



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

## **MALTA**

*Second Quarterly Report: April to June 2016*

*Directorate for Health Information and Research (DHIR)  
National Obstetric Information System (NOIS), Malta*

<https://health.gov.mt/en/dhir/Pages/Registries/births.aspx>

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

### **Background**

A national obstetric information system was launched at the Directorate for 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 second quarter of 2016 and where appropriate compares it to the figures reported for the same period of the previous 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 1010 maternities/deliveries registered in the Maltese Islands for the second quarter of 2015, which resulted in a total of 1033 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 20 births (*1053 births reported in 2nd quarter 2015*).

## **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 second quarter of 2016, the greatest number of deliveries 350 (34.7%), occurred in the age group 30-34 years, followed by the 25-29 year age group with 299 (29.6%) maternities. There were 2 (0.2%) deliveries in the age group <15 years and 3 (0.3) deliveries in the 45+ age group. The minimum age of mothers at delivery was 14 years while the maximum age was 47 years. The most frequent age at delivery was 30 years and the average age at delivery was 30.03 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	2 <sup>nd</sup> Quarter 2016		2 <sup>nd</sup> Quarter 2015	
	Frequency	%	Frequency	%
<15	2	0.2	0	0
15-19	39	3.9	22	2.1
20-24	112	11.1	121	11.6
25-29	299	29.6	317	30.5
30-34	350	34.7	384	36.9
35-39	171	16.9	166	16
40-44	34	3.4	30	2.9
45+	3	0.3	0	0
Unspecified	0	0	0	0

#### *Marital Status:*

For the second quarter of 2016, 27.7% (280) of all deliveries occurred to mothers who were reported as single (never married); while 67.6% (683) of all deliveries occurred to mothers reported as married, and 4.7% (47) of mothers were reported as separated or divorced. No births occurred to widowed females. Marital status was specified for all mothers.

#### *Nationality:*

79.9% (807) of all deliveries this quarter occurred to women of Maltese nationality while 20.1% (203) were Non-Maltese. Nationality was specified for all mothers.

#### *Parity:*

There were 54.9% (554) of mothers who were primiparas (ie. delivering for the first time) while 45.1% (456) were multiparas (i.e. having already delivered at least one baby, live or still) in the second quarter of 2016.

**MATERNAL LIFESTYLES**

There were 70 (6.9%) mothers who were reported to smoke one or more cigarettes during pregnancy in the second quarter of this year. No mothers were reported to drink alcohol and 4 (0.4%) were reported to be drug abusers.

The following table gives the smoking, alcohol and drug habits of mothers for the second quarters of 2016 and 2015.

**Table 2 – Maternal lifestyles**

	<i>2<sup>nd</sup> Quarter 2016</i>		<i>2<sup>nd</sup> Quarter 2015</i>	
	<i>No.</i>		<i>No.</i>	
<b><i>Cigarette smoking during pregnancy</i></b>				
1 to 3/day	21		22	
> than 3/day	49		65	
Do not smoke	940		953	
Unspecified	0		0	
<b><i>Alcohol consumption during pregnancy</i></b>				
Up to 1unit/day	0		0	
> than 1unit/day	0		0	
None	1010		1040	
Unspecified	0		0	
<b><i>Drug Abuse during pregnancy</i></b>				
Yes	4		3	
No	1006		1037	
Unspecified	0		0	

**SPECIAL CONDITIONS OF PREGNANCY**

In the second quarter of 2016, there were 35 cases of assisted reproduction (ART) reported, this includes all forms of ART namely ovulation stimulation, IVF and ICSI (*17 cases of ART were reported in 2<sup>nd</sup> quarter 2015*).

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 5.5% of mothers were registered as having gestational hypertension in the second quarter of 2016.

**Table 3 – Pregnancy related conditions**

	<i>2<sup>nd</sup> Quarter 2016</i>		<i>2<sup>nd</sup> Quarter 2015</i>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
<b>Antepartum Haemorrhage</b>	11	1.1	23	2.2
<b>Gestational hypertension</b>	56	5.5	60	5.8
<b>Pre-eclampsia</b>	7	0.7	9	0.9
<b>Eclampsia</b>	0	0	0	0
<b>Placenta praevia</b>	15	1.5	11	1.1
<b>Abruption of placenta</b>	2	0.2	1	0.1

***Diabetes in Pregnancy***

In the second quarter of this year, there were 5 mothers who were reported as having Insulin Dependent Diabetes before the current pregnancy while 1 mother was reported as having Non-Insulin Dependent diabetes prior to pregnancy. In addition, there were a total of 33 mothers registered with gestational diabetes.

