



# Perinatal Statistics **REPORT**

Health Research and  
Information Division

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# 2005



## Acknowledgements

The collection and analysis of national perinatal data is a large undertaking, and the compilation of an accurate and comprehensive database on a timely basis is greatly dependent on the commitment and support of those at the forefront of collecting the data. Principal among these are the staff of the maternity hospitals and units as well as the many independent midwives involved in practice. We would like to express our sincere appreciation to all who contribute to the accurate recording and timely notification of statistical information for all births nationally.

Data on 61,786 births were analysed for this report. For each of these records additional information, apart from that required to register each birth, had to be collected in each hospital and by each independent midwife. This National Perinatal Reporting System (NPRS) within the Health Research and Information Division at the ESRI is responsible for collecting, coding, inputting and validating these data to create a national database which has been analysed for the production of this report of perinatal events for 2005.

In addition to financing the NPRS, the Department of Health and Children continues to provide essential support for the operation and development of this system. We would like to acknowledge, in particular, the advice and assistance provided by Hugh Magee and for his comments on an earlier draft of this report.

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## Table of Contents

List of Tables . . . . .	ii
List of Figures . . . . .	v
Executive Summary . . . . .	vi
<b>SECTION 1</b>	
<b>Introduction</b> . . . . .	<b>1</b>
Introduction . . . . .	2
Completeness and Reliability . . . . .	7
Trends and International Comparisons . . . . .	11
<b>SECTION 2</b>	
<b>Selected Trends</b> . . . . .	<b>17</b>
Introduction . . . . .	18
Selected Trends . . . . .	19
<b>SECTION 3</b>	
<b>General Characteristics</b> . . . . .	<b>25</b>
Introduction . . . . .	26
Part 1: Singleton Births . . . . .	27
Part 2: Multiple Births . . . . .	43
<b>SECTION 4</b>	
<b>Perinatal Care</b> . . . . .	<b>55</b>
Introduction . . . . .	56
Part 1: Singleton Births . . . . .	57
Part 2: Multiple Births . . . . .	65
<b>SECTION 5</b>	
<b>Perinatal Outcomes</b> . . . . .	<b>71</b>
Introduction . . . . .	72
Part 1: Singleton Births . . . . .	73
Part 2: Multiple Births . . . . .	81
<b>APPENDICES</b>	
Appendix A: Definitions . . . . .	86
Appendix B: Copy of Part 3 of the Birth Notification Form . . . . .	91
Appendix C: Classification of Occupation . . . . .	92
Appendix D: Cause of Death Classification . . . . .	93
Appendix E: Classification of County of Residence . . . . .	97
Appendix F: Classification of Nationality . . . . .	98
Appendix G: Cross-Tabulations of Selected Variables: 2005 . . . . .	102
Appendix H: Domiciliary Births: 1999–2005 Cross-Tabulations of Selected Variables: 2005 . . . . .	127
Appendix I: Gestational Age at Time of First Visit to Doctor or Hospital During Pregnancy . . . . .	134

## List of Tables

2.1	Trends in Vital Events, 1999–2005	19
2.2	Trends in Selected Statistics, 1999–2005	20

### **Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates for Singleton Births for the year 2005 for the following variables:**

3.1	Age of Mother	27
3.2	Maternal Parity	27
3.3	Mother's Marital Status	29
3.4	Father's Occupation	31
3.5	Mother's Occupation	33
3.6	Number of Previous Stillbirths	35
3.7	Birthweight, All Singleton Births	35
3.8	Birthweight, Males	36
3.9	Birthweight, Females	37
3.10	Gestational Age at Delivery	38
3.11	Interval in Years Since Last Birth	39
3.12	Month of Birth	40
3.13	Mother's Nationality	41
3.14	Father's Nationality	42

### **Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates for Multiple Births for the year 2005 for the following variables:**

3.15	Twinning Rate	43
3.16	Age of Mother	43
3.17	Maternal Parity	44
3.18	Mother's Marital Status	44
3.19	Father's Occupation	45
3.20	Mother's Occupation	46
3.21	Number of Previous Stillbirths	47
3.22	Birthweight, All Multiple Births	48
3.23	Birthweight, Males	48
3.24	Birthweight, Females	49
3.25	Gestational Age at Delivery	49
3.26	Interval in Years Since Last Birth	50
3.27	Month of Birth	50
3.28	Mother's Nationality	52
3.29	Father's Nationality	53

**Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates for Singleton Births for the year 2005 for the following variables:**

4.1	Type of Antenatal Care	57
4.2	Mother's Length of Stay in Hospital Prior to Delivery	57
4.3	Mother's Length of Stay in Hospital After Delivery	58
4.4	Method of Delivery	59
4.5	Advance Hospital Bookings	59
4.6	Size of Maternity Unit (number of live births and stillbirths annually)	60
4.7	Inter-Hospital Transfer of Infants, Live Births, Early Neonatal Deaths and Mortality Rate	61
4.8	Rubella: Immune Status of Mother, Numbers and Percentages	61
4.9	Age of Mother by Infant's Type of Feeding, Numbers and Percentages	62

**Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates for Multiple Births for the year 2005 for the following variables:**

4.10	Type of Antenatal Care	65
4.11	Mother's Length of Stay in Hospital Prior to Delivery	65
4.12	Mother's Length of Stay in Hospital After Delivery	66
4.13	Method of Delivery	67
4.14	Advance Hospital Bookings	67
4.15	Inter-Hospital Transfer of Infants, Live Births, Early Neonatal Deaths and Mortality Rate	68
4.16	Rubella: Immune Status of Mother, Numbers and Percentages	68
4.17	Age of Mother by Infant's Type of Feeding, Numbers and Percentages	69

**Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates for Singleton Births for the year 2005 for the following variables:**

5.1	Live Births, Antepartum and Intrapartum Stillbirths, Early Neonatal Deaths, and Mortality Rates by Birthweight	73
5.2	Stillbirths, Early Neonatal Deaths and Mortality Rates by Cause of Death	74
5.3	Perinatal Mortality, Numbers and Rates by Birthweight and Cause of Death	76
5.4	Age at Death, Early Neonatal Deaths	78
5.5	Percentage Distribution of Live Births by Infant's Length of Stay in Hospital	78
5.6	Percentage of Stillbirths and Early Neonatal Deaths undergoing Post-Mortem Examinations	79

**Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates for Multiple Births for the year 2005 for the following variables:**

5.7	Live Births, Antepartum and Intrapartum Stillbirths, Early Neonatal Deaths, and Mortality Rates by Birthweight	81
5.8	Stillbirths, Early Neonatal Deaths and Mortality Rates by Cause of Death	82
5.9	Numbers of Perinatal Deaths by Birthweight and Cause of Death	83
5.10	Age at Death, Early Neonatal Deaths	84
5.11	Percentage Distribution of Live Births by Infant's Length of Stay in Hospital	84
5.12	Percentage of Stillbirths and Early Neonatal Deaths undergoing Post-Mortem Examinations	84

D1	Cause of Death Coding Rules	95
D2	ICD-10, Cause of Death Codes	96

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**The following Tables are based on Singleton and Multiple Live Births and Stillbirths for the year 2005:**

<b>G1</b>	Age of Mother by Maternal Parity, Live and Still Singleton Births	103
<b>G2</b>	Method of Delivery by Maternal Parity, Live and Still Singleton Births	104
<b>G3</b>	Mother's Marital Status by Age of Mother, Live and Still Singleton Births	105
<b>G4</b>	Mother's Marital Status by Age of Father, Live and Still Singleton Births	106
<b>G5</b>	Gestational Age at Delivery by Maternal Parity, Live and Still Singleton Births	107
<b>G6</b>	Age of Mother by Gestational Age at Delivery, Live and Still Singleton Births	108
<b>G7</b>	Method of Delivery by Age of Mother, Live and Still Singleton Births	109
<b>G8</b>	Birthweight by Gestational Age at Delivery, Live and Still Singleton Births	110
<b>G9</b>	Method of Delivery by Mother's Length of Stay in Hospital After Delivery, Live and Still Singleton Births	111
<b>G10</b>	Maternal Parity by Mother's Length of Stay in Hospital After Delivery, Live and Still Singleton Births	112
<b>G11</b>	Father's Occupation by Infant's Birthweight, Live and Still Singleton Births	113
<b>G12</b>	Mother's Occupation by Infant's Birthweight, Live and Still Singleton Births	115
<b>G13</b>	Father's Occupation by Interval in Years Since Last Birth, Live and Still Singleton Births	117
<b>G14</b>	Mother's Occupation by Interval in Years Since Last Birth, Live and Still Singleton Births	118
<b>G15</b>	Father's Occupation by Infant's Type of Feeding, Live Singleton Births	119
<b>G16</b>	Mother's Occupation by Infant's Type of Feeding, Live Singleton Births	120
<b>G17</b>	Infant's Type of Feeding by Maternal Parity, Live Singleton Births	121
<b>G18</b>	Mother's County of Residence by Mother's Marital Status, Live and Still Singleton and Multiple Births	122
<b>G19</b>	Mother's County of Residence by Infant's Type of Feeding, Live Singleton and Multiple Births	124
<b>G20</b>	Mother's County of Residence, Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, Singleton and Multiple Births	126

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**The following tables are based on Domiciliary Births:**

<b>H1</b>	Trends in Selected Statistics, Domiciliary Births, 1999–2005	128
<b>H2</b>	Age of Mother by Maternal Parity, 2005	128
<b>H3</b>	Age of Mother by Gestational Age at Delivery, 2005	129
<b>H4</b>	Birthweight by Gestational Age at Delivery, 2005	129
<b>H5</b>	Mother's Occupation by Birthweight, 2005	130
<b>H6</b>	Mother's Marital Status by Age of Mother, 2005	131
<b>H7</b>	Father's Occupation by Infant's Type of Feeding, Live Births, 2005	132
<b>H8</b>	Mother's Occupation by Infant's Type of Feeding, Live Births, 2005	133

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**Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates for Singleton and Multiple Births for the year 2005 for the following variables:**

<b>I1</b>	Time of First Visit to Doctor or Hospital During Pregnancy, Singleton Births	135
<b>I2</b>	Time of First Visit to Doctor or Hospital During Pregnancy, Multiple Births	135
<b>I3</b>	Mother's Marital Status by Gestational Age at Time of First Visit to Doctor or Hospital During Pregnancy, Singleton Births	136
<b>I4</b>	Interval in Years Since Last Birth by Gestational Age at Time of First Visit to Doctor or Hospital During Pregnancy, Singleton Births	137



## List of Figures

1.1	National Perinatal Reporting System, Diagrammatic View	3
1.2	Perinatal Mortality Rate, Ireland: 1999-2005	11
1.3	Perinatal Mortality Rates for Selected EU Countries: 2005	12
1.4	Trends in Birth Rates for Selected EU Countries: 1999-2005	13
1.5	Birth Rate per 1,000 Population for EU Countries: 2005	14
1.6	Age-Specific Fertility Rates (ASFR) and Total Period Fertility Rates (TPFR), Ireland: 1999-2005	15
1.7	Total Period Fertility Rates for Selected EU Countries: 2005	16
2.1	Percentage of Births to Single Mothers, 1999–2005	21
2.2	Percentage of Births to Single Mothers by Age of Mother, Singleton Births, 1999–2005	21
2.3	Percentage of Low Birthweight Babies, Total Live Births, 1999–2005	22
2.4	Average Length of Stay in Days for Mothers and Infants, 1999–2005	22
2.5	Caesarean Births as a Percentage of Total Live Births, 1999–2005	23
2.6	Percentage of Mothers Breastfeeding, 1999–2005	23
3.1	Perinatal Mortality Rates by Age of Mother, 2005	28
3.2	Percentage Distribution of Parity by Age of Mother, 2005	29
3.3	Mother's Age: Percentage Distribution of Births for Married and Single Status, 2005	30
3.4	Perinatal Mortality Rates by Father's Occupation, 2005	32
3.5	Perinatal Mortality Rates by Mother's Occupation, 2005	34
3.6	Percentage Distribution of Live Births across Birthweight Groups, 2005	36
3.7(A)	Perinatal Mortality Rates for Males and Females by Birthweight (500–2499 grams), 2005	37
3.7(B)	Perinatal Mortality Rates for Males and Females by Birthweight (2500–4500 grams and over), 2005	38
3.8	Perinatal Mortality Rates by Gestational Age, 2005	39
3.9	Birthweights: Cumulative Percentages of Singleton and Multiple Live Births, 2005	47
3.10	Percentage of Total Births to Single Mothers by Mother's County of Residence, Singleton and Multiple Live Births and Stillbirths, 2005	51
4.1	Mother's Postnatal Length of Stay: Cumulative Percentages by Method of Delivery, 2005	58
4.2	Percentage of Live Births by Size of Maternity Unit, 2005	60
4.3	Percentage of Mothers Breastfeeding by Father's Occupation, 2005	63
4.4	Percentage of Mothers Breastfeeding by Mother's Occupation, 2005	63
4.5	Percentage of Mothers Breastfeeding by Age of Mother, 2005	64
4.6	Percentage Distribution of Births by Mother's Postnatal Length of Stay in Days, 2005	66
4.7	Percentage Distribution of Breastfed Infants by Mother's County of Residence, Singleton and Multiple Live Births, 2005	70

## Executive Summary

The principal aim of the National Perinatal Reporting System (NPRS) is the provision of national statistics on perinatal events in Ireland. Since 1999, The Economic and Social Research Institute (ESRI) has been contracted by the Department of Health and Children to oversee the collection, processing, management and reporting of data submitted to the NPRS. In this report, data on pregnancy outcomes, with particular reference to perinatal mortality and important aspects of perinatal care, are presented for 2005. In addition, descriptive social and biological characteristics of mothers giving birth and babies born in 2005 are recorded. The introduction to this report (Section 1) discusses general trends and international comparisons in relation to fertility and perinatal mortality. Section 2 reports on selected statistics (see Table 2.2) and some of the more significant trends are highlighted below.

In 2005, 61,786 births were notified to the NPRS, a decrease of 1.0 per cent since 2004 and an increase of 6.1 per cent since 2001. Of these, 306 were stillbirths giving a stillbirth rate of 5.0 per 1,000 live births and stillbirths in 2005. The stillbirth rate was slightly higher in previous years: 5.4 per 1,000 live births and stillbirths in 2004 and 5.8 per 1,000 live births and stillbirths in 2001. There were 139 early neonatal deaths resulting in an early neonatal death rate of 2.3 per 1,000 live births in 2005. This rate contrasts with a rate of 2.7 per 1,000 live births in 2004 and 2.8 per 1,000 live births in 2001. The perinatal mortality rate was 7.2 per 1,000 live births and stillbirths in 2005, a decrease of 0.9 per 1,000 from 2004 (when the perinatal mortality rate was 8.1 per 1,000 live births and stillbirths). The 2005 perinatal mortality rate was also lower than that reported in 2001 (8.6 per 1,000 live births and stillbirths), and is at its lowest since this series of reports started in 1999.

The average birthweight of babies born in 2005 was estimated at 3,472 grams, marginally lower than that reported in 2004. Average gestational age at delivery in 2005 of 39.4 weeks remained fairly constant since 2001. Low birthweight babies (weighing less than 2,500 grams) accounted for 5.0 per cent of all births in 2005. The twinning rate for 2005 was 15.1 per 1,000 maternities, and comprised 916 sets of twin births, 15 sets of triplet births and 1 set of quadruplet births.

In 2005, single mothers accounted for 30.7 per cent of all women giving birth. This rate has remained relatively stable over the five-year period since 2001. Mother's average age has been continually increasing from 30.3 years in 2001 to 31.0 years in 2005. There has also been a small increase in the average age of single mothers, which was 25.4 years in 2001 and 26.6 years in 2005. The average maternal parity fell slightly from 1.07 previous births in 2001 to 1.05 in 2005. The trend in the breastfeeding rate continues to be upward at 44.1 per cent of maternities with live births in 2005, compared with 42.5 per cent in 2004 and only 39.1 per cent in 2001.

The number of home births attended by independent domiciliary midwives decreased in 2005 compared to previous years (183 in 2005 compared to 202 in 2004 – a decrease of 9.4 per cent). Over the period 2001 to 2005 the number of births attended by independent domiciliary midwives fell by 25.3 per cent (from 245 in 2001 to 183 in 2005).

Delivery by caesarean section was estimated at 25.9 per cent of all live births in 2005, compared with 25.2 per cent in 2004 and 22.0 per cent in 2001. In 2005, 24.9 per cent of singleton births were delivered by caesarean section, an increase of 0.6 percentage points from 2004. The 2005 caesarean section rate for singleton births also exceeded that reported in 2001 (21.1 per cent of all live singleton births). The percentage of multiple births delivered by caesarean section in 2005 was 60.4 per cent, an increase of 4.6 percentage points from 2004 and over 7 percentage points higher than that reported in 2001.

Average lengths of stay for both mother and infant continued to decline in 2005. Infant's length of stay decreased from an average of 4.1 days in 2001 to 3.7 days in 2005, while mother's average total length of stay fell from 4.4 days in 2001 to 3.8 days in 2005.

The proportion of early neonatal deaths undergoing post-mortem examinations fell from 44.4 per cent in 1999 to 33.6 per cent in 2001. This proportion increased to 42.1 per cent in 2002 but fell to 41.7 per cent and 38.2 per cent in 2003 and 2004 respectively. The proportion of early neonatal deaths undergoing post-mortem examinations in 2005 has decreased further to 24.4 per cent.



Introduction

SECTION

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**1**



## Introduction

### AIMS

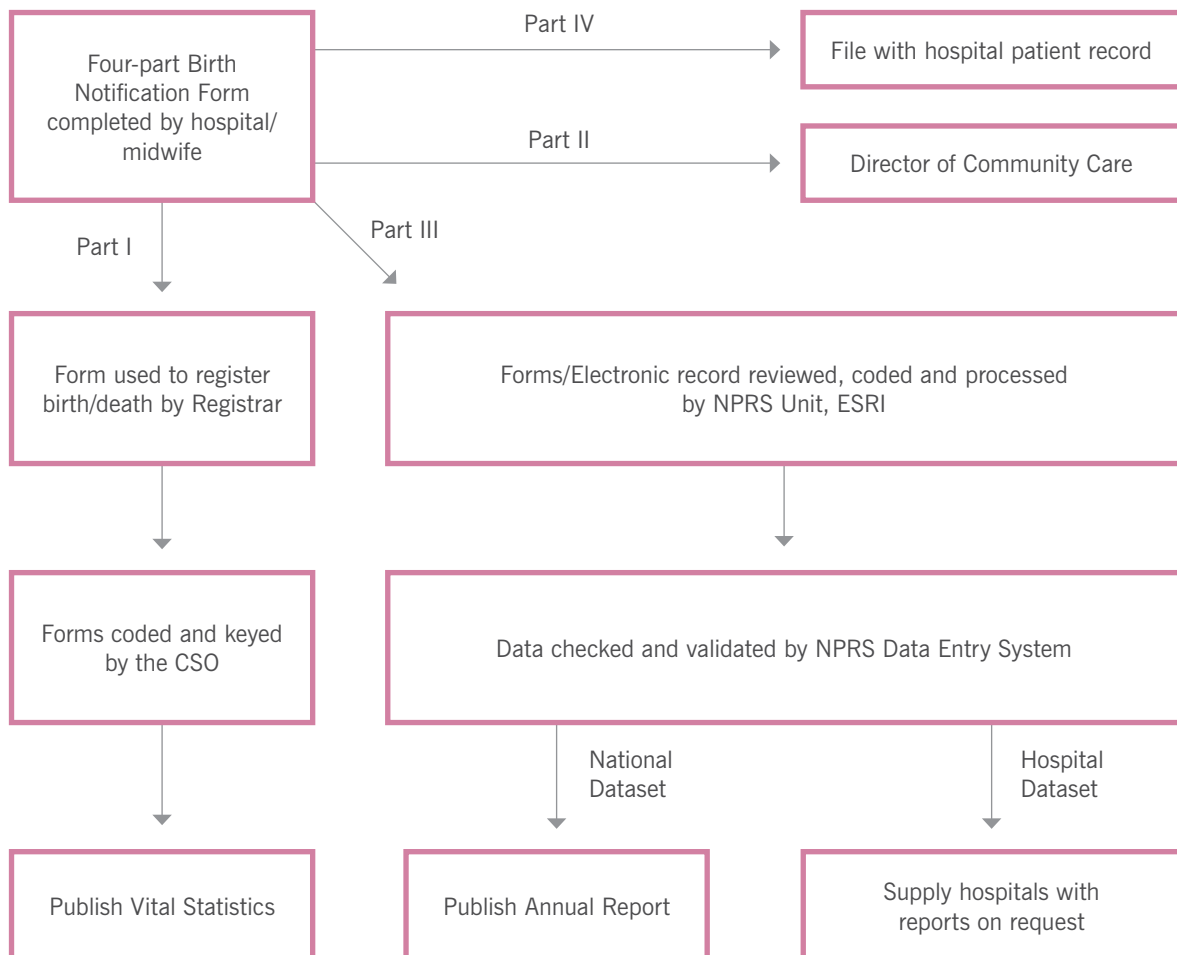
This report of the National Perinatal Reporting System (NPRS) has as its principal aim the provision of national statistics on perinatal events for the year 2005. More specifically, the report aims to describe the fundamental social and biological characteristics of mothers and their babies, to report on pregnancy outcomes with particular reference to perinatal mortality, and to highlight important aspects of perinatal care. Although great strides have been made in reducing infant and perinatal mortality during the past twenty years, the perinatal period continues to be a time of relatively high mortality. Set in this context, the importance of monitoring variables related to perinatal health becomes evident.

This report presents what might be considered a minimum national data set and is intended to serve as a foundation for the development of basic time series analyses and to allow for the possible addition of further variables and more extensive analysis in future years. In mid-2003 the birth notification form (BNF01/2003) was revised to facilitate a number of new fields that were required by the General Register Office (GRO) for birth registrations (part 1). These changes have resulted in the collection of two new variables by the NPRS: nationality and country of residence for both the mother and father. These variables were reported on for the first time in 2004 and are included in this report on 2005 data. It is hoped that the publication of the data reported to the NPRS will stimulate a wider interest in research in the area of perinatal epidemiology and promote a general recognition of the importance of having an accurate and complete perinatal reporting system. For background information on the development of the perinatal reporting system please see previous reports (HIPE & NPRS Unit, Report on Perinatal Statistics for 2002, The Economic and Social Research Institute, 2005). The definitions for parameters estimated in this report are contained in Appendix A.

### DATA COLLECTION AND PROCESSING

Births are registered and notified on a standard four-part form (see Appendix B). The top copy of the form is sent by the hospital to the Registrar of Births and serves as the official document of registration. This copy is subsequently forwarded to the Central Statistics Office (CSO) for use in the production of quarterly and annual reports on vital statistics. The second part of the form, containing additional information on the health of the mother and the infant and on the care received, goes to the Director of Community Care and Medical Officer of Health in the mother's area of residence. It serves the dual purpose of notifying the local medical and nursing services that have responsibility for the postnatal care of the mother and child and of providing the basis for health records used by the health boards. The third part of the form has all identifying information deleted and is sent to the NPRS Unit at The Economic and Social Research Institute (ESRI). The fourth and final copy is retained by the hospital. For domiciliary births, the same four-part form is used and the first three parts are processed as with hospital births while part 4 is retained by the midwife. Figure 1.1 provides a diagrammatic representation of the information system. All the tables in the present report are based on data contained in the third copy of the standard form.

Figure 1.1  
National Perinatal Reporting System, Diagrammatic View



The data collected by the NPRS can be logically grouped into demographic, clinical and administrative data. The data collected by the NPRS for 2005 include:

#### DEMOGRAPHIC DATA

- Date of infant's birth, sex of infant, multiple birth indicator
- Date of father's birth, father's county and country of residence, father's occupation, father's nationality
- Date of mother's birth, mother's county and country of residence, mother's occupation, mother's nationality
- Marital status of mother and date of present marriage.

## CLINICAL DATA

- Infant's birthweight and period of gestation and mother's obstetric history (including parity)
- Autopsy indicator – whether stillbirth occurred before or during labour
- Main cause of death and one secondary cause of death for infant
- Maternal immunity to rubella, method of delivery
- Infant's BCG vaccination
- Main maternal disease or condition and one secondary maternal disease or condition affecting the infant or foetus
- Main disease or congenital malformation and one secondary disease or congenital malformation affecting the infant or foetus.

## ADMINISTRATIVE DATA

- Hospital number, case number (unique to hospital of birth)
- Type of birth indicator, place of birth
- Date of last birth (live or still)
- Type of death indicator, place of death
- Type of antenatal care received, date of first visit to doctor and hospital during pregnancy
- Type of feeding, pre-booked admission indicator, dates of mother's admission and discharge, date of infant's discharge
- Infant transfer indicator, hospital number for hospital to which infant was transferred.

Occupations are coded according to the CSO system of socio-economic group classification (see Appendix C). For 2005 data, diseases and cause of death are coded for the first time using the Tenth Revision of the International Classification of Diseases (ICD-10) and according to the guidelines set out by the World Health Organisation (WHO) (see below and Appendix D for further details on updating from ICD-9 to ICD-10). On completion of data entry, the NPRS Unit in The Health Research and Information Division at the ESRI undertakes checks for data coverage and validation.



## THE TENTH REVISION OF THE INTERNATIONAL CLASSIFICATION OF DISEASES ICD-10<sup>1</sup>

The Tenth Revision of the *International Statistical Classification of Diseases and Related Health Problems* is the latest in a series that was formalised in 1893 as the Bertillon Classification or International List of Causes of Death. While the title has been amended to make the content and purpose clearer and to reflect the progressive extension of the scope of the classification beyond diseases and injuries, the familiar abbreviation 'ICD' has been retained. In the updated classification, conditions have been grouped in a way that was felt to be most suitable for general epidemiological purposes and the evaluation of health care.

The Tenth Revision of the ICD represents the broadest scope of any ICD revision to date. It has over 2,000 categories, which is almost 900 more than are in place in ICD-9. The great expansion in the use of the ICD necessitated a thorough rethinking of its structure with a view to devising a stable and flexible classification which should not require any fundamental revision for many years. Consequently, although the traditional ICD structure was retained, an alphanumeric coding scheme replaced the previous numeric one. This provides a larger coding frame and leaves room for future revision without disruption of the numbering system. The alphanumeric codes also distinguish ICD-10 from any previous ICD version.

ICD-10 was published by the WHO in Geneva in 1992 and is a major update of the WHO's ICD-9 Classification of Diseases. Updating is now maintained by the WHO International Collaborating Centres through their Update and Maintenance Committee. The Ninth Revision introduced an optional alternative method of classifying diagnostic statement, including information about both an underlying general disease and a manifestation in a particular organ or site. This system became known as the dagger and asterisk system and is retained in the Tenth Revision.

### ICD-10 CHANGES FROM ICD-9

ICD-10 is the first new diagnostic coding system since the widespread use of computers in healthcare. With the development of ICD-10, the title was amended to *International Statistical Classification of Diseases and Related Health Problems* in order to reflect the progressive extension and scope of the classification beyond diseases and injuries. ICD-10 differs from ICD-9 in several ways:

- The structure is alphanumeric
- Some chapters have been restructured
- Some diseases have been reclassified
- New features have been added
- The classification's specificity and detail have been expanded.

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1 For details on The Tenth Revision of The International Classification of Diseases and updating from ICD-9 to ICD-10 see: ICD-10 Second Edition, 2005, 1: Tabular List and Murphy D. et al. 2004. *Updating Clinical Coding in Ireland: Options and Opportunities*, HIPE & NPRS Unit, ESRI.

ICD-10 is an expanded classification in comparison with the Ninth Revision. ICD-10 changed chapters, categories and titles, and regrouped conditions. New chapters were created for *Diseases of the eye and adnexa* (ICD-10 Chapter VII) and *Diseases of the ear and mastoid process* (ICD-10 Chapter VIII). Existing chapters on *Diseases of the genitourinary system*, on *Pregnancy, childbirth and the puerperium*, on *Certain conditions originating in the perinatal period*, and on *Congenital malformations, deformations and chromosomal abnormalities* have been brought together as contiguous chapters XIV to XVII.

Chapter XVI, *Certain conditions originating in the perinatal period*, has been expanded and increased from 20 three-digit subcategories to 59 subcategories. Chapters XVII and XVIII, *Congenital malformations, deformations and chromosomal abnormalities* and *Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified* have been expanded by over 300 per cent at the three-digit subcategory level.

The former supplementary classifications of *External causes of morbidity and mortality* and of *Factors influencing health status and contact with health services* now form part of the main classification (ICD-10 Chapters XX and XXI).

The NPRS dataset collects data on morbidity and mortality on mothers giving birth and their babies. The NPRS coders are trained in ICD-10 coding practices, with particular focus on chapters *Pregnancy, childbirth and the puerperium*, *Certain conditions originating in the perinatal period*, and *Congenital malformation, deformations and chromosomal abnormalities* (Chapters XV–XVII). The Tenth Revision of the International Classification of Diseases came into effect for births from 1 January 2005 onwards. The CSO commenced using ICD-10 from 1 January 2007. See Appendix D for a detailed description on cause of death classification and coding rules applied by coders in the NPRS Unit at the ESRI.

## FORMAT AND CONTENTS

This report presents a set of national tabulations for perinatal events for 2005 indicating frequencies, stillbirth rates, early neonatal death rates, and perinatal mortality rates set out for a number of the most important social, biological and health care variables. The data are presented in four main sections covering selected trends, general characteristics, perinatal care, and perinatal outcomes. The definitions for parameters reported in these sections are contained in Appendix A. Section 2 (Selected Trends) documents significant trends in the principal variables for the years 1999–2005. Section 3 (General Characteristics) contains tables relating to the following variables: maternal age; parity; marital status; socio-economic group of mother and father (derived from collection of data on occupations); distribution of previous stillbirths; birthweight (by sex); twinning rate; gestational age; interval since last birth; month of birth and nationality of mother and father.

Section 4 (Perinatal Care) deals with variables which fall more naturally into the category of use of health care facilities and type of antenatal care received, and deals with the following distributions: type of antenatal care received; length of mother's antenatal stay; length of mother's postnatal stay; mother's immunity to rubella; method of delivery; whether hospital admission was booked or not; type of feeding; transfer of infants between hospitals and classification of outcome according to size of maternity unit.

In Section 5 (Perinatal Outcomes), causes of perinatal deaths and other factors closely related to the outcome of pregnancy are considered. In this section tables are presented on the following variables: numbers of antepartum and intrapartum stillbirths by birthweight groups; numbers and rates for cause of death and cause of death by birthweight; age at death for early neonatal deaths; numbers and percentages of stillbirths and early neonatal deaths undergoing post-mortem examinations and the length of infant's stay in hospital. It should be noted that Sections 3, 4 and 5 are each divided into two parts: Part 1 relates to singleton births and Part 2 relates to multiple births.

## Completeness and Reliability

### COVERAGE

The National Perinatal Reporting System covers all live births and stillbirths occurring in Ireland. However, there are differences in the vital statistics published by the Central Statistics Office and the data presented in this report. The reasons for these differences are outlined here.

### MISSING VALUES

No attempt has been made to assign values to missing data, and they are included as a separate category in each table. Each year the proportion of cases with the value 'not stated' continues to decline. This is a positive outcome arising from continued effort on the part of the NPRS staff, hospital administrators, and independent midwives to reduce the number of missing values for all variables collected in the data set. This improves the completeness of the reported data, which is a key objective for the NPRS.

Two new variables, nationality and country of residence for both the mother and father, were introduced in May 2003. Analysis of father and mother's nationality was included in the *Report on Perinatal Statistics* for the first time in 2004. Father's nationality was missing for 11.3 per cent of all births where mother's marital status is recorded as married<sup>2</sup> in 2004, and is missing for 2.6 per cent of all births where mother's marital status is recorded as married in 2005. Mother's nationality was missing for 2.9 per cent of all births in 2004 and is missing for only 0.7 per cent of all births in 2005. Father's date of birth and mother's occupation were included for the first time in the report for 1999 and were missing for 52 per cent and 11 per cent respectively. For 2005, father's date of birth is missing for 8.3 per cent of births where mother's marital status is married. Missing values for mother's occupation remain very low as less than 1.0 per cent of births in 2005 did not have this information recorded.

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<sup>2</sup> It should be noted that where a mother's marital status is recorded as 'never married', 'widowed', 'separated', or 'divorced' the General Register Office (GRO) does not require father's details to register the birth. This information is, therefore, generally not provided in these circumstances.

The majority of variables are close to complete in the 2005 dataset with 'Mother's Age' missing for only 59 records. 'Type of Feeding' was missing for 13 records while information on 'Date of Last Birth' has been recorded as 'unknown' for just under 1 per cent of all births. While information on 'Time of First Visit to Doctor or Hospital During Pregnancy' continues to improve, this was not recorded for 3.9 per cent of births in 2005. Dates on antenatal and postnatal lengths of stay are missing for 0.1 per cent of records. Notwithstanding improvements in the completeness of returns, the elimination of 'missing values' for all variables continues to be an important objective for the development of the NPRS.

### DELIVERY OF ANTENATAL CARE

Changing models of antenatal care are being experienced by mothers in Ireland and it is intended that the data collected by the NPRS should reflect these changes. The data collected with regard to 'Mother's Health' is intended to describe the mother's first contact with the health services. The data currently collected in this section include the following:

- Type of antenatal care this pregnancy (Hospital/Obstetrician=1, G.P. only=2, Combined=3, None=4, Midwife Only=5)
- Date of first visit to doctor
- Date of first visit to hospital.

Where 'Antenatal Care This Pregnancy' is indicated as 'combined care', it is expected that the dates of first visit to each health professional is recorded. While over 77 per cent of all births in 2005 were recorded as receiving combined antenatal care, over 43 per cent of these births recorded 'Date of First Visit to Doctor' as 'not known'. The absence of these data regrettably means that the timing of first contact with health professionals within this category may be recorded as the date of the first hospital visit, even though this is likely to have been later than the first visit to the doctor. The proportion of mothers attending antenatal care during the first 12 weeks is, therefore, estimated at around 50 per cent of all births, which is low by European standards.

### AREA OF RESIDENCE

In the interests of safeguarding patient confidentiality, the copy of the notification form received by the NPRS unit at the ESRI does not contain the mother's full address but only the county designation (see Appendix E). As there is no way of validating this information, mother's area of residence has been analysed at county level in this report.

## DATA QUALITY

The NPRS seeks to compile an accurate, complete and up-to-date database on perinatal events over a specified time period. A key issue in addressing the quality of data collected by the NPRS is differences arising between the vital statistics tables compiled by the CSO and the NPRS data. Differences in data reported by these two systems for perinatal events may arise for a variety of reasons. One reason for differences is that information is not always obtained from the same sources. This is particularly evident in the data for cause of death as the CSO and the NPRS have to use different sources for the compilation of these data. The CSO does not obtain information on maternal diseases or conditions affecting the foetus or infant while the NPRS does not have access to coroner's certificates relating to neonatal deaths. The CSO also uses a separate notification form, the medical certificate of a stillbirth (Form 103), for collecting information on late foetal deaths.

Different data sources are also a factor in explaining why there are differences in the rate of stillbirth reported by the CSO and the NPRS. In 1995, stillbirths were registered in Ireland for the first time under the Stillbirths Registration Act, 1994. The CSO collect these data using Part 1 of the birth notification form sent to the GRO, while the NPRS collect them using Part 3 of the birth notification form. The CSO defines a stillbirth as weighing at or over 500 grams and/or at a gestational age of 24 weeks or more. From 1995 onwards, this definition applies to a late foetal death. In accordance with the WHO's definition of a stillbirth, the NPRS includes all late foetal deaths weighing at least 500 grams, irrespective of gestational age. In 2005, the NPRS recorded a higher number of stillbirths than the CSO. Applying the CSO's definition of a stillbirth, the number of stillbirths recorded by the NPRS would be estimated at 329 stillbirths. The CSO, however, reports 254 stillbirths indicating that in 2005 a number of stillbirths were notified to NPRS but not registered to the GRO. When we apply the WHO definition of a stillbirth to the data collected by the NPRS, the number of stillbirths recorded by the NPRS is estimated at 306. In accordance with WHO guidelines, only these 306 stillbirths are included in the NPRS dataset for this report. Differences in the definitions of stillbirth used by the CSO and the WHO are, therefore, an important factor in understanding differences in the stillbirth numbers and rates and the perinatal mortality rate reported by the CSO and the NPRS.

