



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

***MALTA***

*First Quarterly Report: January to March 2007*

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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 / Mater Dei 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 first quarter of 2007 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 913 maternities/deliveries registered in the Maltese Islands for the first quarter of 2007, which resulted in a total of 923 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 49 births (972 births reported in 1<sup>st</sup> quarter 2006).

## **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 first quarter of 2007, the greatest number of deliveries (33%), occurred in the age group 25 to 29 years while there were no deliveries in the age group <15 years and one in the 45 and over age group. The minimum age of the mothers was 15 years while the maximum age was 45 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>1<sup>st</sup> Quarter 2007</i>		<i>1<sup>st</sup> Quarter 2006</i>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
<15	0	0	0	0
15-19	56	6	44	5
20-24	159	17	176	18
25-29	300	33	328	34
30-34	275	30	296	31
35-39	100	11	99	10
40-44	20	2	12	1
45+	1	<1	0	0
Unspecified	2	<1	0	0

*Marital Status:*

For the first quarter of 2007, 22% (205) of all deliveries occurred to mothers who were reported as single (never married); while 75% (682) of all deliveries occurred to mothers reported as married, and 3% (26) of mothers were reported as either widowed, separated or divorced. Marital status was specified for all deliveries.

In the first quarter of 2007, all mothers were registered as having 'Support at home to raise the infant'.

*Nationality:*

92% (840) of all deliveries this quarter, occurred to women of Maltese nationality while 7% (65) were Non-Maltese. In the remaining 1% (8) nationality was not specified.

*Parity:*

There were 51% (470) of mothers who were primiparas while 49% (443) were multiparas in the first quarter of 2007.

***MATERNAL LIFESTYLES***

There were 28 (3%) of mothers who were reported to smoke one or more cigarettes during pregnancy in the first quarter of this year. None were reported to drink excessive alcohol and 4 (<1%) was reported as being drug abusers.

The following table gives the smoking, alcohol and drug habits of mothers for the first quarters of 2007 and 2006.

<b>Maternal Lifestyles</b>	<b>1<sup>st</sup> Quarter 2007</b>	<b>1<sup>st</sup> Quarter 2006</b>
	<b>No.</b>	<b>No.</b>
<b>Cigarette smoking during pregnancy:</b>		
1 to 3/day	5	7
>than 3/day	23	24
Do not smoke	872	912
Unspecified	13	12
<b>Alcohol consumption during pregnancy:</b>		
Up to 1unit/day	0	0
>than 1unit/day	0	0
None	900	943
Unspecified	13	12
<b>Drug Abuse during pregnancy</b>		
Yes	4	1
No	896	942
Unspecified	13	12

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

In the first quarter of 2007, there were 4 cases of assisted reproduction (ART) reported, this includes all forms of ART namely ovulation stimulation, IVF and ICSI (11 cases of ART reported in 1<sup>st</sup> quarter 2006).

The table below gives the number of mothers reported with specific obstetric conditions during pregnancy. The most frequently recorded was gestational hypertension, there were in fact 6% of mothers who were registered as having gestational hypertension in the first quarter of 2007.

<b>Conditions recorded during pregnancy</b>	<b>1<sup>st</sup> Quarter 2007</b>			<b>1<sup>st</sup> Quarter 2006</b>		
	<b>No</b>	<b>Yes</b>	<b>Unspecified</b>	<b>No</b>	<b>Yes</b>	<b>Unspecified</b>
Antepartum Haemorrhage	902	11	0	948	7	0
Gestational hypertension	854	59	0	907	48	0
Pre-eclampsia	912	1	0	947	8	0
Placenta praevia	901	12	0	945	10	0
Abruption of placenta	909	4	0	952	3	0
Cardiovascular disease	912	1	0	954	1	0

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

In the first quarter of this year, there were 2 mothers who were reported as being Insulin Dependent Diabetic before the current pregnancy while 1 mother was reported with Non-Insulin Dependent diabetes prior to pregnancy. In addition, there were a total of 21 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 first quarter of 2007, there were a total of 904 (99%) singleton and 8 (1%) twin deliveries, there was 1 triplet delivery and no quadruplet deliveries.

<i>Category</i>	<i>1<sup>st</sup> Quarter 2007</i>	<i>1<sup>st</sup> Quarter 2006</i>
Singleton	904	940
Twin	8	13
Triplet	1	2
Quadruplet	0	0

**INFANT BIRTHS**

**TOTAL INFANT BIRTHS AND GENDER DISTRIBUTION**

In the first quarter of this year, there were a total of 923 infant births.

There were more male infants born than female, the gender distribution for this quarter was 490 (53%) males and 433 (47%) females (*1<sup>st</sup> quarter 2006: males –523; females – 449*).

**INFANTS AND METHOD OF BIRTH**

Of the 923 infants born, 555 (60%) were delivered as a vertex delivery, 333 (36%) by emergency or elective Caesarean Section and 35 (4%) by assisted vaginal delivery (includes forceps, ventouse and breech).

<i>Method of Birth*</i>	<i>1<sup>st</sup> Quarter 2007</i>	<i>1<sup>st</sup> Quarter 2006</i>
Infants delivered by vertex delivery	555	579
Infants delivered by emergency/elective Caesarean Section	333	359
Infants delivered by forceps	2	3
Infants delivered by ventouse	33	31
Breech deliveries	0	0

*\*Data analysed according to total infant births*

This quarter there were 333 babies born by caesarian section but 323 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 (913) this quarter.

**INFANT BIRTH WEIGHTS**

In the first quarter of 2007, there were 864 (94%) of the total births that occurred in the birth weight range of 2500g to 4999g. 46 (5%) of the total births were in the low birth weight range of 1500g to 2499g, 10 (1%) of births were of very low birth weight 500g to 1499g. In 2 cases the birth weight was unspecified. One liveborn baby was reported with birth weight of less than 500g. No babies were reported with a birth weight of 5000g or more.

<i>Birth weights</i>	<i>1<sup>st</sup> Quarter 2007</i>	<i>1<sup>st</sup> Quarter 2005</i>
<500g	1*	0
500-999g	5	5
1000-1499g	5	10
1500-1999g	4	10
2000-2499g	42	47
2500-2999g	202	230
3000-3499g	398	410
3500-3999g	227	211
4000-4499g	31	43
4500-4999g	6	5
5000+	0	0
Unspecified	2	1
Average Birth weight (g)	3221	3188

\*This baby was born alive but suffered an early neonatal death.

**OUTCOME OF BIRTH**

The number of live births for the first quarter of this year was 921 which accounted for 99.8% of the total births at a national level. The remaining 2 births were stillbirths.

<i>Outcome of Birth</i>	<i>1<sup>st</sup> Quarter 2007</i>	<i>1<sup>st</sup> Quarter 2006</i>
Babies born alive	921	969
Stillbirths	2	3

Of the 921 live births this quarter, there were 3 early neonatal deaths and no late neonatal deaths registered.

<i>Neonatal Deaths</i>	<i>1<sup>st</sup> Quarter 2007</i>	<i>1<sup>st</sup> Quarter 2006</i>
Early Neonatal deaths	3	1
Late Neonatal deaths	0	0

**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>1<sup>st</sup> Quarter 2007</i>	<i>1<sup>st</sup> Quarter 2006</i>
Breast only	510	575
Bottle only	256	256
Mixed (Breast & Bottle)	145	121
Other*	12	19
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. Luke's / Mater Dei Hospital, Pieta

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St. James Hospital, Sliema

St. James Hospital, Zabbar

St. Philip's Hospital, Sta Venera.