

Report on

# PERINATAL STATISTICS

for 2002

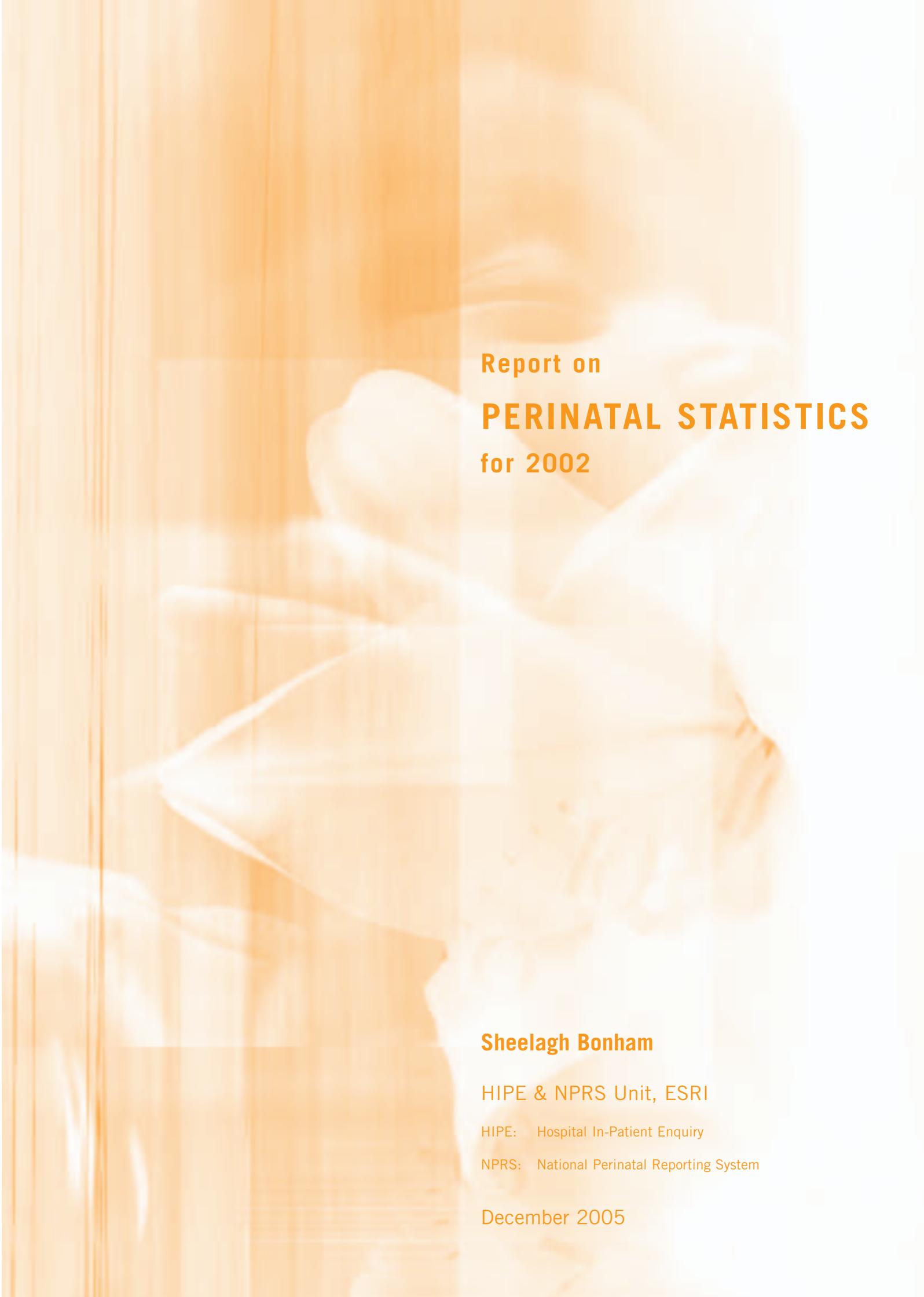
HIPE & NPRS Unit, ESRI

HIPE: Hospital In-Patient Enquiry

NPRS: National Perinatal Reporting System

December 2005





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**Sheelagh Bonham**

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# Acknowledgements

The collection and analysis of national perinatal data is a large undertaking and the compilation of an accurate and comprehensive data base on a timely basis depends on the co-operation and assistance of many people. Principal among these are the staff of the maternity hospitals and units as well as the many independent midwives involved in practice. I would like to express my sincere appreciation to all who contribute to the accurate recording and timely notification of statistical information for all births nationally.

Information on just over 60,865 births was 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 information was compiled and validated by the National Perinatal Reporting System (NPRS) within the HIPE & NPRS Unit at The Economic and Social Research Institute (ESRI) to create a national data base from which this report was produced.

In addition to funding the work of the HIPE & NPRS Unit at the ESRI, the Department of Health and Children continues to provide essential support for the operation and development of the NPRS at the ESRI since 1999. We would like to acknowledge, in particular, the advice and assistance provided by Hugh Magee and Ciara O'Shea in the production of this perinatal report, which relates to data for 2002.

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We hope that the production of this report by the ESRI will allow national statistics on perinatal events to be observed over time. This report highlights the richness of the resource offered by high quality, timely and accurate data for research and evaluation of perinatal events, in particular, and health and health care services at the population level.

**Sheelagh Bonham**

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# Executive Summary

The principal aim of the National Perinatal Reporting System (NPRS) is the provision of national statistics on perinatal events. 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 2002. In addition, descriptive social and biological characteristics of mothers giving birth and babies born in 2002 are recorded.

In 2002, 60,865 births were notified to the National Perinatal Reporting System,<sup>1</sup> an increase of 4.5 per cent since 2001 and 23.4 per cent since 1993. Of these, 343 were stillbirths giving a stillbirth rate of 5.6 per 1,000 live births and stillbirths in 2002. This is a decrease of 0.2 per 1,000 since 2001 but represents an overall decrease of 1.8 per cent over the previous decade. There were 170 early neonatal deaths resulting in an early neonatal death rate of 2.8 per 1,000 live births in 2002. This rate remained unchanged from 2001. The overall rate of early neonatal deaths from 1993 to 2002 has decreased by 6.7 per cent. The perinatal mortality rate was 8.4 per 1,000 live and still births in 2002, a decrease of 2.3 per cent from 2001. The overall perinatal mortality rate has decreased by 3.4 per cent over the decade 1993 to 2002.

The average birthweight of babies born in 2002 is estimated at 3,474g, virtually no change from 2001 and just less than 1 per cent lower than that estimated in 1993 (3,500g). Average gestational age at delivery in 2002 of 39.5 weeks remains constant since 1999 and is 1.6 per cent lower than the recorded average gestational age at delivery of 40.1 weeks in 1993. Low birthweight babies (weighing less than 2,500g) represented 4.9 per cent of all births in 2002. Between 1993 and 2002, low birthweight babies as a proportion of all live births has increased by 18.2 per cent. The twinning rate for 2002 is 14.4 per 1,000 maternities, and comprised 864 twin births, 18 triplet births and 3 quadruplet births.

In 2002, single mothers accounted for 30 per cent of all women giving birth, representing an increase of 65.4 per cent in the rate of 18.1 per cent estimated in 1993. The average age of all mothers in 2002 remains at 30 years. The average age of single mothers increases very slightly each year. Over the last decade this has increased from 23 years in 1993 to 26 years in 2002. Average maternal parity at 1.1 in 2002 remains stable compared to recent years but is down from 1.3 in 1993. This represents an overall decline of 20.3 per cent from 1993 to 2002. The trend in the breastfeeding rate continues to be upward at 41.1 per cent in 2002 compared to 39.1 per cent in 2001.

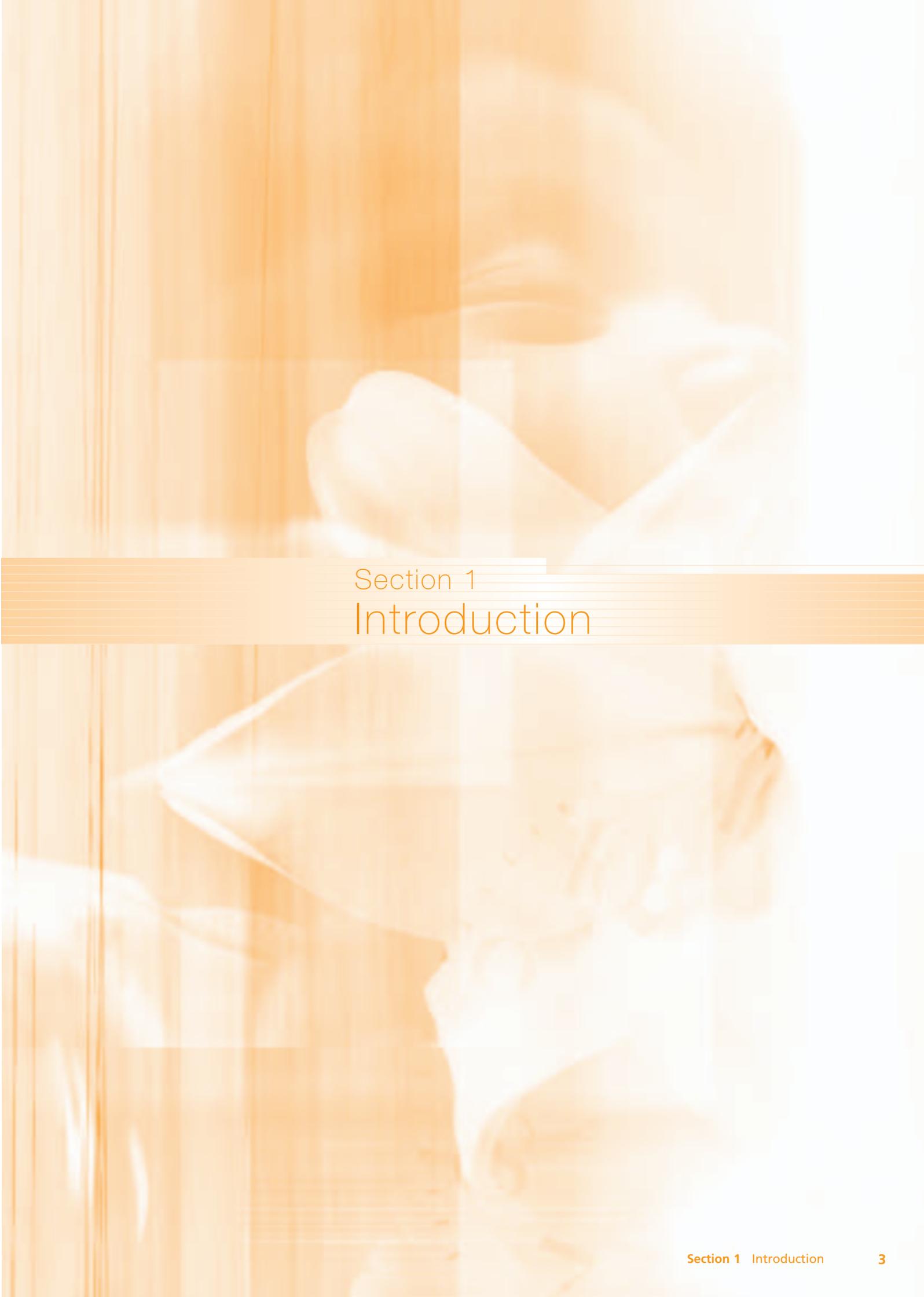
<sup>1</sup> Reports of 51 births are missing from the National statistics presented in this report. These reports relate to births at Mayo General Hospital for which data had not been returned at the time of preparation of this Report.

2002 saw a continued increase in the number of home births attended by independent domiciliary midwives compared to previous years. In 2002 there were 288 such births while in 2001 there were 245, representing an increase of 17.5 per cent for 2002. In 1993 there were 142 independent domiciliary midwife births, the increase over the period 1993 to 2002 is therefore estimated at 102.8 per cent.

Delivery by caesarean section is estimated at 22.4 per cent of all live births in 2002, a marginal increase of the 22.0 per cent estimated for 2001. In 2002 the percentage of singleton births delivered by caesarean section was 21.6, an increase of 0.6 per cent from 2001; the percentage of multiple births delivered by caesarean section in 2002 was 49.5 per cent, a decrease of 3.3 per cent from 2001. The rate of caesarean section for all births has now increased by 72.1 per cent over the decade from 13.0 per cent in 1993. While the rates of caesarean section are different for singleton and multiple births, the rate of the change over the decade 1993 to 2002 is higher for singleton births, for which the rate of caesarean section increased by 71.9 per cent, compared to multiple births, for which the increase in the caesarean section rate is estimated at 41.6 per cent.

Average lengths of stay for both mother and infant continued to decline in 2002. Infant's length of stay has decreased from an average of 4.6 days in 1993 to 3.9 days in 2002 while mother's length of stay has declined from 5.2 days in 1993 to 4.1 days in 2002.

For the first time this decade there has been an increase in the percentage of early neonatal deaths undergoing post-mortem examinations. This rate, 42.1 per cent, has increased by 25.4 per cent between 2001 and 2002 alone. Over the past decade, the overall rate for post-mortems has decreased by 36.9 per cent from the 1993 rate of 66.7 per cent.



Section 1  
Introduction



## Section 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 2002. 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 was revised to facilitate a number of new fields that were required by the General Register Office (part 1) for birth registrations. These changes have resulted in the collection of two new variables, nationality and country of residence for both the mother and father, by the NPRS. These variables will be reported in the national statistics from 2004. 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.

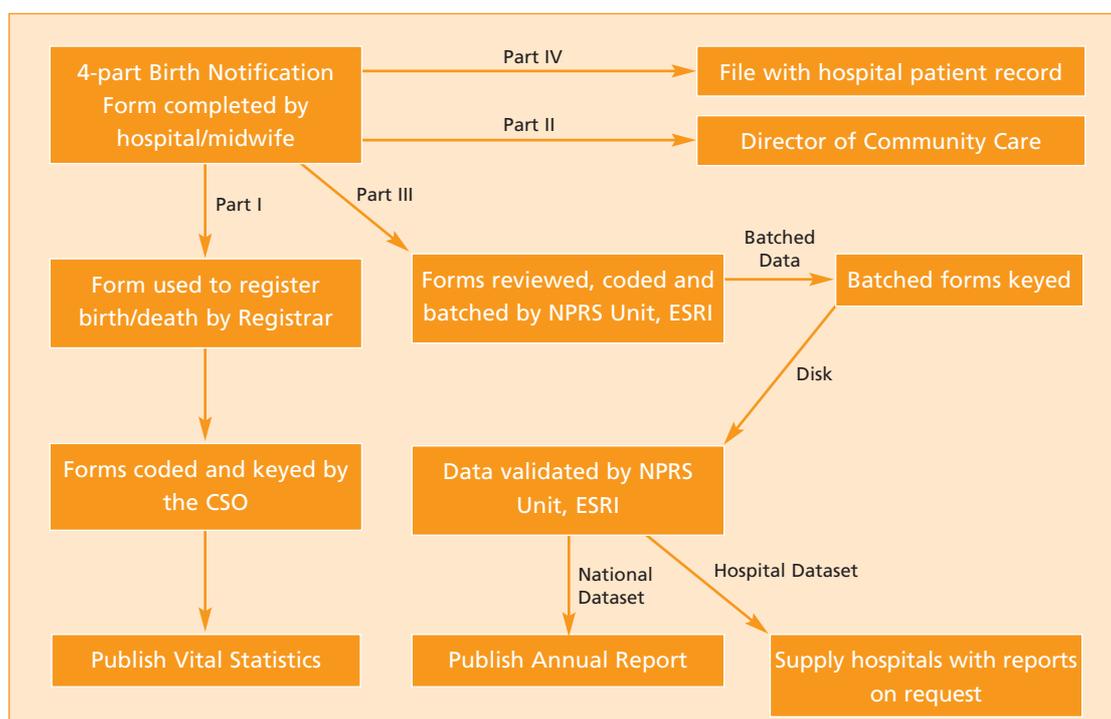
### Development of the Perinatal Reporting System

The need to rationalise data collection systems on childbirth became increasingly evident during the 1970s. Prior to the current system, hospitals used a standard form for the registration of live births; a second form completed by the hospital provided statistical information on those births to the Central Statistics Office (CSO); a third form was employed to notify stillbirths to health board(s) and to the CSO; and a variety of non-standard forms were in use to provide for the notification of births to the appropriate health board authorities as soon as possible after the birth. The decision was taken to devise an integrated system to provide, on one form, for the registration and notification of births and for the informational requirements of all those involved in perinatal care, including the provision of basic perinatal statistics for research and planning purposes. A four-part form was designed and printed on self-copying paper, and pilot tests were carried out to ascertain the feasibility of the scheme. The next step involved the gradual extension of the scheme across the country and the parallel development of systems for data collection, computerisation and reporting. In March 1981, a Steering Committee was set up to supervise the extension of the scheme into a comprehensive national system. On the committee were representatives from the Institute of Obstetricians and Gynaecologists, the Irish Perinatal Society, the health boards, the Medico-Social Research Board, maternity hospitals, the Central Statistics Office, the Central Computing Service, and the Department of Health. By 1982, the Perinatal Reporting System covered approximately 64 per cent of all births; the first report, which referred to 1984, had 94 per cent coverage; and national coverage has been complete since 1985. In June 1999, The Economic and Social Research Institute was contracted by the Department of Health and Children to oversee the collection and processing of data required by the Perinatal Reporting System. See Appendix A for a copy of Part 3 of the four-part form. The ESRI has primary responsibility for the collection, processing and reporting of data from 1999 onwards.

