comparative birth and perinatal mortality statistics for Malta and the EU.

Acknowledgements go to all contributing hospitals: Mater Dei, Gozo General, St. James - Sliema and Zabbar and St. Philip's Hospitals and their respective staff.