The gap between the twinning rate calculated by the CSO and the NPRS is very narrow. For 2005 the CSO report a twinning rate of 15.5 per 1,000 maternities<sup>3</sup> and the NPRS report a twinning rate of 15.1 per 1,000 maternities. The NPRS dataset excludes all births where weight is under 500 grams. In the case of a multiple birth where one or more births from the set weighs under 500 grams, the birth/s weighing under 500 grams are removed from the national dataset. Any birth/s weighing over 500 grams in the multiple birth set are retained in the national dataset as a multiple birth/s. The following example may clarify this: A set of twins are born. Twin 1 weighs less than 500 grams, twin 2 weighs more than 500 grams. Twin 1 is removed from the national dataset and twin 2 remains in the national dataset and is recorded as the second twin of a multiple birth. This may result in incomplete sets of multiple births in the national dataset and a lower number of multiple births recorded for reporting purposes (see also Table 3.15). There is a single field on the birth notification form that identifies a multiple birth. If these data were not recorded then the NPRS has no way of identifying multiple births. It would be assumed, however, that the additional personal identification data available to the CSO ensures a more comprehensive estimate of the number of multiple births.

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3 *Source: Report on Vital Statistics, 2005, Central Statistics Office, Dublin.*

Finally, differences in coding procedures may be reflected in the published statistics. The International Classification of Disease (ICD) coding procedures are recognised as being particularly difficult in the area of causes of perinatal mortality and the current separate coding arrangements between the CSO and the NPRS may, therefore, lead to significant discrepancies. With the update to ICD-10 in both NPRS and the CSO (*Report on Vital Statistics, 2007 onwards*) it is hoped any such discrepancies would be minimised.

Ideally, the data sources and coding for reporting on perinatal events should be harmonised between the CSO and the NPRS. Currently, representatives of both systems, together with the Department of Health and Children, are in the process of putting procedures in place to facilitate the achievement of this objective. The computerisation of the birth registration system represents an important step in this process, as this will eliminate the duplication of paperwork, coding and validation procedures. The GRO began its national roll-out for the computerisation of birth registration in September 2003. This covers the registration information collected on the top copy of the birth notification form and future phases of the computerisation programme are intended to include all statistical data.

Pending the completion of the full scale programme of computerisation, the CSO and the NPRS are collaborating in the use of the computerised information that is currently available. Commencing with 2005 data, this process is intended to ensure the correct identification of all births by both the CSO and the NPRS and reduce duplication of effort in keying registered data, thereby improving data quality. Because the data for Part 3 of the form still has to be keyed centrally, the Health Research and Information Division at the ESRI have developed an in-house data entry system whereby notifications of births from 1 January, 2004 are coded and entered directly onto the NPRS as they are received. This system validates the information received on each form at the point of data entry.

A parallel development aimed at improving the timeliness of data reporting and data quality involves initiatives focused on the electronic transfer of data directly from hospitals. Currently, data in electronic format are being received by the NPRS from the Rotunda, Coombe, and National Maternity Hospitals, and it is hoped to expand this development to other hospitals with similar systems capability. Notwithstanding these advancements in the computerisation of data collection and validation, we continue to rely on midwives and hospital staff to provide accurate and up-to-date data to the NPRS. The new instruction manual to facilitate completion of BNF01/2003, issued in May 2003 and updated in September 2006, details the requirements for completion of each field and is intended as an additional aid to personnel completing the returns. The continued development of computerised registration and notification and electronic data transfer are, however, an essential prerequisite to the achievement of the NPRS goal of delivering optimum data quality, timeliness and comprehensive coverage.

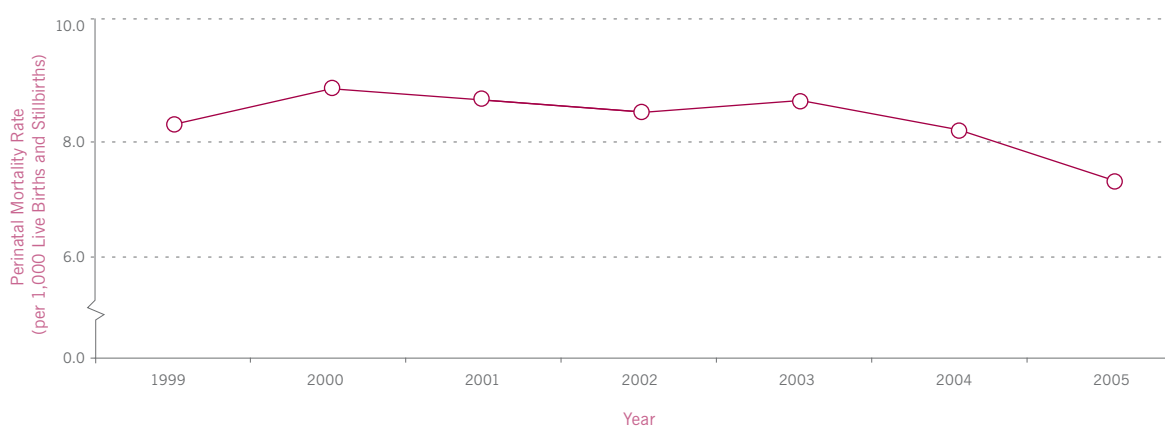
## Trends and International Comparisons

This section presents data on three key indicators which are influential in determining the structure of the Irish population. At a national level, the data presented in this section show how these parameters have changed in Ireland over time. International comparisons then allow the most recent statistics for Ireland to be compared with those for other European countries. The indicators for Ireland were estimated using data from the NPRS for the period 1999 to 2005.<sup>4</sup>

### PERINATAL MORTALITY

Figure 1.2 shows the perinatal mortality rate in Ireland from 1999 to 2005. The perinatal mortality rate is the ratio of total stillbirths and early neonatal deaths to total live births and stillbirths and is expressed as the rate per 1,000 live births and stillbirths. In 1999 the perinatal mortality rate was 8.2 per 1,000 live births and stillbirths. This rate peaked at 8.8 per 1,000 live births and stillbirths in 2000 and declined to 8.6 and 8.4 per 1,000 live births and stillbirths in 2001 and 2002 respectively. For 2003, the perinatal mortality rate increased marginally to 8.6 per 1,000 live births and stillbirths, resuming its decline once again to 8.1 per 1,000 live births and stillbirths in 2004. Over the entire period reported in Figure 1.2, the lowest perinatal mortality rate was recorded in 2005 (7.2 per 1,000 live births and stillbirths), which also represented the largest annual reduction in the rate.<sup>5</sup>

**Figure 1.2**  
Perinatal Mortality Rate, Ireland: 1999–2005



**Note:** See Table 2.1 for data.

<sup>4</sup> Data from the NPRS for 1999 to 2004 are contained in previous Reports on Perinatal Statistics. In these earlier reports, the data on the three indicators presented in Section 1 were obtained from the CSO.

<sup>5</sup> For comparison purposes, the CSO reported a perinatal mortality rate of 6.2 per 1,000 live births and stillbirths in 2005 (see Table 4.2, *Report on Vital Statistics 2005*). In the *Report on Vital Statistics 2005*, the CSO states that its estimate is likely to be affected by under-reporting of stillbirths, which may be one factor in explaining the difference between its perinatal mortality rate and that derived from NPRS. The CSO Report notes the following:

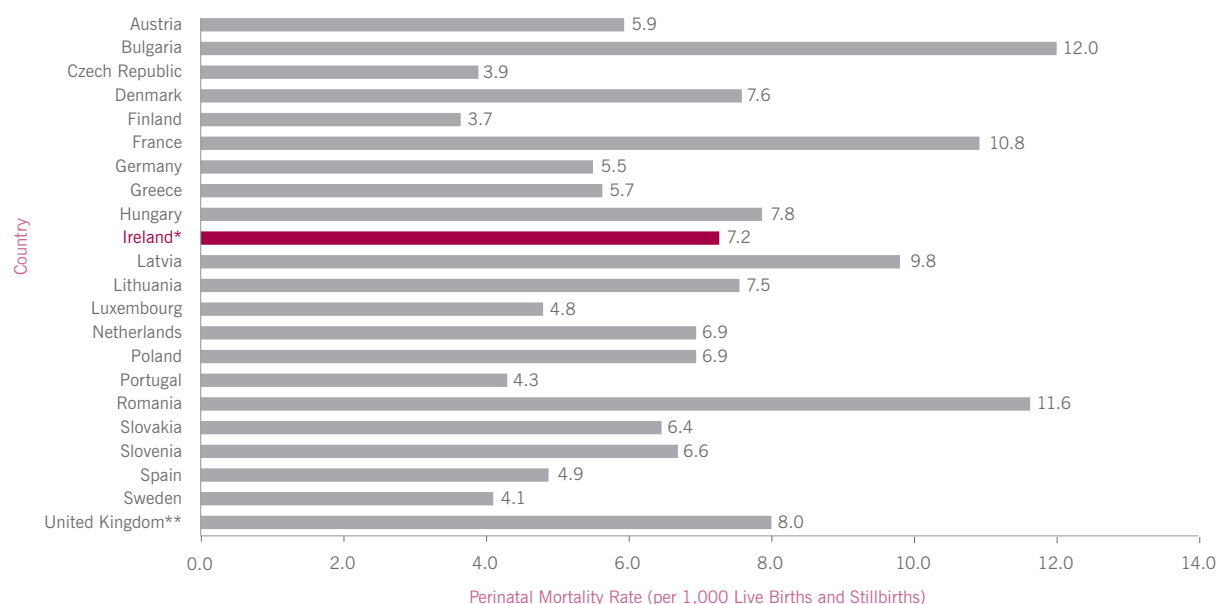
“The NPRS figures are derived from birth notification forms, rather than from stillbirths registered. In recent years, the numbers of stillbirths according to NPRS reports have been higher than the numbers published in these [CSO] reports. This suggests that there is some non-registration of stillbirths and that caution should be taken in interpreting the statistics on stillbirths in these [CSO] reports.” (Central Statistics Office, June 2008, *Report on Vital Statistics 2005*, Dublin: Central Statistics Office. Chapter 4, Infant Mortality, Stillbirths and Maternal Mortality 2005, pp. 156.)

As previously discussed in Section 1, these differences between the NPRS and CSO data emphasise the need to exercise extreme caution when comparing data from two different sources.

The factors impacting on the level of perinatal mortality are complex and encompass a wide range of environmental and biological variables. Birthweight, parity, mother's age, social status, and type of antenatal care, as well as many other variables have a bearing on perinatal risk. Data, presented in the subsequent sections of this report, indicate levels of perinatal mortality for the principal variables associated with risk.

Ireland's standing in the European Union (EU) in relation to perinatal mortality is shown in Figure 1.3. For the 22 countries for which 2005 data were available, the highest perinatal mortality rates were recorded in Bulgaria and Romania at 12.0 and 11.6 per 1,000 live births and stillbirths respectively. The country with the lowest perinatal mortality rate was Finland at 3.7 per 1,000 live births and stillbirths. Considering the countries in ascending order of their perinatal mortality rate, Ireland had a comparatively high perinatal mortality rate, ranking 14th out of the 22 countries listed in Figure 1.3. In contrast, the perinatal mortality rates of the United Kingdom (8.0 per 1,000 live births and stillbirths, ranked 18th) and France (10.8 per 1,000 live births and stillbirths, ranked 20th) were higher still. When countries are compared it should be remembered that rates are affected by national policies on abortion, availability of services related to fertility treatment, differences in the comprehensiveness and accuracy of registration and notification systems, and variations in definitions employed (for example, for stillbirth).

**Figure 1.3**  
Perinatal Mortality Rates for Selected EU Countries: 2005



**Source:** 'Population and Social Conditions', Eurostat, Data Navigation Tree, date consulted July 2008. <http://epp.eurostat.ec.europa.eu>

\* National figure compiled by NPRS. See Table 2.1 for data.

\*\* Office for National Statistics, *Health Statistics Quarterly* 36, Winter 2007.

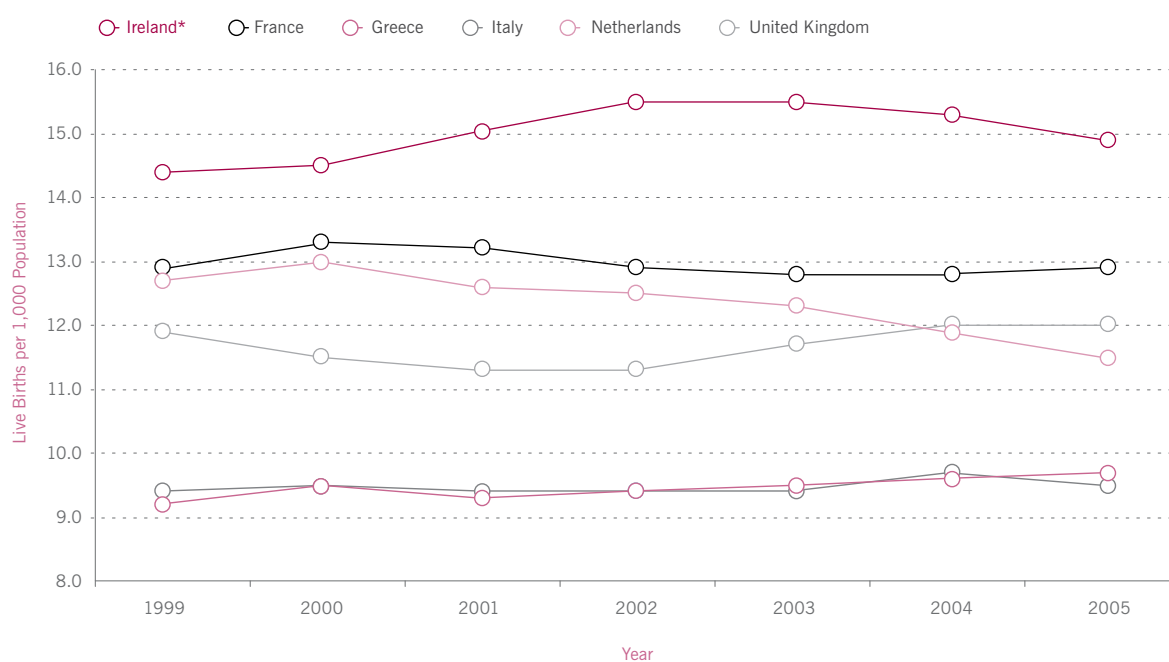


## BIRTH RATE

The birth rate is based on the total number of live births per 1,000 population.<sup>6</sup> Figure 1.4 shows trends in birth rates for selected EU countries since 1999. For the countries reviewed, Ireland has consistently had the highest birth rate over the period, even though this rate has been falling since 2003. While Ireland's birth rate was closer to that of other European countries in 1999, since 2000 the gap has grown between Ireland and France, the European country closest to Ireland in terms of birth rates. At 14.9 per 1,000 population in 2005, Ireland continued to have the highest birth rate of any of the 27 EU countries (Figure 1.5).<sup>7</sup>

Figure 1.4

Trends in Birth Rates for Selected EU Countries: 1999–2005



Source: 'Population and Social Conditions', Eurostat, Data Navigation Tree, date consulted July 2008. <http://epp.eurostat.ec.europa.eu>

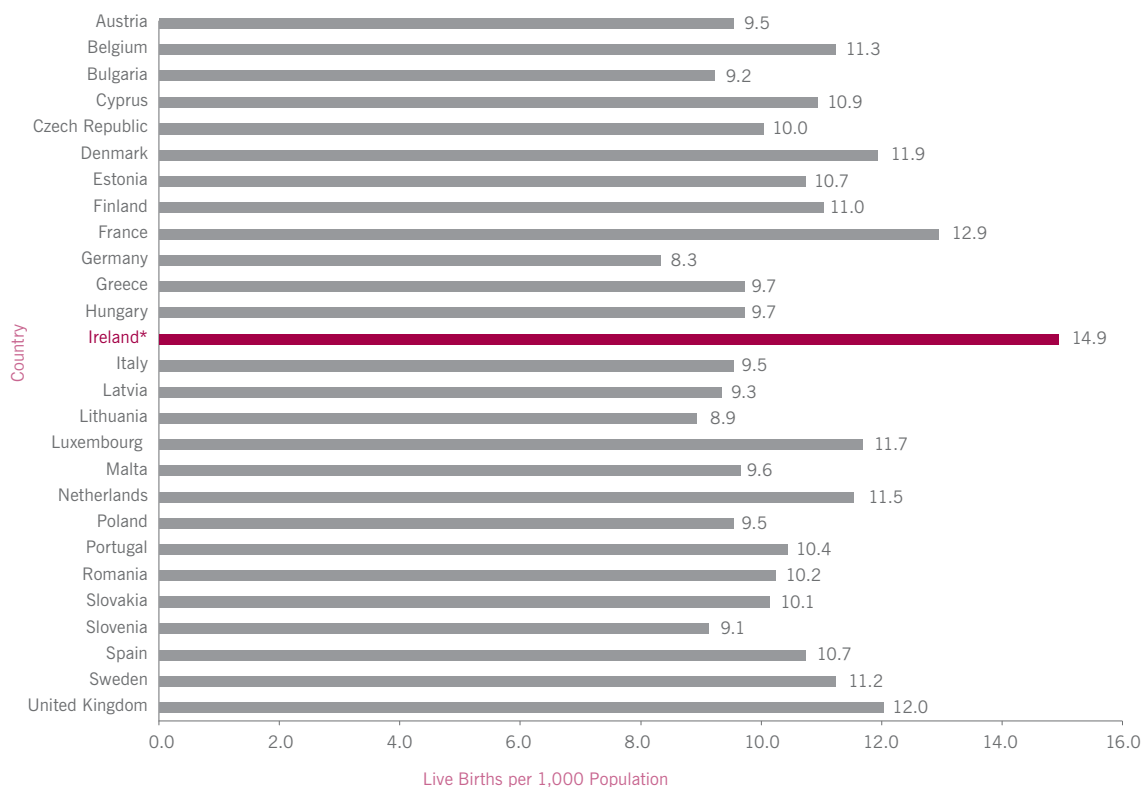
\*National figures are based on NPRS data on live births from 1999 onwards.

Figure 1.5 presents the birth rate for EU countries in 2005. Apart from Ireland (14.9), the country with the next highest birth rate is France (12.9) followed by the United Kingdom (12.0). In 2005, Germany (8.3) and Lithuania (8.9) had the lowest birth rate followed by Slovenia (9.1).

<sup>6</sup> The population estimates used in the denominator of the birth rate were calculated by the Department of Health and Children and obtained from Ireland and Northern Ireland's Population Health Observatory (INISPHO) PHIS (Online) Indicators System, <http://www.inispho.org/phs/indicators>. Date consulted July 2008. For the Census year 2002, population data from PHIS concur with the Census.

<sup>7</sup> According to the CSO's 2005 *Report on Vital Statistics*, the birth rate was 14.8 in 2005.

**Figure 1.5**  
**Birth Rate per 1,000 Population for EU Countries: 2005**



**Source:** 'Population and Social Conditions', Eurostat, Data Navigation Tree, date consulted July 2008. <http://epp.eurostat.ec.europa.eu>

\* National figure is based on NPRS data.

It should be noted that the crude birth rate could rise or fall depending on the numbers of women in the age cohorts from 15 to 49 years old. Changes in the crude birth rate often mask underlying trends in fertility. The next section is therefore concerned with changes in fertility over time.

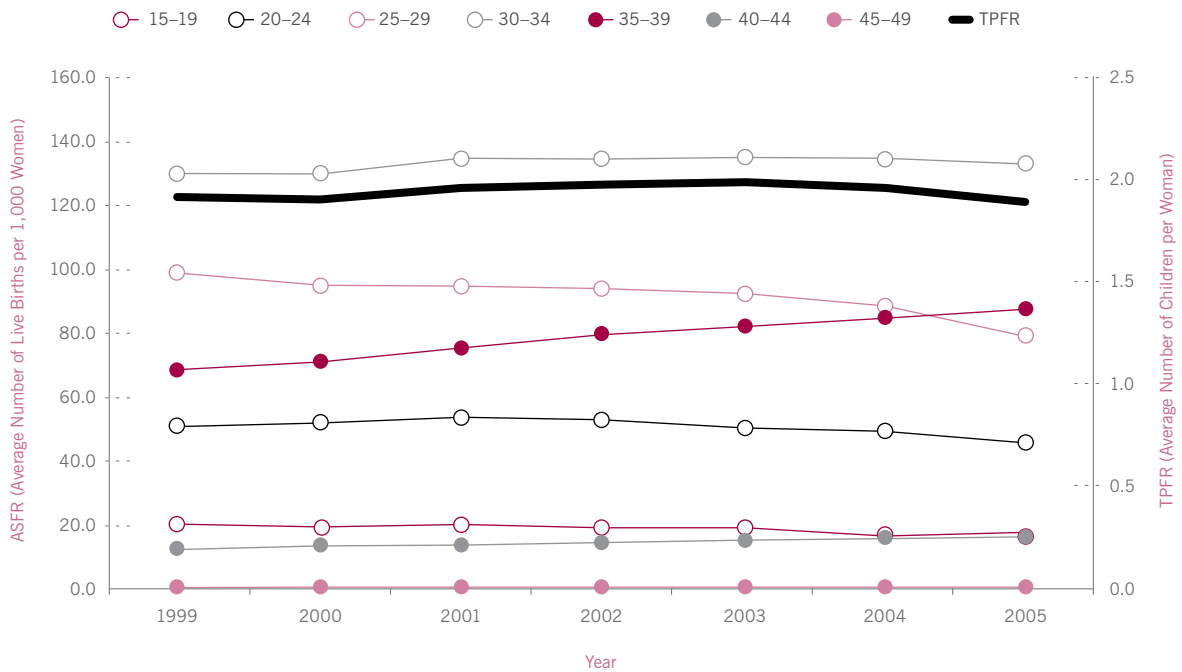
## FERTILITY

Figure 1.6 shows the trend in the total period fertility rate (TPFR) in Ireland from 1999 to 2005. The TPFR for a given year indicates the number of children a woman could expect to have if the age-specific fertility rates for that year applied throughout her fertile years. The Irish TPFR has declined overall from an average of 1.91 in 1999 to 1.89 in 2005, despite reaching a high of 1.98 in the intervening years.<sup>8</sup> The age-specific fertility rates (ASFR), used in the calculation of the TPFR and also shown in Figure 1.6, indicate differences in fertility patterns between younger and older age groups. While the number of live births per 1,000 women aged between 20 to 24 and 25 to 29 has been declining, women in the 30 to 34, 35 to 39 and 40 to 44 year age groups recorded an increasing number of live births over the period. In all years the 30 to 34 year age group recorded the highest ASFR. Interestingly, 2005 was the first year in which the ASFR for the 35 to 39 year age group was higher than that for the 25 to 29 year age group.

<sup>8</sup> The CSO have estimated the TPFR to be 1.88 in 2005 (see Table 2.1, *Report on Vital Statistics 2005*).

Figure 1.6

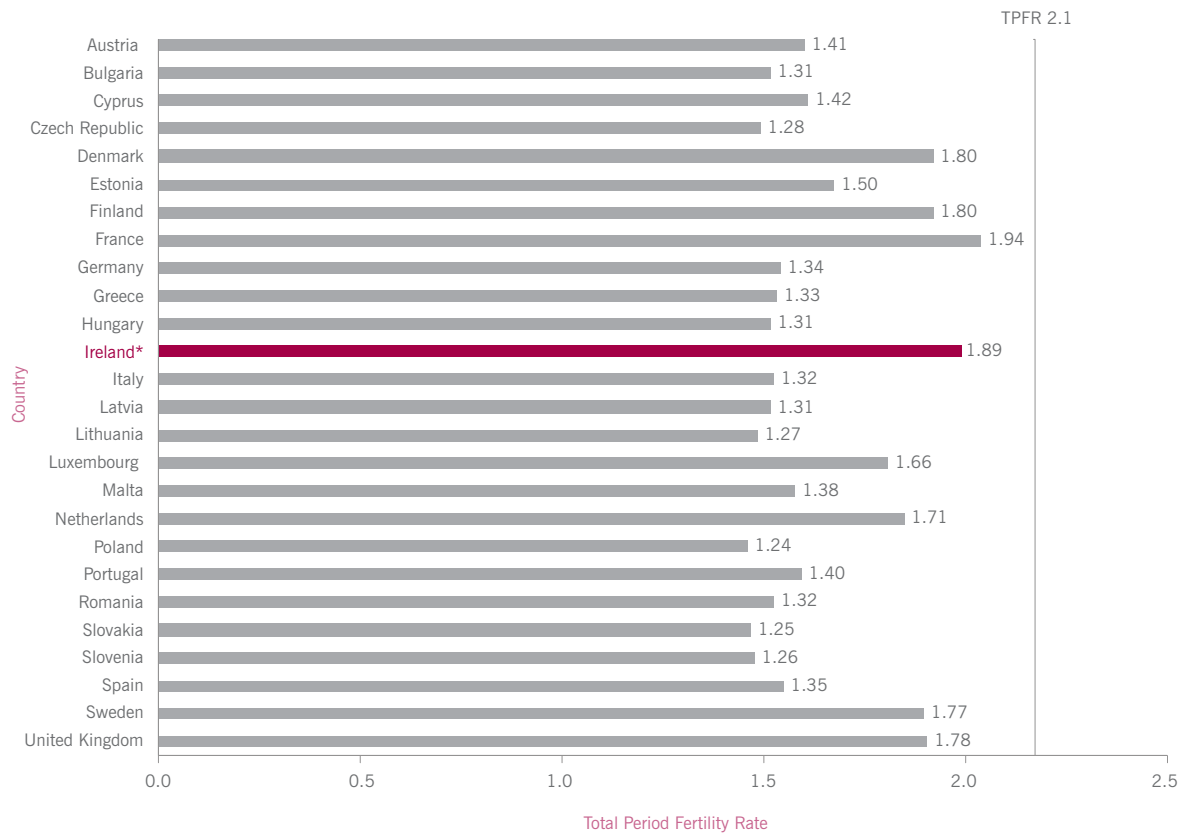
## Age-Specific Fertility Rates (ASFR) and Total Period Fertility Rates (TPFR) Ireland: 1999–2005



**Note:** Total period fertility rates and age-specific fertility rates (ASFR) are calculated using NPRS data from 1999 onwards. ASFR is the number of live births to women in a particular age group divided by the female population in that age group, multiplied by 1,000. The TPFR is compiled by summing the ASFRs for the relevant five-year age groups, dividing by 1,000 and multiplying by 5. Female population estimates were obtained from Ireland and Northern Ireland's Population Health Observatory (INIsPHO) PHIS (Online) Indicators System, <http://www.inispho.org/phis/indicators>. Date consulted July 2008.

As in all 27 EU countries currently, the TPFR for Ireland remains below the level required for the long-term replacement of the population (TPFR of 2.1) in the absence of any net inward migration. Using data from Eurostat and the NPRS, Figure 1.7 shows that, for 2005, Ireland had the second highest TPFR in the EU at 1.89, just behind France with a TPFR of 1.94. For 2005, Poland had the lowest TPFR (1.24) of the EU countries for which data were available.

Figure 1.7  
Total Period Fertility Rates for Selected EU Countries: 2005



**Source:** 'Population and Social Conditions', Eurostat, Data Navigation Tree, date consulted July 2008. <http://epp.eurostat.ec.europa.eu>

\* National figure is based on NPRS data.

Selected Trends

SECTION

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2



## Introduction

A general review of the data reported to the NPRS over the period 1999–2005 is presented in this section. Tables 2.1 and 2.2 examine trends in vital and selected statistics for these years. Figures 2.1 to 2.6 present selected data for a number of variables, including single mothers, low birthweight babies, caesarean births, mother's breastfeeding, and other aspects of perinatal care. Each of these figures summarise data for 1999–2005.

**Table 2.1**  
Trends in Vital Events, 1999–2005  
Singleton and Multiple Births, Numbers and Rates (per 1,000) for Live Births, Stillbirths, Early Neonatal Deaths, and Perinatal Deaths

Vital Events	Year																	
	1999		2000		2001		2002		2003		2004		2005					
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate				
Live Births:	Singleton	52,556	-	53,429	-	56,115	-	58,752	-	59,837	-	60,186	-	59,621	-			
	Multiple	1,463	-	1,429	-	1,807	-	1,770	-	1,795	-	1,881	-	1,859	-			
	Total	54,019	-	54,858	-	57,922	-	60,522	-	61,632	-	62,067	-	61,480	-			
Stillbirths:	Singleton	274	5.2	288	5.4	307	5.4	319	5.4	327	5.4	313	5.2	281	4.7			
	Multiple	14	9.5	20	13.8	32	17.4	24	13.4	30	16.4	26	13.6	25	13.3			
	Total	288	5.3	308	5.6	339	5.8	343	5.6	357	5.8	339	5.4	306	5.0			
Early Neonatal Deaths:	Singleton	130	2.5	153	2.9	136	2.4	149	2.5	156	2.6	140	2.3	109	1.8			
	Multiple	27	18.5	23	16.1	24	13.3	21	11.9	21	11.7	28	14.9	30	16.1			
	Total	157	2.9	176	3.2	160	2.8	170	2.8	177	2.9	168	2.7	139	2.3			
Perinatal Deaths:	Singleton	404	7.6	441	8.2	443	7.9	468	7.9	483	8.0	453	7.5	390	6.5			
	Multiple	41	27.8	43	29.7	56	30.5	45	25.1	51	27.9	54	28.3	55	29.2			
	Total	445	8.2	484	8.8	499	8.6	513	8.4	534	8.6	507	8.1	445	7.2			
Adjusted Perinatal Deaths:	Singleton	301	5.7	317	5.9	311	5.5	353	6.0	336	5.6	336	5.6	287	4.8			
	Multiple	37	25.1	31	21.4	45	24.5	43	24.0	48	26.3	46	24.2	43	23.0			
	Total	338	6.2	348	6.3	356	6.1	396	6.5	384	6.2	382	6.1	330	5.4			

Table 2.2  
Trends in Selected Statistics, 1999–2005

Selected Statistics	1999	2000	2001	2002	2003	2004	2005
<b>General Characteristics</b>							
Average Age of Mother in years <sup>1</sup>	30.06	30.18	30.27	30.41	30.58	30.79	31.02
Average Maternal Parity <sup>1</sup>	1.10	1.09	1.07	1.06	1.05	1.05	1.05
Single Mothers (%) <sup>1,9</sup>	29.73	30.09	30.14	30.01	30.20	30.63	30.71
Average Age of Single Mothers in years <sup>1,9</sup>	24.74	24.98	25.36	25.72	26.10	26.38	26.63
Average Number of Previous Stillbirths per 1,000 maternities <sup>1</sup>	14.03	13.06	13.57	12.43	12.02	12.60	12.79
<b>Average weight in grams<sup>2</sup></b>							
Singleton Births	3,505.35	3,517.27	3,509.36	3,503.73	3,500.64	3,507.96	3,503.23
Multiple Births	2,467.24	2,509.85	2,470.41	2,489.72	2,487.13	2,471.20	2,469.18
Total Births	3,477.19	3,491.05	3,476.96	3,474.07	3,471.11	3,476.56	3,471.97
<b>Low birthweight &lt;2500 grams (%)<sup>2</sup></b>							
Singleton Births	3.80	3.84	3.84	3.76	3.87	3.71	3.76
Multiple Births	47.71	43.35	46.46	44.18	45.07	45.56	45.62
Total Births	4.99	4.87	5.17	4.94	5.07	4.98	5.02
Average Gestational Age at delivery in weeks <sup>1</sup>	39.48	39.46	39.47	39.45	39.44	39.38	39.42
Average interval since last birth in years <sup>1</sup>	3.82	3.84	3.81	3.85	3.78	3.72	3.76
<b>Perinatal Care</b>							
Hospital & GP combined antenatal care (%) <sup>1</sup>	72.53	72.43	73.29	74.07	75.86	77.29	77.47
Mother's average length of stay in days <sup>3</sup>	4.71	4.54	4.38	4.09	3.95	3.85	3.84
Immunity to Rubella (%) <sup>1</sup>	89.63	87.76	86.84	86.49	87.30	90.49	90.26
<b>Method of Delivery (%)<sup>4</sup></b>							
<b>Singleton Births</b>							
Spontaneous	65.35	64.56	64.29	63.27	62.24	60.54	60.05
Caesarean	19.69	20.55	21.05	21.61	23.14	24.23	24.86
Forceps <sup>5</sup>	4.27	3.78	3.21	3.19	2.89	2.48	2.85
<b>Multiple Births</b>							
Spontaneous	32.33	33.73	29.83	33.62	26.30	28.23	25.51
Caesarean	47.23	50.31	52.74	49.49	58.33	55.82	60.44
Forceps <sup>5</sup>	3.08	2.52	2.71	2.99	1.56	2.34	1.67
<b>Total Births</b>							
Spontaneous	64.46	63.76	63.22	62.41	61.20	59.56	59.00
Caesarean	20.43	21.32	22.04	22.43	24.17	25.19	25.93
Forceps <sup>5</sup>	4.24	3.74	3.20	3.18	2.85	2.48	2.82
Booked Hospital Admissions (%) <sup>1</sup>	96.57	96.49	98.17	97.59	97.47	98.14	98.41
Mothers breastfeeding (%) <sup>6</sup>	36.16	38.41	39.13	41.14	41.32	42.46	44.13
<b>Infant's average length of stay in days<sup>7</sup></b>							
Singleton Births	4.17	4.08	3.89	3.68	3.62	3.55	3.52
Multiple Births	10.68	10.73	11.45	10.16	10.09	10.59	10.14
Total Births	4.34	4.25	4.12	3.87	3.80	3.76	3.72
Post-mortems for Early Neonatal Deaths (%) <sup>8</sup>	44.37	39.41	33.55	42.07	41.72	38.16	24.43

<sup>1</sup> Based on maternities.

<sup>2</sup> Based on live births.

<sup>3</sup> Based on maternities with live births.

<sup>4</sup> Based on live births. These figures were not based on total maternities but on total births, to give a more accurate picture as each infant in a multiple pregnancy can have a different method of delivery. See Tables 4.4 and 4.13 for data on all Methods of Delivery.

<sup>5</sup> Excludes breech deliveries.

<sup>6</sup> Based on maternities with live births. Excludes early neonatal deaths.

<sup>7</sup> Based on live births. Excludes early neonatal deaths.

<sup>8</sup> Based on early neonatal deaths.

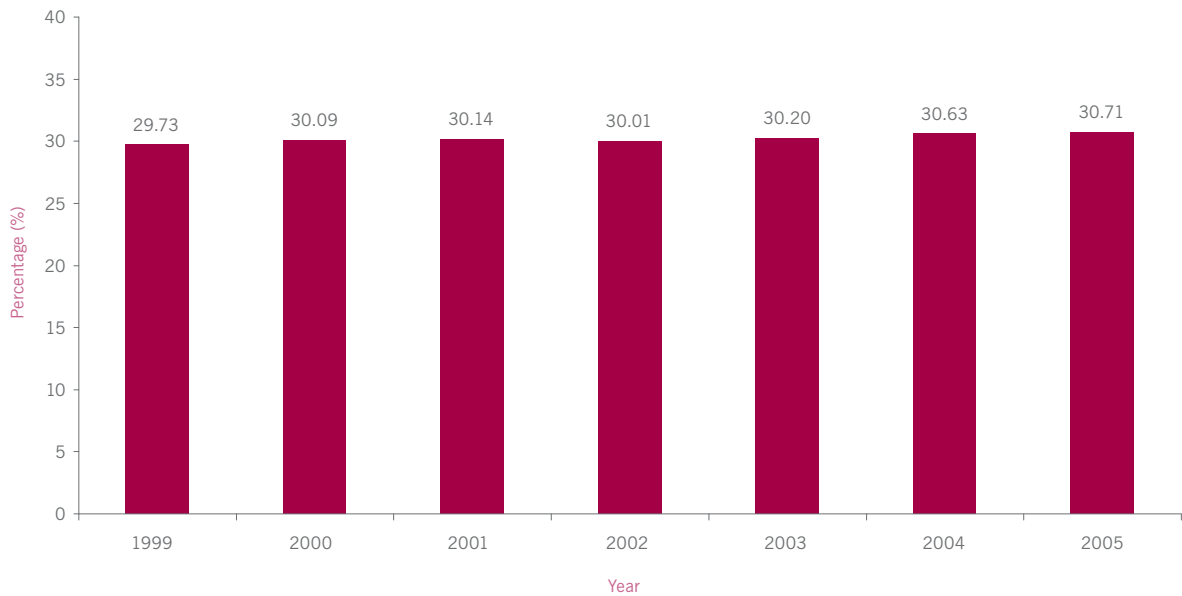
<sup>9</sup> Data recording marital status as 'Never Married' are classified as 'Single' marital status in this report.

**Notes:** These selected statistics are set out according to the order in which they appear in subsequent sections of this report. Further details for each statistic, including mortality rates, are given in these sections.