## Data Collection

Births are registered and notified on a standard four-part form. 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 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. Figure 1.1 provides a diagrammatic representation of the information system. In January 1998, the four-part form replaced the two-part Domiciliary Notification Form for the notification of domiciliary births. Just as with hospital births, Part 1 is sent to the Registrar of Births and subsequently to the CSO; Part 2 is sent to the Director of Community Care and Medical Officer of Health in the mother's area of residence; the third copy is sent to the NPRS unit at the ESRI; and the fourth copy is retained by the midwife. 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 National Perinatal Reporting System can be logically grouped into demographic, clinical and administrative data. The data collected by the NPRS for 2002 include:

- **Demographic Data**  
Date of infant's birth; sex of infant; multiple birth indicator;  
Date of father's birth; father's county of residence; father's occupation;  
Date of mother's birth; mother's county of residence; mother's occupation;  
Marital status of mother and date of present marriage.

- Clinical Data**

Infant's birthweight and period of gestation; mother's obstetric history; 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.

## Data Processing

Coding of the forms takes place in the NPRS Unit at the ESRI. Occupations are coded according to the Central Statistics Office system of socio-economic group classification (see Appendix B). Diseases and cause of death are coded using the ninth revision of the International Classification of Diseases (ICD) and according to the guidelines set out by the World Health Organisation (see Appendix C). The data are entered onto computer by a private company and the file is then transferred to the NPRS Unit at the ESRI for validation, processing and the production of reports (see Figure 1.1). Checks are also carried out to ensure the completeness of returns from each hospital. Validation, reports and analyses are carried out using the Statistical Analysis System (SAS) software.

## Format and Contents

This report presents a set of national tabulations for perinatal events for 2002 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. Section 2 (Selected Trends) documents significant trends in the principal variables for the years 1991-1993 and 1999-2002. Section 3 contains tables relating to the following variables: maternal age; parity; marital status; socio-economic group of mother; socio-economic group of father; distribution of previous stillbirths; birthweight (by sex); twinning rate; gestational age; interval since last birth; and month of birth.

Section 4 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: gestational age at first antenatal contact of mother with the health services; type of antenatal care received; number of antenatal days stay by the mother; number of postnatal days stay by the mother; 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, 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 dealing with singleton births and Part 2 dealing with multiple births. A number of cross-tabulations of selected variables of importance are contained in Appendix E, and many of the graphs in the report are based on data abstracted from these tables.

Appendix F presents an analysis of perinatal deaths for 2002 according to the classification system suggested by Dr. J.S. Wigglesworth. This system sets out five general and mutually exclusive cause of death categories designed to provide for relatively straightforward classification and to identify problem areas with implications for the clinical management of patients. The classification criteria as well as the results are set out in this Appendix.

Finally, Appendix G documents significant trends in the principal variables for domiciliary births in 1999-2002 as well as a number of cross-tabulations of selected variables for domiciliary births in 2002.

# Definitions

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

## Outcomes and Rates

**Live Birth (LB):** 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.

**Stillbirth (SB) 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:

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

**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.

**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.

**Note:** In this report, where rates are based on very small numbers, they should be interpreted with caution and should not be used as estimates of the true population rates.

## 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 2002 there were 48 births under hospital administered home birth schemes. For the purposes of this report these births are treated as hospital births due to the 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. Single: including women with civil annulments and women who have been widowed for more than 10 months.
- iii. Widowed: including all women who have been widowed for 10 months or less.
- iv. Separated: covers the following categories:
  - Deserted.
  - Legally separated.
  - Church decree of nullity.
  - Otherwise separated.
- v. Divorced.

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

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

**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.

**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.

### 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.
- v. Caesarean section.
- vi. Other specified and Combined.

**Hospital Admission Booked or Unbooked:** Domiciliary births are not included in the tables relating to this variable.

**Type of Feeding:** Indicates whether artificial, breastfeeding or a combination of both was being used at the time of discharge.

**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 perinatal events occurring during the year.

### 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, the guidelines recommended by the World Health Organisation have been followed. A summary of these guidelines, together with a list of the International Classification of Disease codes grouped into each category, is provided in Appendix C.

**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.

Note:

- All perinatal statistics and definitions are based on WHO ICD-9 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 3.15 the values for 'under 15' are not included as there are no occurrences of these multiple births for mother's age 'under 15'.

# Completeness and Reliability

## Coverage

The National Perinatal Reporting System covers all live births and stillbirths occurring in Ireland.<sup>2</sup> However, there are differences in the vital statistics published by the CSO and the data presented in this report. The reasons for this are outlined below.

## Missing Values

No attempt has been made to assign values to missing data, and they are included as a separate category in each table. In comparison to previous years, many variables show substantial improvement in the proportion of cases with the value 'not stated'. 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.

There were no new variables introduced in 2002. Father's date of birth and mother's occupation were included for the first time in the report for 1999. For 2002, father's date of birth is missing for 14.0 per cent of births where mother's marital status is married.<sup>3</sup> Missing values for mother's occupation are also very low and are not available for only 1.6 per cent of births in 2002. Efforts will continue to be expended to improve coverage for these and all variables for future reports.

The number of missing values recorded for 'date of first visit to the doctor or hospital during pregnancy' has improved in 2002 and the number of births for which this information is not recorded has dropped to 5.7 per cent. This is a welcome improvement for this important variable as it acts as an indicator of the length of antenatal care each mother has received. Improvements are also notable for 'type of antenatal care' where coverage is virtually complete (only 7 records with missing values).

Completeness of variables relating to the infant has also improved in the 2002 dataset. 'Type of feeding' has been recorded as 'not stated' for only 14 births, while birthweight is unknown for only 10 births. 'Gestational age at delivery' is also virtually complete and is not stated for 12 births in 2002. Coverage for 'method of delivery' decreased very slightly and was unknown for 22 births.

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.

## Accuracy

While computer validation can identify illogical or unacceptable data, it cannot detect information, which, though valid, is inaccurate. Information on the county of residence of mother can also be inaccurate since in safeguarding 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 A). It is possible that data entered in this space may refer to the county in which the birth occurred. Consequently, mother's area of residence has been analysed at health board level in this report. The new instruction manual to facilitate completion of BNF01/2003 issued in May 2003 details the requirements for completion of each field, both new and existing. Careful attention to these instructions will complement the efforts that are continually in progress to improve all aspects of data quality (see Future Reports and Improvements below).

<sup>2</sup> The National statistics presented in this report are missing 51 births. These reports relate to births at Mayo General Hospital for which data had not been returned at the time of preparation of this report.

<sup>3</sup> It should be noted that where a mother's marital status is single, widowed, separated or divorced the General Register Office (GRO) does not require father's details to register the birth, and as such this information is generally not provided.

## Discrepancies with CSO Data

Differences between the vital statistics tables compiled by the CSO and the NPRS data for 2002 presented here arise for a variety of reasons. One reason for these differences is that information is not always obtained from the same sources. This is particularly evident in the tabulations regarding cause of death. 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 (Form 103) for collecting information on late foetal deaths.

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 General Register Office (GRO), while the NPRS collect them using Part 3 of the birth notification form. The CSO defines a stillbirth as weighing at or over 500g 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 World Health Organisation's (WHO) definition of a stillbirth, the NPRS includes all late foetal deaths weighing at least 500g, irrespective of gestational age. In 2002 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 385 stillbirths. The CSO, however, reports 364 stillbirths indicating that in 2002 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 343. In accordance with WHO guidelines, only these 343 stillbirths are included in the NPRS dataset for this report. Differences in the definitions of stillbirth used by the CSO and the WHO is 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 ESRI is very narrow. For 2002 the CSO report a twinning rate of 14.9 per 1,000 maternities and the NPRS report a twinning rate of 14.4 per 1,000 maternities. The NPRS dataset excludes all births where weight is < 500 grams. In the case of a multiple birth where one or more births weighs <500 grams, these births are removed from the dataset. Any births weighing >500 grams are retained in the dataset as multiple births, where appropriate. 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 3.14). There is a single field on the birth notification form that identifies a multiple birth. If this is not recorded then the ESRI has no way of identifying multiple births. However, it would be assumed that the additional personal identification data available to the CSO ensures a more comprehensive estimate by this agency of the number of multiple births.

Finally, differences in coding procedures can be reflected in the published statistics. The International Classification of Disease (ICD) coding procedures are recognised as being particularly difficult and subjective in the area of causes of perinatal mortality and the current separate coding arrangements between the CSO and the NPRS can therefore lead to significant discrepancies. Ideally, the data sources and data coding should be harmonised between the CSO and NPRS. One approach to achieving this objective would involve computerisation of the birth registration system and the consequent elimination of duplicate paperwork, coding and validation. The General Register Office (GRO) began its national roll-out for the computerisation of birth registration in September 2003. This will cover the registration information currently collected on the top copy of the birth notification form. Parts 2, 3 and 4 of the form, which contain additional statistical information, will

continue as paper based systems. Future phases of the computerisation programme are intended to include all statistical data. In the interim, the NPRS is exploring the option of downloading the computerised information electronically and linking it with the statistical data captured in Part 3 of the form. This would assist in ensuring identification of all births, reduce duplication of effort in keying registered data and improve data quality. The HIPE & NPRS Unit at the ESRI has developed an in-house data entry system whereby notifications of births from January 1st 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. With more timely and efficient validation of NPRS data, the publication of the NPRS Report is also expected to be more timely for the data for 2004 onwards. With system improvements, we rely on hospital administrators to provide accurate and up-to-date data and ongoing adaptation to more efficient data collection procedures will be essential to ensure the accuracy and future viability of this very valuable statistical resource.

### Future Reports and Improvements

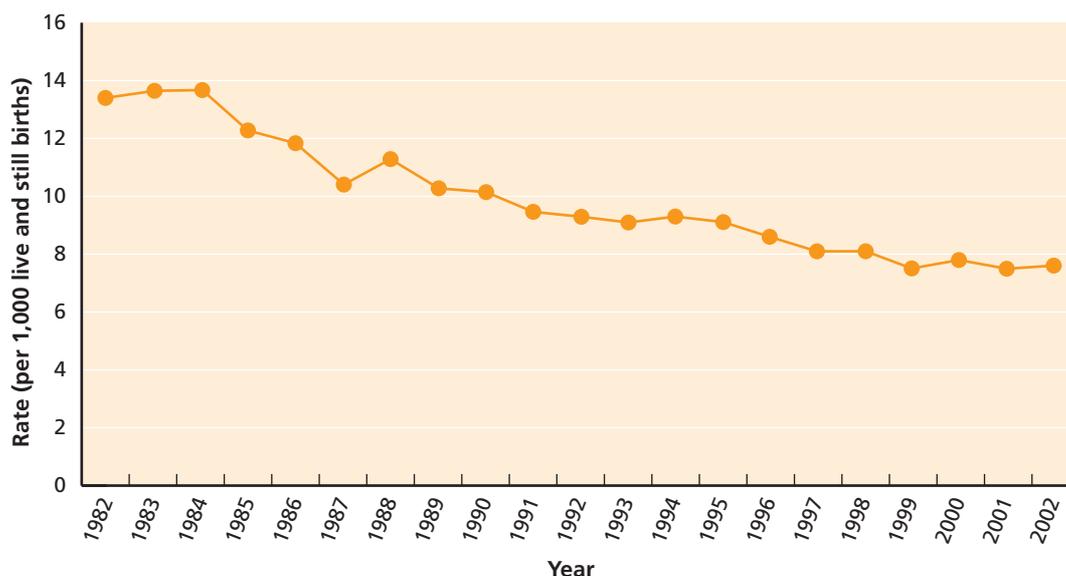
The minimum perinatal data set contained in this report is intended to serve as a foundation for the monitoring of perinatal health. As emphasised above, in order to do this effectively the data must be accurate, comprehensive and up-to-date. While the 2002 report again notes progress in the reduction of levels of 'not stated' data and discrepancies with CSO estimates, the elimination of these problems remains a key objective. The continued development of computerised registration and notification would seem to be an essential prerequisite to the achievement of the NPRS goal of delivering optimum data quality, timeliness and comprehensive coverage.

# General Trends and International Comparisons<sup>4</sup>

## Perinatal Mortality

Recent decades have witnessed a substantial decline in infant, neonatal and perinatal mortality in Ireland. Figure 1.2 shows the perinatal mortality rate in Ireland from 1982-2002. These rates are based on the national statistics compiled by the CSO. Between 1965 and 1980 the perinatal mortality rate fell by more than half from 30 deaths per 1,000 live births and stillbirths to 14.8 per 1,000 live births and stillbirths. From 1981 until 1984 the rate remained stable at around 13.5 per 1,000 live births and stillbirths, but resumed its decline to 10.4 per 1,000 live births and stillbirths in 1987 before rising slightly to 11.3 per 1,000 live births and stillbirths in 1988. From 1989 the rate declined relatively steadily from 10.3 per 1,000 live births and stillbirths to a low of 7.5 per 1,000 live births and stillbirths in 1999, which was half the 1980 rate. For 2000, the perinatal mortality rate increased marginally to 7.8 per 1,000 live births and stillbirths, dropped to 7.5 per 1,000 live births and stillbirths in 2001 and is reported at 7.6 per 1,000 live births and stillbirths for 2002.

**Figure 1.2**  
**Perinatal Mortality Rate, Ireland: 1982-2002**



Note: In 1995 a broader definition of stillbirths was employed by the CSO. The new definition includes stillbirths at or over 500g or at a gestational age of 24 weeks or more. Figures given here are based on the old definition of a stillbirth (at or over 28 weeks) to facilitate comparisons over time.

Source: Report on *Vital Statistics, 2002*, Central Statistics Office.

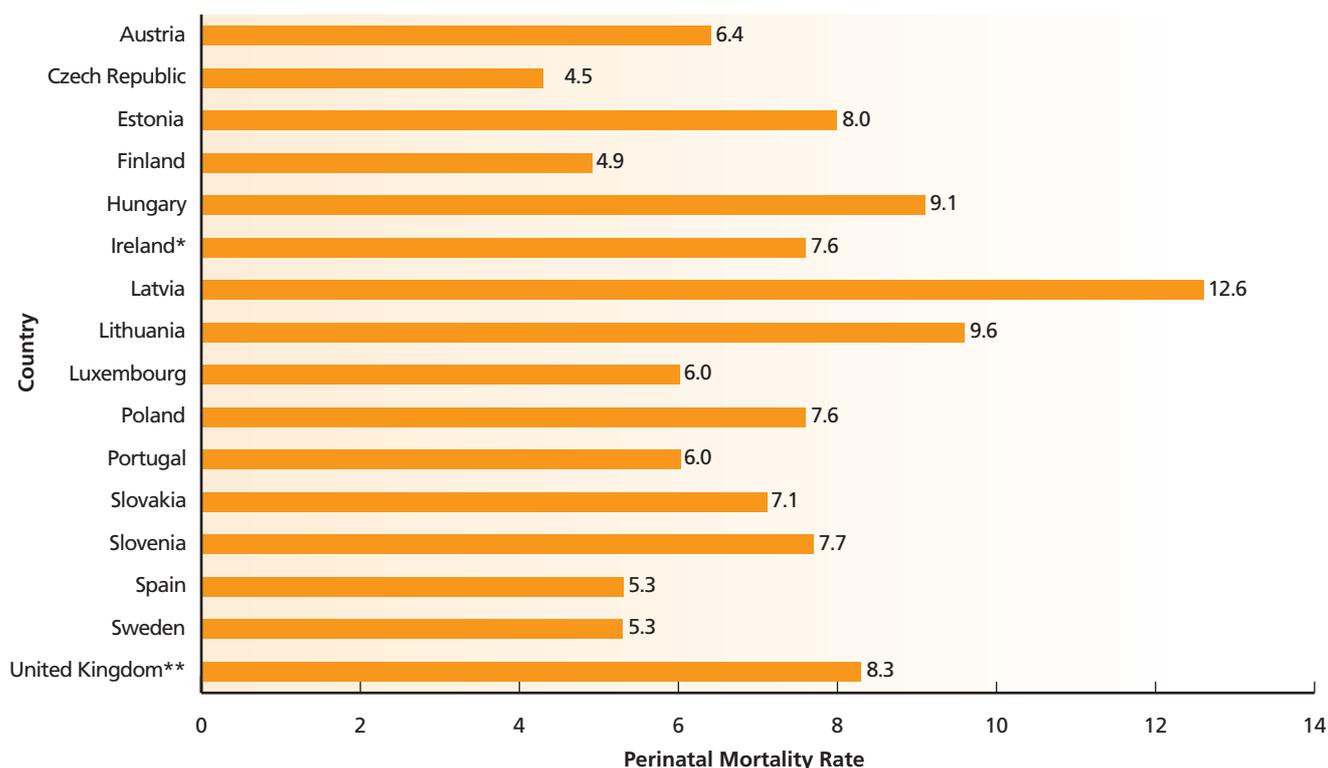
The factors impacting on the level of perinatal mortality are complex and encompass a wide range of environmental and biological variables. Birthweight, parity, mother's age, social status and type of antenatal care as well as many other variables have a bearing on perinatal risk. Data in this report indicate levels of perinatal mortality for the principal variables associated with risk. Ireland's standing in relation to other countries in the European Union (EU) is shown in Figure 1.3. Of the sixteen countries for which data are available for 2002, Ireland's perinatal mortality rate is amongst the highest recorded at 7.6 per 1,000, with only the United Kingdom and a number of new member

<sup>4</sup>National figures presented in this section are based on official registration data as compiled by the Central Statistics Office. These figures may differ somewhat from numbers and rates appearing in the tables of this report for reasons given in the previous section.