***DELIVERIES ACCORDING TO PLURALITY***

For the second quarter of 2016, there were a total of 987 singleton and 23 twin deliveries; there were no triplet or quadruplet deliveries.

**Table 4 –Delivery by Plurality**

	<i>2<sup>nd</sup> Quarter 2016</i>	<i>2<sup>nd</sup> Quarter 2015</i>
Singleton	987	1027
Twin	23	13
Triplet	0	0
Quadruplet	0	0

## **INFANT BIRTHS**

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

In the second quarter of this year, there were a total of 1033 infant births.

There were more male infants born than female, the gender distribution for this quarter was 547 (53.0%) males and 486 (47.0%) females (*2<sup>nd</sup> quarter 2015: males – 574; females – 479*).

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

Of the 1033 infants born, 667 (64.6%) were delivered as unassisted vaginal vertex delivery, 326 (31.5%) by emergency or elective Caesarean Section and 40 (3.9%) by assisted vaginal delivery (this includes forceps, ventouse and breech deliveries).

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

	<i>2<sup>nd</sup> Quarter 2016</i>	<i>2<sup>nd</sup> Quarter 2015</i>
<b>Vaginal vertex delivery</b>	667	673
<b>Emergency/elective Caesarean Section</b>	326	336
<b>Forceps delivery</b>	1	5
<b>Ventouse</b>	36	38
<b>Breech</b>	3	1

*\*Data presented according to total infant births*

This quarter there were 326 babies born by caesarian section but 305 caesarean deliveries performed; this due to the fact that a number of caesareans are done in multiple birth deliveries. Only 1 twin pregnancy was delivered by a breech delivery and not a Caesarean section. The Caesarean section operation rate was 30.2% of the total maternal deliveries (1010) this quarter.

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

This quarter there were 98 (9.5%) preterm babies of less than 37 weeks gestation. 18 (1.7%) were very preterm being less than 32 weeks of gestation.

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

	<i>2<sup>nd</sup> Quarter 2016</i>	<i>2<sup>nd</sup> Quarter 2015</i>
<b>Extremely Preterm (22 - 27 wks)</b>	10	5
<b>Very Preterm (28 - 31 wks)</b>	8	6
<b>Moderately Preterm (32 - 36wks)</b>	80	50
<b>Term (37 - 41wks)</b>	935	989
<b>Post term (&gt;41 wks)</b>	0	2
<b>Unknown</b>	0	1

**INFANT BIRTH WEIGHTS**

In the second quarter of 2016, there were 948 (91.8%) of the total births that occurred in the birth weight range of 2500g to 4499g, 65 (6.3%) of the total births were in the low birth weight range of 1500g to 2499g, 13 (1.3%) of births were of very low birth weight 500g to 1499g. There were 4 babies with birth weight below 500g but gestation 22 weeks+ and 3 babies with birth weight of 4500g or over.

**Table 7 – Births by birth weight**

	<i>2<sup>nd</sup> Quarter 2016</i>	<i>2<sup>nd</sup> Quarter 2015</i>
<500g	4	3
500-999g	6	4
1000-1499g	7	4
1500-1999g	24	9
2000-2499g	41	47
2500-2999g	206	220
3000-3499g	420	450
3500-3999g	282	257
4000-4499g	40	51
4500-4999g	3	8
5000+	0	0
Unspecified	0	0
<b>Average Birth weight (g)</b>	3211	3244

**OUTCOME OF BIRTH**

The number of live births for the second quarter of this year was 1029 which accounted for 99.6% of the total births at a national level. The remaining 4 births were stillbirths. Stillbirths are defined as fetal death at or after 22 completed weeks of gestation.

**Table 8 – Live and still births**

	<i>2<sup>nd</sup> Quarter 2016</i>	<i>2<sup>nd</sup> Quarter 2015</i>
<b>Babies born alive</b>	1029	1048
<b>Stillbirths</b>	4	5

Of the 1029 live births this quarter, there were 4 early neonatal deaths, that is dying within the first 7 days of life while there were 3 late neonatal deaths, that is dying between 8 and 28 days of life.

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

	<i>2<sup>nd</sup> Quarter 2016</i>	<i>2<sup>nd</sup> Quarter 2015</i>
<b>Early Neonatal deaths</b>	4	3
<b>Late Neonatal deaths</b>	3	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>2<sup>nd</sup> Quarter 2016</i>	<i>2<sup>nd</sup> Quarter 2015</i>
<b>Breast only</b>	582	620
<b>Bottle only</b>	281	261
<b>Mixed (Breast &amp; Bottle)</b>	160	163
<b>Other*</b>	10	9
<b>Unspecified</b>	0	0

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

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