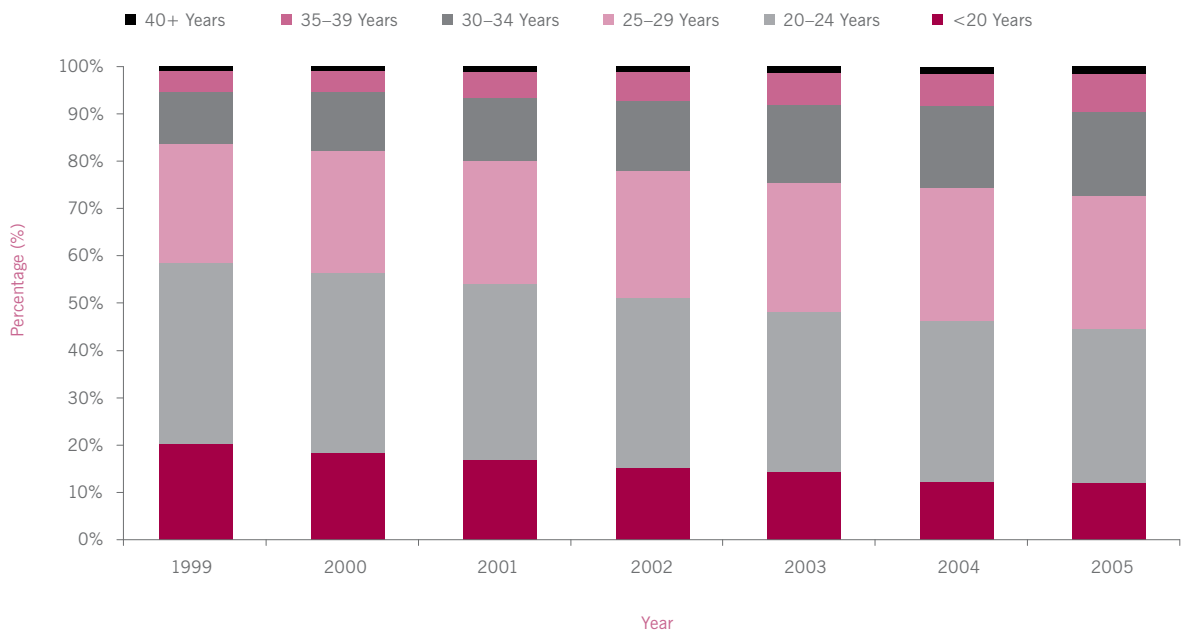
'Not Stated' or 'Not Known' values are not included in the calculation of percentages.



**Figure 2.1**  
 Percentage of Births to Single Mothers, 1999–2005



**Figure 2.2**  
 Percentage of Births to Single Mothers by Age of Mother, Singleton Births, 1999–2005



**Source:** Reports on *Perinatal Statistics for 1999–2002*, The Economic & Social Research Institute. Appendix E, Tables E3.  
 Reports on *Perinatal Statistics for 2003 and 2004*, The Economic & Social Research Institute. Appendix F, Table F3.

**Note:** See Appendix G, Table G3 for data on 2005.

Figure 2.3

Percentage of Low Birthweight Babies, Total Live Births, 1999–2005

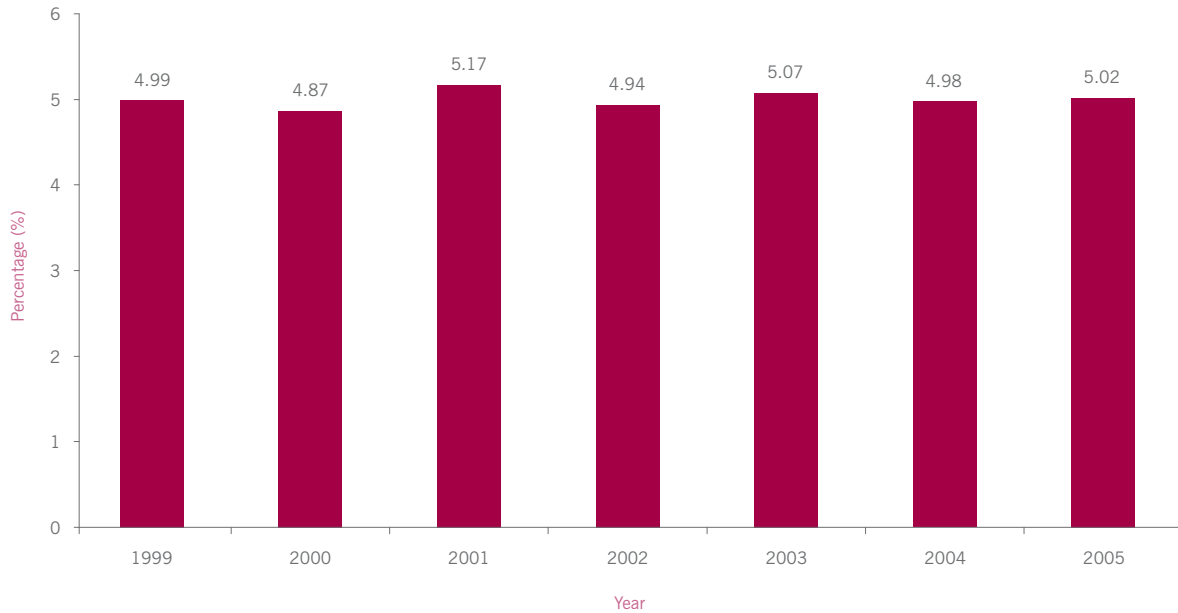
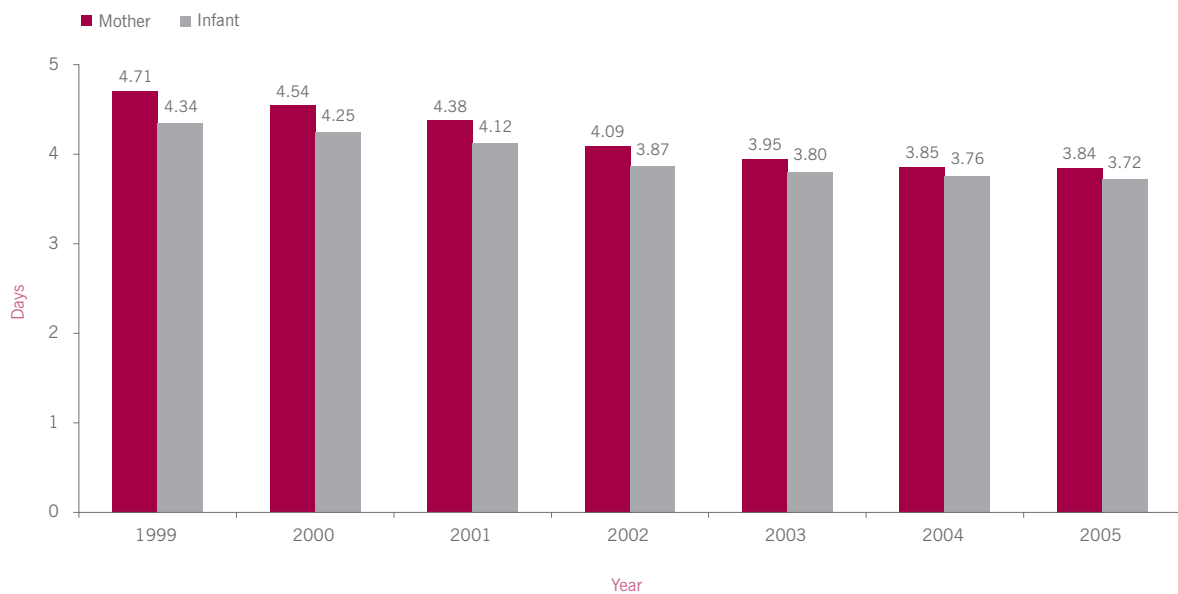


Figure 2.4

Average Length of Stay in Days for Mothers and Infants, 1999–2005



**Note:** Data on mother's length of stay is based on maternities with live births only. Data on infant's length of stay is based on live births, excluding early neonatal deaths.

Figure 2.5  
Caesarean Births as a Percentage of Total Live Births, 1999–2005

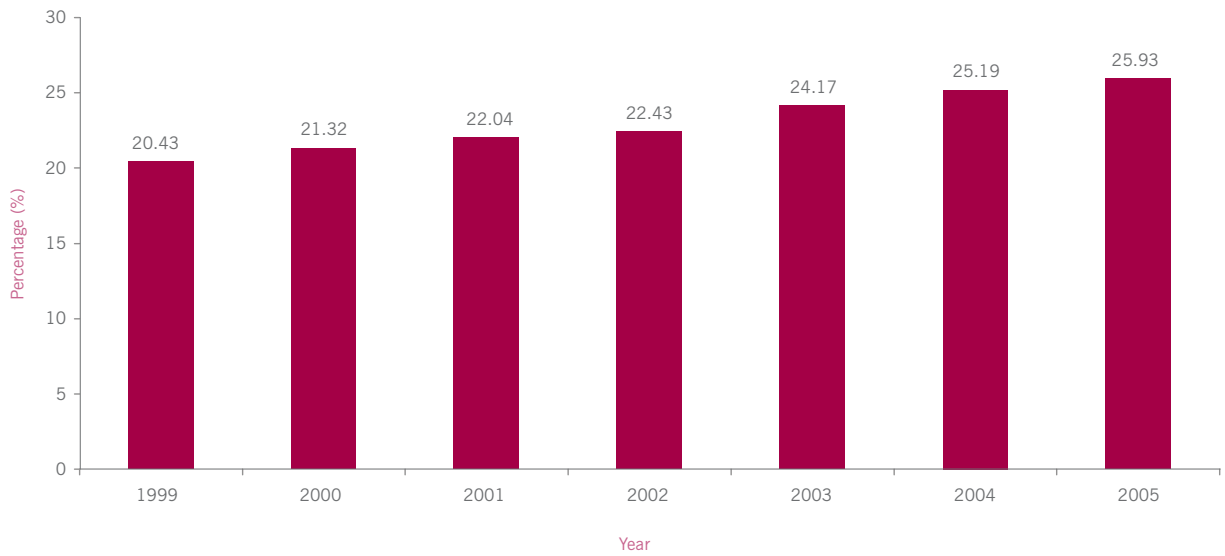
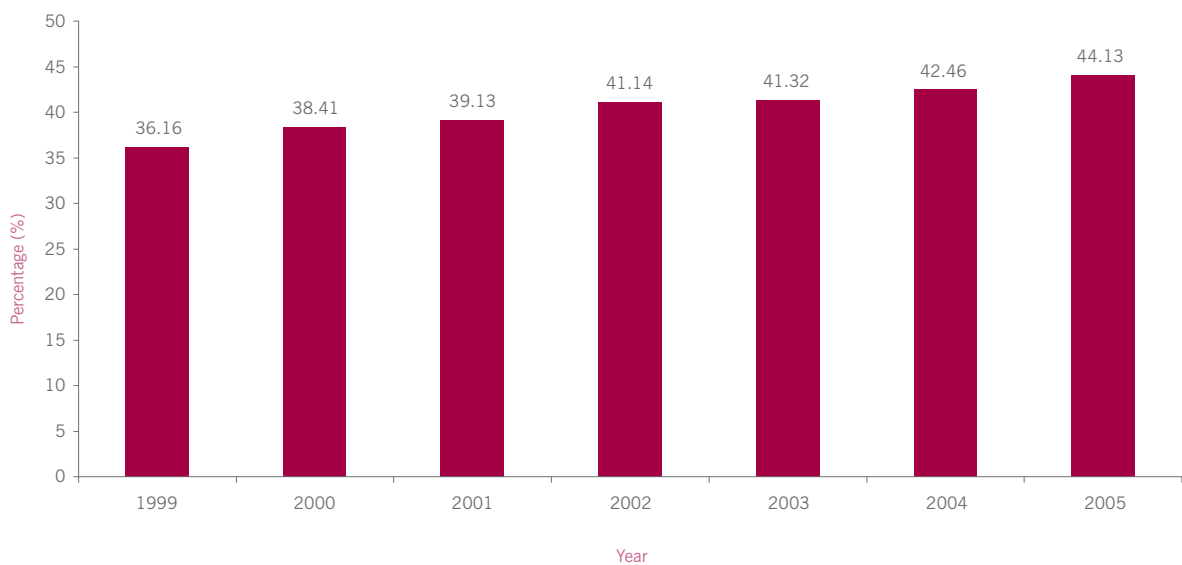


Figure 2.6  
Percentage of Mothers Breastfeeding, 1999–2005



**Note:** Based on maternities with live births, excluding early neonatal deaths.



# General Characteristics

SECTION

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**3**



## Introduction

This section presents a more detailed analysis of data reported to the NPRS for 2005. Part 1 reports on singleton births and Part 2 on multiple births. The following tables outline data for live births, stillbirths and early neonatal deaths, together with their corresponding rates. The perinatal mortality rate and adjusted perinatal mortality rate are also outlined in each table. Tables and figures are presented in some detail for a number of variables, including mother's age, marital status, father's and mother's occupations and nationalities, and birth-weight. See Appendix G, Table G20 for numbers and rates on mother's county of residence.

## Part 1: Singleton Births

Table 3.1

Age of Mother

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

Singleton Births

Age of Mother	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR*
Under 15 Years	6	0.0	0	0.0	0	0.0	0.0	0.0
15–19 Years	2,381	4.0	18	7.5	5	2.1	9.6	7.1
20–24 Years	7,609	12.8	36	4.7	19	2.5	7.2	6.0
25–29 Years	13,330	22.4	39	2.9	22	1.7	4.6	3.0
30–34 Years	20,991	35.2	90	4.3	31	1.5	5.7	4.3
35–39 Years	12,770	21.4	62	4.8	23	1.8	6.6	4.7
40–44 Years	2,420	4.1	21	8.6	9	3.7	12.3	8.6
45 Years & Over	69	0.1	1	14.3	0	0.0	14.3	0.0
Not Stated	45	0.1	14	237.3	0	0.0	237.3	210.5
<b>Total</b>	<b>59,621</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

\* In this and subsequent tables, 'Adjusted PMR' gives a recalculated perinatal mortality rate which excludes all deaths due to congenital anomalies.

Table 3.2

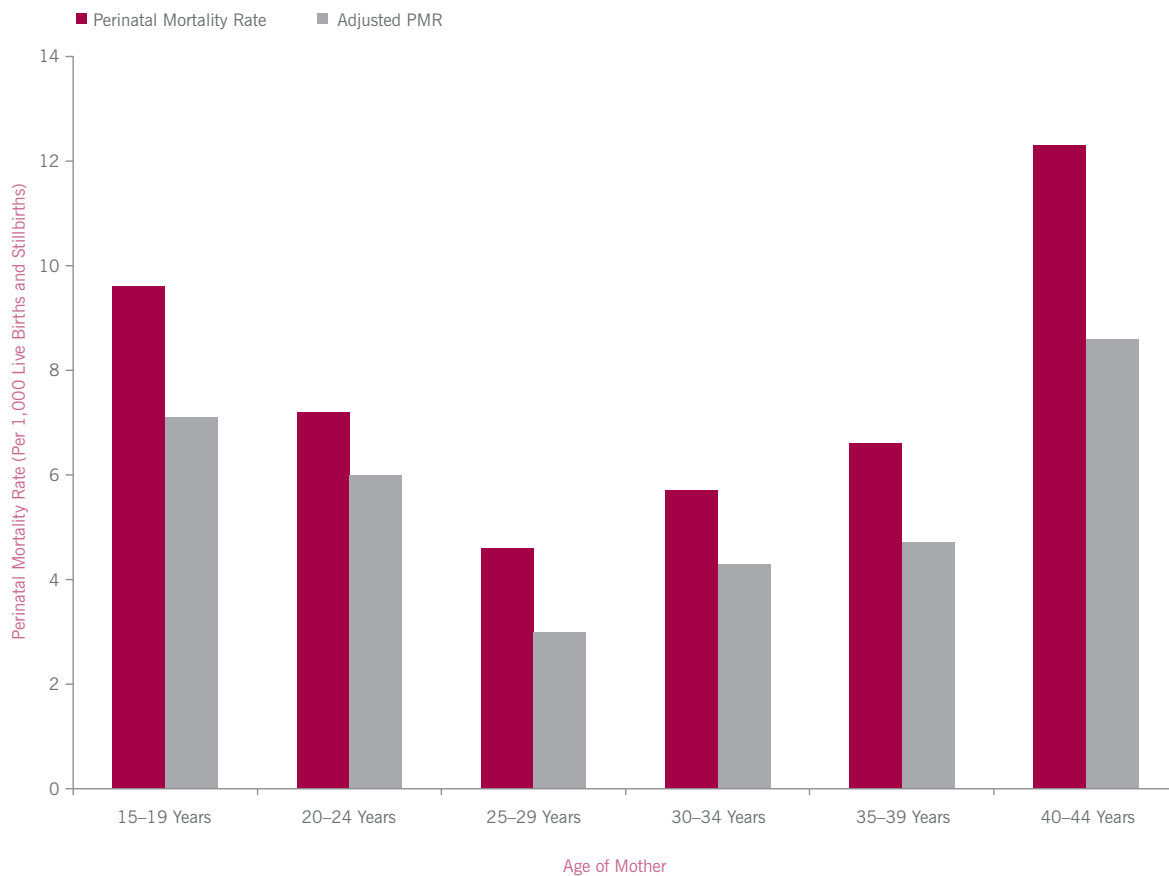
Maternal Parity

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

Singleton Births

Maternal Parity	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0	24,040	40.3	123	5.1	49	2.0	7.1	5.3
1	18,974	31.8	78	4.1	27	1.4	5.5	4.2
2	10,451	17.5	44	4.2	15	1.4	5.6	3.6
3	3,916	6.6	22	5.6	8	2.0	7.6	5.1
4	1,329	2.2	6	4.5	8	6.0	10.5	9.0
5	506	0.8	3	5.9	1	2.0	7.9	5.9
6	215	0.4	1	4.6	1	4.7	9.3	4.7
More than 6	189	0.3	4	20.7	0	0.0	20.7	20.7
Not Stated	1	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>59,621</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

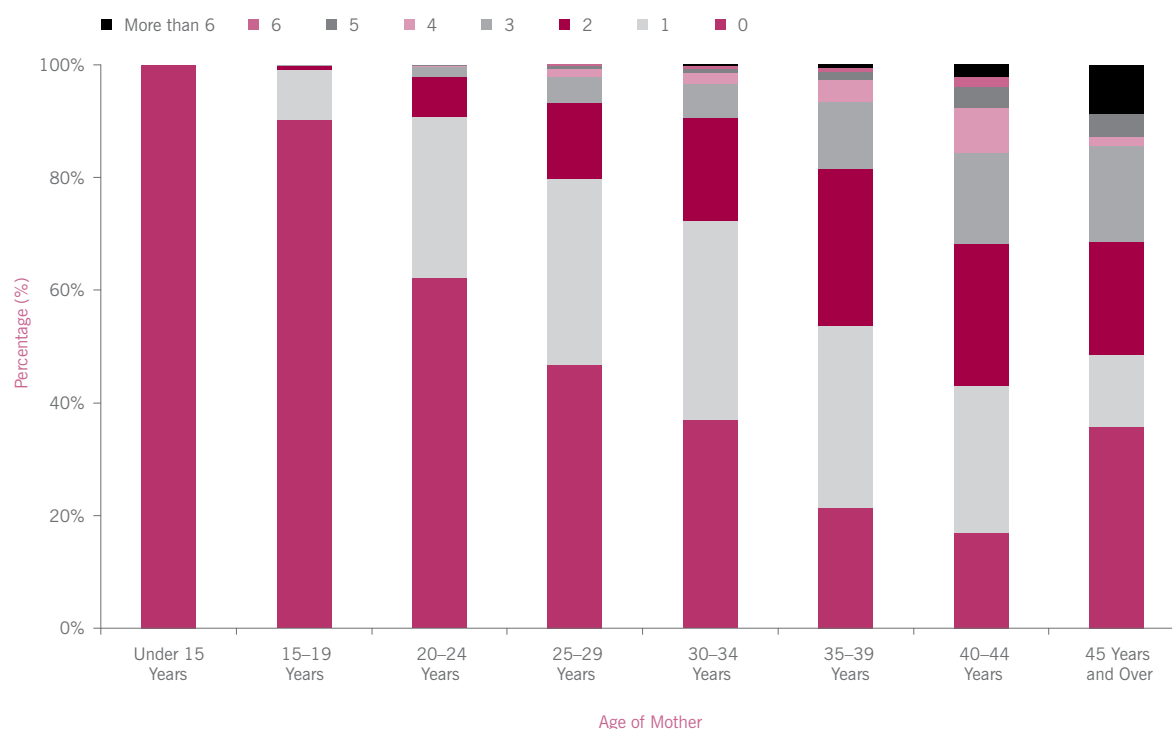
Figure 3.1  
Perinatal Mortality Rates by Age of Mother, 2005  
Singleton Births



**Notes:** See Table 3.1 for data. The adjusted rate excludes all deaths due to congenital anomalies. Categories where rates would be based on <100 live births are not included in this graph.



**Figure 3.2**  
 Percentage Distribution of Parity by Age of Mother, 2005  
 Singleton Births

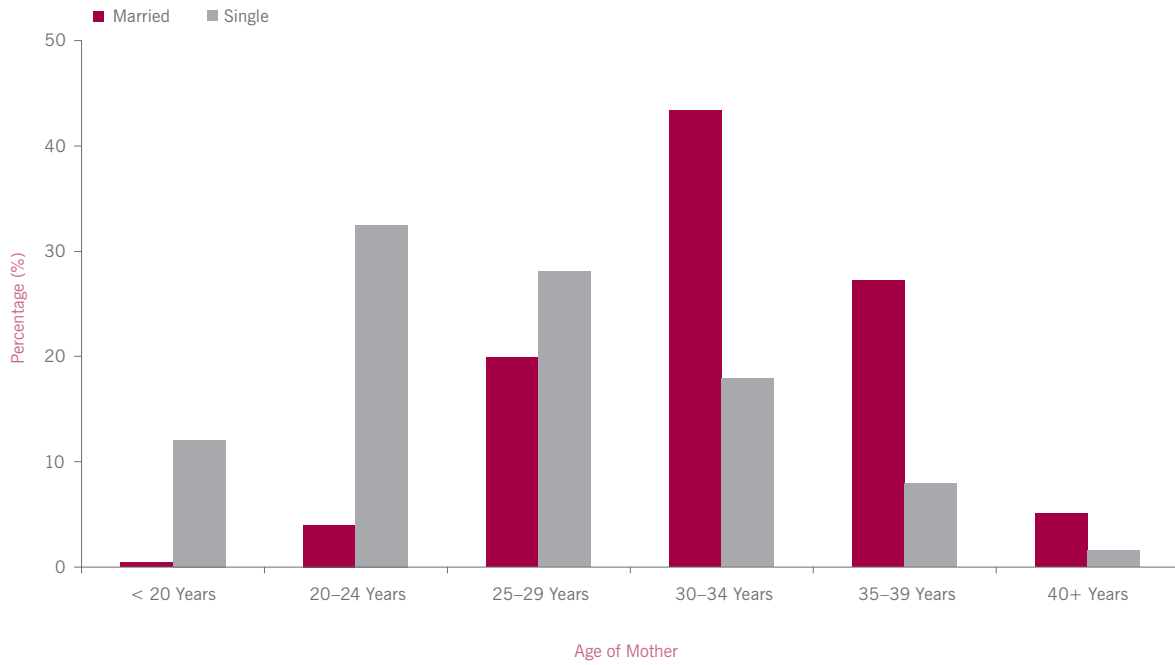


**Note:** See Appendix G, Table G1 for data. ‘Not Stated’ data are not included in the calculation of percentages.

**Table 3.3**  
 Mother’s Marital Status  
 Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
 Singleton Births

Mother’s Marital Status	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Married	40,172	67.4	172	4.3	65	1.6	5.9	4.1
Never Married	18,389	30.8	100	5.4	40	2.2	7.6	6.0
Widowed	77	0.1	1	12.8	1	13.0	25.6	25.6
Separated	700	1.2	6	8.5	2	2.9	11.3	8.5
Divorced	280	0.5	2	7.1	1	3.6	10.6	7.1
Not Stated	3	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>59,621</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

**Figure 3.3**  
**Mother's Age: Percentage Distribution of Births for Married and Single Status, 2005**  
**Singleton Births**



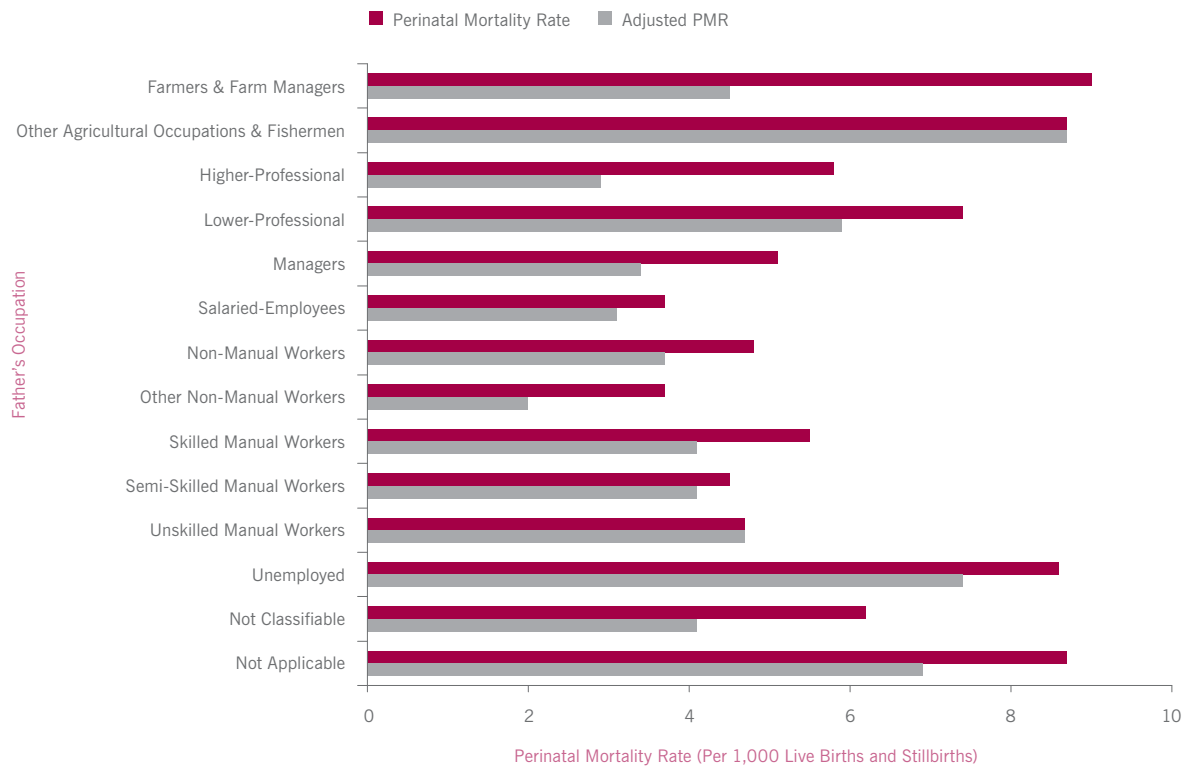
**Note:** See Appendix G, Table G3 for data. 'Not Stated' data are not included in the calculation of percentages.

Table 3.4  
 Father's Occupation  
 Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
 Singleton Births

Father's Occupation	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Farmers & Farm Managers	2,214	3.7	15	6.7	5	2.3	9.0	4.5
Other Agricultural Occupations & Fishermen	459	0.8	2	4.3	2	4.4	8.7	8.7
Higher-Professional	4,094	6.9	18	4.4	6	1.5	5.8	2.9
Lower-Professional	2,553	4.3	14	5.5	5	2.0	7.4	5.9
Managers	4,735	7.9	15	3.2	9	1.9	5.1	3.4
Salaried-Employees	1,620	2.7	6	3.7	0	0.0	3.7	3.1
Non-Manual Workers	4,525	7.6	14	3.1	8	1.8	4.8	3.7
Other Non-Manual Workers	5,103	8.6	11	2.2	8	1.6	3.7	2.0
Skilled Manual Workers	12,878	21.6	52	4.0	19	1.5	5.5	4.1
Semi-Skilled Manual Workers	2,451	4.1	10	4.1	1	0.4	4.5	4.1
Unskilled Manual Workers	636	1.1	3	4.7	0	0.0	4.7	4.7
Unemployed	1,740	2.9	10	5.7	5	2.9	8.6	7.4
Not Classifiable	1,452	2.4	7	4.8	2	1.4	6.2	4.1
Not Applicable	14,619	24.5	96	6.5	32	2.2	8.7	6.9
Home Duties	90	0.2	1	11.0	0	0.0	11.0	11.0
Not Stated	452	0.8	7	15.3	7	15.5	30.5	22.0
<b>Total</b>	<b>59,621</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

**Note:** See Appendix C for a description of the classification system for occupations.

**Figure 3.4**  
**Perinatal Mortality Rates by Father's Occupation, 2005**  
**Singleton Births**



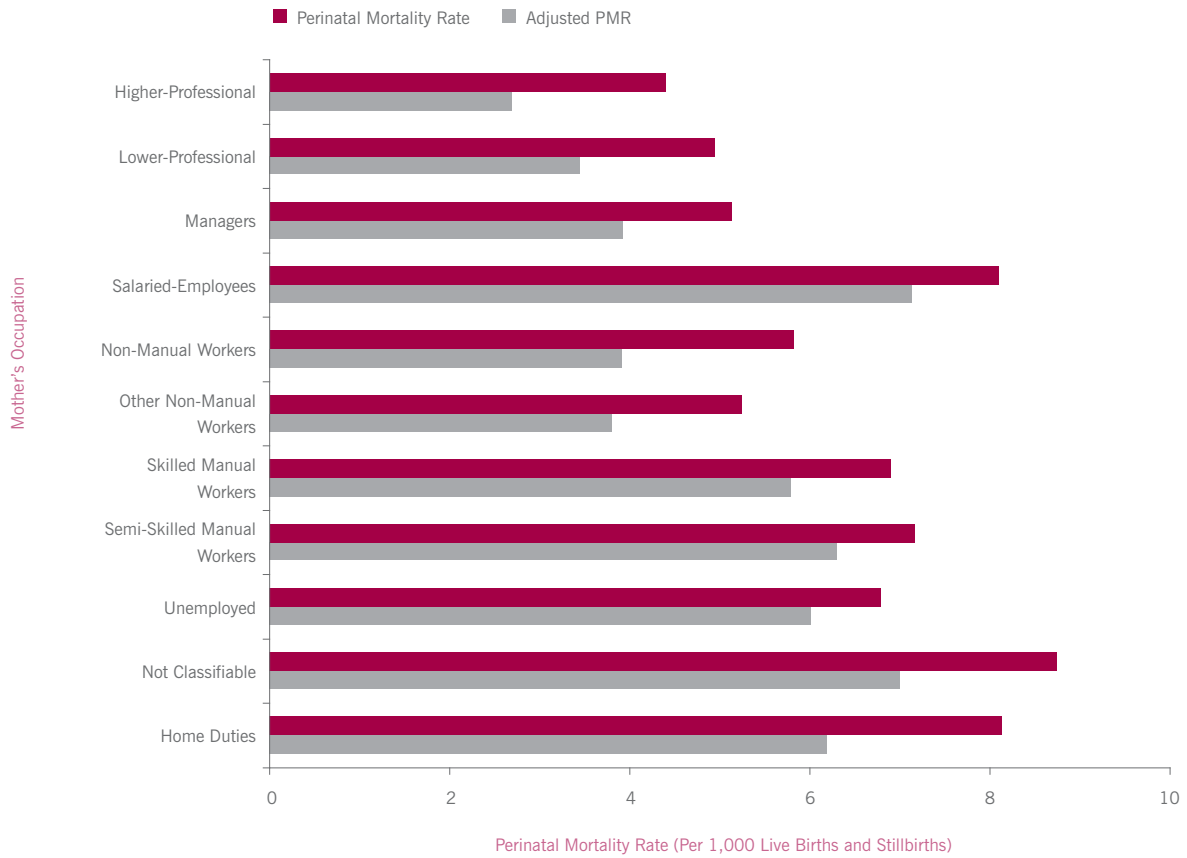
**Notes:** See Table 3.4 for data. The adjusted rate excludes all deaths due to congenital anomalies.  
 Categories where rates would be based on <100 live births are not included in this graph.

Table 3.5  
 Mother's Occupation  
 Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
 Singleton Births

Mother's Occupation	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Farmers & Farm Managers	94	0.2	1	10.5	1	10.6	21.1	10.6
Other Agricultural Occupations & Fishermen	44	0.1	0	0.0	0	0.0	0.0	0.0
Higher-Professional	2,952	5.0	8	2.7	5	1.7	4.4	2.7
Lower-Professional	7,703	12.9	30	3.9	8	1.0	4.9	3.4
Managers	3,876	6.5	13	3.3	7	1.8	5.1	3.9
Salaried-Employees	1,100	1.8	9	8.1	0	0.0	8.1	7.2
Non-Manual Workers	13,643	22.9	55	4.0	25	1.8	5.8	3.9
Other Non-Manual Workers	7,441	12.5	27	3.6	12	1.6	5.2	3.8
Skilled Manual Workers	865	1.5	5	5.7	1	1.2	6.9	5.8
Semi-Skilled Manual Workers	2,201	3.7	13	5.9	3	1.4	7.2	6.3
Unskilled Manual Workers	15	0.0	0	0.0	0	0.0	0.0	0.0
Unemployed	2,478	4.2	13	5.2	4	1.6	6.8	6.0
Not Classifiable	2,284	3.8	13	5.7	7	3.1	8.7	7.0
Home Duties	14,566	24.4	87	5.9	32	2.2	8.1	6.2
Not Stated	359	0.6	7	19.1	4	11.1	30.1	19.3
<b>Total</b>	<b>59,621</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

**Note:** 'Not Applicable' is not used in the classification of maternal occupation. See Appendix C for a description of the classification system for occupations.

**Figure 3.5**  
**Perinatal Mortality Rates by Mother's Occupation, 2005**  
**Singleton Births**



**Notes:** See Table 3.5 for data. The adjusted rate excludes all deaths due to congenital anomalies. Categories where rates would be based on <100 live births are not included in this graph.

Table 3.6

Number of Previous Stillbirths (for women having second and subsequent births)  
Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
Singleton Births

Previous Stillbirths	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0	34,930	98.2	147	4.2	58	1.7	5.8	4.2
1	577	1.6	10	17.0	1	1.7	18.7	17.1
2	55	0.2	1	17.9	1	18.2	35.7	18.2
3 and over	18	0.1	0	0.0	0	0.0	0.0	0.0
Not Stated	1	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>35,581</b>	<b>100</b>	<b>158</b>	<b>4.4</b>	<b>60</b>	<b>1.7</b>	<b>6.1</b>	<b>4.4</b>

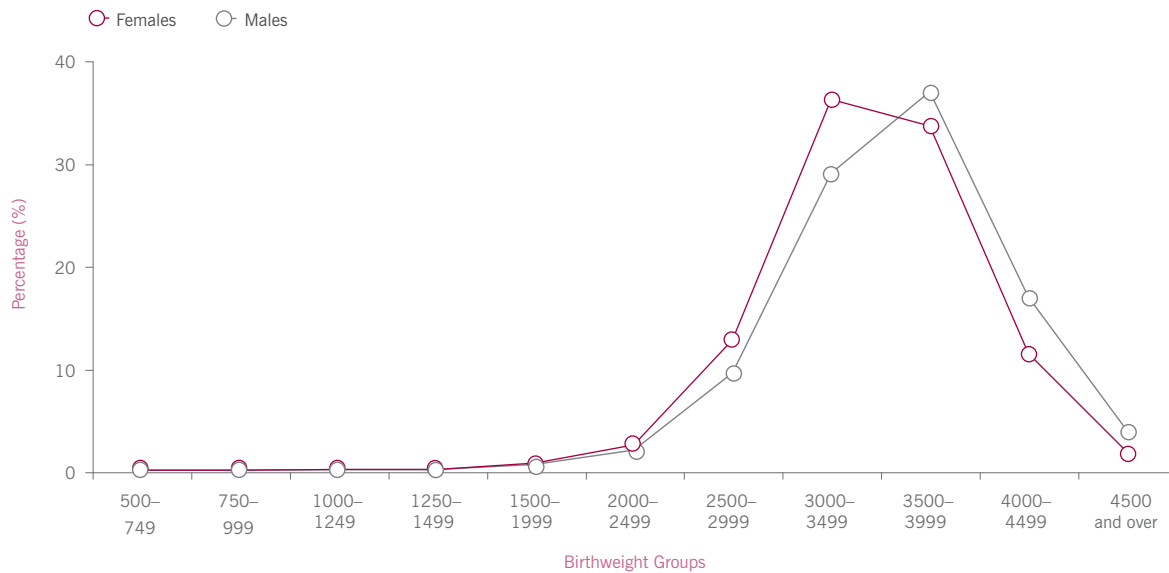
*Note:* Primiparae (i.e. women with no previous live births or stillbirths) are not included in this table.