Where the data are available EU comparisons are based on EU membership at time of publication (i.e. twenty-five countries).

states including Hungary, Latvia, Lithuania and Estonia showing higher rates. Of the sixteen countries represented here, the Czech Republic records the lowest perinatal mortality rate at 4.5 per 1,000 followed by Finland with 4.9 per 1,000. When comparing between countries it should be remembered that rates are affected by national policies on abortion, by differences in the comprehensiveness and accuracy of registration and notification systems and by differences in definitions employed (for example, for stillbirth).

**Figure 1.3**  
**Perinatal Mortality Rate, 2002, for Selected EU Countries**



Source: *Population and Social Conditions, Demography, Perinatal Mortality Rate 2002*, Eurostat, October 2005.

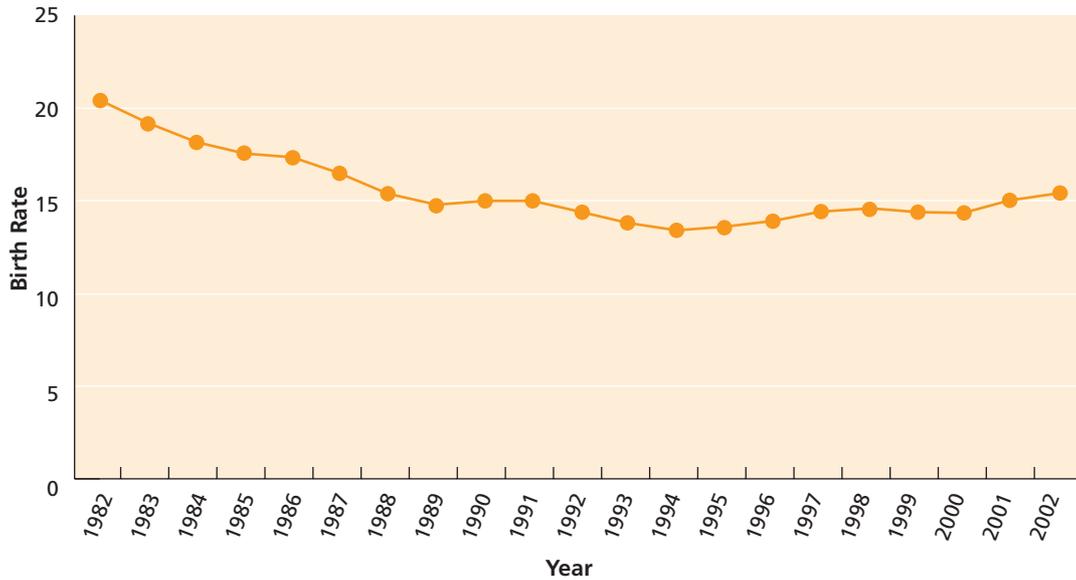
\*National figure compiled by the Central Statistics Office, Report on *Vital Statistics, 2002*.

\*\* Source: Office for National Statistics, *Health Statistics Quarterly 24*, Winter 2004.

## Birth Rate

Figures for births per 1,000 population over the past twenty years illustrate an overall reduction of 24 per cent in the crude birth rate since 1982. From 1982, the birth rate steadily declined from 20.4 per 1,000 population to 14.8 per 1,000 population in 1989. It then rose slightly in 1990 to 15.1 per 1,000 population and immediately began to decline again to reach an all time low of 13.5 per 1,000 population in 1994. Since 1995 the birth rate has gradually increased to 14.6 per 1,000 population in 1998, and has remained stable up until 2000 at 14.5 per 1,000 population. For 2001 the birth rate increased to 15.0 per 1,000 population and has increased again in 2002 to 15.5 per 1,000 population. This represents a return to the rates experienced in the early 1990s (Figure 1.4).

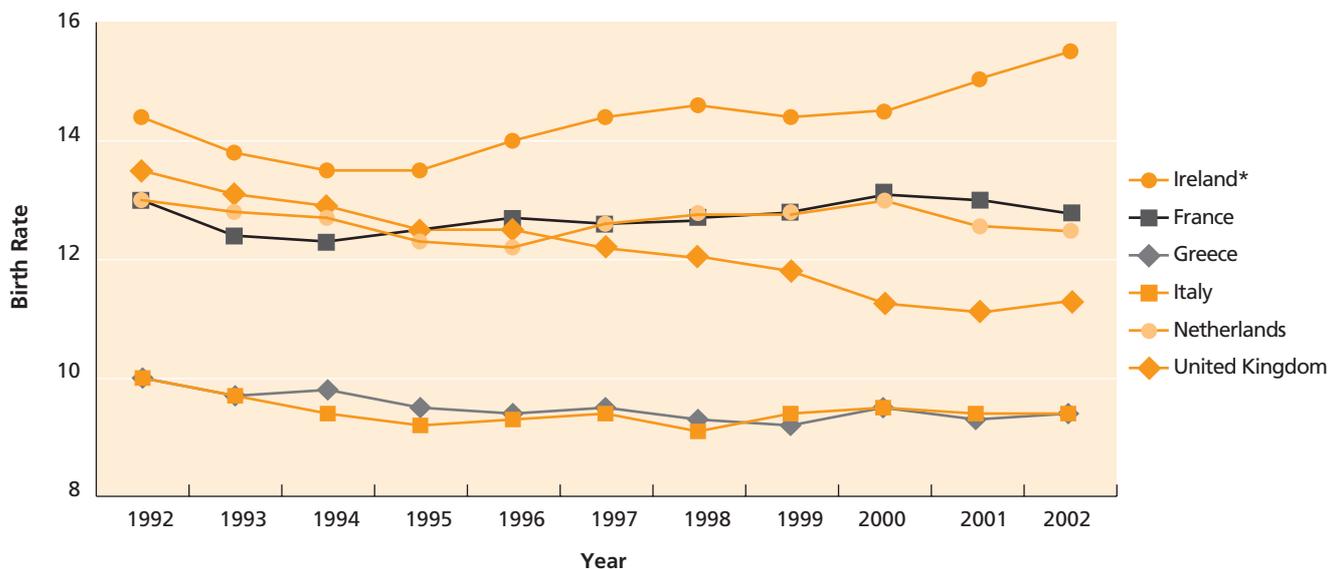
**Figure 1.4**  
**Birth Rate per 1,000 Population, Ireland: 1982-2002**



Source: Reports on *Vital Statistics, 1982-2002*, Central Statistics Office.

Figure 1.5 shows trends in birth rates for selected EU countries in the last decade. For the countries reviewed, Ireland has consistently had the highest birth rate over the period. While Ireland's birth rate moved closer to that of other European countries around 1995 we continue to have the highest birth rate of any of the twenty-five EU countries in 2002.

**Figure 1.5**  
**Trends in Birth Rates for Selected EU Countries: 1992-2002**

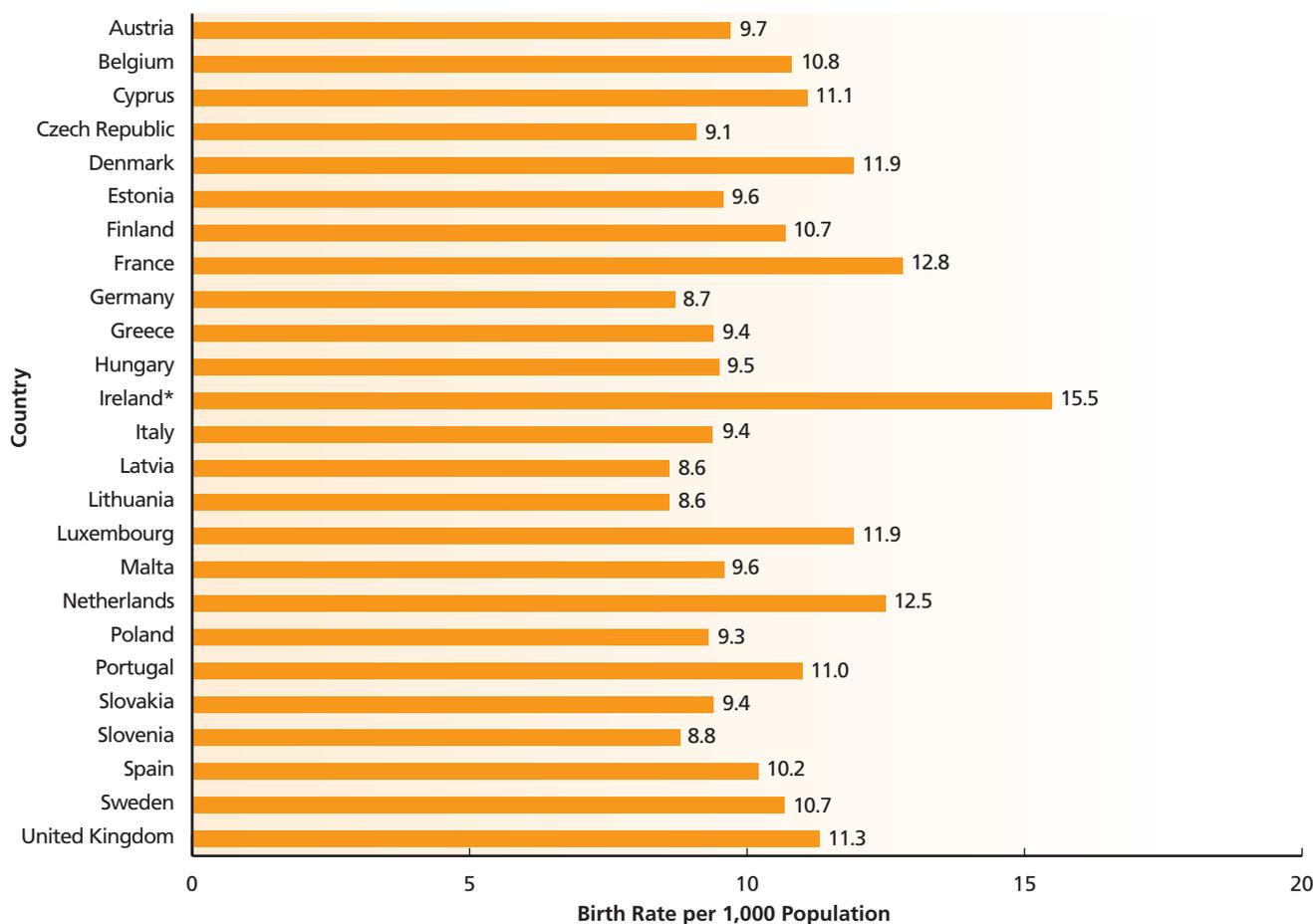


Source: *Population and Social Conditions, Demography, Crude Birth Rate, 1992-2002*, Eurostat, October 2005.

\*National figures. Report on *Vital Statistics, 2002*, Central Statistics Office.

Figure 1.6 displays the birth rate per 1,000 population for EU countries in 2002. Apart from Ireland (15.5), the country with the next highest birth rate is France (12.8) followed by the Netherlands (12.5), then followed by Luxembourg and Denmark (both 11.9). In 2002 Latvia and Lithuania had the lowest birth rate (8.6) followed by Germany (8.7) and Slovenia (8.8).

**Figure 1.6**  
**Birth Rate per 1,000 Population for EU Countries: 2002**



Source: *Population and Social Conditions, Demography, Crude Birth Rate, 2002*, Eurostat, October 2005.  
 \*National figures. Report on *Vital Statistics, 2002*, Central Statistics Office.

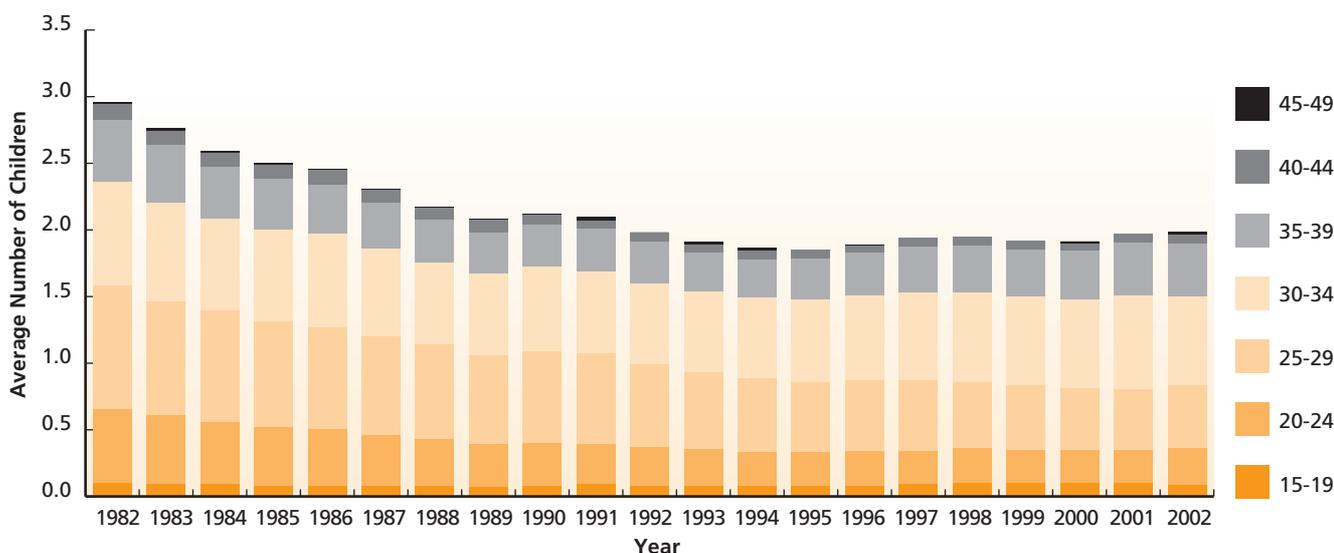
It should be noted that the crude birth rate could rise or fall depending on the numbers of women in the age cohorts from 15-49 years old. Changes in the crude birth rate often mask underlying trends in fertility. The next section is therefore concerned with changes in fertility over time.

## Fertility

Figure 1.7 shows the trend in the Total Period Fertility Rate (TPFR) in Ireland over the past twenty years. 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 from an average of 2.96 in 1982 to 1.98 in 2002, representing a 33 per cent decrease over 20 years.<sup>5</sup> During the latter half of the 1990s, the TPFR remained relatively stable with the rise in the crude birth rate being largely accounted for by the increasing numbers of women in the childbearing age groups. As in all twenty-five 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. While Ireland has experienced a fairly rapid fall in TPFR over recent years, Figure 1.8 shows that for 2002 Ireland continues to have the highest TPFR in the EU (1.97) followed by France (1.88 TPFR). For 2002 the Czech Republic and Slovakia have the lowest total period fertility rates (1.17 and 1.19 respectively) within the twenty-five EU countries.

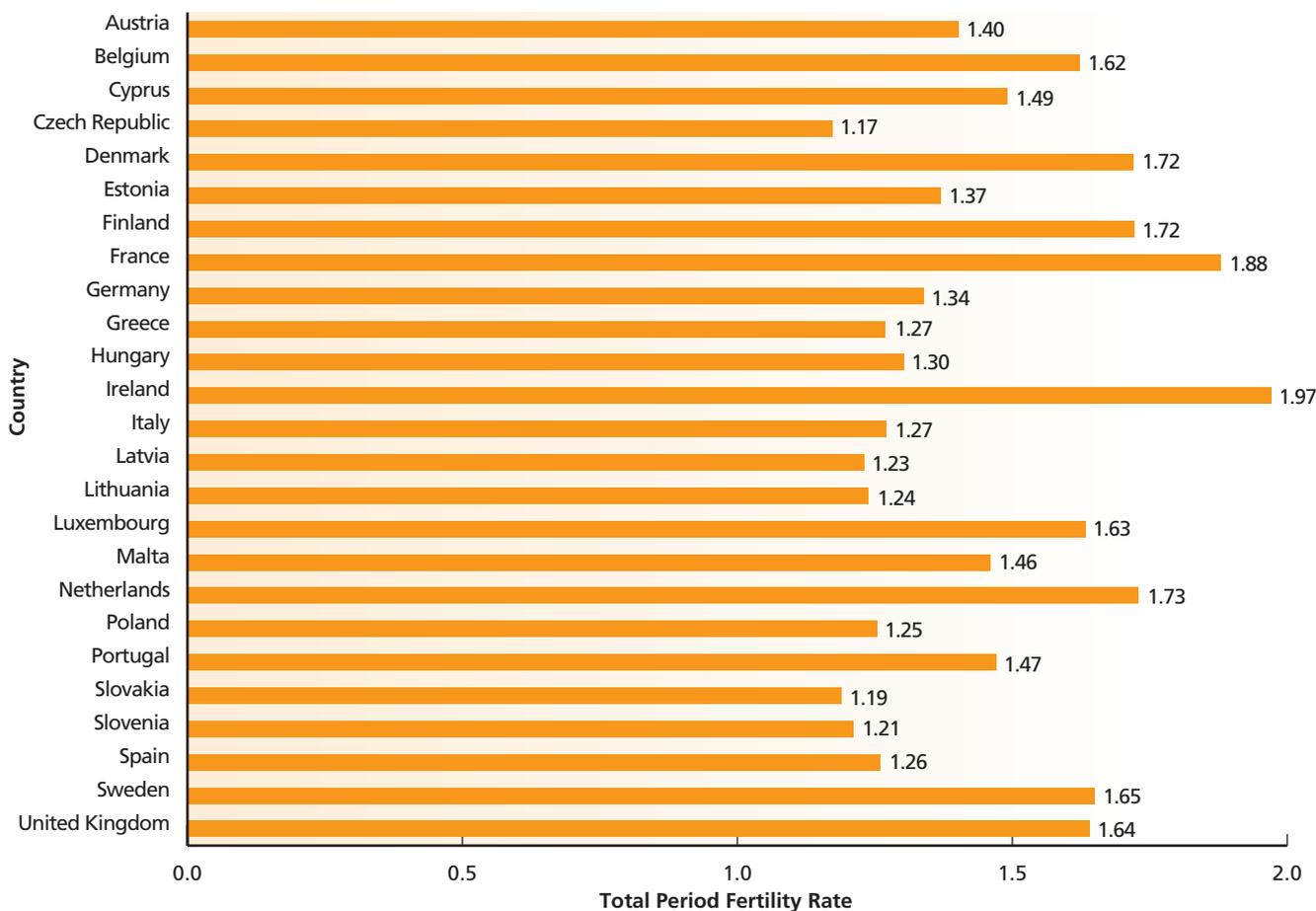
<sup>5</sup> Due to different population estimates used there can be slight differences in Total Fertility Rates. The CSO estimates a Total Period Fertility Rate for Ireland of 1.98 in 2002 while Eurostat estimates a Total Period Fertility Rate of 1.97 for Ireland.

