



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

## **MALTA**

*Third Quarterly Report: July to September 2012*

*Department of Health Information and Research (DHIR)  
National Obstetric Information System (NOIS), Malta*

[https://ehealth.gov.mt/HealthPortal/chief\\_medical\\_officer/healthinfor\\_research/registries/births.aspx](https://ehealth.gov.mt/HealthPortal/chief_medical_officer/healthinfor_research/registries/births.aspx)

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

### **Background**

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

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 DHIR on a regular basis. At the DHIR 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: Mater Dei Hospital, Gozo General Hospital, St James Hospital Sliema and Zabbar.

### *Report analysis*

This report analyses the national maternities/deliveries and infant births that occurred in the third quarter of 2012 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. All births, live or still, of gestation 22 weeks and above are registered and analysed in this report.

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.

This report provides basic statistics regarding births and deliveries in the Maltese Islands. If required, further information and details may be obtained from our website: [https://ehealth.gov.mt/HealthPortal/chief\\_medical\\_officer/healthinfor\\_research/registries/births.aspx](https://ehealth.gov.mt/HealthPortal/chief_medical_officer/healthinfor_research/registries/births.aspx) or by e-mail: [healthinfo@gov.mt](mailto:healthinfo@gov.mt).

### **ANALYSIS**

There were a total of 1128 maternities/deliveries registered in the Maltese Islands for the third quarter of 2012, which resulted in a total of 1152 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 (*1159 births reported in 3rd quarter 2011*).

## **MATERNITIES / DELIVERIES**

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

#### *Maternal Age:*

The maternities have been grouped according to standard age groupings and the frequency distribution of deliveries according to maternal age at delivery has been analysed. In the third quarter of 2012, the greatest number of deliveries (34.0%), occurred in the age group 30-34 years, followed by the 25-29 year age group (31.2%). There was one delivery in the age group <15 years and none in the 45+ age group. The minimum age of mothers at delivery was 14 years while the maximum age was 44 years. The most frequent age at delivery was 30 years (93 mothers) and the average age at delivery was 29 years.

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

**Table 1- Deliveries according to maternal age group**

Age in years	3 <sup>rd</sup> Quarter 2012		3 <sup>rd</sup> Quarter 2011	
	Frequency	%	Frequency	%
<15	1	<1	0	0
15-19	54	4.8	58	5.1
20-24	154	13.7	175	15.4
25-29	352	31.2	354	31.1
30-34	384	34.0	377	33.1
35-39	159	14.1	150	13.2
40-44	24	2.1	25	2.2
45+	0	0	1	<1
Unspecified	0	0	0	0

#### *Marital Status:*

For the third quarter of 2012, 26.2% (296) of all deliveries occurred to mothers who were reported as single (never married); while 70.6% (796) of all deliveries occurred to mothers reported as married, and 3.2% (36) of mothers were reported as widowed, separated or divorced. Marital status was specified for all mothers.

In the third quarter of 2012, all mothers were registered as having 'Support at home to raise the infant'.

#### *Nationality:*

86.5% (976) of all deliveries this quarter, occurred to women of Maltese nationality while 13.3% (150) were Non-Maltese. In 2 cases mother's nationality was not specified.

#### *Parity:*

There were 52.9% (597) of mothers who were primiparas (ie. delivering for the first time) while 47.1% (531) were multiparas (ie. having already delivered at least one live or still birth) in the third quarter of 2012.

**MATERNAL LIFESTYLES**

There were 81 (7.2%) mothers who were reported to smoke one or more cigarettes during pregnancy in the second quarter of this year. One was reported to drink some alcohol in pregnancy and 4 were reported to be drug abusers.

The following table gives the smoking, alcohol and drug habits of mothers for the third quarters of 2012 and 2011.

**Table 2 – Maternal lifestyles**

	<i>3<sup>rd</sup> Quarter 2012</i>	<i>3<sup>rd</sup> Quarter 2011</i>
	<i>No.</i>	<i>No.</i>
<b><i>Cigarette smoking during pregnancy</i></b>		
1 to 3/day	26	22
> than 3/day	55	57
Do not smoke	1047	1060
Unspecified	0	1
<b><i>Alcohol consumption during pregnancy</i></b>		
Up to 1unit/day	1	4
> than 1unit/day	0	0
None	1127	1136
Unspecified	0	0
<b><i>Drug Abuse during pregnancy</i></b>		
Yes	4	10
No	1124	1130
Unspecified	0	0

**SPECIAL CONDITIONS OF PREGNANCY**

In the third quarter of 2012, there were 16 cases of assisted reproduction (ART) reported, this includes all forms of ART namely ovulation stimulation, IVF and ICSI (12 cases of ART reported in 3<sup>rd</sup> quarter 2011).

The table below gives the number and frequency of mothers recorded with specific obstetric conditions during pregnancy. The most frequently recorded was gestational hypertension; in fact 4.5% of mothers were registered as having gestational hypertension in the third quarter of 2011.

**Table 3 – Pregnancy related conditions**

	<i>3<sup>rd</sup> Quarter 2012</i>		<i>3<sup>rd</sup> Quarter 2011</i>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
<b>Antepartum Haemorrhage</b>	14	1.2	24	2.1
<b>Gestational hypertension</b>	51	4.5	46	4.0
<b>Pre-eclampsia</b>	15	1.3	7	0.6
<b>Eclampsia</b>	0	0	0	0
<b>Placenta praevia</b>	7	0.6	17	1.5
<b>Abruption of placenta</b>	5	0.4	8	0.7

***Diabetes in Pregnancy***

In the third quarter of this year, there were 4 mothers who were reported as being Insulin Dependent Diabetics before the current pregnancy while 3 mothers were reported with Non-Insulin Dependent diabetes prior to pregnancy. In addition, there were a total of 51 mothers (4.5%) registered with gestational diabetes who were controlled without the use of insulin, and no mothers registered as having gestational diabetes treated with insulin.