Table 3.7

Birthweight - All Singleton Births  
Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
Singleton Births

Birthweight (grams)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500-749	57	0.1	43	430.0	29	508.8	720.0	708.3
750-999	69	0.1	23	250.0	7	101.4	326.1	261.9
1000-1249	115	0.2	18	135.3	11	95.7	218.0	161.3
1250-1499	130	0.2	20	133.3	8	61.5	186.7	102.9
1500-1999	458	0.8	42	84.0	15	32.8	114.0	80.9
2000-2499	1,412	2.4	37	25.5	13	9.2	34.5	21.7
2500-2999	6,663	11.2	43	6.4	17	2.6	8.9	5.8
3000-3499	19,355	32.5	30	1.5	5	0.3	1.8	1.5
3500-3999	21,059	35.3	15	0.7	3	0.1	0.9	0.7
4000-4499	8,525	14.3	7	0.8	0	0.0	0.8	0.8
4500 and Over	1,777	3.0	2	1.1	0	0.0	1.1	1.1
Not Stated	1	0.0	1	500.0	1	1000.0	1000.0	1000.0
<b>Total</b>	<b>59,621</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

**Figure 3.6**  
**Percentage Distribution of Live Births across Birthweight Groups, 2005**  
**Singleton Births**



**Notes:** See Tables 3.8 and 3.9 for data.

This figure does not include one singleton birth for which the sex was recorded as 'indeterminate' or 'unknown'.

'Not Stated' data are not included in the calculation of percentages.

**Table 3.8**  
**Birthweight - Males**  
**Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005**  
**Singleton Births**

Birthweight (grams)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500-749	21	0.1	26	553.2	10	476.2	766.0	766.0
750-999	37	0.1	14	274.5	5	135.1	372.5	319.1
1000-1249	58	0.2	10	147.1	5	86.2	220.6	171.9
1250-1499	63	0.2	15	192.3	4	63.5	243.6	157.1
1500-1999	219	0.7	27	109.8	5	22.8	130.1	108.3
2000-2499	656	2.1	17	25.3	5	7.6	32.7	18.1
2500-2999	2,945	9.6	27	9.1	8	2.7	11.8	7.4
3000-3499	8,874	29.0	16	1.8	3	0.3	2.1	1.8
3500-3999	11,329	37.0	8	0.7	2	0.2	0.9	0.6
4000-4499	5,203	17.0	6	1.2	0	0.0	1.2	1.2
4500 and Over	1,223	4.0	2	1.6	0	0.0	1.6	1.6
Not Stated	1	0.0	1	500.0	1	1000.0	1000.0	1000.0
<b>Total</b>	<b>30,629</b>	<b>100</b>	<b>169</b>	<b>5.5</b>	<b>48</b>	<b>1.6</b>	<b>7.0</b>	<b>5.4</b>

**Note:** The 2005 dataset includes one singleton birth for which the sex was recorded as 'indeterminate' or 'unknown'. This birth is excluded from Tables 3.8 and 3.9.



Table 3.9

Birthweight - Females

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

Singleton Births

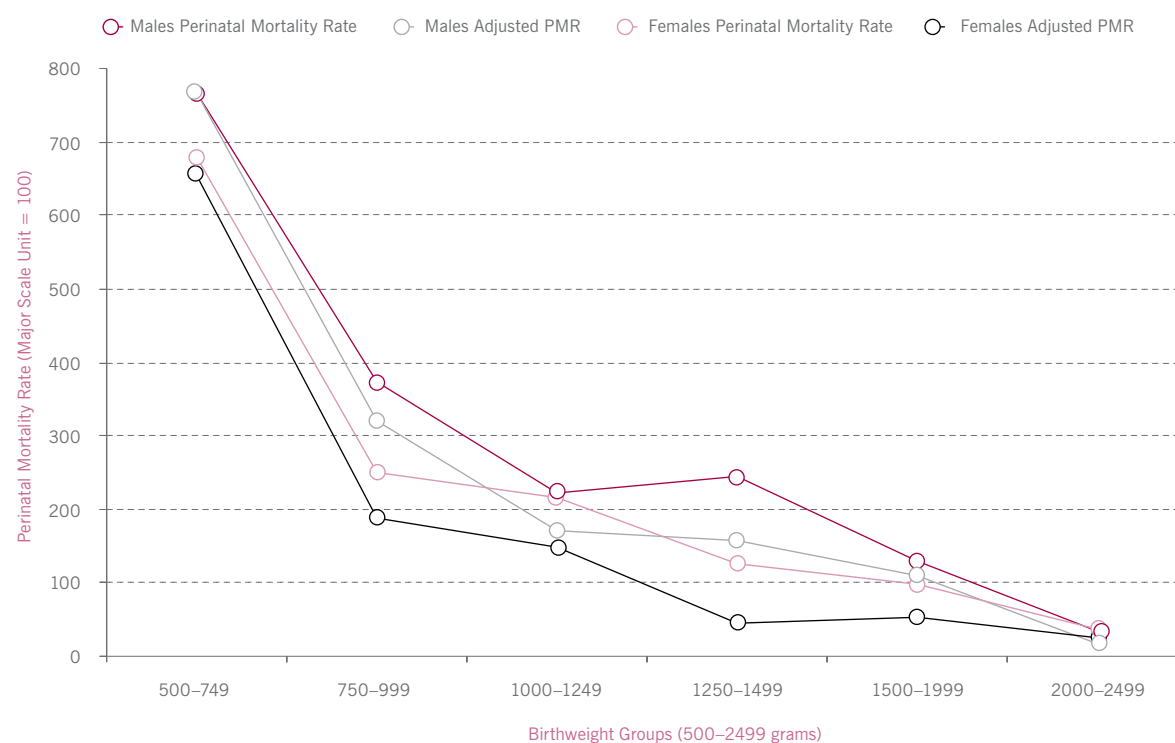
Birthweight (grams)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500–749	36	0.1	17	320.8	19	527.8	679.2	653.1
750–999	31	0.1	9	225.0	1	32.3	250.0	189.2
1000–1249	57	0.2	8	123.1	6	105.3	215.4	150.0
1250–1499	67	0.2	5	69.4	4	59.7	125.0	45.5
1500–1999	239	0.8	15	59.1	10	41.8	98.4	53.7
2000–2499	756	2.6	20	25.8	8	10.6	36.1	24.8
2500–2999	3,718	12.8	16	4.3	9	2.4	6.7	4.6
3000–3499	10,481	36.2	14	1.3	2	0.2	1.5	1.3
3500–3999	9,730	33.6	7	0.7	1	0.1	0.8	0.7
4000–4499	3,322	11.5	1	0.3	0	0.0	0.3	0.3
4500 and Over	554	1.9	0	0.0	0	0.0	0.0	0.0
Not Stated	0	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>28,991</b>	<b>100</b>	<b>112</b>	<b>3.8</b>	<b>60</b>	<b>2.1</b>	<b>5.9</b>	<b>4.2</b>

**Note:** The 2005 dataset includes one singleton birth for which the sex was recorded as ‘indeterminate’ or ‘unknown’. This birth is excluded from Tables 3.8 and 3.9.

Figure 3.7 (A)

Perinatal Mortality Rates for Males and Females by Birthweight (500–2499 grams), 2005

Singleton Births



**Notes:** See Tables 3.8 and 3.9 for data.

This figure does not include one singleton birth for which the sex was recorded as ‘indeterminate’ or ‘unknown’.

Figure 3.7 (B)

Perinatal Mortality Rates for Males and Females by Birthweight (2500–4500 grams and over), 2005  
Singleton Births

**Notes:** See Tables 3.8 and 3.9 for data.

This figure does not include one singleton birth for which the sex was recorded as 'indeterminate' or 'unknown'.

Table 3.10

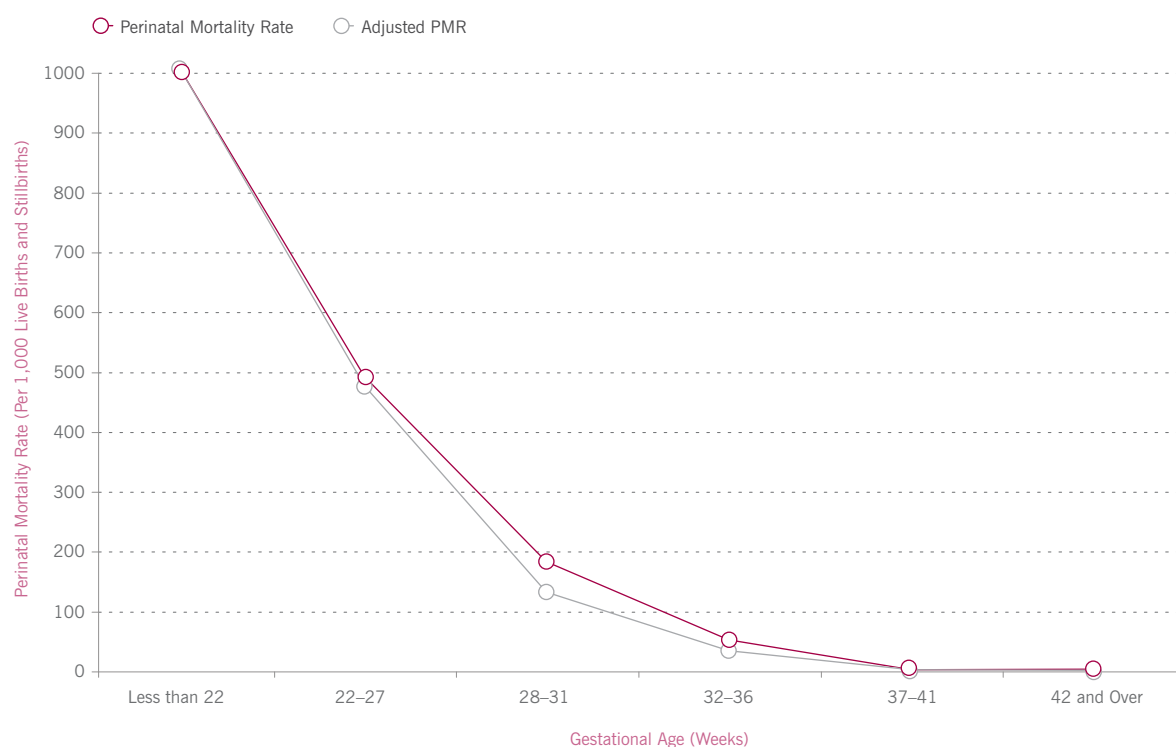
## Gestational Age at Delivery

## Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

## Singleton Births

Gestational Age (weeks)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Less than 22	1	0.0	1	500.0	1	1000.0	1000.0	1000.0
22–27	121	0.2	48	284.0	35	289.3	491.1	475.6
28–31	298	0.5	42	123.5	20	67.1	182.4	131.3
32–36	2,170	3.6	85	37.7	31	14.3	51.4	33.4
37–41	54,464	91.4	101	1.9	19	0.3	2.2	1.6
42 and Over	2,565	4.3	4	1.6	3	1.2	2.7	1.2
Not Stated	2	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>59,621</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

**Figure 3.8**  
Perinatal Mortality Rates by Gestational Age, 2005  
Singleton Births



**Note:** See Table 3.10 for data.

**Table 3.11**  
Interval in Years Since Last Birth  
Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
Singleton Births

Interval Since Last Birth	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
No Previous Births	24,040	40.3	123	5.1	49	2.0	7.1	5.3
1 year or less	531	0.9	5	9.3	5	9.4	18.7	13.1
>1 year to 2 years	8,651	14.5	46	5.3	16	1.8	7.1	4.6
>2 years to 3 years	9,102	15.3	30	3.3	12	1.3	4.6	3.4
>3 years to 4 years	5,722	9.6	26	4.5	2	0.3	4.9	3.8
>4 years to 5 years	3,522	5.9	9	2.5	6	1.7	4.2	3.1
>5 years to 6 years	2,404	4.0	8	3.3	3	1.2	4.6	3.7
More than 6 years	5,293	8.9	32	6.0	12	2.3	8.3	6.6
Not Stated	356	0.6	2	5.6	4	11.2	16.8	8.5
<b>Total</b>	<b>59,621</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

Table 3.12

## Month of Birth

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

Singleton Births

Month of Birth	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
January	4,761	8.0	14	2.9	11	2.3	5.2	4.6
February	4,409	7.4	27	6.1	4	0.9	7.0	5.2
March	5,071	8.5	30	5.9	11	2.2	8.0	5.9
April	4,762	8.0	24	5.0	2	0.4	5.4	4.2
May	4,963	8.3	29	5.8	7	1.4	7.2	5.0
June	5,033	8.4	23	4.5	14	2.8	7.3	4.8
July	5,390	9.0	16	3.0	8	1.5	4.4	3.1
August	5,222	8.8	13	2.5	7	1.3	3.8	2.1
September	5,202	8.7	35	6.7	11	2.1	8.8	6.1
October	4,955	8.3	24	4.8	7	1.4	6.2	5.4
November	4,862	8.2	25	5.1	14	2.9	8.0	5.9
December	4,991	8.4	21	4.2	13	2.6	6.8	5.4
Total	59,621	100	281	4.7	109	1.8	6.5	4.8

**Table 3.13**  
**Mother's Nationality**  
**Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005**  
**Singleton Births**

Mother's Nationality	Live Births	Per Cent (%) Live Births	Per Cent (%) Live Births by Mother's Marital Status			Stillbirths	Per Cent (%) Stillbirths	Per Cent (%) Stillbirth by Mother's Marital Status			Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
			Married	Never Married	Other*			Married	Never Married	Other*					
Ireland	49,393	82.8	55.3	26.2	1.3	229	81.5	50.2	29.5	1.8	4.6	89	1.8	6.4	4.7
UK	1,978	3.3	2.0	1.2	0.1	10	3.6	1.8	1.4	0.4	5.0	3	1.5	6.5	3.5
EU15 (excluding Ireland & UK)	793	1.3	0.8	0.5	0.0	2	0.7	0.4	0.4	0.0	2.5	0	0.0	2.5	2.5
EU15 to EU25 Accession States	1,118	1.9	1.0	0.8	0.1	6	2.1	0.4	1.4	0.4	5.3	3	2.7	8.0	5.4
Rest of Europe	977	1.6	1.2	0.4	0.0	4	1.4	1.1	0.4	0.0	4.1	3	3.1	7.1	4.1
Africa	2,605	4.4	3.3	0.9	0.1	14	5.0	3.9	1.1	0.0	5.3	6	2.3	7.6	6.9
Asia	1,717	2.9	2.4	0.4	0.0	10	3.6	2.1	0.7	0.7	5.8	1	0.6	6.4	4.6
America	466	0.8	0.6	0.1	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0
Australia	113	0.2	0.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0
New Zealand and Other Oceania	49	0.1	0.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0
Multi-Nationality	1	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0
Other Nationality	4	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0
Not Stated	407	0.7	0.5	0.2	0.0	6	2.1	1.4	0.7	0.0	14.5	4	9.8	24.2	19.5
<b>Total</b>	<b>59,621</b>	<b>100</b>	<b>67.4</b>	<b>30.8</b>	<b>1.8</b>	<b>281</b>	<b>100</b>	<b>61.2</b>	<b>35.6</b>	<b>3.2</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

\* Including divorced, married but separated, widowed, not stated

**Note:** See Appendix F for a description of the classification system employed for nationalities.

**Table 3.14**  
**Father's Nationality**  
**Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005**  
**Singleton Births**

Father's Nationality	Live Births	Per Cent (%) Live Births		Stillbirths			Per Cent (%) Stillbirths			Per Cent (%) Stillbirth by Mother's Marital Status			Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
		Per Cent (%) Live Births	Married	Never Married	Other*	Stillbirths	Per Cent (%) Stillbirths	Married	Never Married	Other*							
											Married	Never Married					
Ireland	36,598	61.4	53.9	7.0	0.5	135	48.0	44.1	3.6	0.4	3.7	53	1.4	5.1	3.7		
UK	1,720	2.9	2.4	0.4	0.0	4	1.4	1.1	0.0	0.4	2.3	2	1.2	3.5	2.9		
EU15 (excluding Ireland & UK)	458	0.8	0.7	0.1	0.0	1	0.4	0.0	0.4	0.0	2.2	3	6.6	8.7	6.6		
EU15 to EU25 Accession States	608	1.0	0.8	0.2	0.0	1	0.4	0.4	0.0	0.0	1.6	3	4.9	6.6	1.7		
Rest of Europe	720	1.2	1.1	0.1	0.0	3	1.1	1.1	0.0	0.0	4.1	2	2.8	6.9	5.5		
Africa	2,072	3.5	3.3	0.2	0.0	12	4.3	3.9	0.4	0.0	5.8	5	2.4	8.2	6.7		
Asia	1,211	2.0	2.0	0.1	0.0	8	2.8	2.8	0.0	0.0	6.6	1	0.8	7.4	4.9		
America	290	0.5	0.4	0.0	0.0	2	0.7	0.4	0.0	0.4	6.8	0	0.0	6.8	6.8		
Australia	94	0.2	0.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0		
New Zealand and Other Oceania	55	0.1	0.1	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0		
Multi-Nationality	3	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0		
Other Nationality	4	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0		
Not Stated	1,548	2.6	2.6	0.0	0.0	21	7.5	7.5	0.0	0.0	13.4	10	6.5	19.8	12.2		
Not Applicable	14,240	23.9	0.0	22.7	1.2	94	33.5	0.0	31.3	2.1	6.6	30	2.1	8.7	6.9		
<b>Total</b>	<b>59,621</b>	<b>100</b>	<b>67.4</b>	<b>30.8</b>	<b>1.8</b>	<b>281</b>	<b>100</b>	<b>61.2</b>	<b>35.6</b>	<b>3.2</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>		

\* Including divorced, married but separated, widowed, not stated

Notes: See Appendix F for a description of the classification system employed for nationalities.

'Not Applicable' applies to father's nationality only. Where mother's marital status is recorded as 'never married', 'widowed', 'separated', or 'divorced' the GRO does not require father's details to register the birth. This information is, therefore, generally not provided in these circumstances.

## Part 2: Multiple Births

**Table 3.15**  
Maternities, Twins, Triplets, Quadruplets, and Twinning Rate for 2005  
Multiple Births

Births	Maternities	Sets of Twins	Sets of Triplets	Sets of Quadruplets	Twinning Rate
61,786*	60,837	916	15	1	15.1

\* Includes Stillbirths.

**Notes:** In 2005 there were 1,893 multiple births notified to the NPRS, comprising 1,842 twin, 47 triplet and 4 quadruplet births. Of these, nine twins weighed less than 500 grams and there was one incomplete set of triplets where one triplet was not registered, as it did not meet with registration criteria.

In accordance with the WHO guidelines the National Perinatal Dataset includes only births weighing 500 grams or more.

Therefore, for the purposes of this table the number of complete sets of Twins is 916, sets of Triplets is 15, and set of Quadruplets is 1. See also Section 1, Introduction.

**Table 3.16**  
Age of Mother  
Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
Multiple Births

Age of Mother	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
15–19 Years	23	1.2	0	0.0	0	0.0	0.0	0.0
20–24 Years	171	9.2	6	33.9	5	29.2	62.1	46.0
25–29 Years	343	18.5	2	5.8	9	26.2	31.9	26.2
30–34 Years	649	34.9	8	12.2	9	13.9	25.9	21.4
35–39 Years	576	31.0	6	10.3	7	12.2	22.3	15.6
40–44 Years	85	4.6	3	34.1	0	0.0	34.1	34.1
45 Years and Over	12	0.6	0	0.0	0	0.0	0.0	0.0
Total	1,859	100	25	13.3	30	16.1	29.2	23.0

**Note:** There were no multiple births to Mothers aged < 15 years.

Table 3.17

## Maternal Parity

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

## Multiple Births

Maternal Parity	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0	755	40.6	12	15.6	16	21.2	36.5	28.9
1	581	31.3	7	11.9	6	10.3	22.1	13.7
2	330	17.8	4	12.0	3	9.1	21.0	21.0
3	134	7.2	1	7.4	1	7.5	14.8	14.8
4	31	1.7	1	31.3	1	32.3	62.5	62.5
5	20	1.1	0	0.0	3	150.0	150.0	105.3
6	8	0.4	0	0.0	0	0.0	0.0	0.0
Total	1,859	100	25	13.3	30	16.1	29.2	23.0

Table 3.18

## Mother's Marital Status

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

## Multiple Births

Mother's Marital Status	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Married	1,433	77.1	19	13.1	18	12.6	25.5	19.4
Never Married	377	20.3	6	15.7	12	31.8	47.0	39.5
Separated	41	2.2	0	0.0	0	0.0	0.0	0.0
Divorced	8	0.4	0	0.0	0	0.0	0.0	0.0
Total	1,859	100	25	13.3	30	16.1	29.2	23.0



Table 3.19  
 Father's Occupation  
 Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
 Multiple Births

Father's Occupation	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Farmers & Farm Managers	102	5.5	4	37.7	1	9.8	47.2	47.2
Other Agricultural Occupations & Fishermen	8	0.4	0	0.0	0	0.0	0.0	0.0
Higher-Professional	157	8.4	2	12.6	2	12.7	25.2	19.0
Lower-Professional	103	5.5	0	0.0	0	0.0	0.0	0.0
Managers	176	9.5	1	5.6	1	5.7	11.3	5.7
Salaried-Employees	53	2.9	1	18.5	1	18.9	37.0	37.0
Non-Manual Workers	149	8.0	0	0.0	2	13.4	13.4	13.4
Other Non-Manual Workers	157	8.4	3	18.8	2	12.7	31.3	31.3
Skilled Manual Workers	415	22.3	6	14.3	5	12.0	26.1	16.8
Semi-Skilled Manual Workers	74	4.0	1	13.3	1	13.5	26.7	13.5
Unskilled Manual Workers	10	0.5	0	0.0	0	0.0	0.0	0.0
Unemployed	69	3.7	1	14.3	3	43.5	57.1	29.4
Not Classifiable	53	2.9	0	0.0	0	0.0	0.0	0.0
Not Applicable	326	17.5	6	18.1	12	36.8	54.2	45.6
Home Duties	2	0.1	0	0.0	0	0.0	0.0	0.0
Not Stated	5	0.3	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,859</b>	<b>100</b>	<b>25</b>	<b>13.3</b>	<b>30</b>	<b>16.1</b>	<b>29.2</b>	<b>23.0</b>

**Note:** See Appendix C for a description of the classification system for occupations.

Table 3.20  
 Mother's Occupation  
 Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
 Multiple Births

Mother's Occupation	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Farmers & Farm Managers	3	0.2	1	250.0	1	333.3	500.0	500.0
Other Agricultural Occupations & Fishermen	2	0.1	0	0.0	0	0.0	0.0	0.0
Higher-Professional	114	6.1	1	8.7	1	8.8	17.4	8.8
Lower-Professional	229	12.3	6	25.5	3	13.1	38.3	34.2
Managers	139	7.5	0	0.0	1	7.2	7.2	0.0
Salaried-Employees	44	2.4	0	0.0	2	45.5	45.5	45.5
Non-Manual Workers	444	23.9	3	6.7	5	11.3	17.9	11.3
Other Non-Manual Workers	228	12.3	4	17.2	7	30.7	47.4	34.9
Skilled Manual Workers	23	1.2	1	41.7	0	0.0	41.7	0.0
Semi-Skilled Manual Workers	45	2.4	1	21.7	2	44.4	65.2	65.2
Unemployed	70	3.8	0	0.0	2	28.6	28.6	14.5
Not Classifiable	62	3.3	0	0.0	0	0.0	0.0	0.0
Home Duties	448	24.1	6	13.2	4	8.9	22.0	19.9
Not Stated	8	0.4	2	200.0	2	250.0	400.0	400.0
<b>Total</b>	<b>1,859</b>	<b>100</b>	<b>25</b>	<b>13.3</b>	<b>30</b>	<b>16.1</b>	<b>29.2</b>	<b>23.0</b>

**Notes:** 'Not Applicable' is not used in the classification of maternal occupation.  
 See Appendix C for a description of the classification system for occupations.

Table 3.21

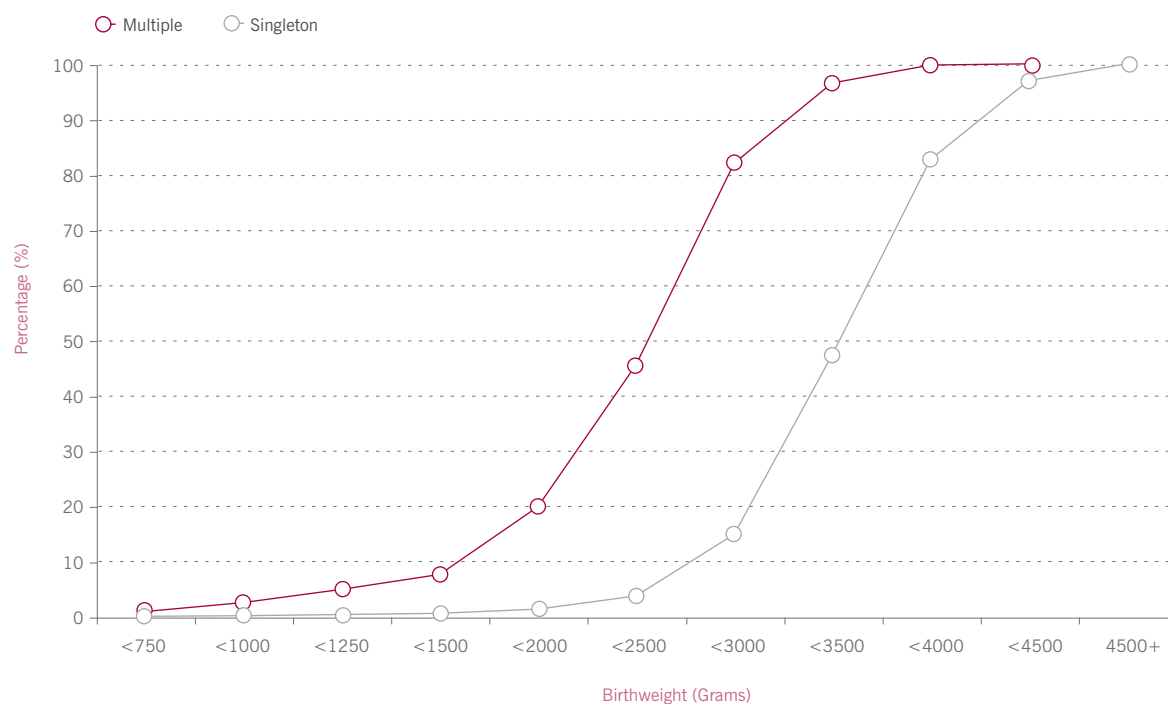
Number of Previous Stillbirths (for women having second and subsequent births)  
 Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
 Multiple Births

Previous Stillbirths	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0	1,076	97.5	12	11.0	14	13.0	23.9	18.5
1	26	2.4	1	37.0	0	0.0	37.0	37.0
2	2	0.2	0	0.0	0	0.0	0.0	0.0
Total	1,104	100	13	11.6	14	12.7	24.2	18.9

**Note:** Primiparae (i.e. women with no previous live births or stillbirths) are not included in this table.

Figure 3.9

Birthweights: Cumulative Percentages of Singleton and Multiple Births, 2005  
 Multiple Births



**Note:** Data are compiled from Tables 3.7 and 3.22.

Table 3.22

## Birthweight - All Multiple Births

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

## Multiple Births

Birthweight (grams)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500-749	19	1.0	7	269.2	7	368.4	538.5	520.0
750-999	30	1.6	5	142.9	4	133.3	257.1	212.1
1000-1249	44	2.4	0	0.0	6	136.4	136.4	116.3
1250-1499	51	2.7	3	55.6	4	78.4	129.6	96.2
1500-1999	227	12.2	4	17.3	3	13.2	30.3	26.1
2000-2499	477	25.7	5	10.4	1	2.1	12.4	8.3
2500-2999	678	36.5	0	0.0	2	2.9	2.9	2.9
3000-3499	269	14.5	0	0.0	1	3.7	3.7	3.7
3500-3999	61	3.3	1	16.1	2	32.8	48.4	0.0
4000-4499	3	0.2	0	0.0	0	0.0	0.0	0.0
Total	1,859	100	25	13.3	30	16.1	29.2	23.0

Table 3.23

## Birthweight - Males

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

## Multiple Births

Birthweight (grams)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500-749	6	0.6	5	454.5	3	500.0	727.3	727.3
750-999	12	1.3	2	142.9	0	0.0	142.9	76.9
1000-1249	21	2.2	0	0.0	4	190.5	190.5	150.0
1250-1499	28	3.0	2	66.7	1	35.7	100.0	100.0
1500-1999	100	10.6	3	29.1	1	10.0	38.8	38.8
2000-2499	217	23.0	4	18.1	1	4.6	22.6	13.7
2500-2999	368	38.9	0	0.0	2	5.4	5.4	5.4
3000-3499	146	15.4	0	0.0	0	0.0	0.0	0.0
3500-3999	45	4.8	1	21.7	2	44.4	65.2	0.0
4000-4499	2	0.2	0	0.0	0	0.0	0.0	0.0
Total	945	100	17	17.7	14	14.8	32.2	25.1

**Note:** The 2005 dataset includes one multiple birth for which sex was recorded as 'indeterminate' or 'unknown'. This birth is excluded from Tables 3.23 and 3.24.

Table 3.24

## Birthweight - Females

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

Multiple Births

Birthweight (grams)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500–749	13	1.4	2	133.3	4	307.7	400.0	357.1
750–999	18	2.0	3	142.9	4	222.2	333.3	300.0
1000–1249	23	2.5	0	0.0	2	87.0	87.0	87.0
1250–1499	23	2.5	1	41.7	3	130.4	166.7	90.9
1500–1999	126	13.8	1	7.9	1	7.9	15.7	15.7
2000–2499	260	28.5	1	3.8	0	0.0	3.8	3.8
2500–2999	310	34.0	0	0.0	0	0.0	0.0	0.0
3000–3499	123	13.5	0	0.0	1	8.1	8.1	8.1
3500–3999	16	1.8	0	0.0	0	0.0	0.0	0.0
4000–4499	1	0.1	0	0.0	0	0.0	0.0	0.0
Total	913	100	8	8.7	15	16.4	25.0	20.7

*Note:* The 2005 dataset includes one multiple birth for which sex was recorded as ‘indeterminate’ or ‘unknown’. This birth is excluded from Tables 3.23 and 3.24.

Table 3.25

## Gestational Age at Delivery

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

Multiple Births

Gestational Age (weeks)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
22–27	49	2.6	8	140.4	14	285.7	386.0	363.6
28–31	92	4.9	7	70.7	5	54.3	121.2	103.1
32–36	700	37.7	6	8.5	5	7.1	15.6	10.0
37–41	1,018	54.8	4	3.9	6	5.9	9.8	5.9
Total	1,859	100	25	13.3	30	16.1	29.2	23.0

Table 3.26

## Interval in Years Since Last Birth

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

Multiple Births

Interval Since Last Birth	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
No previous births	755	40.6	12	15.6	16	21.2	36.5	28.9
1 year or less	36	1.9	0	0.0	0	0.0	0.0	0.0
>1 year to 2 years	221	11.9	1	4.5	0	0.0	4.5	0.0
>2 years to 3 years	276	14.8	6	21.3	2	7.2	28.4	21.4
>3 years to 4 years	179	9.6	0	0.0	2	11.2	11.2	11.2
>4 years to 5 years	126	6.8	0	0.0	4	31.7	31.7	24.0
>5 years to 6 years	71	3.8	2	27.4	2	28.2	54.8	54.8
More than 6 years	189	10.2	4	20.7	4	21.2	41.5	31.4
Not Stated	6	0.3	0	0.0	0	0.0	0.0	0.0
Total	1,859	100	25	13.3	30	16.1	29.2	23.0

Table 3.27

## Month of Birth

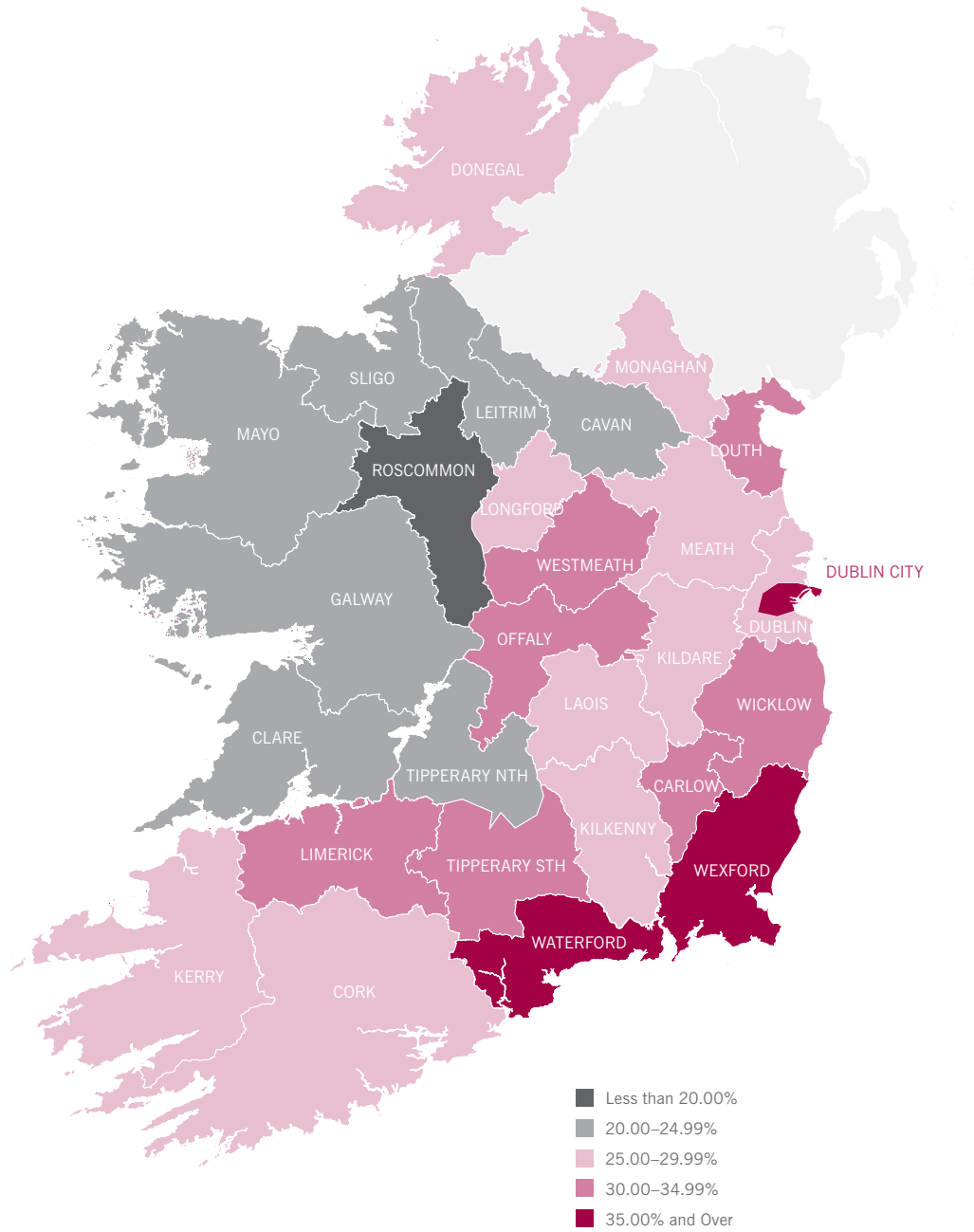
Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

Multiple Births

Month of Birth	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
January	172	9.3	3	17.1	2	11.6	28.6	17.3
February	135	7.3	0	0.0	4	29.6	29.6	7.6
March	168	9.0	1	5.9	3	17.9	23.7	23.7
April	170	9.1	3	17.3	4	23.5	40.5	17.8
May	140	7.5	1	7.1	0	0.0	7.1	7.1
June	162	8.7	0	0.0	2	12.3	12.3	12.3
July	181	9.7	0	0.0	4	22.1	22.1	16.7
August	129	6.9	4	30.1	3	23.3	52.6	52.6
September	152	8.2	2	13.0	3	19.7	32.5	32.5
October	134	7.2	2	14.7	0	0.0	14.7	7.4
November	190	10.2	4	20.6	3	15.8	36.1	36.1
December	126	6.8	5	38.2	2	15.9	53.4	46.2
Total	1,859	100	25	13.3	30	16.1	29.2	23.0

Figure 3.10

Percentage of Total Births to Single Mothers by Mother's County of Residence, 2005  
 Singleton and Multiple Live Births and Stillbirths



**Note:** See Appendix G, Table G18 for data. Example: of all births to mothers resident in Meath, 25.0% were to single mothers.