**Figure 1.7**  
**Total Period Fertility Rates Subdivided by Age Groups, Ireland: 1982-2002**



Source: Report on *Vital Statistics, 2002*, Central Statistics Office.

**Figure 1.8**  
**Total Period Fertility Rate, 2002, for EU Countries**



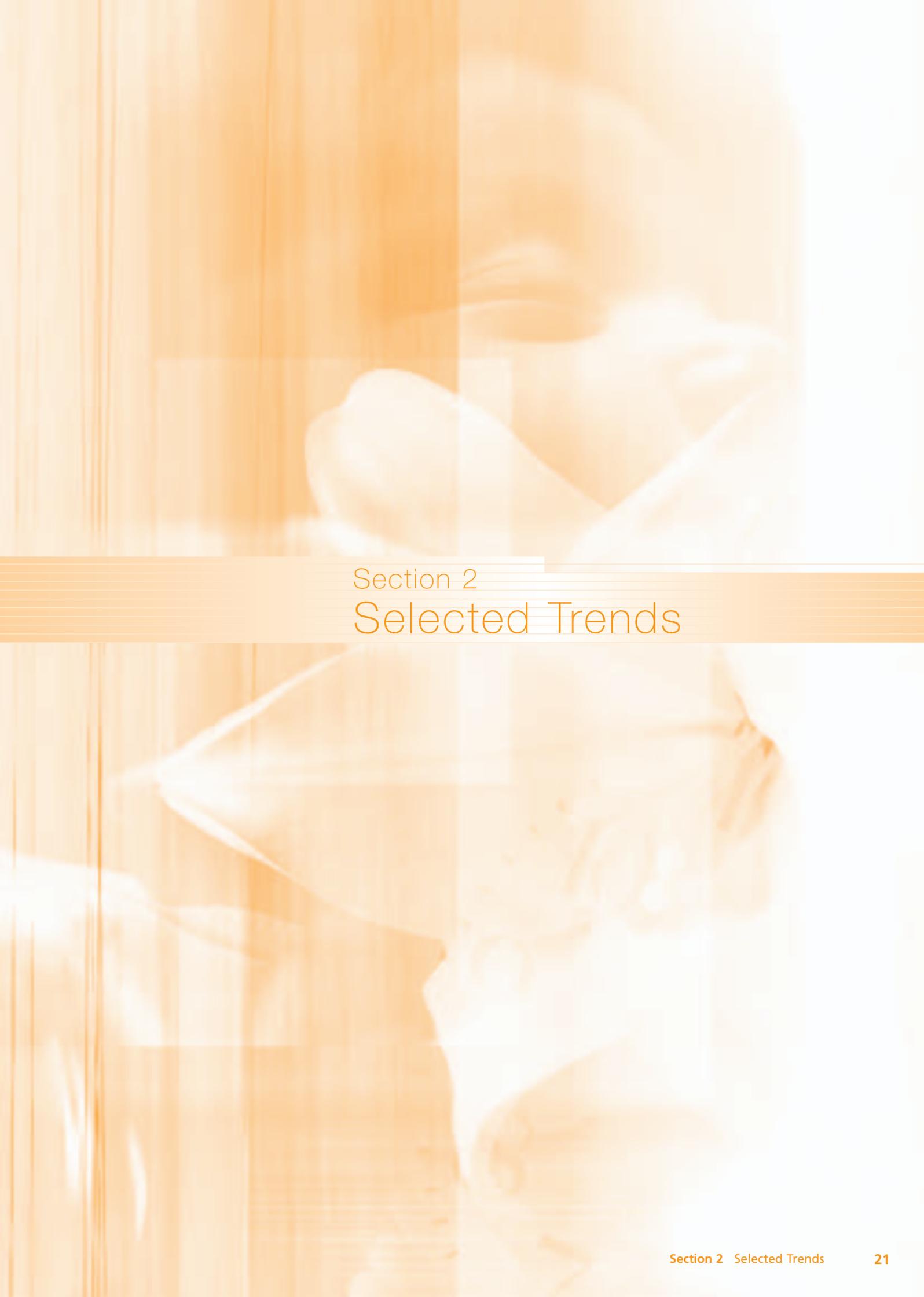
Source: *Population and Social Conditions, Demography*, Total Fertility Rate, 2002, Eurostat, October 2005.

Note:

- For comparative purposes all rates (including that for Ireland) for Figure 1.8 are from Eurostat, October 2005.

- Due to different population estimates used there can be slight differences in Total Period Fertility Rates compared with official CSO figures.





Section 2  
Selected Trends

## Section 2 Selected Trends

### Introduction

A general review of the data reported to the NPRS over the period 1991-1993 and 1999-2002 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 2.7 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 1991-1993 and 1999-2002.

## Section 2 Selected Trends

**Table 2.1**  
**Trends in Vital Events, 1991-1993 and 1999-2002**

Singleton and Multiple Births, Numbers and Rates for  
Live Births, Stillbirths, Early Neonatal Deaths and Perinatal Deaths

Vital Events		1991		1992		1993		Year		2000		2001		2002	
		Number	Rate												
Live Births:	Singleton	51,242	-	49,686	-	48,030	-	52,556	-	53,429	-	56,115	-	58,752	-
	Multiple	1,200	-	1,182	-	1,001	-	1,463	-	1,429	-	1,807	-	1,770	-
	Total	52,442	-	50,868	-	49,031	-	54,019	-	54,858	-	57,922	-	60,522	-
Stillbirths:	Singleton	284	5.5	285	5.7	272	5.6	274	5.2	288	5.4	307	5.4	319	5.4
	Multiple	18	14.8	16	31.4	11	10.9	14	9.5	20	13.8	32	17.4	24	13.4
	Total	302	5.7	301	5.9	283	5.7	288	5.3	308	5.6	339	5.8	343	5.6
Early Neonatal: Deaths	Singleton	195	3.8	173	3.5	131	2.7	130	2.5	153	2.9	136	2.4	149	2.5
	Multiple	24	20.0	19	16.1	16	16.0	27	18.5	23	16.1	24	13.3	21	11.9
	Total	219	4.2	192	3.8	147	3.0	157	2.9	176	3.2	160	2.8	170	2.8
Perinatal : Deaths	Singleton	479	9.3	458	9.2	403	8.3	404	7.6	441	8.2	443	7.9	468	7.9
	Multiple	42	34.5	35	29.2	27	26.7	41	27.8	43	29.7	56	30.5	45	25.1
	Total	521	9.9	493	9.6	430	8.7	445	8.2	484	8.8	499	8.6	513	8.4
Adjusted : Perinatal Deaths	Singleton	320	6.2	318	6.4	294	6.1	301	5.7	317	5.9	311	5.5	353	6.0
	Multiple	39	32.1	32	26.8	18	17.9	37	25.1	31	21.4	45	24.5	43	24.0
	Total	359	6.8	350	6.9	312	6.3	338	6.2	348	6.3	356	6.1	396	6.5

**Table 2.2**  
**Trends in Selected Statistics, 1991-1993 and 1999-2002**

Selected Statistics	1991	1992	1993	1999	2000	2001	2002
<b>General Characteristics</b>							
Average Age of Mother in years	29.11	29.18	29.30	30.06	30.18	30.27	30.41
Average Maternal Parity	1.43	1.37	1.33	1.10	1.09	1.07	1.06
Single Mothers (%)	15.54	16.50	18.14	29.71	30.09	30.14	30.01
Average Age of Single Mothers in years	22.36 <sup>E</sup>	22.41 <sup>E</sup>	22.83 <sup>E</sup>	24.74	24.98	25.36	25.72
Average Number of Previous Stillbirths per 1,000 maternities	17.22	19.82	23.18	14.03	13.06	13.57	12.58
Average weight in grams - Singleton Births	3,548.02	3,525.01	3,520.02	3,505.35	3,517.36	3,509.36	3,503.73
- Multiple Births	2,653.17	2,549.84	2,535.38	2,467.24	2,509.85	2,470.41	2,489.72
- Total Births	3,527.54	3,502.37	3,499.98	3,477.19	3,491.13	3,476.96	3,474.07
Low birthweight <2500 grams (%)							
- Singleton Births	3.43	3.24	3.39	3.80	3.84	3.84	3.76
- Multiple Births	38.38	41.38	42.23	47.71	43.35	46.46	44.18
- Total Births	4.23	4.13	4.18	4.99	4.87	5.17	4.94
Average Gestational Age at delivery in weeks	39.59	40.23	40.08	39.48	39.46	39.47	39.45
Average interval since last birth in years	3.68	3.69	3.75	3.82	3.84	3.81	3.85
<b>Perinatal Care</b>							
Hospital & GP combined antenatal care (%)	58.97	61.97	63.94	72.30	72.39	73.25	74.06
Average gestational age at time of first visit to doctor in weeks	11.80	11.63	11.58	15.54	15.41	15.28	15.40
Mother's average length of stay in days	5.24	5.12	5.15	4.71	4.54	4.38	4.09
Immunity to Rubella (%) <sup>1</sup>	89.40	89.02	89.36	89.63	87.76	86.84	86.49
Method of Delivery (%) <sup>2</sup> <i>Singleton Births</i>							
- Spontaneous	73.64	73.72	72.95	65.35	64.56	64.29	63.27
- Caesarean	11.30	11.78	12.57	19.69	20.55	21.05	21.61
- Forceps <sup>3</sup>	9.58	8.30	7.79	4.27	3.78	3.21	3.19
<i>Multiple Births</i>							
- Spontaneous	39.36	40.78	37.99	32.33	33.73	29.83	33.62
- Caesarean	30.70	29.69	34.95	47.23	50.31	52.74	49.49
- Forceps <sup>3</sup>	8.07	6.40	6.48	3.08	2.52	2.71	2.99
<i>Total Births</i>							
- Spontaneous	72.85	72.96	72.24	64.46	63.76	63.22	62.41
- Caesarean	11.75	12.19	13.03	20.43	21.33	22.04	22.43
- Forceps <sup>3</sup>	9.54	8.25	7.77	4.24	3.74	3.20	3.18
Booked Hospital Admissions (%)	98.94	98.99	98.46	96.49	96.48	98.17	97.58
Mother's breastfeeding (%)	31.85	33.85	33.89	36.16	38.41	39.13	41.14
<b>Perinatal Outcomes</b>							
Wigglesworth Classes (Rate) <sup>4</sup>							
- Macerated Stillbirths	2.96	3.48	3.10	3.46	4.04	3.67	4.23
- Congenital Anomalies	2.88	2.74	2.37	1.94	2.46	2.50	1.87
- Immaturity	1.44	1.48	1.20	1.39	1.07	1.27	1.23
- Asphyxia	2.39	1.74	1.91	1.93	1.38	1.49	1.43
- Specific Conditions	0.38	0.47	0.43	0.49	0.51	0.63	0.64
- Total	10.05	9.91	9.00	9.11	9.45	9.57	9.40
Infant's average length of stay in days							
- Singleton Births	4.41	4.44	4.52	4.17	4.08	3.89	3.68
- Multiple Births	7.83	9.56	11.27	10.68	10.73	11.45	10.16
- Total Births	4.47	4.54	4.59	4.34	4.25	4.12	3.87
Post-mortems for Early Neonatal Deaths (%)	66.12	73.78	66.67	44.37	39.41	33.55	42.07

<sup>1</sup> The proportion of Mother's recorded as having immunity to rubella has fallen to 86.5 per cent. This is most likely influenced by an increase in 'unknown' values for the field 'mother's immunity to rubella' in 2002. See Tables 4.9 and 4.18.

<sup>2</sup> These figures were not based on total maternities but on total births, to give a more accurate picture as each infant in a multiple can have a different method of delivery.

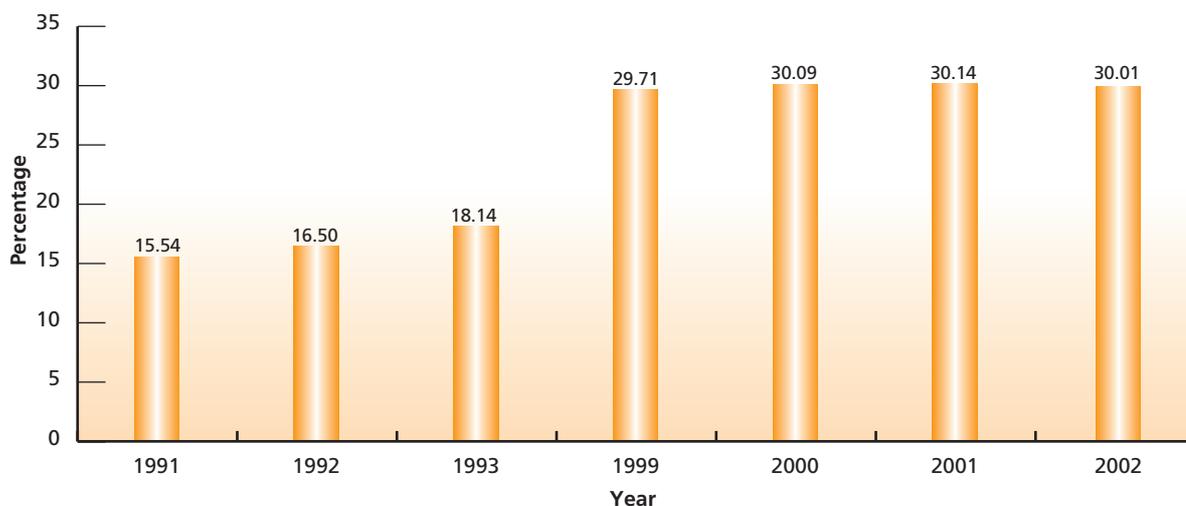
<sup>3</sup> Excludes breech deliveries.

<sup>4</sup> See Appendix F for details of method.

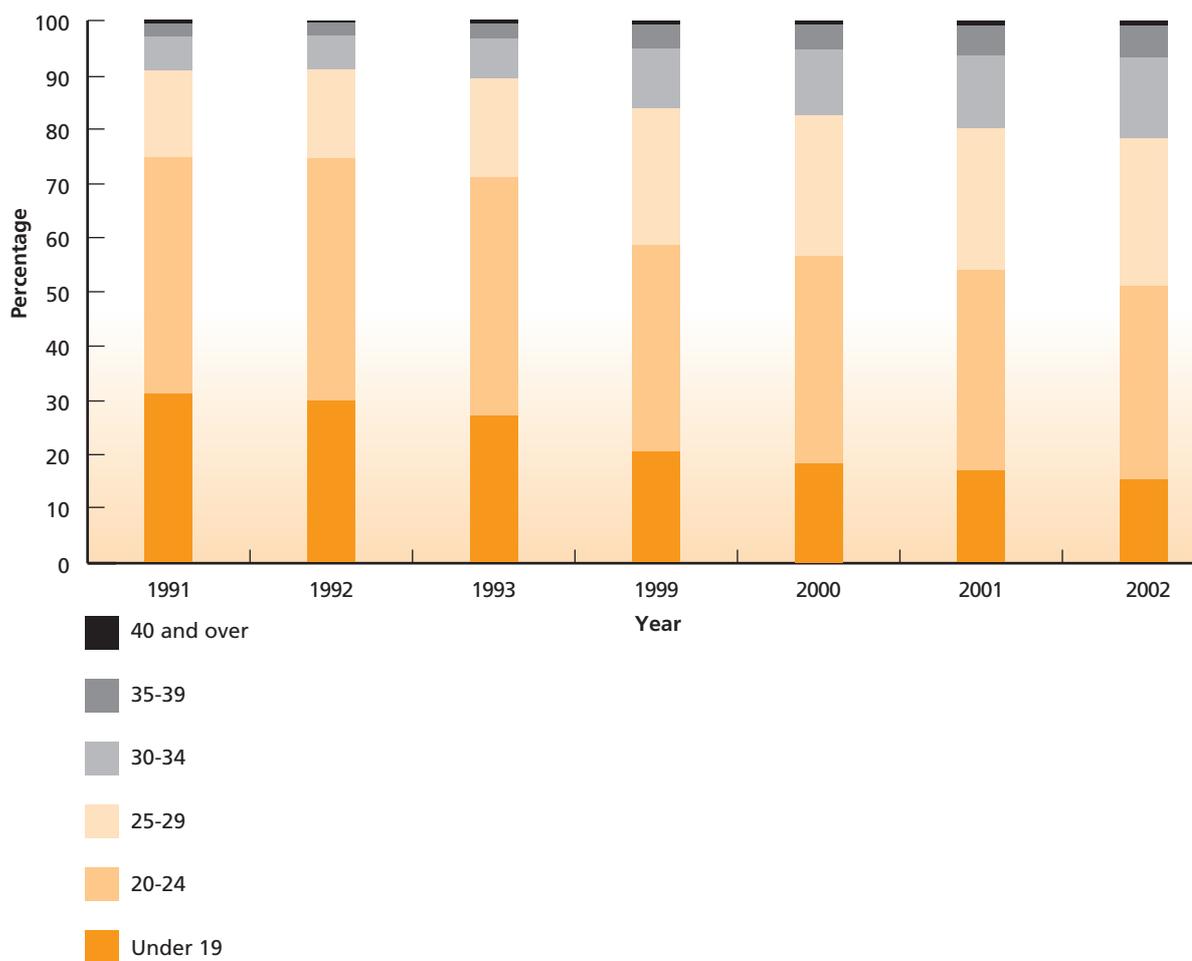
E= Estimate. Weighted averages from data in Appendix E, Table 3, Reports on *Perinatal Statistics, 1991-1993*, Department of Health.

