



## ***NATIONAL OBSTETRIC INFORMATION SYSTEM (NOIS)***

***MALTA***

*Second Quarterly Report: April to June 2006*

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## **NATIONAL OBSTETRIC INFORMATION SYSTEMS (NOIS)**

A national obstetric information system was launched at the Department of Health Information (DHI) at the beginning of 1999 and now covers practically all deliveries taking place on the islands of Malta and Gozo.

### *Data collection and Sources of Information*

Systematic data collection for NOIS commences once the mother delivers her baby. Information regarding the course and outcome of each pregnancy is recorded by the relevant staff at each centre on a standard NOIS sheet. Once the data are recorded, the sheets are forwarded to the DHI on a regular basis. At the DHI the relevant sheets are processed and entered into the NOIS database. All data is kept in accordance with the Data Protection Act, 2001.

The maternity centres actively participating in this information system are: St. Lukes Hospital, Gozo General Hospital, St James Hospital Sliema and Zabbar and St. Philip's Hospital.

### *Report analysis*

This report analyses the national maternities/deliveries and infant births that occurred in the second quarter of 2006 and where appropriate compares it to the figures reported for the same period of last year. The data in this report describes the birth statistics for all maternities (Maltese and non-Maltese) and infant births registered into the system.

Data is sent to the Registry from all hospitals on the Maltese Islands. Accuracy and completeness of data sent on the NOIS reporting sheets is the responsibility of the Hospital providing data.

## **ANALYSIS**

There were a total of 926 maternities/deliveries registered in the Maltese Islands for the second quarter of 2006, which resulted in a total of 945 infant births.

Comparing these figures with those reported for the same period last year one can see that the number of infant births decreased by 7 births (952 births reported in 2nd quarter 2005).

## **MATERNITIES / DELIVERIES**

### ***MATERNAL AGE, MARITAL STATUS, NATIONALITY AND PARITY***

#### *Maternal Age:*

The maternities have been grouped according to the standard age groupings and the frequency distribution of deliveries according to maternal age at delivery has been analysed. In the second quarter of 2006, the greatest number of deliveries (35%), occurred in the age group 25 to 29 years while there were <1% deliveries in the age group <15 years and no deliveries in the 45+ age group. The minimum age of the mothers was 13 years while the maximum age was 43 years. The most frequent age at delivery was 30 years, while the average age at delivery was 28 years.

The frequency distribution of deliveries according to maternal age group is given in the following table.

**Deliveries according to maternal age groups:**

<i>Age group (years)</i>	<i>2<sup>nd</sup> Quarter 2006</i>		<i>2<sup>nd</sup> Quarter 2005</i>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
<15	2	<1	3	<1
15-19	50	5	63	7
20-24	164	18	158	17
25-29	327	35	345	37
30-34	281	30	264	28
35-39	84	9	89	9
40-44	17	2	15	2
45+	0	0	1	<1
Unspecified	1	<1	0	0

*Marital Status:*

For the second quarter of 2006, 19% (177) of all deliveries occurred to mothers who were reported as single (never married); while 78% (720) of all deliveries occurred to mothers reported as married, and 3% (27) of mothers were reported as widowed, separated or divorced. Marital status was not specified for two deliveries.

In the second quarter of 2006, all mothers were registered as having ‘Support at home to raise the infant’.

*Nationality:*

93% (863) of all deliveries this quarter, occurred to women of Maltese nationality while 6% (53) were Non-Maltese. In the remaining 1% (10) nationality was not specified.

*Parity:*

There were 54% (500) of mothers who were primiparas while 46% (426) were multiparas in the second quarter of 2006.

***MATERNAL LIFESTYLES***

There were 14 (1.5%) mothers who were reported to smoke one or more cigarettes during pregnancy in the second quarter of this year. One was reported to drink excessive alcohol and 2 (<1%) were reported as being a drug abusers.

The following table gives the smoking, alcohol and drug habits of mothers for the second quarters of 2006 and 2005.

<i>Maternal Lifestyles</i>	<i>2<sup>nd</sup> Quarter 2006</i>	<i>2<sup>nd</sup> Quarter 2005</i>
	<i>No.</i>	<i>No.</i>
<b><i>Cigarette smoking during pregnancy:</i></b>		
1 to 3/day	3	12
>than 3/day	11	50
Do not smoke	873	875
Unspecified	39	1
<b><i>Alcohol consumption during pregnancy:</i></b>		
Up to 1unit/day	0	0
>than 1unit/day	1	0
None	886	937
Unspecified	39	1
<b><i>Drug Abuse during pregnancy</i></b>		
Yes	2	4
No	885	933
Unspecified	39	1

### ***SPECIAL CONDITIONS OF PREGNANCY***

In the second quarter of 2006, there were 6 cases of assisted reproduction (ART) reported, this includes all forms of ART namely ovulation stimulation, IVF and ICSI (*5 cases of ART reported in 2<sup>nd</sup> quarter 2005*).

The table below gives the number of mothers recorded with specific obstetric conditions during pregnancy. The most frequently recorded was gestational hypertension, there were in fact 5.5% of mothers who were registered as having gestational hypertension in the second quarter of 2006.