**Table 3.28**  
**Mother's Nationality**  
**Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005**  
**Multiple Births**

Mother's Nationality	Live Births	Per Cent (%) Live Births	Per Cent (%) Live Births by Mother's Marital Status			Stillbirths	Per Cent (%) Stillbirths	Per Cent (%) Stillbirth by Mother's Marital Status			Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
			Married	Never Married	Other*			Married	Never Married	Other*					
Ireland	1,581	85.0	67.0	16.4	1.6	21	84.0	64.0	20.0	0.0	13.1	27	17.1	30.0	24.5
UK	74	4.0	2.4	1.1	0.4	0	0.0	0.0	0.0	0.0	0.0	1	13.5	13.5	0.0
EU15 (excluding Ireland & UK)	9	0.5	0.2	0.2	0.1	1	4.0	4.0	0.0	0.0	100.0	0	0.0	100.0	100.0
EU15 to EU25 Accession States	21	1.1	0.3	0.8	0.1	1	4.0	4.0	0.0	0.0	45.5	0	0.0	45.5	45.5
Rest of Europe	25	1.3	1.0	0.2	0.2	1	4.0	4.0	0.0	0.0	38.5	1	40.0	76.9	0.0
Africa	79	4.2	3.3	0.7	0.2	1	4.0	0.0	4.0	0.0	12.5	0	0.0	12.5	12.5
Asia	38	2.0	1.6	0.4	0.0	0	0.0	0.0	0.0	0.0	0.0	1	26.3	26.3	26.3
America	10	0.5	0.4	0.1	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0
Not Stated	22	1.2	0.9	0.3	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,859</b>	<b>100</b>	<b>77.1</b>	<b>20.3</b>	<b>2.6</b>	<b>25</b>	<b>100</b>	<b>76.0</b>	<b>24.0</b>	<b>0.0</b>	<b>13.3</b>	<b>30</b>	<b>16.1</b>	<b>29.2</b>	<b>23.0</b>

\* Including divorced, married but separated, widowed, not stated.

*Note:* See Appendix F for a description of the classification system employed for nationalities.



**Table 3.29**  
**Father's Nationality**  
**Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005**  
**Multiple Births**

Father's Nationality	Live Births	Per Cent (%) Live Births		Per Cent (%) Live Births by Mother's Marital Status			Stillbirths	Per Cent (%) Stillbirths	Per Cent (%) Stillbirth by Mother's Marital Status			Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
		Married	Never Married	Other*	Married	Never Married			Other*							
Ireland	1,289	69.3	65.0	3.9	0.4	17	68.0	68.0	0.0	0.0	13.0	15	11.6	24.5	20.0	
UK	60	3.2	2.8	0.2	0.2	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	
EU15 (excluding Ireland & UK)	4	0.2	0.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	
EU15 to EU25 Accession States	14	0.8	0.3	0.4	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	
Rest of Europe	27	1.5	1.3	0.0	0.2	1	4.0	4.0	0.0	0.0	35.7	1	37.0	71.4	0.0	
Africa	58	3.1	2.9	0.1	0.1	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	
Asia	22	1.2	1.1	0.1	0.0	1	4.0	4.0	0.0	0.0	43.5	1	45.5	87.0	87.0	
America	8	0.4	0.4	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	
Australia	4	0.2	0.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	
Not Stated	52	2.8	2.8	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	1	19.2	19.2	0.0	
Not Applicable	321	17.3	0.0	15.5	1.8	6	24.0	0.0	24.0	0.0	18.3	12	37.4	55.0	46.3	
<b>Total</b>	<b>1,859</b>	<b>100</b>	<b>77.1</b>	<b>20.3</b>	<b>2.6</b>	<b>25</b>	<b>100</b>	<b>76.0</b>	<b>24.0</b>	<b>0.0</b>	<b>13.3</b>	<b>30</b>	<b>16.1</b>	<b>29.2</b>	<b>23.0</b>	

\* Including divorced, married but separated, widowed, not stated.

**Notes:** See Appendix F for a description of the classification system employed for nationalities.

'Not Applicable' applies to father's nationality only. Where mother's marital status is recorded as 'never married', 'widowed', 'separated' or 'divorced' the GRO does not require father's details to register the birth. This information is, therefore, generally not provided in these circumstances.



Perinatal Care

SECTION

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4



## Introduction

This section presents a detailed review on aspects of perinatal care for the mother and infant. Part 1 reports on perinatal care for singleton births and Part 2 on multiple births. The following tables outline data for live births, stillbirths and early neonatal deaths, together with their corresponding rates. The perinatal mortality rate and adjusted perinatal mortality rate are also outlined in each table. Tables and figures are presented in some detail for a number of variables, including type of antenatal care, mother's antenatal and postnatal length of stay, method of delivery, mother's immunity to rubella, and type of feeding.

## Part 1: Singleton Births

**Table 4.1**  
**Type of Antenatal Care**  
**Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005**  
**Singleton Births**

Type of Antenatal Care	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Hospital/ Obstetrician	12,575	21.1	93	7.3	26	2.1	9.4	6.8
General Practitioner Only	142	0.2	3	20.7	0	0.0	20.7	20.7
Hospital and G.P. Combined	46,305	77.7	178	3.8	78	1.7	5.5	4.1
None	210	0.4	6	27.8	2	9.5	37.0	28.0
Midwife Only	332	0.6	1	3.0	0	0.0	3.0	3.0
Unknown	57	0.1	0	0.0	3	52.6	52.6	52.6
<b>Total</b>	<b>59,621</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

**Table 4.2**  
**Mother's Length of Stay in Hospital Prior to Delivery**  
**Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005**  
**Singleton Births**

Antenatal Length of Stay	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0–1 Days	53,286	89.6	231	4.3	87	1.6	5.9	4.4
2 Days	3,184	5.4	25	7.8	7	2.2	10.0	7.2
3–5 Days	1,860	3.1	14	7.5	6	3.2	10.7	7.0
6–8 Days	486	0.8	3	6.1	2	4.1	10.2	8.2
9–11 Days	177	0.3	3	16.7	0	0.0	16.7	11.2
12–14 Days	123	0.2	1	8.1	1	8.1	16.1	16.1
More than 2 Weeks	278	0.5	4	14.2	6	21.6	35.5	28.6
Not Stated	44	0.1	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>59,438</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

**Notes:** 'Not Stated' includes 31 births where place of birth was recorded as domiciliary but birth was registered by a hospital. Mother was not admitted, or was admitted post delivery, under a planned community midwife scheme. Therefore, dates of mother's antenatal length of stay were not applicable. There were 11 births where place of birth was recorded as 'Born Before Arrival'. Mother's admission date was after the infant's date of birth. Therefore, antenatal length of stay was not applicable. There were 2 births where mother's admission was not stated.

Domiciliary births, of which there were 183, are excluded from this table. See Appendix H for detailed analysis.

Table 4.3

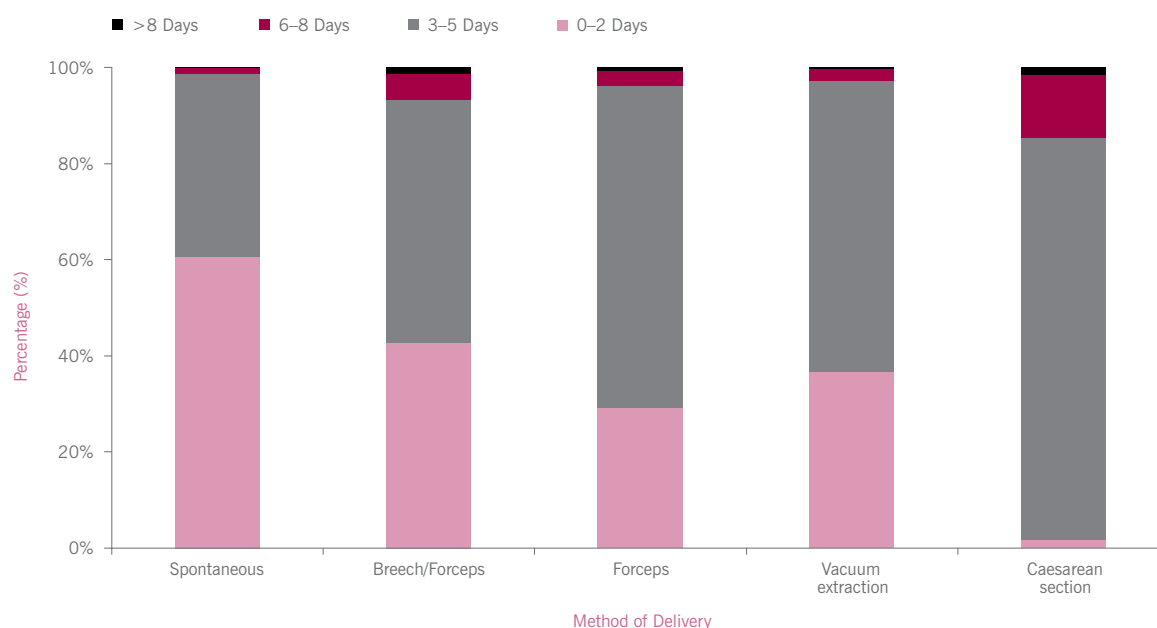
Mother's Length of Stay in Hospital After Delivery  
Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
Singleton Births

Postnatal Length of Stay	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0–1 Days	8,500	14.3	156	18.0	48	5.6	23.6	16.9
2 Days	16,429	27.6	62	3.8	14	0.9	4.6	3.5
3–5 Days	31,557	53.1	52	1.6	42	1.3	3.0	2.2
6–8 Days	2,594	4.4	7	2.7	3	1.2	3.8	3.1
9–11 Days	233	0.4	2	8.5	0	0.0	8.5	8.5
12–14 Days	45	0.1	1	21.7	1	22.2	43.5	43.5
More than 2 Weeks	47	0.1	1	20.8	1	21.3	41.7	41.7
Not Stated	33	0.1	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>59,438</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

**Notes:** 'Not Stated' includes 30 births where place of birth was recorded as domiciliary but birth was registered by a hospital. Mother was not admitted under a planned community midwife scheme. Therefore, dates of mother's length of stay were not applicable. Domiciliary births, of which there were 183, are excluded from this table. See Appendix H for detailed analysis.

Figure 4.1

Mothers Postnatal Length of Stay: Cumulative Percentages by Method of Delivery, 2005  
Singleton Births



**Note:** Data are compiled from Appendix G, Table G9. 'Not Stated' data are not included in the calculation of percentages.

Table 4.4  
Method of Delivery  
Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
Singleton Births

Method of Delivery	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Spontaneous	35,799	60.0	209	5.8	62	1.7	7.5	5.8
Breech/Forceps	180	0.3	31	146.9	6	33.3	175.4	125.6
Forceps	1,700	2.9	3	1.8	1	0.6	2.3	1.8
Vacuum extraction	7,058	11.8	6	0.8	3	0.4	1.3	1.0
Caesarean section	14,820	24.9	29	2.0	36	2.4	4.4	2.9
Other specified & combined	60	0.1	3	47.6	1	16.7	63.5	32.8
Not stated	4	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>59,621</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

Table 4.5  
Advance Hospital Bookings  
Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
Singleton Births

Advance Hospital Bookings	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Booked	58,509	98.4	266	4.5	95	1.6	6.1	4.5
Not Booked	871	1.5	15	16.9	12	13.8	30.5	26.1
Not Stated	58	0.1	0	0.0	2	34.5	34.5	34.5
<b>Total</b>	<b>59,438</b>	<b>100</b>	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>6.5</b>	<b>4.8</b>

**Notes:** 'Not Stated' includes 29 births where place of birth was recorded as domiciliary but birth was registered by a hospital. Mother was not admitted under a planned community midwife scheme. Therefore, hospital bookings were not applicable. Domiciliary births, of which there were 183, are excluded from this table. See Appendix H for detailed analysis.

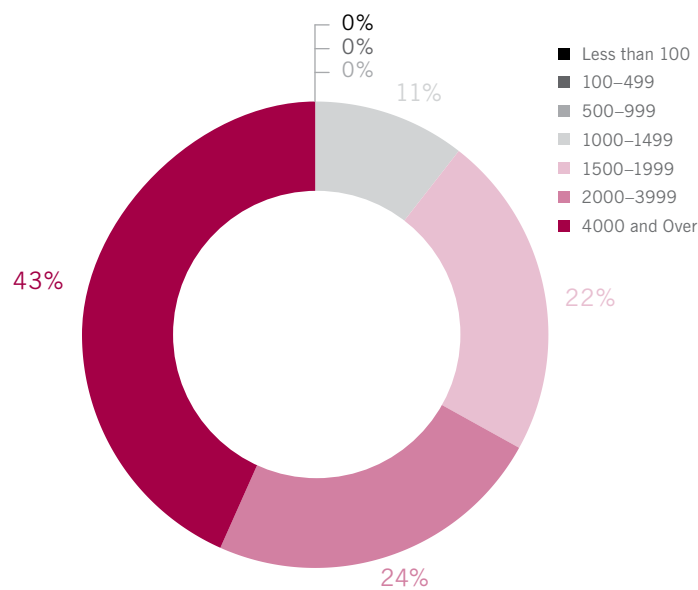
Table 4.6

Size of Maternity Unit (number of live births and stillbirths annually)  
Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

Size of Maternity Unit	Number of Hospitals	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Less than 100	2	3	0.0	0	0.0	0	0.0	0.0	0.0
100–499	0	0	0.0	0	0.0	0	0.0	0.0	0.0
500–999	0	0	0.0	0	0.0	0	0.0	0.0	0.0
1000–1499	5	6,469	10.6	37	5.7	12	1.9	7.5	5.4
1500–1999	8	13,714	22.4	58	4.2	22	1.6	5.8	4.5
2000–3999	5	14,486	23.6	67	4.6	34	2.3	6.9	5.1
4000 and Over	4	26,625	43.4	144	5.4	71	2.7	8.0	6.0
Total	24	61,297	100	306	5.0	139	2.3	7.2	5.4

Figure 4.2

Percentage of Live Births by Size of Maternity Unit, 2005



**Note:** See Table 4.6 for data. The size of unit refers to the number of live births and stillbirths occurring in 2005.



**Table 4.7**  
**Inter-Hospital Transfer of Infants**  
**Live Births, Early Neonatal Deaths and Mortality Rate, 2005**  
**Singleton Births**

Infant Transfer	Live Births	Per Cent (%) Live Births	Early Neonatal Deaths	Early Neonatal Rate
Transferred	350	0.6	4	11.4
Not Transferred	58,976	99.2	104	1.8
Not stated	112	0.2	1	8.9
<b>Total</b>	<b>59,438</b>	<b>100</b>	<b>109</b>	<b>1.8</b>

**Notes:** 'Not Stated' includes 30 births where place of birth was recorded as domiciliary but birth was registered by a hospital. Mother was not admitted under a planned community midwife scheme. Therefore, transfer indicators were not applicable. Domiciliary births, of which there were 183, are excluded from this table. See Appendix H for detailed analysis.

**Table 4.8**  
**Rubella: Immune Status of Mother, Numbers and Percentages, 2005**

Rubella	Frequency	Per Cent (%)
Immune	54,079	90.3
Not Immune	1,633	2.7
Unknown	4,166	7.0
Not Stated	24	0.0
<b>Total</b>	<b>59,902</b>	<b>100</b>

Table 4.9

Age of Mother by Infant's Type of Feeding, Numbers and Percentages, 2005  
Singleton Births

Age of Mother Frequency Row Per Cent Col. Per Cent	Type of Feeding				
	Artificial	Breast	Combined	Not Stated	Total
Under 15 Years	4	2	0	0	6
	66.7	33.3	0.0	0.0	100.0
	0.0	0.0	0.0	0.0	0.0
15-19 Years	1,796	524	56	5	2,381
	75.4	22.0	2.4	0.2	100.0
	5.8	2.0	2.7	5.6	4.0
20-24 Years	4,885	2,484	225	15	7,609
	64.2	32.6	3.0	0.2	100.0
	15.8	9.4	10.7	16.7	12.8
25-29 Years	7,171	5,646	494	19	13,330
	53.8	42.4	3.7	0.1	100.0
	23.1	21.4	23.4	21.1	22.4
30-34 Years	10,084	10,096	779	32	20,991
	48.0	48.1	3.7	0.2	100.0
	32.5	38.2	36.9	35.6	35.2
35-39 Years	5,938	6,365	454	13	12,770
	46.5	49.8	3.6	0.1	100.0
	19.1	24.1	21.5	14.4	21.4
40-44 Years	1,068	1,247	99	6	2,420
	44.1	51.5	4.1	0.2	100.0
	3.4	4.7	4.7	6.7	4.1
45 Years and Over	33	33	3	0	69
	47.8	47.8	4.3	0.0	100.0
	0.1	0.1	0.1	0.0	0.1
Not Stated	31	13	1	0	45
	68.9	28.9	2.2	0.0	100.0
	0.1	0.0	0.0	0.0	0.1
Total	31,010	26,410	2,111	90	59,621
	52.0	44.3	3.5	0.2	100.0
	100.0	100.0	100.0	100.0	100.0

**Notes:** See Appendix G for an explanation of the table format.

'Not Stated' contains 78 early neonatal deaths for which type of feeding was not stated.

Figure 4.3

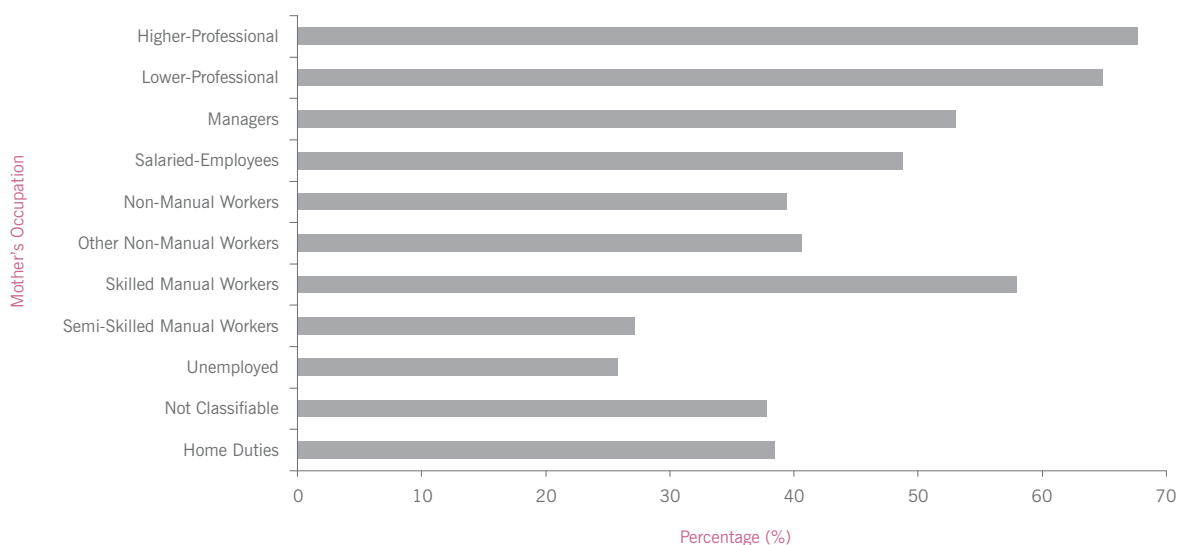
Percentage of Mothers Breastfeeding by Father's Occupation, 2005  
Singleton Births



**Notes:** Data are compiled from Appendix G, Table G15. 'Not Stated' data are not included in the calculation of percentages. Categories where percentages would be based on <100 live births are not included in this graph.

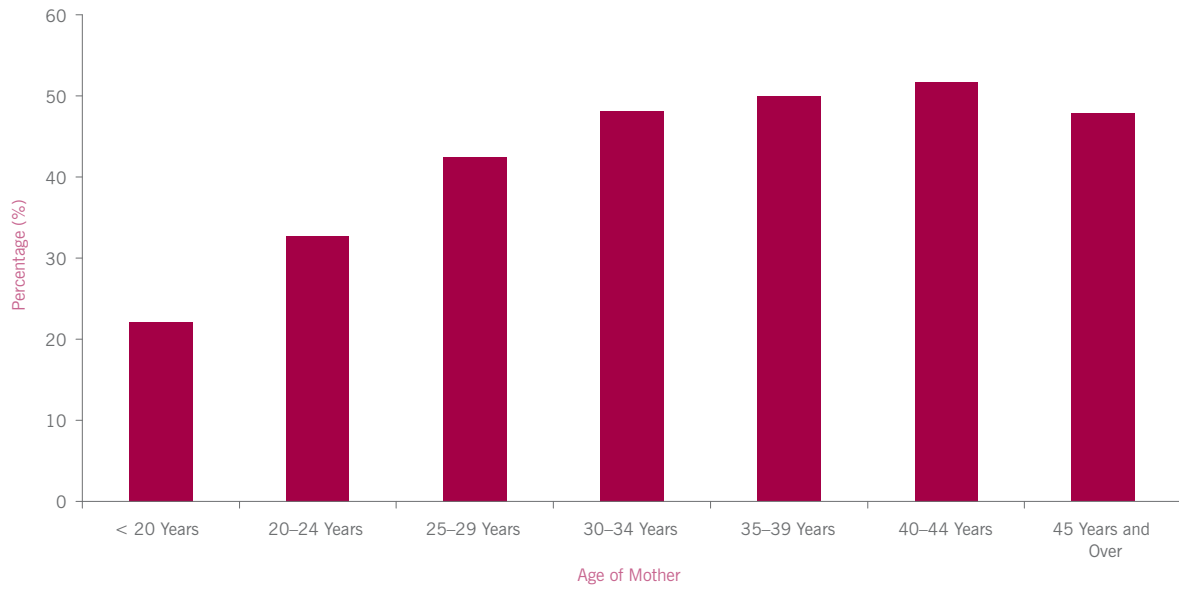
Figure 4.4

Percentage of Mothers Breastfeeding by Mother's Occupation, 2005  
Singleton Births



**Notes:** Data are compiled from Appendix G, Table G16. 'Not Stated' data are not included in the calculation of percentages. Categories where percentages would be based on <100 live births are not included in this graph.

Figure 4.5  
Percentage of Mothers Breastfeeding by Age of Mother, 2005  
Singleton Births



**Note:** See Table 4.9 for data. 'Not Stated' data are not included in the calculation of percentages.

## Part 2: Multiple Births

Table 4.10

### Type of Antenatal Care

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

### Multiple Births

Type of Antenatal Care	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Hospital/Obstetrician	650	35.0	10	15.2	12	18.5	33.3	21.5
General Practitioner Only	4	0.2	0	0.0	0	0.0	0.0	0.0
Hospital and G.P. Combined	1,195	64.3	15	12.4	16	13.4	25.6	22.4
None	6	0.3	0	0.0	0	0.0	0.0	0.0
Unknown	4	0.2	0	0.0	2	500.0	500.0	500.0
<b>Total</b>	<b>1,859</b>	<b>100</b>	<b>25</b>	<b>13.3</b>	<b>30</b>	<b>16.1</b>	<b>29.2</b>	<b>23.0</b>

Table 4.11

### Mother's Length of Stay in Hospital Prior to Delivery

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

### Multiple Births

Antenatal Length of Stay	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0–1 Days	1,393	74.9	17	12.1	19	13.6	25.5	19.3
2 Days	116	6.2	3	25.2	1	8.6	33.6	25.4
3–5 Days	145	7.8	5	33.3	2	13.8	46.7	33.8
6–8 Days	79	4.2	0	0.0	0	0.0	0.0	0.0
9–11 Days	32	1.7	0	0.0	0	0.0	0.0	0.0
12–14 Days	16	0.9	0	0.0	1	62.5	62.5	62.5
More than 2 Weeks	78	4.2	0	0.0	7	89.7	89.7	89.7
<b>Total</b>	<b>1,859</b>	<b>100</b>	<b>25</b>	<b>13.3</b>	<b>30</b>	<b>16.1</b>	<b>29.2</b>	<b>23.0</b>

**Note:** There were no domiciliary multiple births.

Table 4.12

## Mother's Length of Stay in Hospital After Delivery

Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005

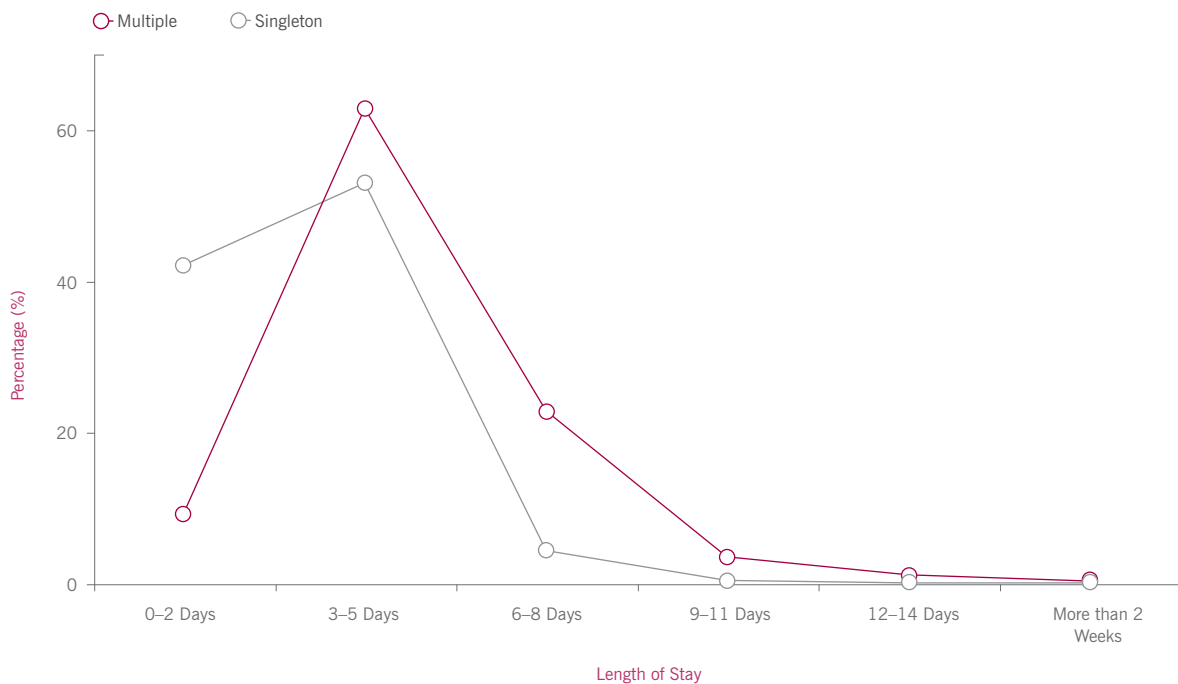
Multiple Births

Postnatal Length of Stay	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0–1 Days	35	1.9	2	54.1	1	28.6	81.1	55.6
2 Days	133	7.2	6	43.2	5	37.6	79.1	72.5
3–5 Days	1,172	63.0	10	8.5	20	17.1	25.4	18.7
6–8 Days	424	22.8	5	11.7	2	4.7	16.3	14.0
9–11 Days	65	3.5	2	29.9	0	0.0	29.9	15.2
12–14 Days	22	1.2	0	0.0	0	0.0	0.0	0.0
More than 2 Weeks	6	0.3	0	0.0	2	333.3	333.3	333.3
Not Stated	2	0.1	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,859</b>	<b>100</b>	<b>25</b>	<b>13.3</b>	<b>30</b>	<b>16.1</b>	<b>29.2</b>	<b>23.0</b>

**Note:** There were no domiciliary multiple births.

Figure 4.6

Percentage Distribution of Births by Mother's Postnatal Length of Stay in Days, 2005



**Notes:** Includes stillbirths. See Tables 4.3 and 4.12 for data.

'Not Stated' data are not included in the calculation of percentages.

Table 4.13  
Method of Delivery  
Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
Multiple Births

Method of Delivery	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Spontaneous	474	25.5	4	8.4	8	16.9	25.1	18.9
Breech/Forceps	71	3.8	4	53.3	0	0.0	53.3	53.3
Forceps	31	1.7	0	0.0	2	64.5	64.5	64.5
Vacuum extraction	152	8.2	0	0.0	0	0.0	0.0	0.0
Caesarean section	1,123	60.4	15	13.2	20	17.8	30.8	23.0
Other specified & combined	7	0.4	2	222.2	0	0.0	222.2	222.2
Not stated	1	0.1	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,859</b>	<b>100</b>	<b>25</b>	<b>13.3</b>	<b>30</b>	<b>16.1</b>	<b>29.2</b>	<b>23.0</b>

Table 4.14  
Advance Hospital Bookings  
Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
Multiple Births

Advance Hospital Bookings	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Booked	1,785	96.0	25	13.8	23	12.9	26.5	20.0
Not Booked	74	4.0	0	0.0	7	94.6	94.6	94.6
<b>Total</b>	<b>1,859</b>	<b>100</b>	<b>25</b>	<b>13.3</b>	<b>30</b>	<b>16.1</b>	<b>29.2</b>	<b>23.0</b>

*Note:* There were no domiciliary multiple births.

**Table 4.15**  
**Inter-Hospital Transfer of Infants**  
**Live Births, Early Neonatal Deaths and Mortality Rate, 2005**  
**Multiple Births**

Infant Transfer	Live Births	Per Cent (%) Live Births	Early Neonatal Deaths	Early Neonatal Rate
Transferred	61	3.3	5	82.0
Not Transferred	1,786	96.1	25	14.0
Not stated	12	0.6	0	0.0
<b>Total</b>	<b>1,859</b>	<b>100</b>	<b>30</b>	<b>16.1</b>

*Note:* There were no domiciliary multiple births.

**Table 4.16**  
**Rubella: Immune Status of Mother, Numbers and Percentages, 2005**  
**Multiple Births**

Rubella	Frequency	Per Cent (%)
Immune	1,630	86.5
Not Immune	57	3.0
Unknown	197	10.5
<b>Total</b>	<b>1,884</b>	<b>100</b>



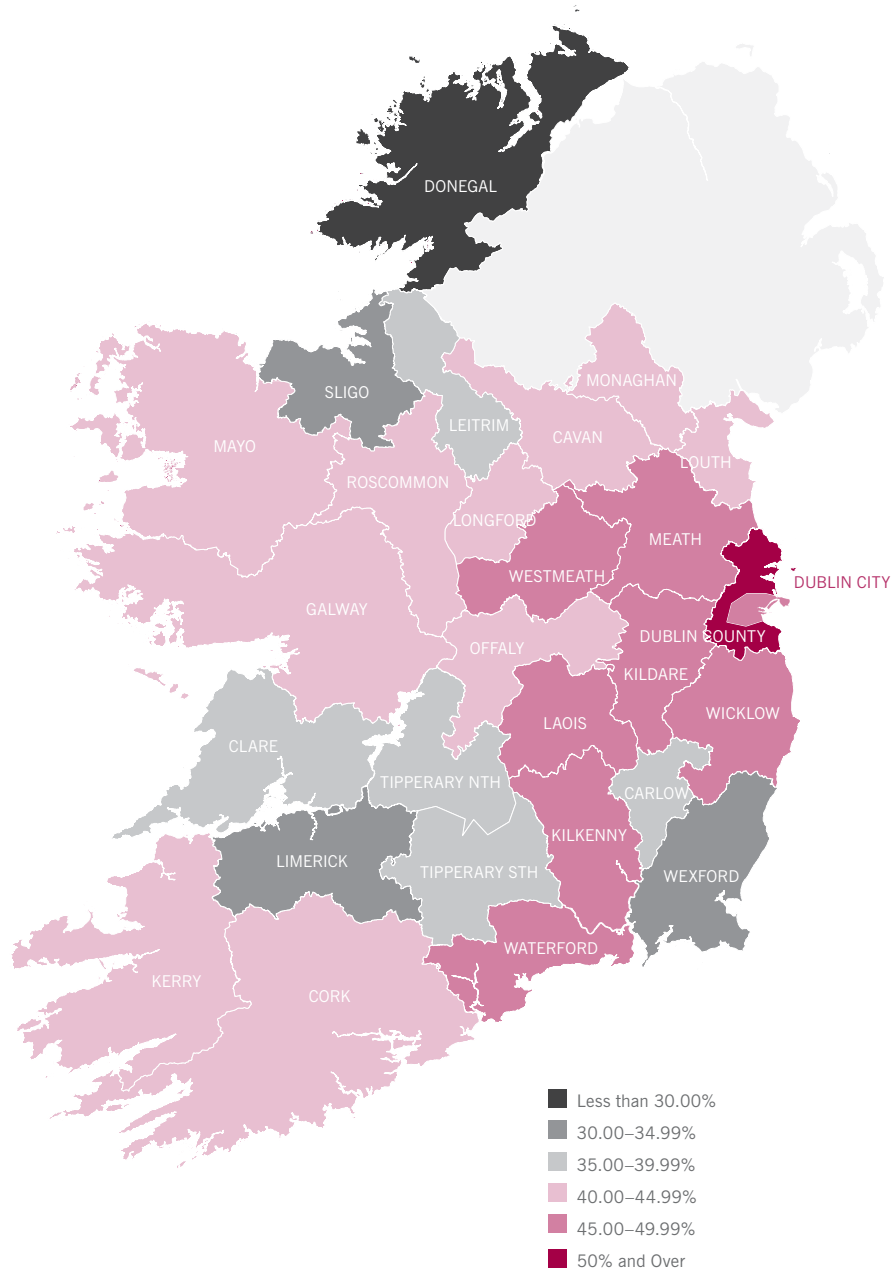
Table 4.17  
Age of Mother by Infant's Type of Feeding, Numbers and Percentages, 2005  
Multiple Births

Age of Mother Frequency Row Per Cent Col. Per Cent	Type of Feeding				
	Artificial	Breast	Combined	Not Stated	Total
15–19 Years	17	6	0	0	23
	73.9	26.1	0.0	0.0	100.0
	1.4	1.2	0.0	0.0	1.2
20–24 Years	126	40	0	5	171
	73.7	23.4	0.0	2.9	100.0
	10.7	7.7	0.0	26.3	9.2
25–29 Years	229	81	28	5	343
	66.8	23.6	8.2	1.5	100.0
	19.4	15.6	20.1	26.3	18.5
30–34 Years	418	164	62	5	649
	64.4	25.3	9.6	0.8	100.0
	35.4	31.6	44.6	26.3	34.9
35–39 Years	335	194	43	4	576
	58.2	33.7	7.5	0.7	100.0
	28.3	37.4	30.9	21.1	31.0
40–44 Years	50	31	4	0	85
	58.8	36.5	4.7	0.0	100.0
	4.2	6.0	2.9	0.0	4.6
45 Years and Over	7	3	2	0	12
	58.3	25.0	16.7	0.0	100.0
	0.6	0.6	1.4	0.0	0.6
Total	1,182	519	139	19	1,859
	63.6	27.9	7.5	1.0	100.0
	100.0	100.0	100.0	100.0	100.0

**Notes:** See Appendix G for an explanation of the table format.

'Not Stated' contains 18 early neonatal deaths for which type of feeding was not stated.

Figure 4.7  
 Percentage Distribution of Breastfed Infants by Mother's County of Residence, 2005  
 Singleton and Multiple Live Births



**Note:** See Appendix G, Table G19 for data. Example: of all live born infants to mothers resident in Carlow, 38.9% were breastfed.

# Perinatal Outcomes

SECTION

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**5**



## Introduction

This section presents a detailed review on aspects of perinatal outcomes for the infant. Part 1 reports on perinatal outcomes for singleton births and Part 2 on multiple births. Cause of death is examined in greater detail according to the guidelines set out by the World Health Organisation in the Tenth Revision of the International Classification of Diseases. The following tables outline data for live births, antepartum and intrapartum stillbirths, and early neonatal deaths, together with their corresponding rates. Mortality numbers and rates are presented by birthweight and cause of death. Age at death for early neonatal deaths and post-mortem analysis are also outlined.

The NPRS dataset collects data on morbidity and mortality on mothers giving birth and their babies. The NPRS coders are trained in ICD-10 coding practices, with particular focus on chapters *Pregnancy, childbirth and the puerperium*, *Certain conditions originating in the perinatal period* and *Congenital malformation, deformations and chromosomal abnormalities* (Chapters XV–XVII). The Tenth Revision of the International Classification of Diseases came into effect for births on 1 January 2005 onwards. See Appendix D for a detailed description on cause of death classification and coding rules applied by coders in the NPRS Unit at the ESRI.