Note: 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. Statistics relating to maternal characteristics are based on total maternities. Missing values are not included in the calculation of percentages.

**Figure 2.1**  
**Percentage of Births to Single Mothers, 1991-1993 and 1999-2002**

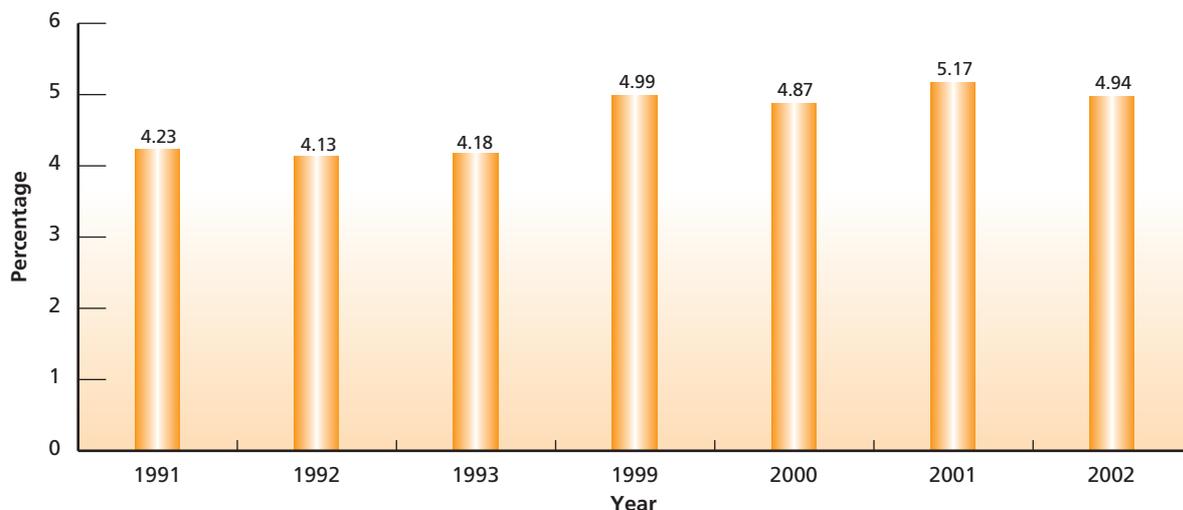


**Figure 2.2**  
**Percentage of Births to Single Mothers by Age of Mother, Singleton Births, 1991-1993 and 1999-2002**

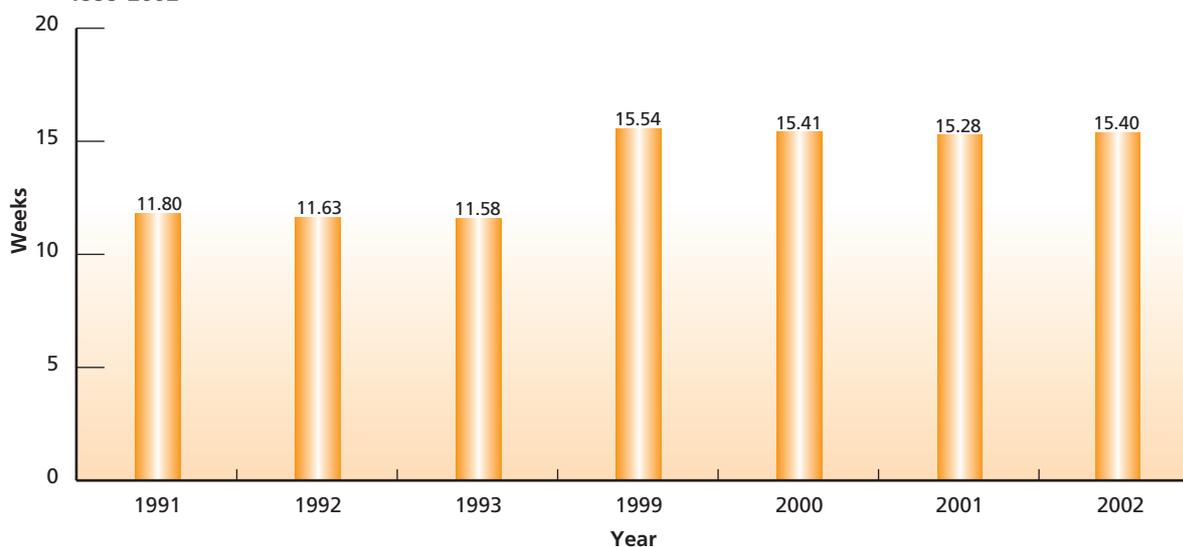


Source: Reports on *Perinatal Statistics, 1991-1993*, Department of Health. Appendix E, Table 3.  
 Reports on *Perinatal Statistics for 1999-2001*, The Economic & Social Research Institute. Appendix E, Tables E3.  
 Note: See Appendix E, Table E3 for data on 2002.

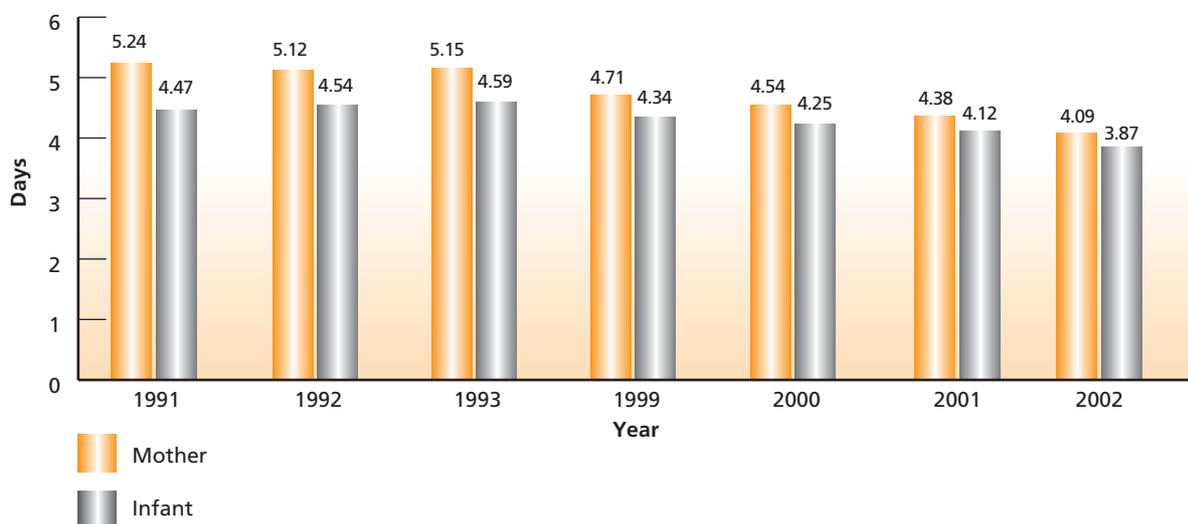
**Figure 2.3**  
**Percentage of Low Birthweight Babies, 1991-1993 and 1999-2002**



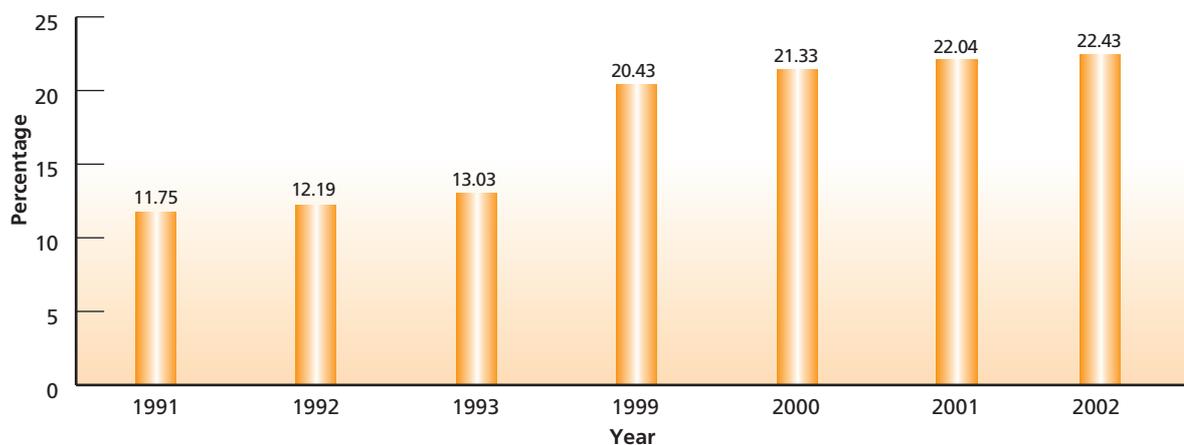
**Figure 2.4**  
**Average Gestational Age at Time of First Visit to Doctor or Hospital in Weeks, 1991-1993 and 1999-2002**



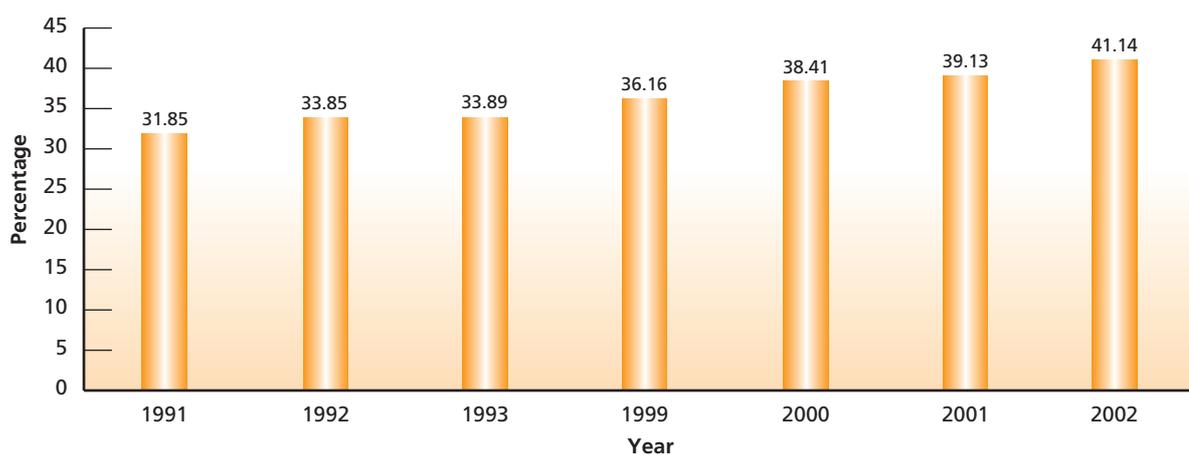
**Figure 2.5**  
**Average Length of Stay in Days for Mothers and Infants, 1991-1993 and 1999-2002**



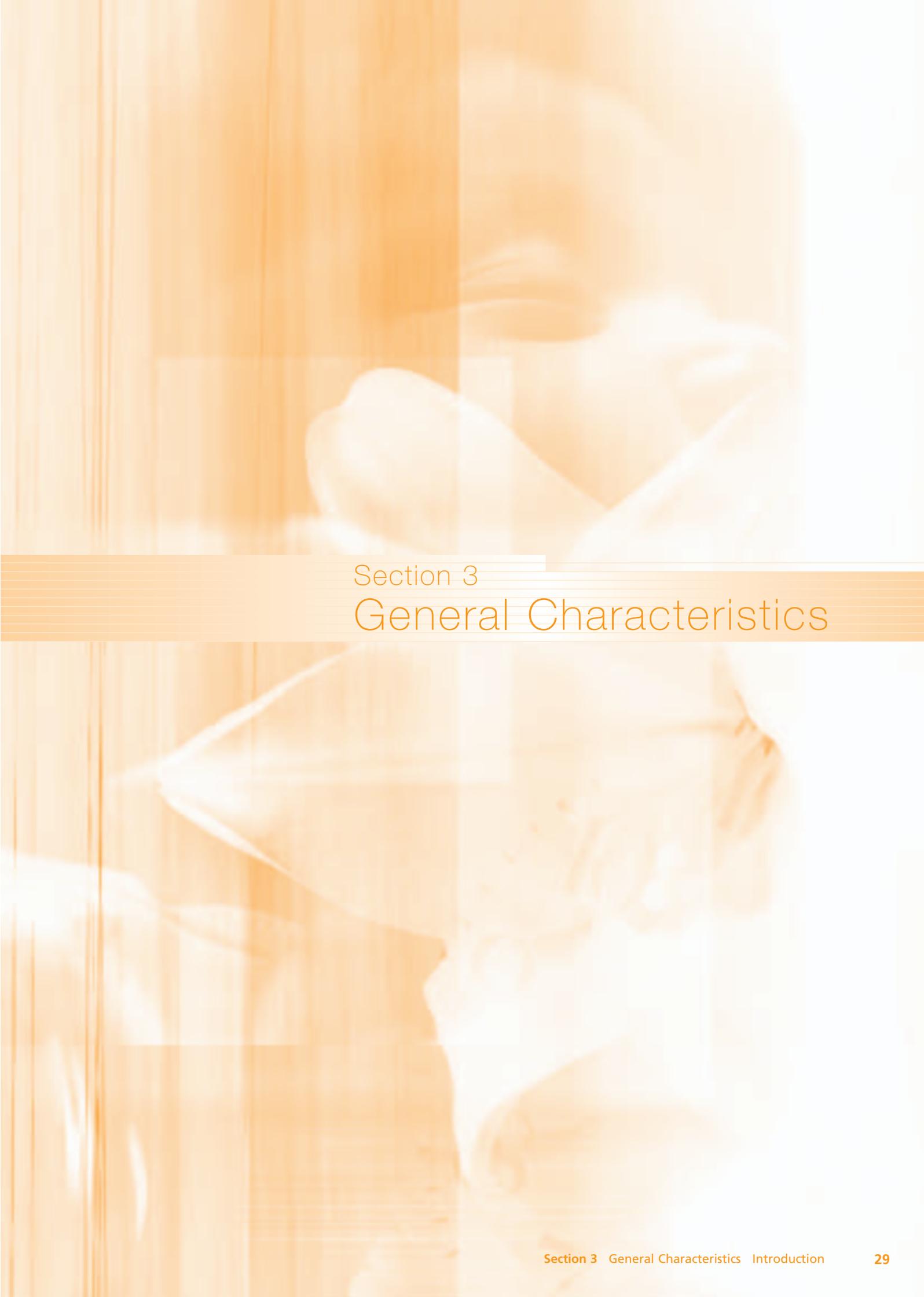
**Figure 2.6**  
**Caesarean Births as a Percentage of Total Births, 1991-1993 and 1999-2002**



**Figure 2.7**  
**Percentage of Mother's Breastfeeding, 1991-1993 and 1999-2002**







Section 3

# General Characteristics

This section presents a more detailed analysis of data reported to the NPRS for 2002. 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 and mother's occupation; birthweight; health board of residence.

Section 3  
General Characteristics

**Part 1 Singleton Births**



## Section 3 General Characteristics

### Part 1 Singleton Births

**Table 3.1**  
**Age of Mother**

Live Births, Stillbirths, Early Neonatal Deaths and Mortality Rates, 2002  
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	10	0.0	0	0.0	0	0.0	0.0	0.0
15-19	2,933	5.0	19	6.4	14	4.8	11.2	8.8
20-24	8,461	14.4	48	5.6	23	2.7	8.3	6.6
25-29	14,320	24.4	70	4.9	44	3.1	7.9	5.7
30-34	19,737	33.6	99	5.0	45	2.3	7.3	5.5
35-39	11,261	19.2	67	5.9	15	1.3	7.2	5.7
40-44	1,916	3.3	15	7.8	8	4.2	11.9	7.3
45 and over	66	0.1	0	0.0	0	0.0	0.0	0.0
Not Stated	48	0.1	1	20.4	0	0.0	20.4	20.4
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

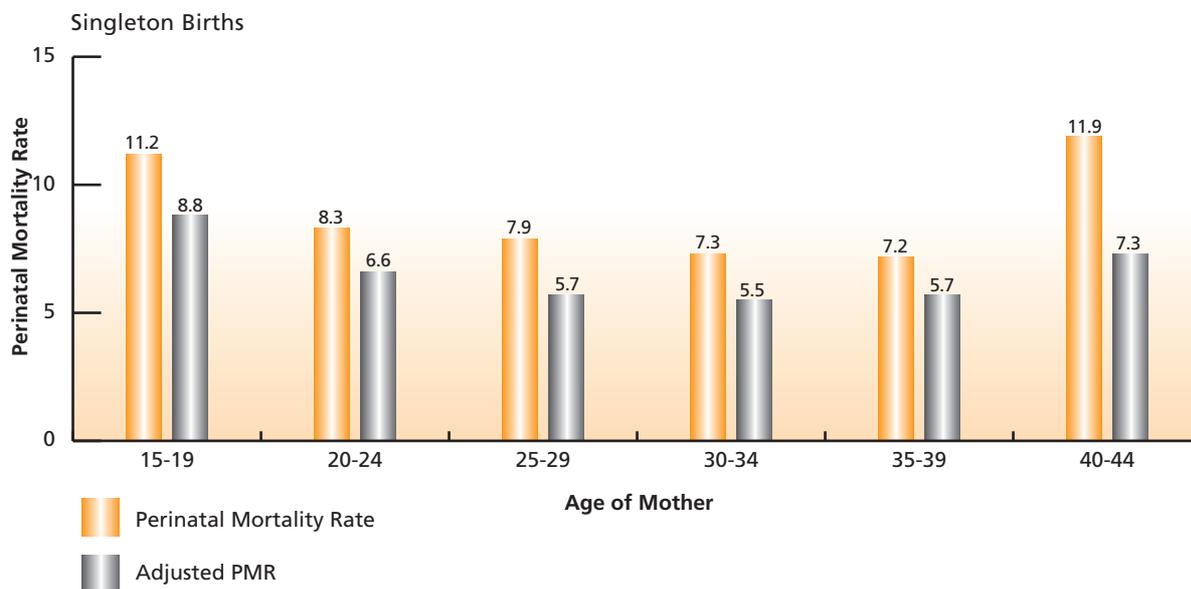
\*In this and subsequent tables, 'Adjusted PMR' gives a recalculated perinatal mortality rate which excludes all deaths due to congenital anomalies.