***DELIVERIES ACCORDING TO PLURALITY***

For the third quarter of 2012, there were a total of 1106 (98.0%) singleton, 20 (1.8%) twin, 2 triplet and no quadruplet deliveries.

**Table 4 –Delivery by Plurality**

	<i>3<sup>rd</sup> Quarter 2012</i>	<i>3<sup>rd</sup> Quarter 2011</i>
Singleton	1106	1121
Twin	20	19
Triplet	2	0
Quadruplet	0	0

## **INFANT BIRTHS**

### **TOTAL INFANT BIRTHS AND GENDER DISTRIBUTION**

In the third quarter of this year, there were a total of 1152 infant births, while there were 1159 in the same quarter of 2011.

There were more male infants born than female, the gender distribution for this quarter was 595 (51.6%) males and 557 (48.4%) females (*3<sup>rd</sup> quarter 2011: males – 606; females – 553*).

### **INFANTS AND METHOD OF BIRTH**

Of the 1152 infants born between July and September 2012, 662 (57.5%) were delivered as unassisted vertex delivery, 425 (36.9%) by emergency or elective Caesarean Section and 65 (5.6%) by assisted vaginal delivery (this includes forceps, ventouse and breech deliveries).

**Table 5 – Distribution of births by method of delivery**

	<i>3<sup>rd</sup> Quarter 2012</i>	<i>3<sup>rd</sup> Quarter 2011</i>
<b>Vaginal vertex delivery</b>	662	710
<b>Emergency/elective Caesarean Section</b>	425	398
<b>Forceps delivery</b>	2	2
<b>Ventouse</b>	62	49
<b>Breech</b>	1	0

*\*Data analysed according to total infant births*

This quarter there were 425 babies born by caesarian section but 401 caesarean deliveries performed, this due to the fact that a number of caesareans are done in multiple birth deliveries. The Caesarean section operation rate was 35.5% of the total maternal deliveries (1128) this quarter.

### **BIRTHS BY GESTATIONAL AGE CATEGORY**

This quarter there were 90 (7.8%) preterm babies of less than 37 weeks gestation, of these 8 (0.7%) were very preterm being less than 32 weeks of gestation.

**Table 6 – Distribution by gestational age categories**

	<i>3<sup>rd</sup> Quarter 2012</i>	<i>3<sup>rd</sup> Quarter 2011</i>
<b>Extremely Preterm (22 - 27 wks)</b>	3	7
<b>Very Preterm (28 - 31 wks)</b>	5	8
<b>Moderately Preterm (32 - 36wks)</b>	82	66
<b>Term (37 - 41wks)</b>	1062	1076
<b>Post term (41+ wks)</b>	0	2
<b>Unknown</b>	0	0

**INFANT BIRTH WEIGHTS**

In the third quarter of 2012, there were 1063 (92.3%) of the total births that occurred in the birth weight range of 2500g to 4499g, 73 (6.3%) of the total births were in the low birth weight range of 1500g to 2499g, 12 (1.0%) of births were of very low birth weight 500g to 1499g, no babies were less than 500g although having a gestation of 22 completed weeks. There were 4 infants with a birth weight of 4500g or over, in all cases the birth weight was specified.

**Table 7 – Births by birth weight**

	<i>3<sup>rd</sup> Quarter 2012</i>	<i>3<sup>rd</sup> Quarter 2011</i>
<500g	0	0
500-999g	5	7
1000-1499g	7	7
1500-1999g	15	18
2000-2499g	58	46
2500-2999g	234	269
3000-3499g	511	490
3500-3999g	266	270
4000-4499g	52	42
4500-4999g	4	9
5000+	0	0
Unspecified	0	1
<b>Average Birth weight (g)</b>	3214	3195

**OUTCOME OF BIRTH**

The number of live births for the third quarter of this year was 1149 which accounted for 99.7% of the total births at a national level. The remaining 3 births were stillbirths. Stillbirths are defined as fetal death at or after 22 completed weeks of gestation.

**Table 8 – Live and still births**

	<i>3<sup>rd</sup> Quarter 2012</i>	<i>3<sup>rd</sup> Quarter 2011</i>
<b>Babies born alive</b>	1149	1154
<b>Stillbirths</b>	3	5

Of the 1149 live births this quarter, there was 1 early neonatal death and no late neonatal deaths.

**Table 9 – Early and late neonatal deaths**

	<i>3<sup>rd</sup> Quarter 2012</i>	<i>3<sup>rd</sup> Quarter 2011</i>
<b>Early Neonatal deaths</b>	1	7
<b>Late Neonatal deaths</b>	0	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.

**Table 10 – Infant feeding methods at time of discharge**

	<i>3<sup>rd</sup> Quarter 2012</i>	<i>3<sup>rd</sup> Quarter 2011</i>
<b>Breast only</b>	633	653
<b>Bottle only</b>	343	345
<b>Mixed (Breast &amp; Bottle)</b>	171	147
<b>Other*</b>	5	13
<b>Unspecified</b>	0	1

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

**ACKNOWLEDGEMENTS**

Acknowledgements go to all contributing hospitals and their respective staff:

Mater Dei Hospital, Tal-Qroqq l/o Msida

Gozo General Hospital, Victoria

St. James Hospital, Sliema

St. James Hospital, Zabbar