<i>Conditions recorded during pregnancy</i>	<i>2<sup>nd</sup> Quarter 2006</i>			<i>2<sup>nd</sup> Quarter 2005</i>		
	<i>No</i>	<i>Yes</i>	<i>Unspecified</i>	<i>No</i>	<i>Yes</i>	<i>Unspecified</i>
Antepartum Haemorrhage	921	5	0	926	11	1
Gestational hypertension	875	51	0	879	58	1
Pre-eclampsia	924	2	0	936	1	1
Placenta praevia	919	7	0	934	3	1
Abruption of placenta	924	2	0	937	0	1
Cardiovascular disease	923	2	1	934	1	3

### ***Diabetes in Pregnancy***

In the second quarter of this year, there was one mother who was reported as being Insulin Dependent Diabetic before the current pregnancy while no mothers were reported with Non-Insulin Dependent diabetes prior to pregnancy. In addition, there were a total of 11 mothers registered with gestational diabetes who were controlled without the use of insulin, and 1 mother registered as having gestational diabetes treated with insulin.

**CATEGORY OF MATERNITY ACCORDING TO DELIVERY**

For the second quarter of 2006, there were a total of 907 (98%) singleton and 19 (2%) twin deliveries, there were no triplet or quadruplet deliveries.

<i>Category</i>	<i>2<sup>nd</sup> Quarter 2006</i>	<i>2<sup>nd</sup> Quarter 2005</i>
Singleton	907	925
Twin	19	12
Triplet	0	1
Quadruplet	0	0

**INFANT BIRTHS**

**TOTAL INFANT BIRTHS AND GENDER DISTRIBUTION**

In the second quarter of this year, there were a total of 945 infant births.

There were more male infants born than female, the gender distribution for this quarter was 504 (53%) males and 441 (47%) females (*2<sup>nd</sup> quarter 2005: males – 509; females – 443*).

**INFANTS AND METHOD OF BIRTH**

Of the 945 infants born, 566 (60%) were delivered as a vertex delivery, 342 (36%) by emergency or elective Caesarean Section and 37 (4%) by assisted vaginal delivery (this includes forceps, ventouse and breech deliveries).

<i>Method of Birth*</i>	<i>2<sup>nd</sup> Quarter 2006</i>	<i>2<sup>nd</sup> Quarter 2005</i>
Infants delivered by vertex delivery	566	601
Infants delivered by emergency/elective Caesarean Section	342	304
Infants delivered by forceps	1	2
Infants delivered by ventouse	36	44
Breech deliveries	0	1

*\*Data analysed according to total infant births*

This quarter there were 342 babies born by caesarian section but 324 caesarian deliveries performed, this due to the fact that a number of caesarians are done in multiple birth deliveries. The Caesarean section operation rate was 35% of the total maternal deliveries (946) this quarter.

**INFANT BIRTH WEIGHTS**

In the second quarter of 2006, there were 880 (93%) of the total births that occurred in the birth weight range of 2500g to 4999g, 57 (6%) of the total births were in the low birth weight range of 1500g to 2499g, 5 (<1%) of births were of very low birth weight 500g to 1499g. In 2 cases the birth weight was unspecified. One intrauterine fetal death in a pair of twins was reported with a birth weight of 350g at a gestation of 27 weeks. There were no deliveries of 5000g or over.

<i>Birth weights</i>	<i>2<sup>nd</sup> Quarter 2006</i>	<i>2<sup>nd</sup> Quarter 2005</i>
<500g	1*	0
500-999g	1	4
1000-1499g	4	4
1500-1999g	11	5
2000-2499g	46	44
2500-2999g	220	193
3000-3499g	391	422
3500-3999g	226	235
4000-4499g	39	37
4500-4999g	4	6
5000+	0	0
Unspecified	2	2
Average Birth weight (g)	3231	3236

\* This reported case was an intrauterine fetal death of one of a pair of twins delivered at 27 weeks gestation.

**OUTCOME OF BIRTH**

The number of live births for the second quarter of this year was 941 which accounted for 99.6% of the total births at a national level. The remaining 4 births were stillbirths.

<i>Outcome of Birth</i>	<i>2<sup>nd</sup> Quarter 2006</i>	<i>2<sup>nd</sup> Quarter 2005</i>
Babies born alive	941	951
Stillbirths	4	1

Of the 941 live births this quarter, there was 1 early neonatal deaths and 1 late neonatal deaths registered.

<i>Neonatal Deaths</i>	<i>2<sup>nd</sup> Quarter 2006</i>	<i>2<sup>nd</sup> Quarter 2005</i>
Early Neonatal deaths	1	1
Late Neonatal deaths	1	1

**INFANT FEEDING METHODS AT DISCHARGE**

Infant feeding habits are recorded by hospital staff at the time of discharge, little can be said on the actual infant feeding habits as these may change soon after discharge from the birthing facilities.

<i>Infant feeding methods at time of discharge</i>	<i>2<sup>nd</sup> Quarter 2006</i>	<i>2<sup>nd</sup> Quarter 2005</i>
Breast only	598	598
Bottle only	254	261
Mixed (Breast & Bottle)	83	86
Other*	10	6
Unspecified	0	1

\* 'Other' - include babies who are still at hospital after 28 days and those who die before discharge

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St. Philip's Hospital, Sta Venera.