**Table 3.2**  
**Maternal Parity**

Live Births, Stillbirths, Early Neonatal Deaths and Mortality Rates, 2002  
Singleton Births

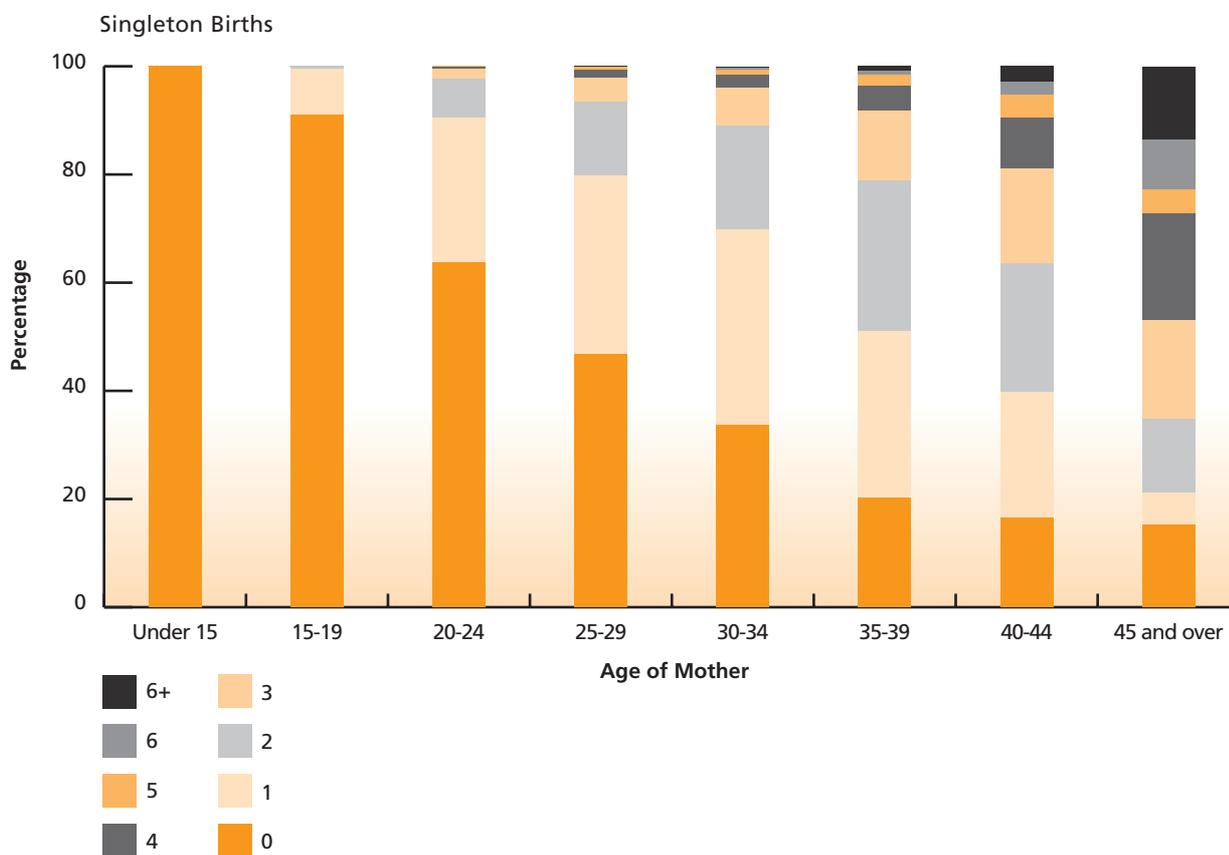
Maternal Parity	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0	24,019	40.9	138	5.7	55	2.3	8.0	6.4
1	18,323	31.2	91	4.9	43	2.3	7.3	5.2
2	9,996	17.0	49	4.9	26	2.6	7.5	5.6
3	3,961	6.7	19	4.8	12	3.0	7.8	5.0
4	1,449	2.5	11	7.5	7	4.8	12.3	10.3
5	530	0.9	6	11.2	3	5.7	16.8	13.1
6	239	0.4	4	16.5	1	4.2	20.6	16.5
More than 6	229	0.4	1	4.3	2	8.7	13.0	8.7
Not Stated	6	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

**Figure 3.1**  
**Perinatal Mortality Rates by Age of Mother, 2002**



Note: See Table 3.1 for data. The adjusted rate excludes all deaths due to congenital anomalies.

**Figure 3.2**  
**Percentage Distribution of Parity by Age of Mother, 2002**



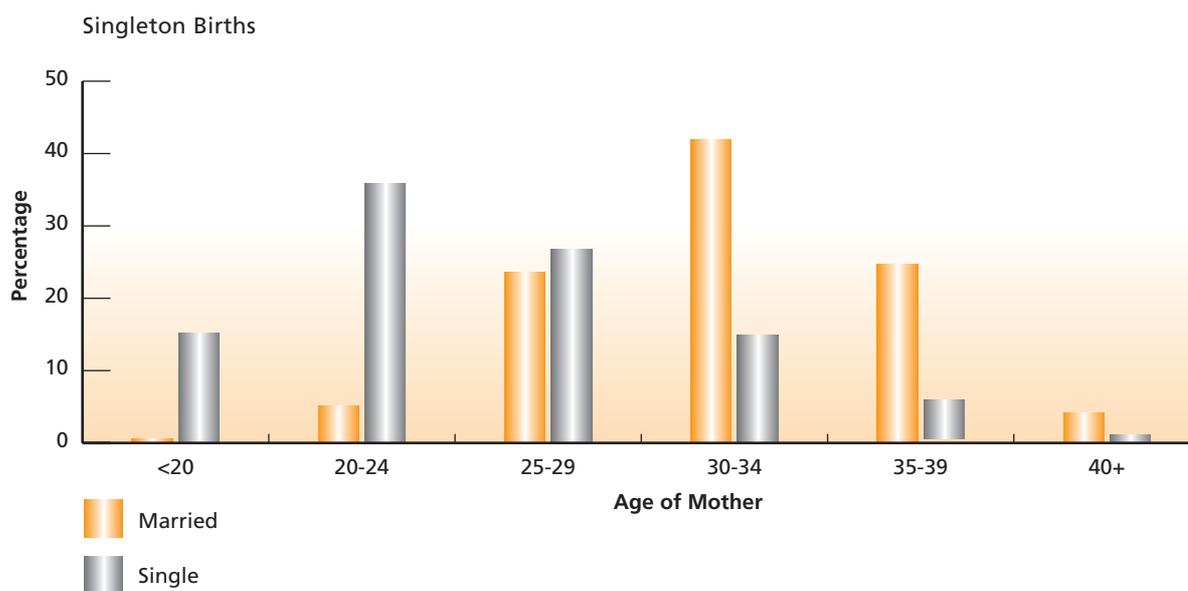
Note: See Appendix E, Table E1 for data. 'Not Stated' data are not included in the calculation of percentages.

**Table 3.3**  
**Marital Status**

Live Births, Stillbirths, Early Neonatal Deaths and Mortality Rates, 2002  
Singleton Births

Marital Status	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Married	40,110	68.3	199	4.9	88	2.2	7.1	5.3
Single	17,688	30.1	117	6.6	56	3.2	9.7	7.6
Widowed	79	0.1	0	0.0	0	0.0	0.0	0.0
Separated	707	1.2	2	2.8	4	5.7	8.5	4.2
Divorced	161	0.3	1	6.2	1	6.2	12.3	6.2
Not Stated	7	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

**Figure 3.3**  
**Mother's Age: Percentage Distribution of Singleton Births for Married and Single Status, 2002**



Note: See Appendix E, Table E3 for data. 'Not Stated' data are not included in the calculation of percentages.

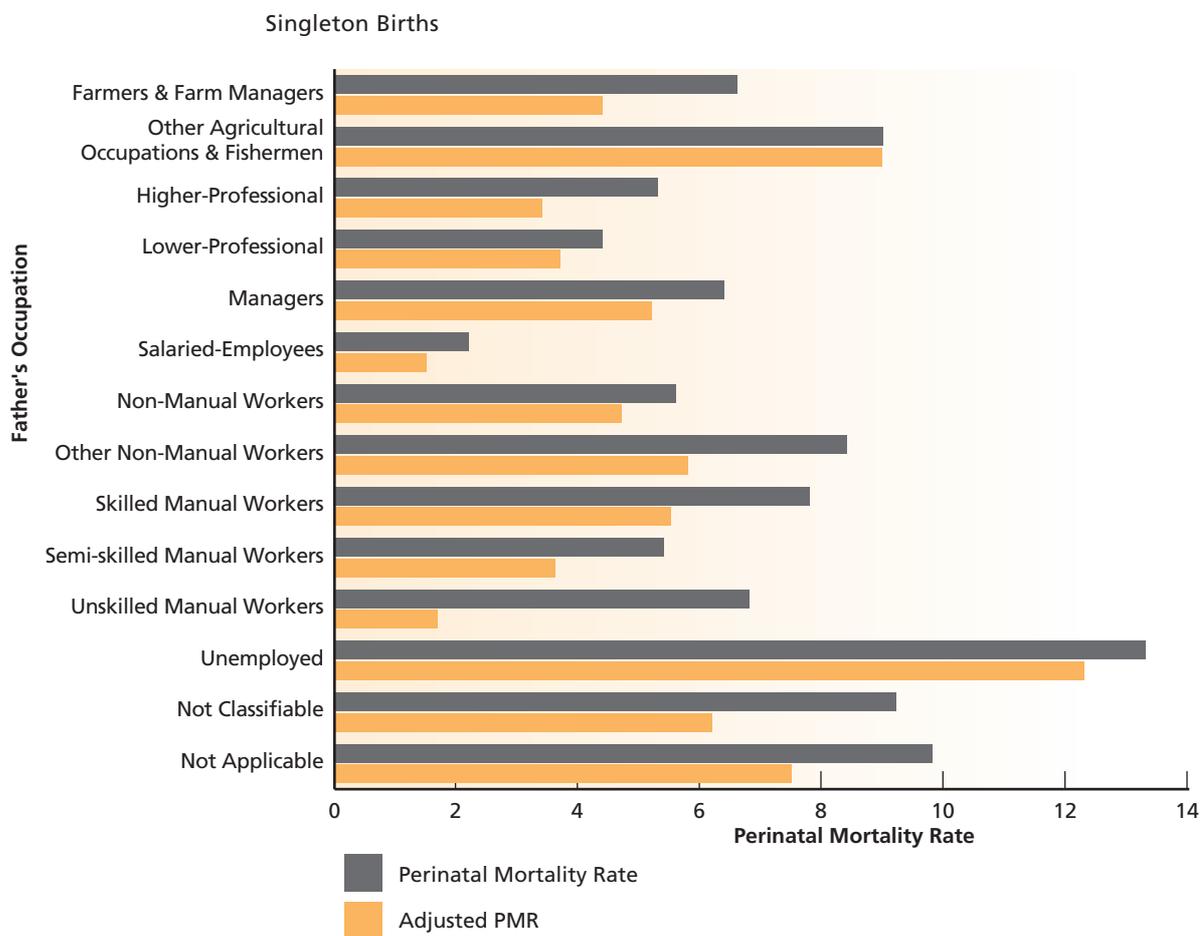
**Table 3.4**  
**Father's Occupation**

Live Births, Stillbirths, Early Neonatal Deaths and Mortality Rates, 2002  
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	2,709	4.6	12	4.4	6	2.2	6.6	4.4
Other Agricultural Occupations & Fishermen	553	0.9	3	5.4	2	3.6	9.0	9.0
Higher-Professional	3,786	6.4	14	3.7	6	1.6	5.3	3.4
Lower-Professional	2,729	4.6	10	3.7	2	0.7	4.4	3.7
Managers	4,836	8.2	21	4.3	10	2.1	6.4	5.2
Salaried-Employees	1,372	2.3	2	1.5	1	0.7	2.2	1.5
Non-Manual Workers	4,269	7.3	16	3.7	8	1.9	5.6	4.7
Other Non-Manual Workers	4,489	7.6	29	6.4	9	2.0	8.4	5.8
Skilled Manual Workers	10,276	17.5	50	4.8	31	3.0	7.8	5.5
Semi-skilled Manual Workers	2,745	4.7	13	4.7	2	0.7	5.4	3.6
Unskilled Manual Workers	585	1.0	2	3.4	2	3.4	6.8	1.7
Unemployed	1,933	3.3	16	8.2	10	5.2	13.3	12.3
Not Classifiable	645	1.1	4	6.2	2	3.1	9.2	6.2
Not Applicable	16,364	27.9	109	6.6	52	3.2	9.8	7.5
Not Stated	1,461	2.5	18	12.2	6	4.1	16.2	13.6
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

Note: In this table 'Not Classifiable' includes 67 Fathers whose occupation was recorded as 'Home Duties'. See Appendix B for a description of the classification system for occupations.

**Figure 3.4**  
**Perinatal Mortality Rates by Father's Occupation, 2002**



Note: See Table 3.4 for data. The adjusted rate excludes all deaths due to congenital anomalies.

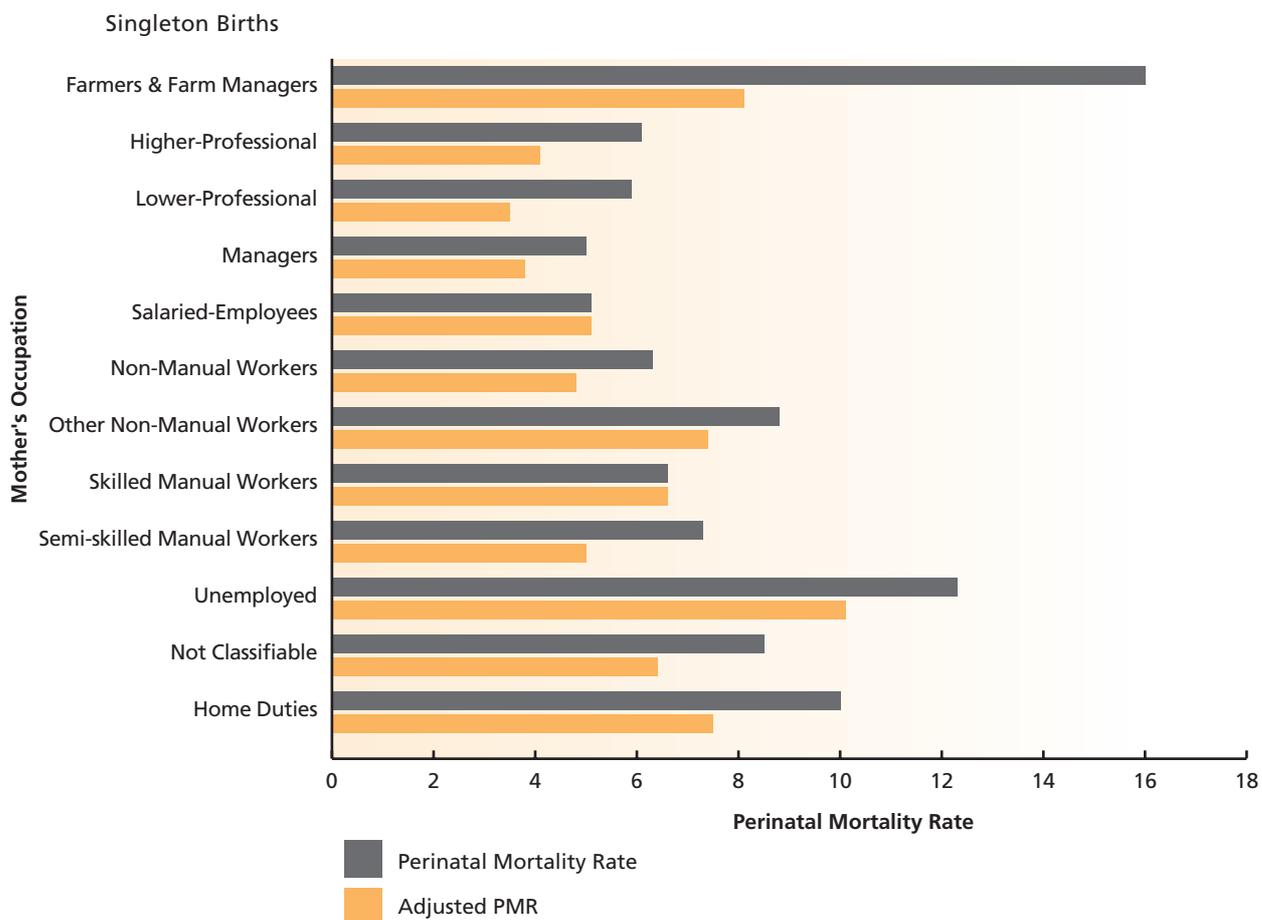
**Table 3.5**  
**Mother's Occupation**

Live Births, Stillbirths, Early Neonatal Deaths and Mortality Rates, 2002  
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	123	0.2	2	16.0	0	0.0	16.0	8.1
Other Agricultural Occupations & Fishermen	86	0.1	0	0.0	0	0.0	0.0	0.0
Higher-Professional	2,453	4.2	11	4.5	4	1.6	6.1	4.1
Lower-Professional Managers	7,128	12.1	26	3.6	16	2.2	5.9	3.5
Salaried-Employees	3,406	5.8	12	3.5	5	1.5	5.0	3.8
Non-Manual Workers	787	1.3	4	5.1	0	0.0	5.1	5.1
Other Non-Manual Workers	13,607	23.2	63	4.6	23	1.7	6.3	4.8
Skilled Manual Workers	5,773	9.8	34	5.9	17	2.9	8.8	7.4
Semi-skilled Manual Workers	750	1.3	3	4.0	2	2.7	6.6	6.6
Unskilled Manual Workers	2,990	5.1	15	5.0	7	2.3	7.3	5.0
Unemployed	7	0.0	1	125.0	0	0.0	125.0	125.0
Not Classifiable	2,575	4.4	17	6.6	15	5.8	12.3	10.1
Home Duties	1,873	3.2	10	5.3	6	3.2	8.5	6.4
Not Stated	16,259	27.7	114	7.0	49	3.0	10.0	7.5
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

