



NATIONAL OBSTETRIC INFORMATION SYSTEM (NOIS)

MALTA

Third Quarterly Report: July to September 2009

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

www.sahha.gov.mt/pages.aspx?page=92

NOIS Registry:

Public Health Specialist (Contact person):

Dr. Miriam Gatt

Data management:

Ms. V. Parnis

Ms. M. Mallia

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 and St. Philip's Hospital.

Report analysis

This report analyses the national maternities/deliveries and infant births that occurred in the third quarter of 2009 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: www.sahha.gov.mt/pages.aspx?page=92 or by e-mail: healthinfo@gov.mt.

ANALYSIS

There were a total of 1052 maternities/deliveries registered in the Maltese Islands for the third quarter of 2009, which resulted in a total of 1070 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 80 births (1150 births reported in 3rd quarter 2008).

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 2009, the greatest number of deliveries (33.7%), occurred in the age group 25 to 29 years, closely followed by the 30-34 year age group (31.8%). There were <1% deliveries in the age group <15 years and <1% of deliveries in the 45+ age group. The minimum age of mothers at delivery was 14 years while the maximum age was 49 years. The most frequent age at delivery was 29 years (91 mothers) and the average age at delivery was also 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 rd Quarter 2009		3 rd Quarter 2008	
	Frequency	%	Frequency	%
<15	1	<1	2	<1
15-19	75	7.1	67	6
20-24	150	14.3	188	17
25-29	355	33.7	395	35
30-34	335	31.8	336	30
35-39	119	11.3	112	10
40-44	14	1.3	25	2
45+	3	<1	2	<1
Unspecified	0	0	3	<1

Marital Status:

For the third quarter of 2009, 24.1% (254) of all deliveries occurred to mothers who were reported as single (never married); while 71.0% (747) of all deliveries occurred to mothers reported as married, and 4.8% (50) of mothers were reported as widowed, separated or divorced. Marital status was not specified for 1 mother.

In the third quarter of 2009, all mothers were registered as having 'Support at home to raise the infant'.

Nationality:

91.7% (965) of all deliveries this quarter, occurred to women of Maltese nationality while 8.0% (84) were Non-Maltese. In the remaining 0.3% (3) nationality was not specified.

Parity:

There were 52.9% (557) of mothers who were primiparas (ie. delivering for the first time) while 47.1% (495) were multiparas (ie. having already delivered at least one child) in the third quarter of 2009.

MATERNAL LIFESTYLES

There were 93 (8.8%) mothers who were reported to smoke one or more cigarettes during pregnancy in the second quarter of this year. None were reported to drink excessive alcohol and 10 were reported to be drug abusers.

The following table gives the smoking, alcohol and drug habits of mothers for the third quarters of 2009 and 2008.

Table 2 – Maternal lifestyles

	<i>3rd Quarter 2009</i>	<i>3rd Quarter 2008</i>
	<i>No.</i>	<i>No.</i>
<i>Cigarette smoking during pregnancy</i>		
1 to 3/day	13	17
> than 3/day	80	33
Do not smoke	954	1074
Unspecified	5	6
<i>Alcohol consumption during pregnancy</i>		
Up to 1unit/day	0	0
> than 1unit/day	0	0
None	1047	1124
Unspecified	5	6
<i>Drug Abuse during pregnancy</i>		
Yes	10	14
No	1037	1110
Unspecified	5	6

SPECIAL CONDITIONS OF PREGNANCY

In the third quarter of 2009, there were 11 cases of assisted reproduction (ART) reported, this includes all forms of ART namely ovulation stimulation, IVF and ICSI (19 cases of ART reported in 3rd quarter 2008).

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 5.8% of mothers were registered as having gestational hypertension in the third quarter of 2009.

Table 3 – Pregnancy related conditions

	<i>3rd Quarter 2009</i>		<i>3rd Quarter 2008</i>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
Antepartum Haemorrhage	35	3.3	17	1.5
Gestational hypertension	61	5.8	70	6.2
Pre-eclampsia	14	1.3	21	1.9
Eclampsia	2	0.2	2	0.2
Placenta praevia	8	0.8	17	1.5
Abruption of placenta	2	0.2	0	0

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 one mother was reported with Non-Insulin Dependent diabetes prior to pregnancy. In addition, there were a total of 54 mothers (5.1%) registered with gestational diabetes who were controlled without the use of insulin, and no mothers registered as having gestational diabetes treated with insulin. In the 3rd quarter of 2008 there were 3.7% of mothers registered as having gestational diabetes.