## Part 1: Singleton Births

Table 5.1

Live Births, Antepartum and Intrapartum Stillbirths, Early Neonatal Deaths, and Mortality Rates by Birthweight, 2005  
Singleton Births

Birthweight (grams)	Live Births	Per Cent (%) Live Births	Antepartum Stillbirths	Intrapartum Stillbirths	Not Stated	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500–749	57	0.1	38	3	2	430.0	29	508.8	720.0	708.3
750–999	69	0.1	19	2	2	250.0	7	101.4	326.1	261.9
1000–1249	115	0.2	15	1	2	135.3	11	95.7	218.0	161.3
1250–1499	130	0.2	18	1	1	133.3	8	61.5	186.7	102.9
1500–1999	458	0.8	34	3	5	84.0	15	32.8	114.0	80.9
2000–2499	1,412	2.4	33	2	2	25.5	13	9.2	34.5	21.7
2500–2999	6,663	11.2	38	2	3	6.4	17	2.6	8.9	5.8
3000–3499	19,355	32.5	24	3	3	1.5	5	0.3	1.8	1.5
3500–3999	21,059	35.3	14	1	0	0.7	3	0.1	0.9	0.7
4000–4499	8,525	14.3	7	0	0	0.8	0	0.0	0.8	0.8
4500 and Over	1,777	3.0	1	1	0	1.1	0	0.0	1.1	1.1
Not Stated	1	0.0	0	0	1	500.0	1	1000.0	1000.0	1000.0
Total	59,621	100	241	19	21	4.7	109	1.8	6.5	4.8

Table 5.2  
Stillbirths, Early Neonatal Deaths and Mortality Rates by Cause of Death, 2005  
Singleton Births

Cause of Death	ICD-10 Code	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Total Deaths	Perinatal Mortality Rate
<b>Foetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery</b>	P00-P04	82	1.4	2	0.0	84	1.4
Foetus and newborn affected by maternal conditions that may be unrelated to present pregnancy	P00.0-P00.9	10	0.2	0	0.0	10	0.2
Foetus and newborn affected by complications of placenta, cord and membranes	P02.0-P02.9	67	1.1	2	0.0	69	1.2
<b>Disorders related to length of gestation and foetal growth</b>	P05-P08	27	0.5	31	0.5	58	1.0
Slow foetal growth and foetal malnutrition	P05.0-P05.9	4	0.1	0	0.0	4	0.1
Disorders related to short gestation and low birthweight, not elsewhere classified	P07.0-P07.3	23	0.4	31	0.5	54	0.9
<b>Birth trauma</b>	P10-P15	0	0.0	1	0.0	1	0.0
<b>Respiratory and cardiovascular disorders specific to the perinatal period</b>	P20-P29	36	0.6	16	0.3	52	0.9
Intrauterine hypoxia	P20.0-P20.9	30	0.5	0	0.0	30	0.5
Birth asphyxia	P21.0-P21.9	0	0.0	5	0.1	5	0.1
Other respiratory conditions originating in the perinatal period	P28.0-P28.9	1	0.0	7	0.1	8	0.1
Cardiovascular disorders originating in the perinatal period	P29.0-P29.9	4	0.1	0	0.0	4	0.1
<b>Infections specific to the perinatal period</b>	P35-P39	9	0.2	3	0.1	12	0.2
Bacterial sepsis of newborn	P36.0-P36.9	3	0.1	2	0.0	5	0.1
<b>Haemorrhagic and haematological disorders of foetus and newborn</b>	P50-P61	4	0.1	1	0.0	5	0.1
<b>Transitory endocrine and metabolic disorders specific to foetus and newborn</b>	P70-P74	4	0.1	0	0.0	4	0.1
<b>Conditions involving the integument and temperature regulation of foetus and newborn</b>	P80-P83	9	0.2	2	0.0	11	0.2
<b>Other disorders originating in the perinatal period</b>	P90-P96	56	0.9	3	0.1	59	1.0
Symptoms, signs and ill-defined conditions	P95, P96.9	56	0.9	1	0.0	57	1.0
<b>Congenital malformations of the nervous system</b>	Q00-Q07	11	0.2	12	0.2	23	0.4
Anencephaly and similar malformations	Q00.0-Q00.2	9	0.2	7	0.1	16	0.3
<b>Congenital malformations of the circulatory system</b>	Q20-Q28	9	0.2	4	0.1	13	0.2
Other congenital malformations of heart	Q24.0-Q24.9	4	0.1	3	0.1	7	0.1

Table 5.2 (continued)

Cause of Death	ICD-10 Code	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Total Deaths	Perinatal Mortality Rate
<b>Congenital malformations of the respiratory system</b>	Q30-Q34	1	0.0	4	0.1	5	0.1
<b>Cleft lip and cleft palate</b>	Q35-Q37	0	0.0	1	0.0	1	0.0
<b>Other congenital malformations of the digestive system</b>	Q38-Q45	1	0.0	2	0.0	3	0.1
<b>Congenital malformations of the urinary system</b>	Q60-Q64	4	0.1	7	0.1	11	0.2
Renal agenesis and other reduction defects of kidney	Q60.0-Q60.6	3	0.1	6	0.1	9	0.2
<b>Congenital malformations and deformations of the musculoskeletal system</b>	Q65-Q79	1	0.0	8	0.1	9	0.2
Congenital malformations of musculoskeletal system, not elsewhere classified	Q79.0-Q79.9	0	0.0	5	0.1	5	0.1
<b>Other congenital malformations</b>	Q80-Q89	11	0.2	3	0.1	14	0.2
Other congenital malformations, not elsewhere classified	Q89.0-Q89.9	10	0.2	3	0.1	13	0.2
<b>Chromosomal abnormalities, not elsewhere classified</b>	Q90-Q99	15	0.3	9	0.2	24	0.4
Down's syndrome	Q90.0-Q90.9	4	0.1	0	0.0	4	0.1
Edward's syndrome and Patau's syndrome	Q91.0-Q91.7	9	0.2	8	0.1	17	0.3
<b>All other causes</b>	A00.0-099.9, R00.0-Z99.9	1	0.0	0	0.0	1	0.0
<b>Total</b>	-	<b>281</b>	<b>4.7</b>	<b>109</b>	<b>1.8</b>	<b>390</b>	<b>6.5</b>

**Table 5.3**  
**Perinatal Mortality, Numbers and Rates, by Birthweight and Cause of Death, 2005**  
**Singleton Births**

Cause of Death	ICD-10 Code	Birthweight (grams)												Total
		500–749	750–999	1000–1249	1250–1499	1500–1999	2000–2499	2500–2999	3000–3499	3500–3999	4000–4499	4500 and Over	Not Stated	
Foetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery	P00-P04	10	7	5	5	13	11	19	9	4	0	0	1	84
		100.0	76.1	37.6	33.3	26.0	7.6	2.8	0.5	0.2	0.0	0.0	500.0	1.4
Disorders related to length of gestation and foetal growth	P05-P08	37	5	6	3	5	0	2	0	0	0	0	0	58
		370.0	54.3	45.1	20.0	10.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	1.0
Birth trauma	P10-P15	0	0	0	0	0	0	0	1	0	0	0	0	1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Respiratory and cardiovascular disorders specific to the perinatal period	P20-P29	10	1	3	1	8	12	3	7	3	2	2	0	52
		100.0	10.9	22.6	6.7	16.0	8.3	0.4	0.4	0.1	0.2	1.1	0.0	0.9
Infections specific to the perinatal period	P35-P39	2	2	1	2	1	1	0	3	0	0	0	0	12
		20.0	21.7	7.5	13.3	2.0	0.7	0.0	0.2	0.0	0.0	0.0	0.0	0.2
Haemorrhagic and haematological disorders of foetus and newborn	P50-P61	0	0	1	0	0	0	2	1	0	1	0	0	5
		0.0	0.0	7.5	0.0	0.0	0.0	0.3	0.1	0.0	0.1	0.0	0.0	0.1
Transitory endocrine and metabolic disorders specific to foetus and newborn	P70-P74	0	1	0	0	1	0	1	1	0	0	0	0	4
		0.0	10.9	0.0	0.0	2.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1
Conditions involving the integument and temperature regulation of foetus and newborn	P80-P83	2	2	2	0	2	1	1	0	1	0	0	0	11
		20.0	21.7	15.0	0.0	4.0	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.2
Other disorders originating in the perinatal period	P90-P94.9, P96.0-P96.8	0	0	0	1	0	0	1	0	0	0	0	0	2
		0.0	0.0	0.0	6.7	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Symptoms, signs and ill-defined conditions	P95, P96.9	7	3	2	2	9	6	10	8	6	4	0	0	57
		70.0	32.6	15.0	13.3	18.0	4.1	1.5	0.4	0.3	0.5	0.0	0.0	1.0



Table 5.3 (continued)

Cause of Death	ICD-10 Code	Birthweight (grams)												Total		
		500–749	750–999	1000–1249	1250–1499	1500–1999	2000–2499	2500–2999	3000–3499	3500–3999	4000–4499	4500 and Over	Not Stated			
Congenital malformations of the nervous system	Q00-Q07	Number	1	2	3	1	1	8	5	2	0	0	0	0	0	23
		Rate	10.0	21.7	22.6	6.7	2.0	5.5	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Congenital malformations of the circulatory system	Q20-Q28	Number	2	0	2	1	0	0	3	2	1	0	0	0	0	13
		Rate	20.0	0.0	15.0	6.7	4.0	0.0	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Congenital malformations of the respiratory system	Q30-Q34	Number	0	0	1	0	0	1	2	1	0	0	0	0	0	5
		Rate	0.0	0.0	7.5	0.0	0.0	0.7	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Cleft lip and cleft palate	Q35-Q37	Number	0	0	0	0	0	0	1	0	0	0	0	0	0	1
		Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other congenital malformations of the digestive system	Q38-Q45	Number	0	0	0	1	0	0	1	0	0	1	0	0	0	3
		Rate	0.0	0.0	0.0	6.7	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Congenital malformations of the urinary system	Q60-Q64	Number	0	1	0	1	5	1	2	0	0	0	0	0	0	11
		Rate	0.0	10.9	0.0	6.7	10.0	0.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	500.0
Congenital malformations and deformations of the musculoskeletal system	Q65-Q79	Number	0	0	1	0	2	2	4	0	0	0	0	0	0	9
		Rate	0.0	0.0	7.5	0.0	4.0	1.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other congenital malformations	Q80-Q89	Number	0	3	0	3	4	3	0	0	1	0	0	0	0	14
		Rate	0.0	32.6	0.0	20.0	8.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chromosomal abnormalities, not elsewhere classified	Q90-Q99	Number	1	2	2	7	4	4	3	0	1	0	0	0	0	24
		Rate	10.0	21.7	15.0	46.7	8.0	2.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All other causes	A00.0-099.9, R00.0-Z99.9	Number	0	1	0	0	0	0	0	0	0	0	0	0	0	1
		Rate	0.0	10.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
All causes of perinatal mortality		Number	72	30	29	28	57	50	60	35	18	7	2	2	2	390
		Rate	720.0	326.1	218.0	186.7	114.0	34.5	8.9	1.8	0.9	0.8	1.1	1.1	1.1	1000.0

**Table 5.4**  
Age at Death  
Early Neonatal Deaths, 2005  
Singleton Births

Time	Frequency	Per Cent (%)
<b>Completed Hours</b>		
<1	26	23.9
1	21	19.3
2	10	9.2
3	3	2.8
4	5	4.6
5	1	0.9
6	2	1.8
7	1	0.9
8	4	3.7
9	4	3.7
11	1	0.9
12	1	0.9
18	1	0.9
19	1	0.9
Total under 1 Day	81	74.3
<b>Completed Days</b>		
1	8	7.3
2	6	5.5
3	2	1.8
4	4	3.7
5	5	4.6
6	3	2.8
Total under 1 Week	28	25.7
Total	109	100

**Table 5.5**  
Percentage Distribution of Live Births by  
Infant's Length of Stay in Hospital, 2005  
Singleton Births

Infant's Length of Stay (Days)	Live Births	Per Cent (%) Live Births
0-2	24,513	41.3
3-5	30,441	51.3
6-10	3,060	5.2
11-28	896	1.5
29 or more	380	0.6
Not stated	39	0.1
Total	59,329	100

**Notes:** This table does not include domiciliary births and early neonatal deaths.

'Not stated' includes 31 births where place of birth was recorded as domiciliary but birth was registered by a hospital. Infant was not admitted under a planned community midwife scheme. Therefore, infant's length of stay was not applicable.

**Table 5.6**  
 Percentage of Stillbirths and Early Neonatal Deaths undergoing Post-Mortem Examinations, 2005  
 Singleton Births

Post-Mortem	Type of Death		
	Early Neonatal Deaths	Stillbirths	Total
Frequency Row Per Cent Col. Per Cent			
Post-Mortem	27	131	158
	17.1	82.9	100.0
	24.8	46.6	40.5
No Post-Mortem	74	145	219
	33.8	66.2	100.0
	67.9	51.6	56.2
Not Stated	8	5	13
	61.5	38.5	100.0
	7.3	1.8	3.3
Total	109	281	390
	27.9	72.1	100.0
	100.0	100.0	100.0

*Note:* See appendix G for an explanation of the table format.



## Part 2: Multiple Births

**Table 5.7**  
Live Births, Antepartum and Intrapartum Stillbirths, Early Neonatal Deaths, and Mortality Rates by Birthweight, 2005  
Multiple Births

Birthweight (grams)	Live Births	Per Cent (%) Live Births	Antepartum Stillbirths	Intrapartum Stillbirths	Not Stated	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500-749	19	1.0	6	1	0	269.2	7	368.4	538.5	520.0
750-999	30	1.6	5	0	0	142.9	4	133.3	257.1	212.1
1000-1249	44	2.4	0	0	0	0.0	6	136.4	136.4	116.3
1250-1499	51	2.7	3	0	0	55.6	4	78.4	129.6	96.2
1500-1999	227	12.2	3	0	1	17.3	3	13.2	30.3	26.1
2000-2499	477	25.7	5	0	0	10.4	1	2.1	12.5	8.3
2500-2999	678	36.5	0	0	0	0.0	2	3.0	3.0	3.0
3000-3499	269	14.5	0	0	0	0.0	1	3.7	3.7	3.7
3500-3999	61	3.3	1	0	0	16.1	2	32.8	48.4	0.0
4000-4499	3	0.2	0	0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,859</b>	<b>100</b>	<b>23</b>	<b>1</b>	<b>1</b>	<b>13.3</b>	<b>30</b>	<b>16.1</b>	<b>29.2</b>	<b>23.0</b>

Table 5.8

Stillbirths, Early Neonatal Deaths and Mortality Rates by Cause of Death, 2005  
Multiple Births

Cause of Death	ICD-10 Code	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Total Deaths	Perinatal Mortality Rate
Foetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery	P00-P04	10	5.3	1	0.5	11	5.8
Disorders related to length of gestation and foetal growth	P05-P08	3	1.6	9	4.8	12	6.4
Birth trauma	P10-P15	0	0.0	1	0.5	1	0.5
Respiratory and cardiovascular disorders specific to the perinatal period	P20-P29	2	1.1	7	3.8	9	4.8
Infections specific to the perinatal period	P35-P39	1	0.5	0	0.0	1	0.5
Haemorrhagic and haematological disorders of foetus and newborn	P50-P61	1	0.5	3	1.6	4	2.1
Transitory endocrine and metabolic disorders specific to foetus and newborn	P70-P74	0	0.0	1	0.5	1	0.5
Conditions involving the integument and temperature regulation of foetus and newborn	P80-P83	1	0.5	0	0.0	1	0.5
Other disorders originating in the perinatal period	P90-P96	3	1.6	0	0.0	3	1.6
Congenital malformations of the nervous system	Q00-Q07	0	0.0	1	0.5	1	0.5
Congenital malformations of the respiratory system	Q30-Q34	0	0.0	1	0.5	1	0.5
Congenital malformations and deformations of the musculoskeletal system	Q65-Q79	1	0.5	1	0.5	2	1.1
Other congenital malformations	Q80-Q89	2	1.1	5	2.7	7	3.7
Chromosomal abnormalities, not elsewhere classified	Q90-Q99	1	0.5	0	0.0	1	0.5
<b>Total</b>	-	<b>25</b>	<b>13.3</b>	<b>30</b>	<b>16.1</b>	<b>55</b>	<b>29.2</b>

Table 5.9  
Numbers of Perinatal Deaths by Birthweight and Cause of Death, 2005  
Multiple Births

Cause of Death	ICD-10 Code	Birthweight (grams)										Total
		500-749	750-999	1000-1249	1250-1499	1500-1999	2000-2499	2500-2999	3000-3499	3500-3999		
Foetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery	P00-P04	5	2	0	3	1	0	0	0	0	0	11
Disorders related to length of gestation and foetal growth	P05-P08	8	2	1	0	1	0	0	0	0	0	12
Birth trauma	P10-P15	0	0	0	0	1	0	0	0	0	0	1
Respiratory and cardiovascular disorders specific to the perinatal period	P20-P29	0	2	3	2	0	1	1	0	0	0	9
Infections specific to the perinatal period	P35-P39	0	0	0	0	1	0	0	0	0	0	1
Haemorrhagic and haematological disorders of foetus and newborn	P50-P61	0	1	1	0	0	1	0	0	1	0	4
Transitory endocrine and metabolic disorders specific to foetus and newborn	P70-P74	0	0	0	0	0	0	1	0	0	0	1
Conditions involving the integument and temperature regulation of foetus and newborn	P80-P83	0	0	0	0	1	0	0	0	0	0	1
Symptoms, signs and ill-defined conditions	P95, P96.9	0	0	0	0	1	2	0	0	0	0	3
Congenital malformations of the nervous system	Q00-Q07	1	0	0	0	0	0	0	0	0	0	1
Congenital malformations of the respiratory system	Q30-Q34	0	0	1	0	0	0	0	0	0	0	1
Congenital malformations and deformations of the musculoskeletal system	Q65-Q79	0	0	0	0	0	2	0	0	0	0	2
Other congenital malformations	Q80-Q89	0	2	0	2	1	0	0	0	0	2	7
Chromosomal abnormalities, not elsewhere classified	Q90-Q99	0	0	0	0	0	0	0	0	0	0	1
Total	-	14	9	6	7	7	6	2	1	3	55	

Table 5.10  
Age at Death  
Early Neonatal Deaths, 2005  
Multiple Births

Time	Frequency	Per Cent (%)
<b>Completed Hours</b>		
<1	5	16.7
1	4	13.3
5	1	3.3
7	1	3.3
17	1	3.3
21	1	3.3
Total under 1 Day	13	43.3
<b>Completed Days</b>		
1	4	13.3
2	7	23.3
3	2	6.7
5	1	3.3
Total under 1 Week	14	46.7
Unknown	3	10.0
Total	30	100

Table 5.11  
Percentage Distribution of Live Births by  
Infant's Length of Stay in Hospital, 2005  
Multiple Births

Infant's Length of Stay (Days)	Live Births	Per Cent (%) Live Births
0-2	105	5.7
3-5	865	47.3
6-10	413	22.6
11-28	332	18.2
29 or more	112	6.1
Not stated	2	0.1
Total	1,829	100

*Notes:* There were no domiciliary multiple births.  
Early neonatal deaths are not included in this table.

Table 5.12  
Percentage of Stillbirths and Early Neonatal Deaths undergoing Post-Mortem Examinations, 2005  
Multiple Births

Post-Mortem	Type of Death		
	Early Neonatal Deaths	Stillbirths	Total
Frequency			
Row Per Cent			
Col. Per Cent			
Post-Mortem	5	7	12
	41.7	58.3	100.0
	16.7	28.0	21.8
No Post-Mortem	25	18	43
	58.1	41.9	100.0
	83.3	72.0	78.2
Total	30	25	55
	54.5	45.5	100.0
	100.0	100.0	100.0

*Note:* See Appendix G for an explanation of the table format.





## APPENDICES

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## Appendix A

### Definitions

This section collates the definitions of the terms used in the analyses for this report.

#### OUTCOMES AND RATES<sup>9</sup>

**Birth Rate:** The Birth Rate or Crude Birth Rate is the ratio of total live births to total population over a specified period of time. The birth rate is often expressed as the number of live births per 1,000 of the population per year.

**Live Birth:** A live birth is defined as the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. In accordance with World Health Organisation (WHO) guidelines, live births weighing less than 500 grams are not included in the national statistics presented in this report.

**Stillbirth and Stillbirth Rate:** Foetal death is defined as death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy. A foetal death is indicated by the fact that, after such separation, the foetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. Following WHO guidelines, a stillbirth, in this report, refers to the death of a foetus weighing at least 500 grams. The **stillbirth rate** is given as follows:

$$\frac{\text{Number of Stillbirths} \times 1,000}{\text{Total Number of Live Births and Stillbirths}}$$

**Early Neonatal Death (ENND) and Early Neonatal Mortality Rate:** An early neonatal death refers to the death of a live-born infant during the first week of life. The **early neonatal mortality rate** is calculated as follows:

$$\frac{\text{Number of Early Neonatal Deaths} \times 1,000}{\text{Total Number of Live Births}}$$

<sup>9</sup> In this report, where rates are based on very small numbers, they should be interpreted with caution.

**Perinatal Death and Perinatal Mortality Rate (PMR):** Perinatal deaths include stillbirths and early neonatal deaths. The **perinatal mortality rate (PMR)** is calculated as follows:

$$\frac{\text{Number of Stillbirths and Early Neonatal Deaths} \times 1,000}{\text{Total Number of Live Births and Stillbirths}}$$

In this report a second perinatal mortality rate has been calculated excluding all stillbirths and early neonatal deaths due to congenital anomalies. This **adjusted rate (Adjusted PMR)** to some extent removes those perinatal events where death was unavoidable, but no attempt has been made to exclude only invariably fatal congenital anomalies.

**Congenital Anomalies** are physiological or structural abnormalities that develop at or before birth and are present at the time of birth. Congenital anomalies are those diseases/conditions categorised in *ICD-10*, Chapter XVII, codes Q00.0-Q99.9.

**Twinning Rate:** This is given by:

$$\frac{\text{Number of Twin Maternities} \times 1,000}{\text{Total Number of Maternities}}$$

Twin maternities, which resulted in stillbirths, are included in the calculation of the twinning rate.

## OTHER ITEMS

The definitions given below relate to the principal classification variables contained in the main section of the report and refer only to those terms where explanation is considered necessary. The definitions are grouped according to the section in which they first appear.

## GENERAL CHARACTERISTICS

**Born Before Arrival (BBA):** Born before arrival indicates that an infant was delivered before arrival at hospital.

**Domiciliary Birth:** Domiciliary births are *planned* home births. The vast majority of these are attended by an independent midwife and are not associated with a hospital. In 2005 there were 35 births under hospital administered home birth schemes. For the purposes of this report these births are treated as hospital births due to their small numbers.

**Parity:** Maternal parity indicates a mother's total number of previous live births and stillbirths.

**Marital Status:** Five categories are recognised as specified below:

- i. Married
- ii. Never Married<sup>10</sup>
- iii. Widowed
- iv. Separated, covering the following categories:
  - Deserted
  - Legally separated
  - Church decree of nullity
  - Otherwise separated
- v. Divorced

**Mother's and Father's Nationality:** Country of birth for mother and father. This definition is for the sole purpose of giving the necessary directions for the completion of the Birth Notification Form and is not a legal definition.

**Mother's and Father's Occupation:** Occupations are coded and grouped, with minor modifications, according to the system of socio-economic groupings as used by the Central Statistics Office in the *1991 Census of Population*, Volume 6. Details are given in Appendix C.

**Birthweight:** Birthweight is given in grams and hospitals are asked to record the weight within the first hour after birth. In accordance with WHO guidelines, infants weighing under 500 grams are not included in the national statistics presented in this report.

**Period of Gestation:** Gestational age at delivery is recorded in completed weeks and is measured or estimated according to the best method available in each case.

**Time Since Last Birth:** This variable gives the time, grouped into yearly intervals, since the mother's last live birth or stillbirth.

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<sup>10</sup> Data recording marital status as 'Never Married' are classified as 'Single' marital status in this report.

## PERINATAL CARE

**Antenatal Length of Stay:** This is computed as the difference, in days, between a mother's date of admission and her date of delivery. Domiciliary births are not included in tables relating to this variable.

**Postnatal Length of Stay:** This is computed as the difference, in days, between the date of delivery and the date of the mother's discharge from hospital. A return of 'not stated' for this variable may indicate that the completed form was returned before the mother had been discharged. Domiciliary births are not included in tables relating to this variable.

**Immunity to Rubella:** An affirmative answer should be recorded only where there is documented evidence of a rubella antibody test. A history of rubella or previous immunisation is not sufficient.

**Method of Delivery:** Six categories are used:

- i. Spontaneous cephalic delivery, without any of the following:
- ii. Breech delivery, spontaneous, with or without forceps to after-coming head, breech extraction
- iii. Forceps delivery
- iv. Vacuum extraction<sup>11</sup>
- v. Caesarean section
- vi. Other Specified and Combined (for example, combination of spontaneous delivery followed by a vacuum extraction or caesarean section).

**Hospital Admission Booked or Unbooked:** This indicates whether a mother's admission into hospital for delivery was booked or unbooked prior to delivery. Domiciliary births are not included in the tables relating to this variable.

**Type of Feeding:** This indicates whether artificial feeding, breastfeeding, or a combination of both was being used at the time of discharge. The **Breastfeeding Rate** is based on live births only (excluding ENNDs), and is calculated as follows:

$$\frac{\text{Number of Mothers Breastfeeding} \times 100}{\text{Total Live Births (excluding ENNDs)}}$$

**Transfer of Infants:** This identifies infants who were transferred to another hospital for medical reasons.

**Size of Maternity Unit:** Size in this context refers to the number of live births and stillbirths occurring during the year.

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<sup>11</sup> Also known as Ventouse Deliveries (Source: Henderson Jane. et al. "Pregnancy and Childbirth", Health Care Needs Assessment, <http://hcn.a.radcliffe-oxford.com/pregframe.htm>, date consulted 21<sup>st</sup> November 2006.)

## PERINATAL OUTCOMES

**Antepartum and Intrapartum Stillbirths:** These refer to stillbirths occurring prior to and during labour respectively.

**Cause of Death:** This categorisation indicates the principal underlying pathological cause, which in the opinion of the certifier made the greatest contribution to the death of the infant or foetus. In assigning cause of death in the NPRS, the guidelines recommended by the WHO have been followed. A summary of these guidelines is provided in Appendix D. The Tenth Revision of the International Classification of Diseases came into effect for births from 1 January 2005 onwards.

**Age at Death:** The age of early neonatal deaths is given in completed hours if the infant survived less than 1 day and in completed days otherwise.

**Post-mortem:** This indicates whether or not a post-mortem examination was performed. In some cases a return of 'not stated' may be due to the notification form being returned prior to post-mortem.

**Length of Infant's Stay:** This is computed as the difference, in days, between the infant's date of birth and the date of the infant's discharge from hospital. A return of 'not stated' for this variable may indicate that the completed form was returned before the infant had been discharged. Where an infant was transferred to another hospital, the date of the transfer is given as the date of the infant's discharge. Domiciliary births and perinatal deaths are not included in the tables relating to this variable.

**Notes:** All perinatal statistics and definitions are based on WHO ICD-10 Classifications.

Where a particular value of a variable does not occur in a table, the row corresponding to that value is not included. This arises most frequently in relation to multiple births. For example, in Table 3.16 the values for 'under 15' are not included as there are no occurrences of these multiple births for mother's age 'under 15'.

# Appendix B

## Copy of Part 3 of the Birth Notification Form

The following format was used for births in 2005

**Notification of Birth - To: National Perinatal Reporting System, The Economic & Social Research Institute, Whitaker Square, Sir John Rogerson's Quay, Dublin 2**

TYPE OF BIRTH (Live = 1, Still = 2)  PLACE OF BIRTH (Hospital = 1, BBA = 2, Domiciliary = 3)  NAME AND ADDRESS OF HOSPITAL \_\_\_\_\_

HOSPITAL NO.  CASE NO.

---

**INFANT'S DETAILS**

DATE OF BIRTH (DDMMYYYY)  TIME OF BIRTH \_\_\_\_\_

IF MULTIPLE BIRTH ORDER OF BIRTH No.  of

SEX (Male = 1, Female = 2, Indeterminate = 3)  BIRTHWEIGHT  GRAMMES

PERIOD OF GESTATION  WEEKS

**FATHER'S DETAILS**

COUNTRY  NATIONALITY  OCCUPATION  DATE OF BIRTH (DDMMYYYY)

**MOTHER'S DETAILS**

COUNTRY  NATIONALITY  OCCUPATION  DATE OF BIRTH (DDMMYYYY)

MARITAL STATUS (Married = 1, Never Married = 2, Widowed = 3, Married but Separated = 4, Divorced = 5)

DATE OF PRESENT MARRIAGE (DDMMYYYY)

DATE OF LAST BIRTH (live or still) (DDMMYYYY)

NO. OF PREVIOUS LIVE BIRTHS

CHILDREN STILL LIVING

STILLBIRTHS

SPONTANEOUS ABORTIONS

**PERINATAL DEATH**

TYPE OF DEATH (Early Neonatal = 1, Stillbirth = 2)

WAS AUTOPSY PERFORMED (Yes = 1, No = 2)

AGE AT DEATH  DAYS  HOURS

PLACE OF DEATH

IF STILLBIRTH, DID DEATH OCCUR BEFORE LABOUR (1) DURING LABOUR (2) NOT KNOWN (3)

**CAUSE OF DEATH**

MAIN DISEASE OR CONDITION IN FOETUS OR INFANT \_\_\_\_\_

OTHER DISEASES OR CONDITIONS IN FOETUS OR INFANT \_\_\_\_\_

---

**MOTHER'S HEALTH**

ANTENATAL CARE THIS PREGNANCY (Hospital / Obstetrician = 1, G.P. Only = 2, Combined = 3, None = 4, Midwife Only = 5)

DATE OF FIRST VISIT TO DOCTOR DURING PREGNANCY (DDMMYYYY)

DATE OF FIRST VISIT TO HOSPITAL DURING PREGNANCY (DDMMYYYY)

WAS MOTHER IMMUNE TO RUBELLA (Yes = 1, No = 2, Not Known = 3)

METHOD OF DELIVERY (Spontaneous = 1, Breech = 2, Forceps = 3, Vac. Extraction = 4, Caesarean Sec. = 5, Other = 6)

MAIN MATERNAL DISEASE OR CONDITION AFFECTING FOETUS OR INFANT \_\_\_\_\_

OTHER MATERNAL DISEASES OR CONDITIONS AFFECTING FOETUS OR INFANT \_\_\_\_\_

---

**INFANT'S HEALTH**

TYPE OF FEEDING (Artificial = 1, Breast = 2, Combined = 3)

WAS BCG ADMINISTERED (Yes = 1, No = 2)

MAIN DISEASE OR CONGENITAL MALFORMATION AFFECTING INFANT \_\_\_\_\_

OTHER DISEASES OR CONGENITAL MALFORMATIONS AFFECTING INFANT \_\_\_\_\_

---

**HOSPITAL**

WAS ADMISSION BOOKED (Yes = 1, No = 2)

DATE OF MOTHER'S ADMISSION (DDMMYYYY)

DATE OF MOTHER'S DISCHARGE (DDMMYYYY)

DATE OF INFANT'S DISCHARGE (DDMMYYYY)

WAS INFANT TRANSFERRED TO OTHER HOSPITAL FOR MEDICAL REASONS (Yes = 1, No = 2)

IF 'YES', NAME OF HOSPITAL \_\_\_\_\_

**GENERAL PRACTITIONER ATTENDED BY MOTHER**

Signature \_\_\_\_\_ Date \_\_\_\_\_

BNF01/2003

## Appendix C

### Classification of Occupation

Occupations have been coded and classified into a set of socio-economic groups according to a system devised by the Central Statistics Office (CSO). The final CSO Category of 'Unknown' has been differentiated into five distinct groups for the purposes of the Perinatal Reporting System. These are 'Unemployed', 'Not Classifiable', 'Not Applicable', 'Home Duties' and 'Not Stated'. Occupation is coded as unemployed when occupation is given as unemployed and where no previous occupation is stated. If a previous occupation is stated then occupation is coded to the relevant category. 'Not Classifiable' has been used to categorise indecipherable, unclear, or unlisted occupations where efforts to clarify the information have failed. 'Home Duties' is entered where occupation has been entered as 'full-time mother/father/parent', 'stay at home mother/father/parent', 'housewife', 'home duties', etc. 'Not Stated' applies to those cases where either the mother's or father's occupation has been left blank or has been recorded as 'unknown'.

#### **Under Father's occupation, the following applies:**

'Not Applicable' is entered when the marital status of the mother has been given as never married, widowed, separated or divorced, and where father's occupation has been left blank. 'Not Stated' applies to those cases where the marital status of the mother is recorded as either married or not stated, and where father's occupation has been left blank or has been recorded as 'unknown'. In either case, if an occupation is given for the father then the appropriate occupational code has been used.

#### **The full list of socio-economic groups used in this report is as follows:**

- Farmers and Farm Managers
- Other Agricultural Occupations and Fishermen
- Higher Professional
- Lower Professional
- Employers and Managers
- Salaried Employees
- Intermediate Non-Manual Workers
- Other Non-Manual Workers
- Skilled Manual Workers
- Semi-Skilled Manual Workers
- Unskilled Manual Workers
- Unemployed
- Not Classifiable
- Not Applicable (Father's Occupation Only)
- Home Duties
- Not Stated.



## Appendix D

### Cause of Death Classification

The main cause of death has been determined according to the guidelines set out by the World Health Organisation in the Tenth Revision of the International Classification of Diseases (ICD).<sup>12</sup> Briefly, the principal coding criteria are as follows:

The main cause of death as far as possible should indicate the pathological condition of the infant or foetus, which in the opinion of the certifier made the greatest contribution towards the death.

The following rules are extracted from *ICD-10 Second Edition, 2005, 4. Rules and guidelines for mortality and morbidity coding*. These rules have been applied to cause of death coding in the NPRS dataset as follows:

Section (a)—main disease or condition in foetus or infant

Section (b)—other diseases or conditions in foetus or infant

Section (c)—main maternal disease or condition affecting foetus or infant

Section (d)—other maternal disease or condition affecting foetus or infant.

#### **Rule P1. Mode of death or prematurity entered in section (a)**

If heart or cardiac failure, asphyxia or anoxia (any condition in P20.-, P21.-) or prematurity (any condition in P07.-) is entered in section (a) and other conditions of the infant or foetus are entered in either section (a) or section (b), code the first-mentioned of these other conditions as if it had been entered alone in section (a) and code the condition actually entered in section (a) as if it had been entered in section (b).

#### **Rule P2. Two or more conditions entered in sections (a) or (c)**

If two or more conditions are entered in section (a) or section (c), code the first-mentioned of these as if it had been entered alone in section (a) or (c) and code the others as if they had been entered in sections (b) or (d).

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<sup>12</sup> World Health Organisation, 2005, *International Statistical Classification of Diseases and Related Health Problems*, 10<sup>th</sup> Revision. Vols. 1–3. Geneva: WHO.

**Rule P3. No entry in sections (a) or (c).**

If there is no entry in section (a) but there are conditions of the infant or foetus entered in section (b), code the first-mentioned of these as if it had been entered in section (a); if there are no entries in either section (a) or section (b), either code **P95** (Foetal death of unspecified cause) for stillbirths or code **P96.9** (Condition originating in the perinatal period, unspecified) for early neonatal deaths should be used for section (a).

Similarly, if there is no entry in section (c) but there are maternal conditions entered in section (d), code the first-mentioned of these as if it had been entered in section (c); if there are no entries in either section (c) or section (d) use some artificial code, e.g. xxx.x for section (c) to indicate that no maternal condition was reported.

**Rule P4. Conditions entered in wrong section.**

If a maternal condition (i.e. conditions in **P00-P04**) is entered in section (a) or section (b), or if a condition of the infant or foetus is entered in section (c) or section (d), code the conditions as if they had been entered in the respective correct section.

For the purpose of the cause of death tables included in this report, one further criterion has been applied. Where no infant's condition is given then, where a specific maternal condition is given (any condition in **P00-P04**), the main cause of death is classified under the maternal condition.

Table D1 illustrates these rules.