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

**Figure 3.5**  
**Perinatal Mortality Rates by Mother's Occupation, 2002**



Note:

- See Table 3.5 for data. The adjusted rate excludes all deaths due to congenital anomalies.
- Categories where rates would be based on < 100 Livebirths 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, 2002

## Singleton Births

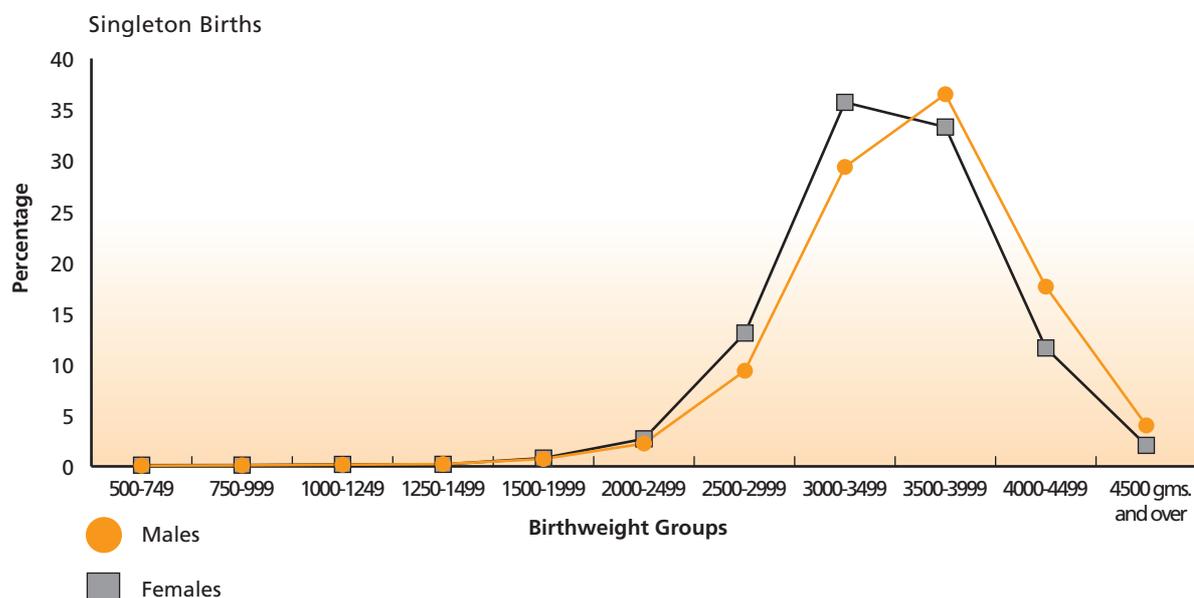
Previous Stillbirths	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0	34,089	98.1	176	5.1	89	2.6	7.7	5.6
1	577	1.7	5	8.6	5	8.7	17.2	10.4
2	42	0.1	0	0.0	0	0.0	0.0	0.0
3 and over	19	0.1	0	0.0	0	0.0	0.0	0.0
Not Stated	6	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>34,733</b>	<b>100.0</b>	<b>181</b>	<b>5.2</b>	<b>94</b>	<b>2.7</b>	<b>7.9</b>	<b>5.7</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, 2002

Birthweight (grams)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500-749	64	0.1	45	412.8	29	453.1	678.9	660.2
750-999	70	0.1	28	285.7	14	200.0	428.6	384.6
1000-1249	103	0.2	18	148.8	11	106.8	239.7	163.6
1250-1499	133	0.2	23	147.4	12	90.2	224.4	153.8
1500-1999	411	0.7	40	88.7	13	31.6	117.5	76.6
2000-2499	1,427	2.4	48	32.5	12	8.4	40.7	29.5
2500-2999	6,573	11.2	41	6.2	16	2.4	8.6	6.5
3000-3499	19,118	32.5	44	2.3	19	1.0	3.3	2.5
3500-3999	20,545	35.0	21	1.0	12	0.6	1.6	1.2
4000-4499	8,519	14.5	8	0.9	9	1.1	2.0	1.6
4500 and over	1,779	3.0	3	1.7	2	1.1	2.8	2.2
Not Stated	10	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

**Figure 3.6**  
**Percentage Distribution of Live Births across Birthweight Groups, 2002**



Note:

- See Tables 3.8 and 3.9 for data.
- This figure does not include 5 births 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, 2002

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	29	0.1	21	420.0	11	379.3	640.0	625.0
750-999	44	0.1	15	254.2	12	272.7	457.6	407.4
1000-1249	49	0.2	7	125.0	7	142.9	250.0	176.5
1250-1499	68	0.2	14	170.7	10	147.1	292.7	216.2
1500-1999	207	0.7	18	80.0	9	43.5	120.0	70.4
2000-2499	627	2.1	20	30.9	9	14.4	44.8	29.8
2500-2999	2,821	9.4	23	8.1	6	2.1	10.2	8.5
3000-3499	8,848	29.4	21	2.4	10	1.1	3.5	2.5
3500-3999	11,037	36.6	13	1.2	9	0.8	2.0	1.4
4000-4499	5,189	17.2	3	0.6	4	0.8	1.3	1.2
4500 and over	1,222	4.1	3	2.4	2	1.6	4.1	3.3
Not Stated	5	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>30,146</b>	<b>100.0</b>	<b>158</b>	<b>5.2</b>	<b>89</b>	<b>3.0</b>	<b>8.2</b>	<b>6.0</b>

Note: This table does not include 5 births for which the sex was recorded as 'indeterminate' or 'unknown'.

**Table 3.9**  
**Birthweight – Females**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

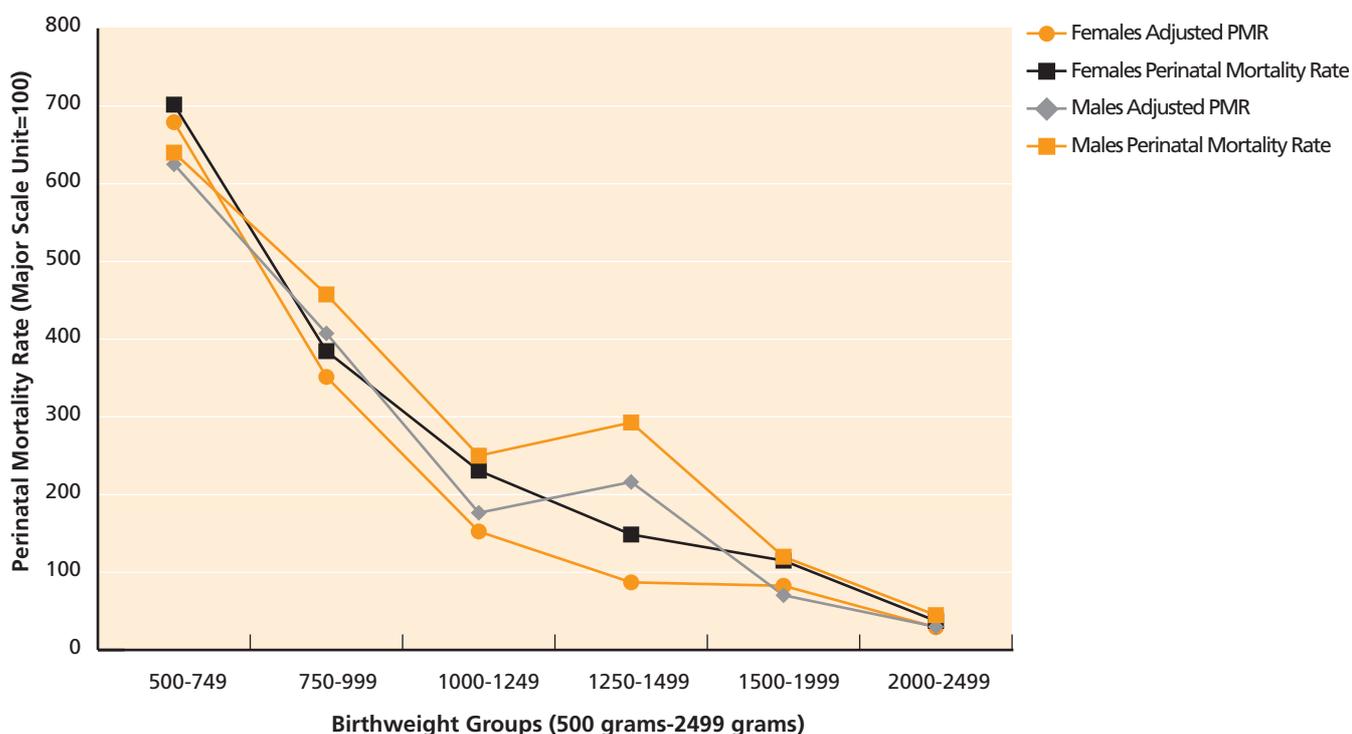
Singleton Births

Birthweight (grams)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500-749	35	0.1	22	386.0	18	514.3	701.8	679.2
750-999	26	0.1	13	333.3	2	76.9	384.6	351.4
1000-1249	54	0.2	11	169.2	4	74.1	230.8	152.5
1250-1499	65	0.2	9	121.6	2	30.8	148.6	87.0
1500-1999	204	0.7	22	97.3	4	19.6	115.0	82.6
2000-2499	800	2.8	28	33.8	3	3.8	37.4	29.2
2500-2999	3,751	13.1	18	4.8	10	2.7	7.4	5.1
3000-3499	10,269	35.9	23	2.2	8	0.8	3.0	2.5
3500-3999	9,507	33.2	8	0.8	3	0.3	1.2	1.1
4000-4499	3,330	11.6	5	1.5	5	1.5	3.0	2.4
4500 and over	557	1.9	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>28,603</b>	<b>100.0</b>	<b>159</b>	<b>5.5</b>	<b>59</b>	<b>2.1</b>	<b>7.6</b>	<b>5.9</b>

Note: This table does not include 5 births for which the sex was recorded as 'indeterminate' or 'unknown'.

**Figure 3.7 (A)**  
**Perinatal Mortality Rates for Males and Females by Birthweight (500g – 2499g), 2002**

Singleton Births

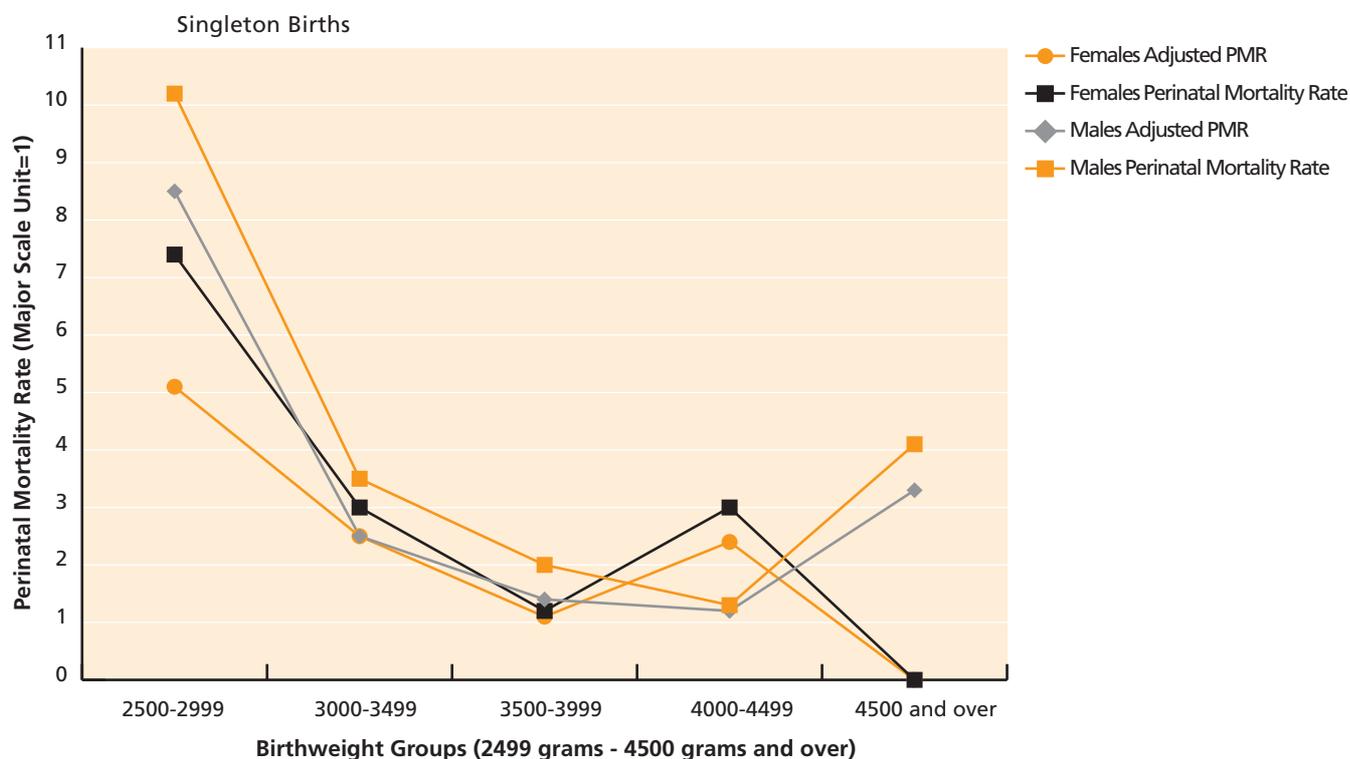


Note:

- See Tables 3.8 and 3.9 for data.

- This figure does not include 5 births for which the sex was recorded as 'indeterminate' or 'unknown'.

**Figure 3.7 (B)**  
**Perinatal Mortality Rates for Males and Females by Birthweight (2500g – 4500g and over), 2002**



Note:  
 - See Tables 3.8 and 3.9 for data.  
 - This figure does not include 5 births for which the sex was recorded as 'indeterminate' or 'unknown'.