DELIVERIES ACCORDING TO PLURALITY

For the third quarter of 2009, there were a total of 1035 (98.4%) singleton, 16 (1.5%) twin and 1 (0.1%) triplet delivery.

Table 4 –Delivery by Plurality

	<i>3rd Quarter 2009</i>	<i>3rd Quarter 2008</i>
Singleton	1035	1111
Twin	16	18
Triplet	1	1
Quadruplet	0	0

INFANT BIRTHS

TOTAL INFANT BIRTHS AND GENDER DISTRIBUTION

In the third quarter of this year, there were a total of 1070 infant births, while there were 1150 in the same quarter of 2008.

There were more male infants born than female, the gender distribution for this quarter was 549 (51.3%) males and 520 (48.6%) females (*3rd quarter 2008: males –617; females – 531*). There was also one neonatal death with severe congenital abnormalities whose gender was uncertain.

INFANTS AND METHOD OF BIRTH

Of the 1070 infants born between July and September 2009, 692 (64.7%) were delivered as unassisted vertex delivery, 336 (31.4%) by emergency or elective Caesarean Section and 42 (3.9%) by assisted vaginal delivery (this includes forceps, ventouse and breech deliveries).

Table 5 – Distribution of births by method of delivery

	<i>3rd Quarter 2009</i>	<i>3rd Quarter 2008</i>
Vaginal vertex delivery	692	773
Emergency/elective Caesarean Section	336	330
Forceps delivery	4	3
Ventouse	37	42
Breech	1	2

**Data analysed according to total infant births*

This quarter there were 336 babies born by caesarian section but 318 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 30.2% of the total maternal deliveries (1052) this quarter.

BIRTHS BY GESTATIONAL AGE CATEGORY

This quarter there were 78 (7.3%) preterm babies of less than 37 weeks gestation. 24 (2.2%) were very preterm being less than 32 weeks of gestation.

Table 6 – Distribution by gestational age categories

	<i>3rd Quarter 2009</i>	<i>3rd Quarter 2008</i>
Extremely Preterm (22 - 27 wks)	9	11
Very Preterm (28 - 31 wks)	15	11
Moderately Preterm (32 - 36wks)	54	57
Term (37 - 41wks)	987	1070
Post term (41+ wks)	5	1
Unknown	0	0

INFANT BIRTH WEIGHTS

In the third quarter of 2009, there were 983 (91.9%) of the total births that occurred in the birth weight range of 2500g to 4999g, 66 (6.2%) of the total births were in the low birth weight range of 1500g to 2499g, 17 (1.6%) of births were of very low birth weight 500g to 1499g and 2 were less than 500g although having a gestation of 22 completed weeks. There were no infants with a birth weight over 5000g, and in 2 cases the birth weight was unspecified.

Table 7 – Births by birth weight

	<i>3rd Quarter 2009</i>	<i>3rd Quarter 2008</i>
<500g	2	1
500-999g	9	10
1000-1499g	8	4
1500-1999g	17	12
2000-2499g	49	50
2500-2999g	209	236
3000-3499g	492	519
3500-3999g	239	258
4000-4499g	36	49
4500-4999g	7	5
5000+	0	3
Unspecified	2	3
Average Birth weight (g)	3183	3222

OUTCOME OF BIRTH

The number of live births for the third quarter of this year was 1060 which accounted for 99.1% of the total births at a national level. The remaining 10 births were stillbirths. Stillbirths are defined as fetal death at or after 22 completed weeks of gestation.

Table 8 – Live and still births

	<i>3rd Quarter 2009</i>	<i>3rd Quarter 2008</i>
Babies born alive	1060	1139
Stillbirths	10	11

Of the 1060 live births this quarter, there were 4 early neonatal deaths and one late neonatal deaths.

Table 9 – Early and late neonatal deaths

	<i>3rd Quarter 2009</i>	<i>3rd Quarter 2008</i>
Early Neonatal deaths	4	7
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.

Table 10 – Infant feeding methods at time of discharge

	<i>3rd Quarter 2009</i>	<i>3rd Quarter 2008</i>
Breast only	628	679
Bottle only	304	369
Mixed (Breast & Bottle)	123	81
Other*	15	20
Unspecified	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

St. Philip's Hospital, Sta Venera.