Table D1  
Cause of Death Coding Rules

ICD-10 Rule	Cause of Death as recorded on the Birth Notification Form								
	Section A		Section B		Section C		Section D		Action
	Main disease or condition in foetus or infant	Other disease or condition in foetus or infant	Main maternal disease or condition affecting foetus or infant	Other maternal disease or condition affecting foetus or infant					
Rule 1	Heart or cardiac failure, asphyxia, anoxia, prematurity (P20.-, P21.- or P07.-)	Other condition	No entry	No entry	No entry	No entry	Code the stated 'other condition' in section A and move condition entered in section A to section B.		
Rule 2	Two or more conditions listed	No entry	Two or more conditions listed	No entry	No entry	No entry	Code the first mentioned condition in sections A and C respectively and code the second mentioned conditions in sections B and D respectively.		
Rule 3	No entry	Condition entered	No entry	Condition entered	No entry	Condition entered	Code the first mentioned condition in section B to section A and the first mentioned condition in section D to section C.		
	No entry	No entry	No entry	No entry	No entry	No entry	Code 'Foetal death of unspecified cause' (P95) for stillbirths or 'Conditions originating in the perinatal period, unspecified' (P96.9) for early neonatal deaths in section A.		
Rule 4	Maternal condition entered (P00-P04)	Maternal condition entered (P00-P04)	Infant condition entered	Infant condition entered	Infant condition entered	Infant condition entered	Code maternal conditions in sections C and D respectively. Code infant conditions in sections A and B respectively.		
Additional Rule	No entry	No entry	Maternal condition (P00-P04)	No entry	No entry	No entry	Code maternal condition to section A.		

Table D2 illustrates the main chapter blocks relating to cause of death categories in this report.

Table D2

ICD-10, Cause of Death Codes

ICD-10 Code	Cause of Death
P00–P04	Foetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery
P05–P08	Disorders related to length of gestation and foetal growth
P10–P15	Birth trauma
P20–P29	Respiratory and cardiovascular disorders specific to the perinatal period
P35–P39	Infections specific to the perinatal period
P50–P61	Haemorrhagic and haematological disorders of foetus and newborn
P70–P74	Transitory endocrine and metabolic disorders specific to foetus and newborn
P75–P78	Digestive system disorders of foetus and newborn
P80–P83	Conditions involving the integument and temperature regulation of foetus and newborn
P90–P96	Other disorders originating in the perinatal period
Q00–Q07	Congenital malformations of the nervous system
Q10–Q18	Congenital malformations of eye, ear, face and neck
Q20–Q28	Congenital malformations of the circulatory system
Q30–Q34	Congenital malformations of the respiratory system
Q35–Q37	Cleft lip and cleft palate
Q38–Q45	Other congenital malformations of the digestive system
Q50–Q56	Congenital malformations of genital organs
Q60–Q64	Congenital malformations of the urinary system
Q65–Q79	Congenital malformations and deformations of the musculoskeletal system
Q80–Q89	Other congenital malformations
Q90–Q99	Chromosomal abnormalities, not elsewhere classified

All other codes have been classified to the category ‘all other causes’.

## Appendix E

### Classification of County of Residence

The following codes are applied to mother's and father's county of residence. Where a Dublin postal code, such as Dublin 13, is entered then a code of 10 is applied for Dublin City. Where there is no postal code and Dublin is recorded then a code of 11 is applied for Dublin County. For births occurring in the HSE South region where Tipperary is recorded as county of residence then a code of 62, Tipperary South Riding, is applied. For births occurring in other HSE regions where Tipperary is recorded as county of residence then a code of 32, Tipperary North Riding, is applied. Where a mother's or father's county of residence is unknown the code 99 is applied. The code 90 is applied where the address given is outside the Republic of Ireland.

10	Dublin City	50	Donegal
11	Dublin County	51	Sligo
12	Kildare	52	Leitrim
13	Wicklow	60	Carlow
20	Laois	61	Kilkenny
21	Offaly	62	Tipperary South Riding
22	Longford	63	Waterford
23	Westmeath	64	Wexford
30	Clare	70	Cork
31	Limerick	71	Kerry
32	Tipperary North Riding	80	Galway
40	Meath	81	Mayo
41	Cavan	82	Roscommon
42	Monaghan	90	Other – all other places outside Republic of Ireland
43	Louth	99	Not Stated

## Appendix F

### Classification of Nationality

Nationality for mother and father is defined by the country of their birth. This definition is for the sole purpose of giving the necessary directions for the completion of the Birth Notification Form and is not a legal definition.

Nationalities have been coded and classified into a set of groups according to a system devised by the Central Statistics Office.

Country groupings are as follows:

**Ireland includes the following:**

Ireland  
Irish American  
Irish English  
Irish European  
Irish Other

**UK includes the following:**

Great Britain  
England  
Northern Ireland  
Scotland  
Wales

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**EU 15 (excluding Ireland and the UK) includes the following:**

Austria	Italy
Belgium	Luxembourg
Denmark	Netherlands
Finland	Portugal
France	Spain
Germany	Sweden
Greece	

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**EU 15 to EU 25 accession states includes the following:**

Cyprus  
Czech Republic  
Estonia  
Hungary  
Latvia  
Lithuania  
Malta  
Poland  
Slovakia  
Slovenia

**Rest of Europe includes the following:**

Albania	Jersey
Andorra	Liechtenstein
Armenia	Macedonia, The Former Yugoslav Republic of
Azerbaijan	Moldova, Republic of
Belarus	Monaco
Bosnia and Herzegovina	Norway
Bulgaria	Romania
Croatia	Russian Federation
Faroe Islands	San Marino
Georgia	Switzerland
Gibraltar	Turkey
Guernsey	Ukraine
Iceland	Vatican City
Isle of Man	Yugoslavia, Federal Republic of

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**Africa includes the following:**

Algeria	Malawi
Angola	Mali
Benin	Mauritania
Botswana	Mauritius
Burkina Faso	Mayotte
Burundi	Morocco
Cameroon	Mozambique
Cape Verde	Namibia
Central African Republic	Niger
Chad	Nigeria
Comoros	Reunion
Congo	Rwanda
Congo, The Democratic Republic of the	Saint Helena
Cote d'Ivoire	Sao Tome and Principe
Djibouti	Senegal
Egypt	Seychelles
Equatorial Guinea	Sierra Leone
Eritrea	Somalia
Ethiopia	South Africa
Gabon	Sudan
Gambia	Swaziland
Ghana	Tanzania, United Republic of
Guinea	Togo
Guinea-Bissau	Tunisia
Kenya	Uganda
Lesotho	Western Sahara
Liberia	Zambia
Libyan Arab Jamahiriya	Zimbabwe
Madagascar	

**Asia includes the following:**

Afghanistan	Lebanon
Bahrain	Macao
Bangladesh	Malaysia
Bhutan	Maldives
British Indian Ocean Territory	Mongolia
Brunei Darussalam	Myanmar
Cambodia	Nepal
China	Oman
East Timor	Pakistan
Hong Kong	Palestinian Territory, Occupied
India	Philippines
Indonesia	Qatar
Iran, Islamic Republic of	Saudi Arabia
Iraq	Singapore
Israel	Sri Lanka
Japan	Syrian Arab Republic
Jordan	Taiwan, Province of China
Kazakhstan	Tajikistan
Korea, Democratic People's Republic of	Thailand
Korea, Republic of	Turkmenistan
Kuwait	United Arab Emirates
Kyrgyzstan	Uzbekistan
Lao People's Democratic Republic	Vietnam
	Yemen

**America includes the following:**

Anguilla	Guyana
Antigua and Barbuda	Haiti
Argentina	Honduras
Aruba	Jamaica
Bahamas	Martinique
Barbados	Mexico
Belize	Montserrat
Bermuda	Netherlands Antilles
Bolivia	Nicaragua
Brazil	Panama
Canada	Paraguay
Cayman Islands	Peru
Chile	Puerto Rico
Colombia	Saint Kitts and Nevis
Costa Rica	Saint Lucia
Cuba	Saint Pierre and Miquelon
Dominica	Saint Vincent and the Grenadines
Dominican Republic	Suriname
Ecuador	Trinidad and Tobago
El Salvador	Turks and Caicos Islands
Falkland Islands (Malvinas)	United States
French Guiana	Uruguay
Greenland	Venezuela
Grenada	Virgin Island, US
Guadeloupe	Virgin Islands, British
Guatemala	



**Australia includes the following:**

Australia

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**New Zealand and Other Oceania includes the following:**

American Samoa	New Zealand
Antarctica	Niue
Bouvet Island	Norfolk Island
Christmas Island	Northern Mariana Islands
Cocos (Keeling) Islands	Palau
Cook Islands	Papua New Guinea
Fiji	Pitcairn
French Polynesia	Samoa
French Southern Territories	Solomon Islands
Guam	South Georgia and the South Sandwich Islands
Heard Island and McDonald Islands	Svalbard and Jan Mayen
Kiribati	Tokelau
Marshall Islands	Tonga
Micronesia, Federated States of	Tuvalu
Nauru	United States Minor Outlying Islands
New Caledonia	Vanuatu
	Wallis and Futuna

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**Multi-Nationality includes the following:**

Mixed/Multi-Nationality (stated as so).

**No Nationality:**

Stated as so.

**Not Stated:**

Where nationality is not provided.

**Not Applicable:**

This applies to father's nationality only. Where mother's marital status is stated as 'never married', 'widowed', 'separated' or 'divorced' the General Register Office does not require father's details to register the birth, and as such this information is generally not provided.

**All Other Nationalities:**

Where nationality is not recorded to any category listed above.

## Appendix G

### Cross-Tabulations of Selected Variables: 2005

This appendix contains a range of cross-tabulations relating to singleton and multiple live births and stillbirths. A full list of these tables is given in the Table of Contents. The format of each cross-tabulation is identical. The values of the two variables are given along the top rows and left hand side column. The top number in each cell indicates the number of observations relating to that combination of variable values. The second number indicates the percentage contribution of that cell to the total for the whole row. The last number indicates the percentage contribution of that cell to the total for the whole column. The figures at the end of each row or column give the overall total for that row or column, and the associated percentages express each of these figures as a percentage of the grand total.



















Table G9

Method of Delivery by Mother's Length of Stay in Hospital After Delivery, Live Births and Stillbirths, 2005  
Singleton Births

Method of Delivery Frequency Row Per Cent Col. Per Cent	Postnatal Length of Stay								Total
	0-1 Days	2 Days	3-5 Days	6-8 Days	9-11 Days	12-14 Days	More than 2 Weeks	Not Stated	
Spontaneous	7,876	13,803	13,645	410	32	10	18	32	35,826
	22.0	38.5	38.1	1.1	0.1	0.0	0.1	0.1	100.0
	91.0	83.7	43.2	15.8	13.6	21.7	37.5	97.0	60.0
Breech/Forceps	38	52	107	11	2	1	0	0	211
	18.0	24.6	50.7	5.2	0.9	0.5	0.0	0.0	100.0
	0.4	0.3	0.3	0.4	0.9	2.2	0.0	0.0	0.4
Forceps	110	389	1,138	54	8	1	3	0	1,703
	6.5	22.8	66.8	3.2	0.5	0.1	0.2	0.0	100.0
	1.3	2.4	3.6	2.1	3.4	2.2	6.3	0.0	2.9
Vacuum extraction	564	2,037	4,274	161	21	3	4	0	7,064
	8.0	28.8	60.5	2.3	0.3	0.0	0.1	0.0	100.0
	6.5	12.4	13.5	6.2	8.9	6.5	8.3	0.0	11.8
Caesarean section	58	201	12,410	1,955	170	31	23	1	14,849
	0.4	1.4	83.6	13.2	1.1	0.2	0.2	0.0	100.0
	0.7	1.2	39.3	75.2	72.3	67.4	47.9	3.0	24.9
Other specified & combined	9	9	32	10	2	0	0	0	62
	14.5	14.5	51.6	16.1	3.2	0.0	0.0	0.0	100.0
	0.1	0.1	0.1	0.4	0.9	0.0	0.0	0.0	0.1
Not stated	1	0	3	0	0	0	0	0	4
	25.0	0.0	75.0	0.0	0.0	0.0	0.0	0.0	100.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	8,656	16,491	31,609	2,601	235	46	48	33	59,719
	14.5	27.6	52.9	4.4	0.4	0.1	0.1	0.1	100.0
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Notes:** 'Not Stated' includes 30 births where place of birth was recorded as domiciliary but birth was registered by a hospital. Mother was not admitted under a planned community midwife scheme. Therefore, dates of mother's length of stay were not applicable. Domiciliary births, of which there were 183, are excluded from this table. See Appendix H for detailed analysis.

Table G10

Maternal Parity by Mother's Length of Stay in Hospital After Delivery, Live Births and Stillbirths, 2005  
Singleton Births

Maternal Parity Frequency Row Per Cent Col. Per Cent	Mother's Length of Stay in Hospital After Delivery								Total
	0-1 Days	2 Days	3-5 Days	6-8 Days	9-11 Days	12-14 Days	More than 2 Weeks	Not Stated	
0	1,550	5,139	15,879	1,382	129	27	23	3	24,132
	6.4	21.3	65.8	5.7	0.5	0.1	0.1	0.0	100.0
	17.9	31.2	50.2	53.1	54.9	58.7	47.9	9.1	40.4
1	3,447	6,092	8,711	663	45	5	9	20	18,992
	18.1	32.1	45.9	3.5	0.2	0.0	0.1	0.1	100.0
	39.8	36.9	27.6	25.5	19.1	10.9	18.8	60.6	31.8
2	2,176	3,263	4,577	362	39	7	14	3	10,441
	20.8	31.3	43.8	3.5	0.4	0.1	0.1	0.0	100.0
	25.1	19.8	14.5	13.9	16.6	15.2	29.2	9.1	17.5
3	904	1,256	1,609	120	17	4	0	6	3,916
	23.1	32.1	41.1	3.1	0.4	0.1	0.0	0.2	100.0
	10.4	7.6	5.1	4.6	7.2	8.7	0.0	18.2	6.6
4	329	465	485	40	3	1	0	0	1,323
	24.9	35.1	36.7	3.0	0.2	0.1	0.0	0.0	100.0
	3.8	2.8	1.5	1.5	1.3	2.2	0.0	0.0	2.2
5	135	138	212	16	1	1	2	1	506
	26.7	27.3	41.9	3.2	0.2	0.2	0.4	0.2	100.0
	1.6	0.8	0.7	0.6	0.4	2.2	4.2	3.0	0.8
6	69	70	66	9	1	1	0	0	216
	31.9	32.4	30.6	4.2	0.5	0.5	0.0	0.0	100.0
	0.8	0.4	0.2	0.3	0.4	2.2	0.0	0.0	0.4
More than 6	46	67	70	9	0	0	0	0	192
	24.0	34.9	36.5	4.7	0.0	0.0	0.0	0.0	100.0
	0.5	0.4	0.2	0.3	0.0	0.0	0.0	0.0	0.3
Not Stated	0	1	0	0	0	0	0	0	1
	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	8,656	16,491	31,609	2,601	235	46	48	33	59,719
	14.5	27.6	52.9	4.4	0.4	0.1	0.1	0.1	100.0
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Notes:** 'Not Stated' includes 30 births where place of birth was recorded as domiciliary but birth was registered by a hospital. Mother was not admitted under a planned community midwife scheme. Therefore, dates of mother's length of stay were not applicable. Domiciliary births, of which there were 183, are excluded from this table. See Appendix H for detailed analysis.

**Table G11**  
**Father's Occupation by Infant's Birthweight, Live Births and Stillbirths, 2005**  
**Singleton Births**

Father's Occupation Frequency Row Per Cent Col. Per Cent	Birthweight (grams)													Total
	500-749	750-999	1000-1249	1250-1499	1500-1999	2000-2499	2500-2999	3000-3499	3500-3999	4000-4499	4500 and Over	Not Stated		
Farmers & Farm Managers	4 0.2 4.0	2 0.1 2.2	8 0.4 6.0	2 0.1 1.3	21 0.9 4.2	43 1.9 3.0	173 7.8 2.6	661 29.7 3.4	795 35.7 3.8	430 19.3 5.0	90 4.0 5.1	0 0.0 0.0	2,229 100.0 3.7	
Other Agricultural Occupations & Fishermen	2 0.4 2.0	0 0.0 0.0	2 0.4 1.5	2 0.4 1.3	3 0.7 0.6	12 2.6 0.8	33 7.2 0.5	143 31.0 0.7	171 37.1 0.8	74 16.1 0.9	19 4.1 1.1	0 0.0 0.0	461 100.0 0.8	
Higher-Professional	5 0.1 5.0	7 0.2 7.6	8 0.2 6.0	8 0.2 5.3	22 0.5 4.4	69 1.7 4.8	361 8.8 5.4	1,315 32.0 6.8	1,488 36.2 7.1	687 16.7 8.1	142 3.5 8.0	0 0.0 0.0	4,112 100.0 6.9	
Lower-Professional	5 0.2 5.0	4 0.2 4.3	4 0.2 3.0	5 0.2 3.3	9 0.4 1.8	42 1.6 2.9	244 9.5 3.6	825 32.1 4.3	939 36.6 4.5	408 15.9 4.8	82 3.2 4.6	0 0.0 0.0	2,567 100.0 4.3	
Managers	7 0.1 7.0	4 0.1 4.3	12 0.3 9.0	13 0.3 8.7	29 0.6 5.8	83 1.7 5.7	430 9.1 6.4	1,438 30.3 7.4	1,768 37.2 8.4	793 16.7 9.3	172 3.6 9.7	1 0.0 50.0	4,750 100.0 7.9	
Salaried-Employees	1 0.1 1.0	2 0.1 2.2	2 0.1 1.5	3 0.2 2.0	9 0.6 1.8	24 1.5 1.7	153 9.4 2.3	478 29.4 2.5	637 39.2 3.0	268 16.5 3.1	49 3.0 2.8	0 0.0 0.0	1,626 100.0 2.7	
Non-Manual Workers	6 0.1 6.0	5 0.1 5.4	6 0.1 4.5	10 0.2 6.7	43 0.9 8.6	102 2.2 7.0	402 8.9 6.0	1,387 30.6 7.2	1,731 38.1 8.2	693 15.3 8.1	154 3.4 8.7	0 0.0 0.0	4,539 100.0 7.6	
Other Non-Manual Workers	6 0.1 6.0	11 0.2 12.0	6 0.1 4.5	12 0.2 8.0	32 0.6 6.4	121 2.4 8.4	550 10.8 8.2	1,649 32.2 8.5	1,837 35.9 8.7	731 14.3 8.6	159 3.1 8.9	0 0.0 0.0	5,114 100.0 8.5	

Table G11 (continued)

Father's Occupation Frequency Row Per Cent Col. Per Cent	Birthweight (grams)												Total	
	500-749	750-999	1000-1249	1250-1499	1500-1999	2000-2499	2500-2999	3000-3499	3500-3999	4000-4499	4500 and Over	Not Stated		
Skilled Manual Workers	19 0.1 19.0	12 0.1 13.0	17 0.1 12.8	23 0.2 15.3	102 0.8 20.4	270 2.1 18.6	1,261 9.8 18.8	4,114 31.8 21.2	4,689 36.3 22.3	2,007 15.5 23.5	416 3.2 23.4	0 0.0 0.0	0 0.0 0.0	12,930 100.0 21.6
Semi-Skilled Manual Workers	3 0.1 3.0	2 0.1 2.2	6 0.2 4.5	8 0.3 5.3	19 0.8 3.8	50 2.0 3.5	304 12.4 4.5	787 32.0 4.1	888 36.1 4.2	325 13.2 3.8	69 2.8 3.9	0 0.0 0.0	0 0.0 0.0	2,461 100.0 4.1
Unskilled Manual Workers	1 0.2 1.0	0 0.0 0.0	0 0.0 0.0	4 0.6 2.7	9 1.4 1.8	18 2.8 1.2	86 13.5 1.3	211 33.0 1.1	217 34.0 1.0	80 12.5 0.9	13 2.0 0.7	0 0.0 0.0	0 0.0 0.0	639 100.0 1.1
Unemployed	0 0.0 0.0	6 0.3 6.5	7 0.4 5.3	3 0.2 2.0	19 1.1 3.8	49 2.8 3.4	243 13.9 3.6	614 35.1 3.2	554 31.7 2.6	212 12.1 2.5	43 2.5 2.4	0 0.0 0.0	0 0.0 0.0	1,750 100.0 2.9
Not Classifiable	1 0.1 1.0	1 0.1 1.1	3 0.2 2.3	5 0.3 3.3	8 0.5 1.6	23 1.6 1.6	157 10.8 2.3	524 35.9 2.7	507 34.7 2.4	184 12.6 2.2	46 3.2 2.6	0 0.0 0.0	0 0.0 0.0	1,459 100.0 2.4
Not Applicable	37 0.3 37.0	35 0.2 38.0	49 0.3 36.8	49 0.3 32.7	167 1.1 33.4	528 3.6 36.4	2,240 15.2 33.4	5,059 34.4 26.1	4,669 31.7 22.2	1,576 10.7 18.5	305 2.1 17.1	1 0.0 50.0	1 0.0 50.0	14,715 100.0 24.6
Home Duties	0 0.0 0.0	0 0.0 0.0	1 1.1 0.8	2 2.2 1.3	2 2.2 0.4	1 1.1 0.1	10 11.0 0.1	25 27.5 0.1	36 39.6 0.2	12 13.2 0.1	2 2.2 0.1	0 0.0 0.0	0 0.0 0.0	91 100.0 0.2
Not Stated	3 0.7 3.0	1 0.2 1.1	2 0.4 1.5	1 0.2 0.7	6 1.3 1.2	14 3.1 1.0	59 12.9 0.9	155 33.8 0.8	148 32.2 0.7	52 11.3 0.6	18 3.9 1.0	0 0.0 0.0	0 0.0 0.0	459 100.0 0.8
Total	100 0.2 100.0	92 0.2 100.0	133 0.2 100.0	150 0.3 100.0	500 0.8 100.0	1,449 2.4 100.0	6,706 11.2 100.0	19,385 32.4 100.0	21,074 35.2 100.0	8,532 14.2 100.0	1,779 3.0 100.0	2 0.0 100.0	2 0.0 100.0	59,902 100.0 100.0

Note: See Appendix C for a description of the classification system for occupations.

**Table G12**  
**Mother's Occupation by Infant's Birthweight, Live Births and Stillbirths, 2005**  
**Singleton Births**

Mother's Occupation Frequency Row Per Cent Col. Per Cent	Birthweight (grams)													Total
	500-749	750-999	1000-1249	1250-1499	1500-1999	2000-2499	2500-2999	3000-3499	3500-3999	4000-4499	4500 and Over	Not Stated		
Farmers & Farm Managers	0	0	0	0	1	4	10	34	34	34	11	1	0	95
	0.0	0.0	0.0	0.0	1.1	4.2	10.5	35.8	35.8	35.8	11.6	1.1	0.0	100.0
	0.0	0.0	0.0	0.0	0.2	0.3	0.1	0.2	0.2	0.2	0.1	0.1	0.0	0.2
Other Agricultural Occupations & Fishermen	0	0	0	0	0	1	3	14	17	7	7	2	0	44
	0.0	0.0	0.0	0.0	0.0	2.3	6.8	31.8	38.6	15.9	15.9	4.5	0.0	100.0
	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1
Higher-Professional	3	6	7	1	17	58	263	915	1,120	466	466	104	0	2,960
	0.1	0.2	0.2	0.0	0.6	2.0	8.9	30.9	37.8	15.7	15.7	3.5	0.0	100.0
	3.0	6.5	5.3	0.7	3.4	4.0	3.9	4.7	5.3	5.5	5.5	5.8	0.0	4.9
Lower-Professional	7	10	14	14	30	141	650	2,399	2,922	1,288	1,288	258	0	7,733
	0.1	0.1	0.2	0.2	0.4	1.8	8.4	31.0	37.8	16.7	16.7	3.3	0.0	100.0
	7.0	10.9	10.5	9.3	6.0	9.7	9.7	12.4	13.9	15.1	15.1	14.5	0.0	12.9
Managers	6	4	4	11	14	67	337	1,203	1,485	634	634	124	0	3,889
	0.2	0.1	0.1	0.3	0.4	1.7	8.7	30.9	38.2	16.3	16.3	3.2	0.0	100.0
	6.0	4.3	3.0	7.3	2.8	4.6	5.0	6.2	7.1	7.4	7.4	7.0	0.0	6.5
Salaried-Employees	3	2	1	3	9	30	112	368	390	164	164	27	0	1,109
	0.3	0.2	0.1	0.3	0.8	2.7	10.1	33.2	35.2	14.8	14.8	2.4	0.0	100.0
	3.0	2.2	0.8	2.0	1.8	2.1	1.7	1.9	1.9	1.9	1.9	1.5	0.0	1.9
Non-Manual Workers	22	20	28	36	130	280	1,496	4,273	4,969	2,034	2,034	408	2	13,698
	0.2	0.1	0.2	0.3	0.9	2.0	10.9	31.2	36.3	14.8	14.8	3.0	0.0	100.0
	22.0	21.7	21.1	24.0	26.0	19.3	22.3	22.0	23.6	23.8	23.8	22.9	100.0	22.9
Other Non-Manual Workers	11	6	21	16	59	184	875	2,485	2,593	1,009	1,009	209	0	7,468
	0.1	0.1	0.3	0.2	0.8	2.5	11.7	33.3	34.7	13.5	13.5	2.8	0.0	100.0
	11.0	6.5	15.8	10.7	11.8	12.7	13.1	12.8	12.3	11.8	11.8	11.7	0.0	12.5

Table G12 (continued)

Mother's Occupation Frequency Row Per Cent Col. Per Cent	Birthweight (grams)												Total
	500-749	750-999	1000-1249	1250-1499	1500-1999	2000-2499	2500-2999	3000-3499	3500-3999	4000-4499	4500 and Over	Not Stated	
Skilled Manual Workers	2 0.2 2.0	1 0.1 1.1	4 0.5 3.0	3 0.3 2.0	7 0.8 1.4	17 2.0 1.2	67 7.7 1.0	284 32.6 1.5	325 37.4 1.5	128 14.7 1.5	32 3.7 1.8	0 0.0 0.0	870 100.0 1.5
Semi-Skilled Manual Workers	5 0.2 5.0	2 0.1 2.2	6 0.3 4.5	4 0.2 2.7	14 0.6 2.8	51 2.3 3.5	315 14.2 4.7	757 34.2 3.9	729 32.9 3.5	283 12.8 3.3	48 2.2 2.7	0 0.0 0.0	2,214 100.0 3.7
Unskilled Manual Workers	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	1 6.7 0.0	7 46.7 0.0	6 40.0 0.0	1 6.7 0.0	0 0.0 0.0	0 0.0 0.0	15 100.0 0.0
Unemployed	2 0.1 2.0	5 0.2 5.4	6 0.2 4.5	9 0.4 6.0	38 1.5 7.6	104 4.2 7.2	412 16.5 6.1	946 38.0 4.9	709 28.5 3.4	215 8.6 2.5	45 1.8 2.5	0 0.0 0.0	2,491 100.0 4.2
Not Classifiable	8 0.3 8.0	5 0.2 5.4	7 0.3 5.3	6 0.3 4.0	21 0.9 4.2	64 2.8 4.4	317 13.8 4.7	810 35.3 4.2	745 32.4 3.5	269 11.7 3.2	45 2.0 2.5	0 0.0 0.0	2,297 100.0 3.8
Home Duties	30 0.2 30.0	27 0.2 29.3	35 0.2 26.3	47 0.3 31.3	148 1.0 29.6	430 2.9 29.7	1,803 12.3 26.9	4,767 32.5 24.6	4,909 33.5 23.3	1,993 13.6 23.4	464 3.2 26.1	0 0.0 0.0	14,653 100.0 24.5
Not Stated	1 0.3 1.0	4 1.1 4.3	0 0.0 0.0	0 0.0 0.0	12 3.3 2.4	18 4.9 1.2	45 12.3 0.7	123 33.6 0.6	121 33.1 0.6	30 8.2 0.4	12 3.3 0.7	0 0.0 0.0	366 100.0 0.6
<b>Total</b>	<b>100</b>	<b>92</b>	<b>133</b>	<b>150</b>	<b>500</b>	<b>1,449</b>	<b>6,706</b>	<b>19,385</b>	<b>21,074</b>	<b>8,532</b>	<b>1,779</b>	<b>2</b>	<b>59,902</b>
	<b>0.2</b>	<b>0.2</b>	<b>0.2</b>	<b>0.3</b>	<b>0.8</b>	<b>2.4</b>	<b>11.2</b>	<b>32.4</b>	<b>35.2</b>	<b>14.2</b>	<b>3.0</b>	<b>0.0</b>	<b>100.0</b>
	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Notes:** 'Not Applicable' is not used in the classification of maternal occupation.

See Appendix C for a description of the classification system for occupations.



Table G13

 Father's Occupation by Interval in Years Since Last Birth, Live Births and Stillbirths, 2005  
 Singleton Births

Father's Occupation	Interval in Years Since Last Birth									
	No Previous Births	1 year or less	>1 year to 2 years	>2 years to 3 years	>3 years to 4 years	>4 years to 5 years	>5 years to 6 years	More than 6 years	Not Stated	Total
Farmers & Farm Managers	665 29.8 2.8	24 1.1 4.5	439 19.7 5.1	458 20.6 5.0	276 12.4 4.8	128 5.7 3.6	90 4.0 3.7	137 6.2 2.6	12 0.5 3.4	2,229 100.0 3.7
Other Agricultural Occupations & Fishermen	136 29.5 0.6	5 1.1 0.9	70 15.2 0.8	85 18.4 0.9	56 12.2 1.0	37 8.0 1.1	16 3.5 0.7	54 11.7 1.0	2 0.4 0.6	461 100.0 0.8
Higher-Professional	1,554 37.8 6.4	21 0.5 3.9	807 19.6 9.3	792 19.3 8.7	408 9.9 7.1	214 5.2 6.1	115 2.8 4.8	181 4.4 3.4	20 0.5 5.6	4,112 100.0 6.9
Lower- Professional	1,050 40.9 4.4	13 0.5 2.4	452 17.6 5.2	442 17.2 4.8	248 9.7 4.3	127 5.0 3.6	92 3.6 3.8	138 5.4 2.6	5 0.2 1.4	2,567 100.0 4.3
Managers	1,723 36.3 7.1	28 0.6 5.2	754 15.9 8.7	909 19.1 10.0	549 11.6 9.6	271 5.7 7.7	168 3.5 7.0	322 6.8 6.1	26 0.6 7.3	4,750 100.0 7.9
Salaried-Employees	611 37.6 2.5	15 0.9 2.8	251 15.4 2.9	284 17.5 3.1	184 11.3 3.2	109 6.7 3.1	71 4.4 2.9	95 5.8 1.8	6 0.4 1.7	1,626 100.0 2.7
Non-Manual Workers	1,714 37.8 7.1	31 0.7 5.8	708 15.6 8.1	788 17.4 8.6	508 11.2 8.8	253 5.6 7.2	185 4.1 7.7	328 7.2 6.2	24 0.5 6.7	4,539 100.0 7.6
Other Non-Manual Workers	1,716 33.6 7.1	47 0.9 8.8	688 13.5 7.9	846 16.5 9.3	525 10.3 9.1	387 7.6 11.0	257 5.0 10.7	612 12.0 11.5	36 0.7 10.1	5,114 100.0 8.5
Skilled Manual Workers	4,798 37.1 19.9	108 0.8 20.2	1,925 14.9 22.1	2,114 16.4 23.2	1,368 10.6 23.8	813 6.3 23.0	544 4.2 22.6	1,171 9.1 22.0	89 0.7 24.9	12,930 100.0 21.6
Semi-skilled Manual Workers	950 38.6 3.9	19 0.8 3.5	317 12.9 3.6	369 15.0 4.0	233 9.5 4.1	165 6.7 4.7	118 4.8 4.9	278 11.3 5.2	12 0.5 3.4	2,461 100.0 4.1
Unskilled Manual Workers	201 31.5 0.8	13 2.0 2.4	90 14.1 1.0	93 14.6 1.0	63 9.9 1.1	48 7.5 1.4	30 4.7 1.2	97 15.2 1.8	4 0.6 1.1	639 100.0 1.1
Unemployed	372 21.3 1.5	41 2.3 7.7	465 26.6 5.4	385 22.0 4.2	202 11.5 3.5	101 5.8 2.9	55 3.1 2.3	111 6.3 2.1	18 1.0 5.0	1,750 100.0 2.9
Not Classifiable	515 35.3 2.1	11 0.8 2.1	269 18.4 3.1	248 17.0 2.7	150 10.3 2.6	86 5.9 2.4	49 3.4 2.0	122 8.4 2.3	9 0.6 2.5	1,459 100.0 2.4
Not Applicable	7,998 54.4 33.1	154 1.1 28.7	1,344 9.1 15.5	1,220 8.3 13.4	918 6.2 16.0	753 5.1 21.3	607 4.1 25.2	1,642 11.2 30.8	79 0.5 22.1	14,715 100.0 24.6
Home Duties	8 8.8 0.0	1 1.1 0.2	20 22.0 0.2	21 23.1 0.2	15 16.5 0.3	15 16.5 0.4	4 4.4 0.2	5 5.5 0.1	2 2.2 0.6	91 100.0 0.2
Not Stated	152 33.1 0.6	5 1.1 0.9	98 21.4 1.1	78 17.0 0.9	45 9.8 0.8	24 5.2 0.7	11 2.4 0.5	32 7.0 0.6	14 3.1 3.9	459 100.0 0.8
<b>Total</b>	<b>24,163</b> <b>40.3</b> <b>100.0</b>	<b>536</b> <b>0.9</b> <b>100.0</b>	<b>8,697</b> <b>14.5</b> <b>100.0</b>	<b>9,132</b> <b>15.2</b> <b>100.0</b>	<b>5,748</b> <b>9.6</b> <b>100.0</b>	<b>3,531</b> <b>5.9</b> <b>100.0</b>	<b>2,412</b> <b>4.0</b> <b>100.0</b>	<b>5,325</b> <b>8.9</b> <b>100.0</b>	<b>358</b> <b>0.6</b> <b>100.0</b>	<b>59,902</b> <b>100.0</b> <b>100.0</b>

**Note:** See Appendix C for a description of the classification system for occupations.

**Table G14**  
**Mother's Occupation by Interval in Years Since Last Birth, Live Births and Stillbirths, 2005**  
**Singleton Births**

Mother's Occupation Frequency Row Per Cent Col. Per Cent	Interval in Years Since Last Birth									Total
	No Previous Births	1 year or less	>1 year to 2 years	>2 years to 3 years	>3 years to 4 years	>4 years to 5 years	>5 years to 6 years	More than 6 years	Not Stated	
Farmers & Farm Managers	40	1	15	19	9	3	1	7	0	95
	42.1	1.1	15.8	20.0	9.5	3.2	1.1	7.4	0.0	100.0
	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.1	0.0	0.2
Other Agricultural Occupations & Fishermen	26	0	9	4	2	1	0	2	0	44
	59.1	0.0	20.5	9.1	4.6	2.3	0.0	4.6	0.0	100.0
	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Higher- Professional	1,381	12	498	521	247	96	80	111	14	2,960
	46.7	0.4	16.8	17.6	8.3	3.2	2.7	3.8	0.5	100.0
	5.7	2.2	5.7	5.7	4.3	2.7	3.3	2.1	3.9	4.9
Lower- Professional	3,321	54	1,359	1,296	705	361	221	380	36	7,733
	43.0	0.7	17.6	16.8	9.1	4.7	2.9	4.9	0.5	100.0
	13.7	10.1	15.6	14.2	12.3	10.2	9.2	7.1	10.1	12.9
Managers	1,982	22	497	535	297	182	118	238	18	3,889
	51.0	0.6	12.8	13.8	7.6	4.7	3.0	6.1	0.5	100.0
	8.2	4.1	5.7	5.9	5.2	5.2	4.9	4.5	5.0	6.5
Salaried-Employees	608	3	137	128	93	48	22	69	1	1,109
	54.8	0.3	12.4	11.5	8.4	4.3	2.0	6.2	0.1	100.0
	2.5	0.6	1.6	1.4	1.6	1.4	0.9	1.3	0.3	1.9
Non-Manual Workers	6,470	86	1,495	1,819	1,235	769	522	1,231	71	13,698
	47.2	0.6	10.9	13.3	9.0	5.6	3.8	9.0	0.5	100.0
	26.8	16.0	17.2	19.9	21.5	21.8	21.6	23.1	19.8	22.9
Other Non-Manual Workers	3,522	47	777	831	600	418	326	914	33	7,468
	47.2	0.6	10.4	11.1	8.0	5.6	4.4	12.2	0.4	100.0
	14.6	8.8	8.9	9.1	10.4	11.8	13.5	17.2	9.2	12.5
Skilled Manual Workers	397	3	128	150	52	38	29	62	11	870
	45.6	0.3	14.7	17.2	6.0	4.4	3.3	7.1	1.3	100.0
	1.6	0.6	1.5	1.6	0.9	1.1	1.2	1.2	3.1	1.5
Semi-skilled Manual Workers	1,088	18	215	222	182	130	93	254	12	2,214
	49.1	0.8	9.7	10.0	8.2	5.9	4.2	11.5	0.5	100.0
	4.5	3.4	2.5	2.4	3.2	3.7	3.9	4.8	3.4	3.7
Unskilled Manual Workers	10	0	0	2	0	0	0	3	0	15
	66.7	0.0	0.0	13.3	0.0	0.0	0.0	20.0	0.0	100.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Unemployed	1,102	37	335	324	206	146	114	209	18	2,491
	44.2	1.5	13.5	13.0	8.3	5.9	4.6	8.4	0.7	100.0
	4.6	6.9	3.9	3.6	3.6	4.1	4.7	3.9	5.0	4.2
Not Classifiable	1,634	12	158	148	115	56	48	119	7	2,297
	71.1	0.5	6.9	6.4	5.0	2.4	2.1	5.2	0.3	100.0
	6.8	2.2	1.8	1.6	2.0	1.6	2.0	2.2	2.0	3.8
Home Duties	2,404	238	3,013	3,079	1,989	1,272	832	1,699	127	14,653
	16.4	1.6	20.6	21.0	13.6	8.7	5.7	11.6	0.9	100.0
	10.0	44.4	34.6	33.7	34.6	36.0	34.5	31.9	35.5	24.5
Not Stated	178	3	61	54	16	11	6	27	10	366
	48.6	0.8	16.7	14.8	4.4	3.0	1.6	7.4	2.7	100.0
	0.7	0.6	0.7	0.6	0.3	0.3	0.3	0.5	2.8	0.6
<b>Total</b>	<b>24,163</b>	<b>536</b>	<b>8,697</b>	<b>9,132</b>	<b>5,748</b>	<b>3,531</b>	<b>2,412</b>	<b>5,325</b>	<b>358</b>	<b>59,902</b>
	<b>40.3</b>	<b>0.9</b>	<b>14.5</b>	<b>15.2</b>	<b>9.6</b>	<b>5.9</b>	<b>4.0</b>	<b>8.9</b>	<b>0.6</b>	<b>100.0</b>
	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Notes:** 'Not Applicable' is not used in the classification of maternal occupation.

See Appendix C for a description of the classification system for occupations.

Table G15

Father's Occupation by Infant's Type of Feeding, Live Births Only, 2005  
Singleton Births

Father's Occupation Frequency Row Per Cent Col. Per Cent	Type of Feeding				
	Artificial	Breast	Combined	Not Stated	Total
Farmers & Farm Managers	1,164 52.6 3.8	991 44.8 3.8	56 2.5 2.7	3 0.1 3.3	2,214 100.0 3.7
Other Agricultural Occupations & Fishermen	247 53.8 0.8	198 43.1 0.7	12 2.6 0.6	2 0.4 2.2	459 100.0 0.8
Higher-Professional	1,185 28.9 3.8	2,740 66.9 10.4	162 4.0 7.7	7 0.2 7.8	4,094 100.0 6.9
Lower-Professional	791 31.0 2.6	1,663 65.1 6.3	95 3.7 4.5	4 0.2 4.4	2,553 100.0 4.3
Managers	2,020 42.7 6.5	2,541 53.7 9.6	166 3.5 7.9	8 0.2 8.9	4,735 100.0 7.9
Salaried-Employees	737 45.5 2.4	805 49.7 3.1	78 4.8 3.7	0 0.0 0.0	1,620 100.0 2.7
Non-Manual Workers	2,113 46.7 6.8	2,231 49.3 8.4	175 3.9 8.3	6 0.1 6.7	4,525 100.0 7.6
Other Non-Manual Workers	2,756 54.0 8.9	2,150 42.1 8.1	192 3.8 9.1	5 0.1 5.6	5,103 100.0 8.6
Skilled Manual Workers	6,745 52.4 21.8	5,727 44.5 21.7	390 3.0 18.5	16 0.1 17.8	12,878 100.0 21.6
Semi-Skilled Manual Workers	1,500 61.2 4.8	867 35.4 3.3	82 3.3 3.9	2 0.1 2.2	2,451 100.0 4.1
Unskilled Manual Workers	433 68.1 1.4	189 29.7 0.7	14 2.2 0.7	0 0.0 0.0	636 100.0 1.1
Unemployed	1,044 60.0 3.4	565 32.5 2.1	128 7.4 6.1	3 0.2 3.3	1,740 100.0 2.9
Not Classifiable	572 39.4 1.8	748 51.5 2.8	131 9.0 6.2	1 0.1 1.1	1,452 100.0 2.4
Not Applicable	9,454 64.7 30.5	4,765 32.6 18.0	372 2.5 17.6	28 0.2 31.1	14,619 100.0 24.5
Home Duties	44 48.9 0.1	43 47.8 0.2	3 3.3 0.1	0 0.0 0.0	90 100.0 0.2
Not Stated	205 45.4 0.7	187 41.4 0.7	55 12.2 2.6	5 1.1 5.6	452 100.0 0.8
<b>Total</b>	<b>31,010</b> <b>52.0</b> <b>100.0</b>	<b>26,410</b> <b>44.3</b> <b>100.0</b>	<b>2,111</b> <b>3.5</b> <b>100.0</b>	<b>90</b> <b>0.2</b> <b>100.0</b>	<b>59,621</b> <b>100.0</b> <b>100.0</b>

**Notes:** See Appendix C for a description of the classification system for occupations.

'Not Stated' contains 78 early neonatal deaths for which type of feeding was not stated.

Table G16  
 Mother's Occupation by Infant's Type of Feeding, Live Births Only, 2005  
 Singleton Births

Mother's Occupation Frequency Row Per Cent Col. Per Cent	Type of Feeding				
	Artificial	Breast	Combined	Not Stated	Total
Farmers & Farm Managers	43 45.7 0.1	49 52.1 0.2	1 1.1 0.1	1 1.1 1.1	94 100.0 0.2
Other Agricultural Occupations & Fishermen	18 40.9 0.1	25 56.8 0.1	1 2.3 0.1	0 0.0 0.0	44 100.0 0.1
Higher-Professional	835 28.3 2.7	1,996 67.6 7.6	116 3.9 5.5	5 0.2 5.6	2,952 100.0 5.0
Lower-Professional	2,418 31.4 7.8	4,992 64.8 18.9	286 3.7 13.5	7 0.1 7.8	7,703 100.0 12.9
Managers	1,689 43.6 5.4	2,053 53.0 7.8	127 3.3 6.0	7 0.2 7.8	3,876 100.0 6.5
Salaried-Employees	523 47.5 1.7	536 48.7 2.0	41 3.7 1.9	0 0.0 0.0	1,100 100.0 1.8
Non-Manual Workers	7,901 57.9 25.5	5,372 39.4 20.3	351 2.6 16.6	19 0.1 21.1	13,643 100.0 22.9
Other Non-Manual Workers	4,135 55.6 13.3	3,022 40.6 11.4	272 3.7 12.9	12 0.2 13.3	7,441 100.0 12.5
Skilled Manual Workers	331 38.3 1.1	501 57.9 1.9	32 3.7 1.5	1 0.1 1.1	865 100.0 1.5
Semi-Skilled Manual Workers	1,544 70.1 5.0	598 27.2 2.3	55 2.5 2.6	4 0.2 4.4	2,201 100.0 3.7
Unskilled Manual Workers	3 20.0 0.0	11 73.3 0.0	1 6.7 0.1	0 0.0 0.0	15 100.0 0.0
Unemployed	1,720 69.4 5.5	640 25.8 2.4	115 4.6 5.4	3 0.1 3.3	2,478 100.0 4.2
Not Classifiable	1,328 58.1 4.3	862 37.7 3.3	88 3.9 4.2	6 0.3 6.7	2,284 100.0 3.8
Home Duties	8,384 57.6 27.0	5,596 38.4 21.2	565 3.9 26.8	21 0.1 23.3	14,566 100.0 24.4
Not Stated	138 38.4 0.4	157 43.7 0.6	60 16.7 2.8	4 1.1 4.4	359 100.0 0.6
<b>Total</b>	<b>31,010</b> <b>52.0</b> <b>100.0</b>	<b>26,410</b> <b>44.3</b> <b>100.0</b>	<b>2,111</b> <b>3.5</b> <b>100.0</b>	<b>90</b> <b>0.2</b> <b>100.0</b>	<b>59,621</b> <b>100.0</b> <b>100.0</b>

**Notes:** 'Not Applicable' is not used in the classification of maternal occupation.

See Appendix C for a description of the classification system for occupations.

'Not Stated' contains 78 early neonatal deaths for which type of feeding was not stated.

Table G17  
 Infant's Type of Feeding by Maternal Parity, Live Births Only, 2005  
 Singleton Births

Type of Feeding Frequency Row Per Cent Col. Per Cent	Maternal Parity									Total
	0	1	2	3	4	5	6	More than 6	Not Stated	
Artificial	11,171	10,422	5,894	2,190	743	308	150	131	1	31,010
	36.0	33.6	19.0	7.1	2.4	1.0	0.5	0.4	0.0	100.0
	46.5	54.9	56.4	55.9	55.9	60.9	69.8	69.3	100.0	52.0
Breast	11,971	7,887	4,199	1,566	505	175	53	54	0	26,410
	45.3	29.9	15.9	5.9	1.9	0.7	0.2	0.2	0.0	100.0
	49.8	41.6	40.2	40.0	38.0	34.6	24.7	28.6	0.0	44.3
Combined	855	640	348	153	78	22	11	4	0	2,111
	40.5	30.3	16.5	7.2	3.7	1.0	0.5	0.2	0.0	100.0
	3.6	3.4	3.3	3.9	5.9	4.3	5.1	2.1	0.0	3.5
Not Stated	43	25	10	7	3	1	1	0	0	90
	47.8	27.8	11.1	7.8	3.3	1.1	1.1	0.0	0.0	100.0
	0.2	0.1	0.1	0.2	0.2	0.2	0.5	0.0	0.0	0.2
Total	24,040	18,974	10,451	3,916	1,329	506	215	189	1	59,621
	40.3	31.8	17.5	6.6	2.2	0.8	0.4	0.3	0.0	100.0
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Note:** 'Not Stated' contains 78 early neonatal deaths for which type of feeding was not stated.

Table G18

Mother's County of Residence by Mother's Marital Status, Live Births and Stillbirths, 2005  
Singleton and Multiple Births

Mother's County of Residence Frequency Row Per Cent Col. Per Cent	Mother's Marital Status						Total
	Married	Never Married	Widowed	Separated	Divorced	Not Stated	
Carlow	531	277	0	12	1	0	821
	64.7	33.7	0.0	1.5	0.1	0.0	100.0
	1.3	1.5	0.0	1.6	0.3	0.0	1.3
Cavan	667	185	1	8	10	1	872
	76.5	21.2	0.1	0.9	1.1	0.1	100.0
	1.6	1.0	1.3	1.1	3.4	33.3	1.4
Clare	1,204	385	3	16	4	0	1,612
	74.7	23.9	0.2	1.0	0.2	0.0	100.0
	2.9	2.0	3.8	2.1	1.4	0.0	2.6
Cork	4,930	1,898	12	79	42	1	6,962
	70.8	27.3	0.2	1.1	0.6	0.0	100.0
	11.8	10.1	15.4	10.6	14.5	33.3	11.3
Donegal	1,371	572	5	29	11	0	1,988
	69.0	28.8	0.3	1.5	0.6	0.0	100.0
	3.3	3.0	6.4	3.9	3.8	0.0	3.2
Dublin City	7,537	5,242	13	155	56	0	13,003
	58.0	40.3	0.1	1.2	0.4	0.0	100.0
	18.0	27.8	16.7	20.8	19.3	0.0	21.0
Dublin County	3,305	1,149	2	39	28	1	4,524
	73.1	25.4	0.0	0.9	0.6	0.0	100.0
	7.9	6.1	2.6	5.2	9.7	33.3	7.3
Galway	2,464	778	1	36	20	0	3,299
	74.7	23.6	0.0	1.1	0.6	0.0	100.0
	5.9	4.1	1.3	4.8	6.9	0.0	5.3
Kerry	1,260	446	3	27	9	0	1,745
	72.2	25.6	0.2	1.6	0.5	0.0	100.0
	3.0	2.4	3.8	3.6	3.1	0.0	2.8
Kildare	2,316	852	4	30	14	0	3,216
	72.0	26.5	0.1	0.9	0.4	0.0	100.0
	5.5	4.5	5.1	4.0	4.8	0.0	5.2
Kilkenny	795	306	1	12	3	0	1,117
	71.2	27.4	0.1	1.1	0.3	0.0	100.0
	1.9	1.6	1.3	1.6	1.0	0.0	1.8
Laois	661	256	3	9	3	0	932
	70.9	27.5	0.3	1.0	0.3	0.0	100.0
	1.6	1.4	3.8	1.2	1.0	0.0	1.5
Leitrim	280	85	1	3	3	0	372
	75.3	22.8	0.3	0.8	0.8	0.0	100.0
	0.7	0.5	1.3	0.4	1.0	0.0	0.6
Limerick	1,695	860	4	28	5	0	2,592
	65.4	33.2	0.2	1.1	0.2	0	100
	4.1	4.6	5.1	3.8	1.7	0	4.2
Longford	342	139	3	10	1	0	495
	69.1	28.1	0.6	2.0	0.2	0.0	100.0
	0.8	0.7	3.8	1.3	0.3	0.0	0.8
Louth	1,009	546	2	27	15	0	1,599
	63.1	34.1	0.1	1.7	0.9	0.0	100.0
	2.4	2.9	2.6	3.6	5.2	0.0	2.6



Table G19

Mother's County of Residence by Infant's Type of Feeding, Live Births Only, 2005  
Singleton and Multiple Births

Mother's County of Residence Frequency Row Per Cent Col. Per Cent	Type of Feeding				
	Artificial	Breast	Combined	Not Stated	Total
Carlow	491	318	6	2	817
	60.1	38.9	0.7	0.2	100.0
	1.5	1.2	0.3	1.8	1.3
Cavan	490	358	17	1	866
	56.6	41.3	2.0	0.1	100.0
	1.5	1.3	0.8	0.9	1.4
Clare	972	592	38	2	1,604
	60.6	36.9	2.4	0.1	100.0
	3.0	2.2	1.7	1.8	2.6
Cork	3,603	3,090	224	9	6,926
	52.0	44.6	3.2	0.1	100.0
	11.2	11.5	10.0	8.3	11.3
Donegal	1,263	551	161	5	1,980
	63.8	27.8	8.1	0.3	100.0
	3.9	2.0	7.2	4.6	3.2
Dublin City	6,310	6,148	450	25	12,933
	48.8	47.5	3.5	0.2	100.0
	19.6	22.8	20.0	22.9	21.0
Dublin County	1,858	2,471	166	9	4,504
	41.3	54.9	3.7	0.2	100.0
	5.8	9.2	7.4	8.3	7.3
Galway	1,553	1,340	396	1	3,290
	47.2	40.7	12.0	0.0	100.0
	4.8	5.0	17.6	0.9	5.4
Kerry	903	766	63	3	1,735
	52.0	44.1	3.6	0.2	100.0
	2.8	2.8	2.8	2.8	2.8
Kildare	1,591	1,497	106	5	3,199
	49.7	46.8	3.3	0.2	100.0
	4.9	5.6	4.7	4.6	5.2
Kilkenny	565	545	3	0	1,113
	50.8	49.0	0.3	0.0	100.0
	1.8	2.0	0.1	0.0	1.8
Laois	480	421	27	0	928
	51.7	45.4	2.9	0.0	100.0
	1.5	1.6	1.2	0.0	1.5
Leitrim	203	145	18	2	368
	55.2	39.4	4.9	0.5	100.0
	0.6	0.5	0.8	1.8	0.6
Limerick	1,760	776	36	4	2,576
	68.3	30.1	1.4	0.2	100.0
	5.5	2.9	1.6	3.7	4.2
Longford	262	214	15	1	492
	53.3	43.5	3.0	0.2	100.0
	0.8	0.8	0.7	0.9	0.8
Louth	839	700	50	3	1,592
	52.7	44.0	3.1	0.2	100.0
	2.6	2.6	2.2	2.8	2.6



Table G19 (continued)

Mother's County of Residence Frequency Row Per Cent Col. Per Cent	Type of Feeding				
	Artificial	Breast	Combined	Not Stated	Total
Mayo	909 53.1 2.8	709 41.4 2.6	91 5.3 4.0	4 0.2 3.7	1,713 100.0 2.8
Meath	1,351 49.6 4.2	1,284 47.1 4.8	82 3.0 3.6	7 0.3 6.4	2,724 100.0 4.4
Monaghan	400 55.6 1.2	297 41.3 1.1	22 3.1 1.0	1 0.1 0.9	720 100.0 1.2
Offaly	571 57.0 1.8	421 42.0 1.6	10 1.0 0.4	0 0.0 0.0	1,002 100.0 1.6
Roscommon	349 52.6 1.1	296 44.6 1.1	18 2.7 0.8	0 0.0 0.0	663 100.0 1.1
Sligo	458 61.1 1.4	247 33.0 0.9	41 5.5 1.8	3 0.4 2.8	749 100.0 1.2
Tipperary NR	393 63.9 1.2	215 35.0 0.8	5 0.8 0.2	2 0.3 1.8	615 100.0 1.0
Tipperary SR	924 60.7 2.9	582 38.3 2.2	10 0.7 0.4	5 0.3 4.6	1,521 100.0 2.5
Waterford	851 52.3 2.6	747 45.9 2.8	27 1.7 1.2	2 0.1 1.8	1,627 100.0 2.6
Westmeath	672 52.8 2.1	585 46.0 2.2	13 1.0 0.6	3 0.2 2.8	1,273 100.0 2.1
Wexford	1,217 59.9 3.8	701 34.5 2.6	108 5.3 4.8	6 0.3 5.5	2,032 100.0 3.3
Wicklow	946 49.7 2.9	906 47.6 3.4	46 2.4 2.0	4 0.2 3.7	1,902 100.0 3.1
Other	4 36.4 0.0	6 54.5 0.0	1 9.1 0.0	0 0.0 0.0	11 100.0 0.0
Not Stated	4 80.0 0.0	1 20.0 0.0	0 0.0 0.0	0 0.0 0.0	5 100.0 0.0
<b>Total</b>	<b>32,192</b> <b>52.4</b> <b>100.0</b>	<b>26,929</b> <b>43.8</b> <b>100.0</b>	<b>2,250</b> <b>3.7</b> <b>100.0</b>	<b>109</b> <b>0.2</b> <b>100.0</b>	<b>61,480</b> <b>100.0</b> <b>100.0</b>

Table G20  
 Mother's County of Residence  
 Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
 Singleton and Multiple Births

Mother's County of Residence	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Carlow	817	1.3	4	4.9	1	1.2	6.1	4.9
Cavan	866	1.4	6	6.9	5	5.8	12.6	9.2
Clare	1,604	2.6	8	5.0	2	1.2	6.2	5.0
Cork	6,926	11.3	36	5.2	12	1.7	6.9	5.0
Donegal	1,980	3.2	8	4.0	6	3.0	7.0	5.0
Dublin City	12,933	21.0	70	5.4	31	2.4	7.8	5.6
Dublin County	4,504	7.3	20	4.4	10	2.2	6.6	4.9
Galway	3,290	5.4	9	2.7	7	2.1	4.8	3.9
Kerry	1,735	2.8	10	5.7	5	2.9	8.6	7.5
Kildare	3,199	5.2	17	5.3	7	2.2	7.5	7.5
Kilkenny	1,113	1.8	4	3.6	0	0.0	3.6	2.7
Laois	928	1.5	4	4.3	0	0.0	4.3	3.2
Leitrim	368	0.6	4	10.8	2	5.4	16.1	13.5
Limerick	2,576	4.2	16	6.2	4	1.6	7.7	6.9
Longford	492	0.8	3	6.1	1	2.0	8.1	6.1
Louth	1,592	2.6	7	4.4	3	1.9	6.3	5.6
Mayo	1,713	2.8	4	2.3	4	2.3	4.7	2.9
Meath	2,724	4.4	21	7.7	9	3.3	10.9	8.4
Monaghan	720	1.2	2	2.8	2	2.8	5.5	4.2
Offaly	1,002	1.6	3	3.0	2	2.0	5.0	4.0
Roscommon	663	1.1	3	4.5	0	0.0	4.5	4.5
Sligo	749	1.2	4	5.3	3	4.0	9.3	8.0
Tipperary NR	615	1.0	2	3.2	2	3.3	6.5	3.3
Tipperary SR	1,521	2.5	12	7.8	4	2.6	10.4	5.2
Waterford	1,627	2.6	9	5.5	2	1.2	6.7	3.7
Westmeath	1,273	2.1	8	6.2	5	3.9	10.1	7.8
Wexford	2,032	3.3	6	2.9	6	3.0	5.9	1.5
Wicklow	1,902	3.1	6	3.1	4	2.1	5.2	3.2
Other	11	0.0	0	0.0	0	0.0	0.0	0.0
Not Stated	5	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>61,480</b>	<b>100</b>	<b>306</b>	<b>5.0</b>	<b>139</b>	<b>2.3</b>	<b>7.2</b>	<b>5.4</b>

*Note:* See Appendix E for the classification system employed for county of residence.

## Appendix H

### Domiciliary Births: 1999–2005 Cross-Tabulations of Selected Variables: 2005

These births have been included, unless otherwise stated, in the analysis presented in previous sections.

In 1999 there were 246 domiciliary births. Of these, there was one early neonatal death and no stillbirths. In 2000 the number of domiciliary births fell to 216 with, again, one early neonatal death and no stillbirths. There were no domiciliary multiple births in 1999 or 2000.

In 2001 the number of domiciliary births increased to 245. Of these, there was one stillbirth and no early neonatal deaths. There was one set of domiciliary twin births in 2001.

The trend in the number of domiciliary births continued to be upwards, increasing to 288 in 2002. Of these, there were no stillbirths and one early neonatal death. There were no domiciliary multiple births in 2002.

In 2003 and 2004 the number of domiciliary births decreased to 236 and 202 respectively. Of these, there were no stillbirths and one early neonatal death only in 2004. There were no domiciliary multiple births in 2003 or 2004.

In 2005 the number of planned domiciliary births again declined to 183. There were no stillbirths, early neonatal deaths or multiple births among domiciliary births in 2005.

The tables that follow (H1-H8) present selected statistics on domiciliary births for 1999–2005 and contain a range of cross-tabulations relating to all domiciliary births for 2005. A full list of these tables is included in the Table of Contents. The format of each cross-tabulation is identical. The values of the two variables are given along the top row and left-hand side column. The top number in each cell indicates the number of observations relating to that combination of variable values. The second number indicates the percentage contribution of that cell to the total for the whole row. The last number indicates the percentage contribution of that cell to the total for the whole column. The figures at the end of each row or column give the overall total for that row or column, and the associated percentages express each of these figures as a percentage of the grand total.



**Table H3**  
**Age of Mother by Gestational Age at Delivery, 2005**  
**Domiciliary Births**

Age of Mother Frequency Row Per Cent Col. Per Cent	Gestational Age (weeks)		
	37-41	42 and Over	Total
20-24 Years	9 100.0 5.2	0 0.0 0.0	9 100.0 4.9
25-29 Years	32 94.1 18.4	2 5.9 22.2	34 100.0 18.6
30-34 Years	67 95.7 38.5	3 4.3 33.3	70 100.0 38.3
35-39 Years	50 94.3 28.7	3 5.7 33.3	53 100.0 29.0
40-44 Years	16 94.1 9.2	1 5.9 11.1	17 100.0 9.3
<b>Total</b>	<b>174</b> <b>95.1</b> <b>100.0</b>	<b>9</b> <b>4.9</b> <b>100.0</b>	<b>183</b> <b>100.0</b> <b>100.0</b>

**Table H4**  
**Birthweight by Gestational Age at Delivery, 2005**  
**Domiciliary Births**

Birthweight (grams) Frequency Row Per Cent Col. Per Cent	Gestational Age (weeks)		
	37-41	42 and Over	Total
2000-2499	1 100.0 0.6	0 0.0 0.0	1 100.0 0.5
2500-2999	3 100.0 1.7	0 0.0 0.0	3 100.0 1.6
3000-3499	45 100.0 25.9	0 0.0 0.0	45 100.0 24.6
3500-3999	70 97.2 40.2	2 2.8 22.2	72 100.0 39.3
4000-4499	42 87.5 24.1	6 12.5 66.7	48 100.0 26.2
4500 and Over	13 92.9 7.5	1 7.1 11.1	14 100.0 7.7
<b>Total</b>	<b>174</b> <b>95.1</b> <b>100.0</b>	<b>9</b> <b>4.9</b> <b>100.0</b>	<b>183</b> <b>100.0</b> <b>100.0</b>

Table H5  
 Mother's Occupation by Birthweight, 2005  
 Domiciliary Births

Mother's Occupation Frequency Row Per Cent Col. Per Cent	Birthweight (grams)						Total
	2000– 2499	2500– 2999	3000– 3499	3500– 3999	4000– 4499	4500 and Over	
Other Agricultural Occupations & Fishermen	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	1 100.0 1.4	0 0.0 0.0	0 0.0 0.0	1 100.0 0.5
Higher-Professional	0 0.0 0.0	0 0.0 0.0	9 52.9 20.0	3 17.6 4.2	4 23.5 8.3	1 5.9 7.1	17 100.0 9.3
Lower-Professional	0 0.0 0.0	1 2.0 33.3	9 17.6 20.0	22 43.1 30.6	18 35.3 37.5	1 2.0 7.1	51 100.0 27.9
Managers	0 0.0 0.0	1 12.5 33.3	2 25.0 4.4	3 37.5 4.2	2 25.0 4.2	0 0.0 0.0	8 100.0 4.4
Salaried-Employees	1 14.3 100.0	0 0.0 0.0	1 14.3 2.2	4 57.1 5.6	0 0.0 0.0	1 14.3 7.1	7 100.0 3.8
Non-Manual Workers	0 0.0 0.0	0 0.0 0.0	4 36.4 8.9	5 45.5 6.9	0 0.0 0.0	2 18.2 14.3	11 100.0 6.0
Other Non-Manual Workers	0 0.0 0.0	0 0.0 0.0	2 9.1 4.4	12 54.5 16.7	5 22.7 10.4	3 13.6 21.4	22 100.0 12.0
Skilled Manual Workers	0 0.0 0.0	0 0.0 0.0	2 50.0 4.4	0 0.0 0.0	2 50.0 4.2	0 0.0 0.0	4 100.0 2.2
Unemployed	0 0.0 0.0	0 0.0 0.0	1 100.0 2.2	0 0.0 0.0	0 0.0 0.0	0 0.0 0.0	1 100.0 0.5
Not Classifiable	0 0.0 0.0	0 0.0 0.0	2 66.7 4.4	0 0.0 0.0	0 0.0 0.0	1 33.3 7.1	3 100.0 1.6
Home Duties	0 0.0 0.0	1 1.7 33.3	13 22.4 28.9	22 37.9 30.6	17 29.3 35.4	5 8.6 35.7	58 100.0 31.7
Total	1 0.5 100.0	3 1.6 100.0	45 24.6 100.0	72 39.3 100.0	48 26.2 100.0	14 7.7 100.0	183 100.0 100.0

**Note:** See Appendix C for a description of the classification system for occupations.

Table H6  
 Mother's Marital Status by Age of Mother, 2005  
 Domiciliary Births

Mother's Marital Status Frequency Row Per Cent Col. Per Cent	Age of Mother					
	20-24 Years	25-29 Years	30-34 Years	35-39 Years	40-44 Years	Total
Married	2	22	53	46	11	134
	1.5	16.4	39.6	34.3	8.2	100.0
	22.2	64.7	75.7	86.8	64.7	73.2
Never Married	7	11	15	5	5	43
	16.3	25.6	34.9	11.6	11.6	100.0
	77.8	32.4	21.4	9.4	29.4	23.5
Widowed	0	0	0	2	0	2
	0.0	0.0	0.0	100.0	0.0	100.0
	0.0	0.0	0.0	3.8	0.0	1.1
Separated	0	1	1	0	0	2
	0.0	50.0	50.0	0.0	0.0	100.0
	0.0	2.9	1.4	0.0	0.0	1.1
Divorced	0	0	1	0	1	2
	0.0	0.0	50.0	0.0	50.0	100.0
	0.0	0.0	1.4	0.0	5.9	1.1
Total	9	34	70	53	17	183
	4.9	18.6	38.3	29.0	9.3	100.0
	100.0	100.0	100.0	100.0	100.0	100.0

Table H7

## Father's Occupation by Infant's Type of Feeding, Live Births Only, 2005

## Domiciliary Births

Father's Occupation Frequency Row Per Cent Col. Per Cent	Type of Feeding		
	Artificial	Breast	Total
Farmers & Farm Managers	0 0.0 0.0	8 100.0 4.7	8 100.0 4.4
Other Agricultural Occupations & Fishermen	0 0.0 0.0	6 100.0 3.5	6 100.0 3.3
Higher-Professional	0 0.0 0.0	14 100.0 8.1	14 100.0 7.7
Lower-Professional	0 0.0 0.0	28 100.0 16.3	28 100.0 15.3
Managers	0 0.0 0.0	20 100.0 11.6	20 100.0 10.9
Salaried-Employees	0 0.0 0.0	6 100.0 3.5	6 100.0 3.3
Non-Manual Workers	1 8.3 9.1	11 91.7 6.4	12 100.0 6.6
Other Non-Manual Workers	2 10.0 18.2	18 90.0 10.5	20 100.0 10.9
Skilled Manual Workers	6 10.0 54.5	54 90.0 31.4	60 100.0 32.8
Semi-Skilled Manual Workers	1 50.0 9.1	1 50.0 0.6	2 100.0 1.1
Unskilled Manual Workers	1 100.0 9.1	0 0.0 0.0	1 100.0 0.5
Not Classifiable	0 0.0 0.0	3 100.0 1.7	3 100.0 1.6
Not Applicable	0 0.0 0.0	3 100.0 1.7	3 100.0 1.6
<b>Total</b>	<b>11 6.0 100.0</b>	<b>172 94.0 100.0</b>	<b>183 100.0 100.0</b>

**Note:** See Appendix C for a description of the classification system for occupations.



Table H8

Mother's Occupation by Infant's Type of Feeding, Live Births Only, 2005  
Domiciliary Births

Mother's Occupation Frequency Row Per Cent Col. Per Cent	Type of Feeding		
	Artificial	Breast	Total
Other Agricultural Occupations & Fishermen	0 0.0 0.0	1 100.0 0.6	1 100.0 0.5
Higher-Professional	0 0.0 0.0	17 100.0 9.9	17 100.0 9.3
Lower-Professional	2 3.9 18.2	49 96.1 28.5	51 100.0 27.9
Managers	0 0.0 0.0	8 100.0 4.7	8 100.0 4.4
Salaried-Employees	0 0.0 0.0	7 100.0 4.1	7 100.0 3.8
Non-Manual Workers	2 18.2 18.2	9 81.8 5.2	11 100.0 6.0
Other Non-Manual Workers	0 0.0 0.0	22 100.0 12.8	22 100.0 12.0
Skilled Manual Workers	1 25.0 9.1	3 75.0 1.7	4 100.0 2.2
Unemployed	0 0.0 0.0	1 100.0 0.6	1 100.0 0.5
Not Classifiable	0 0.0 0.0	3 100.0 1.7	3 100.0 1.6
Home Duties	6 10.3 54.5	52 89.7 30.2	58 100.0 31.7
Total	11 6.0 100.0	172 94.0 100.0	183 100.0 100.0

*Note:* See Appendix C for a description of the classification system for occupations.

## Appendix I

### Gestational Age at Time of First Visit to Doctor or Hospital During Pregnancy

Gestational age at time of first visit to doctor or hospital during pregnancy is calculated using the following formula:

$$\text{GestVis} = \text{HospDoc} - (\text{InfDOB} - (\text{Gestat} * 7))$$

GestVis = gestational age at date of the first visit to doctor or hospital during pregnancy.

HospDoc = first antenatal visit date (either doctor or hospital).

InfDOB = infant's date of birth.

Gestat\*7 = gestation at delivery in days.

The initial calculation produces a period measured in days, which is then converted into weeks for reporting.

The format of each cross-tabulation is identical. The values of the two variables are given along the top row and left-hand side column. The top number in each cell indicates the number of observations relating to that combination of variable values. The second number indicates the percentage contribution of that cell to the total for the whole row. The last number indicates the percentage contribution of that cell to the total for the whole column. The figures at the end of each row or column give the overall total for that row or column, and the associated percentages express each of these figures as a percentage of the grand total.

**Table 11**  
 Time of First Visit to Doctor or Hospital During Pregnancy  
 Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
 Singleton Births

Time of First Visit (weeks)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0-12	30,485	51.1	119	3.9	49	1.6	5.5	3.6
13-19	20,296	34.0	98	4.8	27	1.3	6.1	4.8
20 and over	6,585	11.0	42	6.3	25	3.8	10.1	8.5
Not Stated	2,255	3.8	22	9.7	8	3.5	13.2	10.1
Total	59,621	100.0	281	4.7	109	1.8	6.5	4.8

**Table 12**  
 Time of First Visit to Doctor or Hospital During Pregnancy  
 Live Births, Stillbirths, Early Neonatal Deaths, and Mortality Rates, 2005  
 Multiple Births

Time of First Visit (weeks)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0-12	982	52.8	10	10.1	10	10.2	20.2	18.2
13-19	562	30.2	7	12.3	11	19.6	31.6	21.3
20 and over	176	9.5	5	27.6	7	39.8	66.3	50.6
Not Stated	139	7.5	3	21.1	2	14.4	35.2	28.4
Total	1,859	100.0	25	13.3	30	16.1	29.2	23.0

Table I3

Mother's Marital Status by Gestational Age at Time of First Visit to Doctor or Hospital During Pregnancy, Live Births and Stillbirths, 2005  
Singleton Births

Mother's Marital Status Frequency Row Per Cent Col. Per Cent	Gestational Age at First Visit (weeks)				
	0-12	13-19	20 and over	Not Stated	Total
Married	21,568	13,071	3,737	1,968	40,344
	53.5	32.4	9.3	4.9	100.0
	70.5	64.1	56.4	86.4	67.4
Never Married	8,516	6,961	2,722	290	18,489
	46.1	37.6	14.7	1.6	100.0
	27.8	34.1	41.1	12.7	30.9
Widowed	38	21	17	2	78
	48.7	26.9	21.8	2.6	100.0
	0.1	0.1	0.3	0.1	0.1
Separated	335	247	111	13	706
	47.5	35.0	15.7	1.8	100.0
	1.1	1.2	1.7	0.6	1.2
Divorced	147	94	38	3	282
	52.1	33.3	13.5	1.1	100.0
	0.5	0.5	0.6	0.1	0.5
Not Stated	0	0	2	1	3
	0.0	0.0	66.7	33.3	100.0
	0.0	0.0	0.0	0.0	0.0
Total	30,604	20,394	6,627	2,277	59,902
	51.1	34.0	11.1	3.8	100.0
	100.0	100.0	100.0	100.0	100.0

Table 14

Interval in Years Since Last Birth by Gestational Age at Time of First Visit to Doctor or Hospital During Pregnancy, Live Births and Stillbirths, 2005  
Singleton Births

Interval Since Last Birth Frequency Row Per Cent Col. Per Cent	Gestational Age at First Visit (weeks)				
	0–12	13–19	20 and over	Not Stated	Total
No previous births	12,811	8,012	2,511	829	24,163
	53.0	33.2	10.4	3.4	100.0
	41.9	39.3	37.9	36.4	40.3
1 year or less	233	163	118	22	536
	43.5	30.4	22.0	4.1	100.0
	0.8	0.8	1.8	1.0	0.9
>1 year to 2 years	4,026	2,984	1,301	386	8,697
	46.3	34.3	15.0	4.4	100.0
	13.2	14.6	19.6	17.0	14.5
>2 years to 3 years	4,642	3,169	962	359	9,132
	50.8	34.7	10.5	3.9	100.0
	15.2	15.5	14.5	15.8	15.2
>3 years to 4 years	2,959	1,977	559	253	5,748
	51.5	34.4	9.7	4.4	100.0
	9.7	9.7	8.4	11.1	9.6
>4 years to 5 years	1,839	1,227	350	115	3,531
	52.1	34.7	9.9	3.3	100.0
	6.0	6.0	5.3	5.1	5.9
>5 years to 6 years	1,287	844	197	84	2,412
	53.4	35.0	8.2	3.5	100.0
	4.2	4.1	3.0	3.7	4.0
More than 6 years	2,685	1,930	567	143	5,325
	50.4	36.2	10.6	2.7	100.0
	8.8	9.5	8.6	6.3	8.9
Not Stated	122	88	62	86	358
	34.1	24.6	17.3	24.0	100.0
	0.4	0.4	0.9	3.8	0.6
Total	30,604	20,394	6,627	2,277	59,902
	51.1	34.0	11.1	3.8	100.0
	100.0	100.0	100.0	100.0	100.0







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