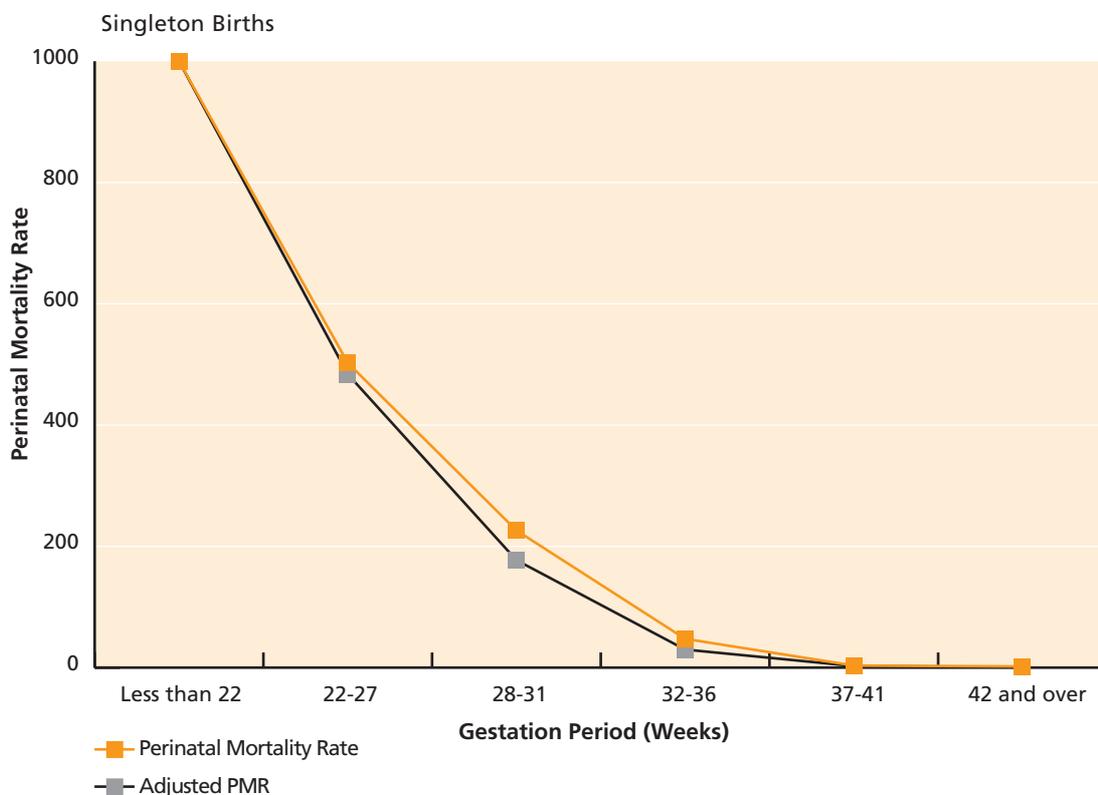
**Table 3.10**  
**Gestation Period at Delivery**

Live Births, Stillbirths, Early Neonatal Deaths  
 and Mortality Rates, 2002

Singleton Births

Gestation Period (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	0	0.0	1	1000.0	1000.0	1000.0
22-27	139	0.2	54	279.8	43	309.4	502.6	483.9
28-31	283	0.5	53	157.7	23	81.3	226.2	177.2
32-36	2,113	3.6	75	34.3	29	13.7	47.5	29.8
37-41	53,090	90.4	133	2.5	50	0.9	3.4	2.6
42 and over	3,115	5.3	3	1.0	3	1.0	1.9	0.6
Not Stated	11	0.0	1	83.3	0	0.0	83.3	83.3
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

**Figure 3.8**  
Perinatal Mortality Rates by Gestation Period, 2002



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, 2002

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	24,019	40.9	138	5.7	55	2.3	8.0	6.4
1 year or less	512	0.9	8	15.4	3	5.9	21.2	21.2
>1 year to 2 years	7,994	13.6	31	3.9	24	3.0	6.9	4.7
>2 years to 3 years	8,623	14.7	34	3.9	15	1.7	5.7	3.9
>3 years to 4 years	5,614	9.6	29	5.1	14	2.5	7.6	5.9
>4 years to 5 years	3,698	6.3	24	6.4	9	2.4	8.9	6.5
>5 years to 6 years	2,359	4.0	13	5.5	5	2.1	7.6	5.5
More than 6 years	5,364	9.1	38	7.0	19	3.5	10.6	7.1
Number of Previous Births Unknown	2	0.0	0	0.0	0	0.0	0.0	0.0
Not Stated	567	1.0	4	7.0	5	8.8	15.8	14.0
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

**Table 3.12**  
**Month of Birth**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	4,614	7.9	25	5.4	17	3.7	9.1	6.3
February	4,475	7.6	29	6.4	9	2.0	8.4	6.7
March	4,900	8.3	31	6.3	10	2.0	8.3	6.3
April	4,772	8.1	18	3.8	14	2.9	6.7	4.8
May	4,956	8.4	32	6.4	12	2.4	8.8	7.0
June	4,830	8.2	24	4.9	14	2.9	7.8	5.4
July	5,083	8.7	27	5.3	12	2.4	7.6	5.9
August	5,081	8.6	29	5.7	16	3.1	8.8	7.3
September	5,187	8.8	17	3.3	10	1.9	5.2	4.2
October	5,191	8.8	28	5.4	13	2.5	7.9	4.8
November	4,717	8.0	30	6.3	12	2.5	8.8	6.1
December	4,946	8.4	29	5.8	10	2.0	7.8	7.2
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

**Table 3.13**  
**Mother's Health Board of Residence**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

Singleton Births

Mother's Health Board of Residence	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Eastern	22,146	37.7	123	5.5	59	2.7	8.2	6.2
Midland	3,572	6.1	29	8.1	7	2.0	10.0	7.5
Mid-Western	4,799	8.2	15	3.1	12	2.5	5.6	4.2
North-Eastern	5,323	9.1	27	5.0	17	3.2	8.2	6.2
North-Western	2,958	5.0	12	4.0	8	2.7	6.7	5.1
South-Eastern	6,560	11.2	36	5.5	14	2.1	7.6	5.8
Southern	8,241	14.0	47	5.7	15	1.8	7.5	5.7
Western	5,107	8.7	30	5.8	17	3.3	9.1	7.0
Other	38	0.1	0	0.0	0	0.0	0.0	0.0
Unknown	8	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

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



Section 3  
General Characteristics

**Part 2 Multiple Births**



## Section 3 General Characteristics

### Part 2 Multiple Births

**Table 3.14**  
**Maternities, Twins, Triplets, Quadruplets and Twinning Rate for 2002**

Births*	Maternities	Sets of Twins	Sets of Triplets	Sets of Quadruplets	Twinning Rate
60,865	59,956	864	18	3	14.4

\* Includes stillbirths.

Note: In 2002 there were 874 sets of Twins notified to the NPRS. Of these 20 births weighed <500 grams. In accordance with the WHO guidelines the National Perinatal Dataset includes only births weighing 500 grams or more. Therefore, for the purposes of this report, the number of *complete* sets of Twins is 864.

**Table 3.15**  
**Age of Mother**

Live Births, Stillbirths, Early Neonatal Deaths  
 and Mortality Rates, 2002

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	40	2.3	0	0.0	0	0.0	0.0	0.0
20-24	161	9.1	0	0.0	3	18.6	18.6	12.5
25-29	349	19.7	9	25.1	4	11.5	36.3	36.3
30-34	708	40.0	7	9.8	6	8.5	18.2	16.8
35-39	439	24.8	7	15.7	8	18.2	33.6	33.6
40-44	69	3.9	1	14.3	0	0.0	14.3	14.3
45 and over	2	0.1	0	0.0	0	0.0	0.0	0.0
Not Stated	2	0.1	0	0.0	0	0.0	0.0	0.0
Total	1,770	100.0	24	13.4	21	11.9	25.1	24.0

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

**Table 3.16**  
**Maternal Parity**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	672	38.0	8	11.8	9	13.4	25.0	22.1
1	553	31.2	8	14.3	7	12.7	26.7	26.7
2	350	19.8	2	5.7	3	8.6	14.2	14.2
3	118	6.7	3	24.8	2	16.9	41.3	41.3
4	41	2.3	3	68.2	0	0.0	68.2	68.2
5	19	1.1	0	0.0	0	0.0	0.0	0.0
6	4	0.2	0	0.0	0	0.0	0.0	0.0
More than 6	13	0.7	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

**Table 3.17**  
**Marital Status**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

Multiple Births

Marital Status	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Married	1,358	76.7	21	15.2	15	11.0	26.1	24.7
Single	374	21.1	2	5.3	6	16.0	21.3	21.3
Separated	38	2.1	1	25.6	0	0.0	25.6	25.6
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

**Table 3.18**  
**Father's Occupation**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	84	4.7	1	11.8	0	0.0	11.8	11.8
Other Agricultural Occupations & Fishermen	26	1.5	0	0.0	0	0.0	0.0	0.0
Higher-Professional	106	6.0	5	45.0	3	28.3	72.1	72.1
Lower-Professional	83	4.7	1	11.9	2	24.1	35.7	35.7
Managers	175	9.9	1	5.7	1	5.7	11.4	11.4
Salaried-Employees	41	2.3	0	0.0	0	0.0	0.0	0.0
Non-Manual Workers	156	8.8	2	12.7	3	19.2	31.6	25.5
Other Non-Manual Workers	149	8.4	0	0.0	1	6.7	6.7	6.7
Skilled Manual Workers	353	19.9	2	5.6	5	14.2	19.7	16.9
Semi-skilled Manual Workers	82	4.6	2	23.8	1	12.2	35.7	35.7
Unskilled Manual Workers	29	1.6	2	64.5	0	0.0	64.5	64.5
Unemployed	52	2.9	4	71.4	1	19.2	89.3	89.3
Not Classifiable	19	1.1	0	0.0	0	0.0	0.0	0.0
Not Applicable	363	20.5	3	8.2	4	11.0	19.1	19.1
Not Stated	52	2.9	1	18.9	0	0.0	18.9	18.9
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

Note: In this table 'Not Classifiable' includes 2 Fathers whose occupation was recorded as 'Home Duties'. See Appendix B for a description of the classification system for occupations.

**Table 3.19**  
**Mother's Occupation**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	2	0.1	0	0.0	0	0.0	0.0	0.0
Other Agricultural Occupations & Fishermen	4	0.2	0	0.0	0	0.0	0.0	0.0
Higher-Professional	89	5.0	2	22.0	2	22.5	44.0	44.0
Lower-Professional Managers	231	13.1	5	21.2	5	21.6	42.4	38.3
Salaried-Employees	121	6.8	0	0.0	1	8.3	8.3	8.3
Non-Manual Workers	29	1.6	0	0.0	0	0.0	0.0	0.0
Other Non-Manual Workers	374	21.1	5	13.2	7	18.7	31.7	29.1
Skilled Manual Workers	165	9.3	1	6.0	1	6.1	12.0	12.0
Semi-skilled Manual Workers	20	1.1	0	0.0	0	0.0	0.0	0.0
Unemployed	74	4.2	1	13.3	0	0.0	13.3	13.3
Not Classifiable	48	2.7	2	40.0	2	41.7	80.0	80.0
Home Duties	39	2.2	0	0.0	0	0.0	0.0	0.0
Not Stated	542	30.6	8	14.5	3	5.5	20.0	20.0
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

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

**Table 3.20**  
**Number of Previous Stillbirths**  
 (for women having second and subsequent births)

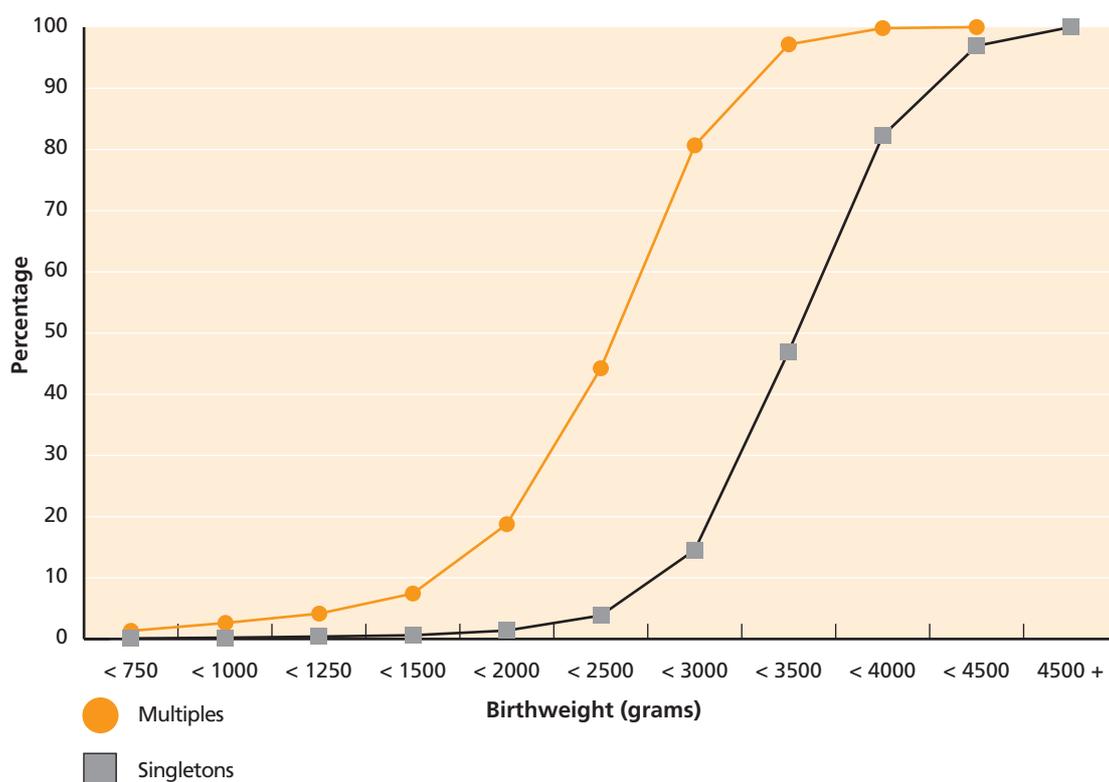
Live Births, Stillbirths, Early Neonatal Deaths  
 and Mortality Rates, 2002

Multiple Births

Previous Stillbirths	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Rate Mortality	Adjusted PMR
0	1,077	98.1	16	14.6	11	10.2	24.7	24.7
1	16	1.5	0	0.0	1	62.5	62.5	62.5
2	5	0.5	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,098</b>	<b>100.0</b>	<b>16</b>	<b>14.4</b>	<b>12</b>	<b>10.9</b>	<b>25.1</b>	<b>25.1</b>

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 Live Births, 2002**



Note: Data are compiled from Tables 3.7 and 3.21.

**Table 3.21**  
**Birthweight – All Multiple Births**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

Birthweight (grams)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500-749	16	0.9	9	360.0	5	312.5	560.0	560.0
750-999	28	1.6	1	34.5	5	178.6	206.9	206.9
1000-1249	28	1.6	3	96.8	4	142.9	225.8	225.8
1250-1499	57	3.2	3	50.0	2	35.1	83.3	51.7
1500-1999	203	11.5	4	19.3	2	9.9	29.0	29.0
2000-2499	450	25.4	1	2.2	1	2.2	4.4	4.4
2500-2999	650	36.7	1	1.5	0	0.0	1.5	1.5
3000-3499	287	16.2	2	6.9	2	7.0	13.8	13.8
3500-3999	46	2.6	0	0.0	0	0.0	0.0	0.0
4000-4499	5	0.3	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

**Table 3.22**  
**Birthweight – Males**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	12	1.3	3	200.0	3	250.0	400.0	400.0
750-999	11	1.2	1	83.3	2	181.8	250.0	250.0
1000-1249	15	1.6	0	0.0	2	133.3	133.3	133.3
1250-1499	29	3.2	3	93.8	1	34.5	125.0	96.8
1500-1999	94	10.3	0	0.0	2	21.3	21.3	21.3
2000-2499	223	24.3	1	4.5	1	4.5	8.9	8.9
2500-2999	345	37.6	1	2.9	0	0.0	2.9	2.9
3000-3499	156	17.0	2	12.7	1	6.4	19.0	19.0
3500-3999	29	3.2	0	0.0	0	0.0	0.0	0.0
4000-4499	3	0.3	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>917</b>	<b>100.0</b>	<b>11</b>	<b>11.9</b>	<b>12</b>	<b>13.1</b>	<b>24.8</b>	<b>23.7</b>

**Table 3.23**  
**Birthweight – Females**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	4	0.5	6	600.0	2	500.0	800.0	800.0
750-999	17	2.0	0	0.0	3	176.5	176.5	176.5
1000-1249	13	1.5	3	187.5	2	153.8	312.5	312.5
1250-1499	28	3.3	0	0.0	1	35.7	35.7	0.0
1500-1999	109	12.8	4	35.4	0	0.0	35.4	35.4
2000-2499	227	26.6	0	0.0	0	0.0	0.0	0.0
2500-2999	305	35.8	0	0.0	0	0.0	0.0	0.0
3000-3499	131	15.4	0	0.0	1	7.6	7.6	7.6
3500-3999	17	2.0	0	0.0	0	0.0	0.0	0.0
4000-4499	2	0.2	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>853</b>	<b>100.0</b>	<b>13</b>	<b>15.0</b>	<b>9</b>	<b>10.6</b>	<b>25.4</b>	<b>24.3</b>

**Table 3.24**  
**Gestation Period at Delivery**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

Multiple Births

Gestation Period (weeks)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Less than 22	0	0.0	2	1000.0	0	0.0	1000.0	1000.0
22-27	38	2.1	3	73.2	11	289.5	341.5	341.5
28-31	102	5.8	6	55.6	6	58.8	111.1	102.8
32-36	640	36.2	5	7.8	2	3.1	10.9	9.3
37-41	990	55.9	8	8.0	2	2.0	10.0	10.0
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

**Table 3.25**  
**Interval in Years Since Last Birth**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	672	38.0	8	11.8	9	13.4	25.0	22.1
1 year or less	25	1.4	3	107.1	0	0.0	107.1	107.1
>1 year to 2 years	211	11.9	4	18.6	3	14.2	32.6	32.6
>2 years to 3 years	280	15.8	2	7.1	0	0.0	7.1	7.1
>3 years to 4 years	205	11.6	0	0.0	2	9.8	9.8	9.8
>4 years to 5 years	105	5.9	3	27.8	2	19.0	46.3	46.3
>5 years to 6 years	73	4.1	1	13.5	3	41.1	54.1	54.1
More than 6 years	176	9.9	3	16.8	2	11.4	27.9	27.9
Not Stated	23	1.3	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

**Table 3.26**  
**Month of Birth**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	155	8.8	5	31.3	0	0.0	31.3	31.3
February	124	7.0	1	8.0	1	8.1	16.0	16.0
March	167	9.4	2	11.8	4	24.0	35.5	35.5
April	160	9.0	3	18.4	2	12.5	30.7	30.7
May	161	9.1	0	0.0	1	6.2	6.2	0.0
June	140	7.9	1	7.1	3	21.4	28.4	21.4
July	148	8.4	4	26.3	0	0.0	26.3	26.3
August	125	7.1	1	7.9	0	0.0	7.9	7.9
September	149	8.4	1	6.7	0	0.0	6.7	6.7
October	177	10.0	4	22.1	5	28.2	49.7	49.7
November	130	7.3	1	7.6	4	30.8	38.2	38.2
December	134	7.6	1	7.4	1	7.5	14.8	14.8
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

**Table 3.27**  
**Mother's Health Board of Residence**

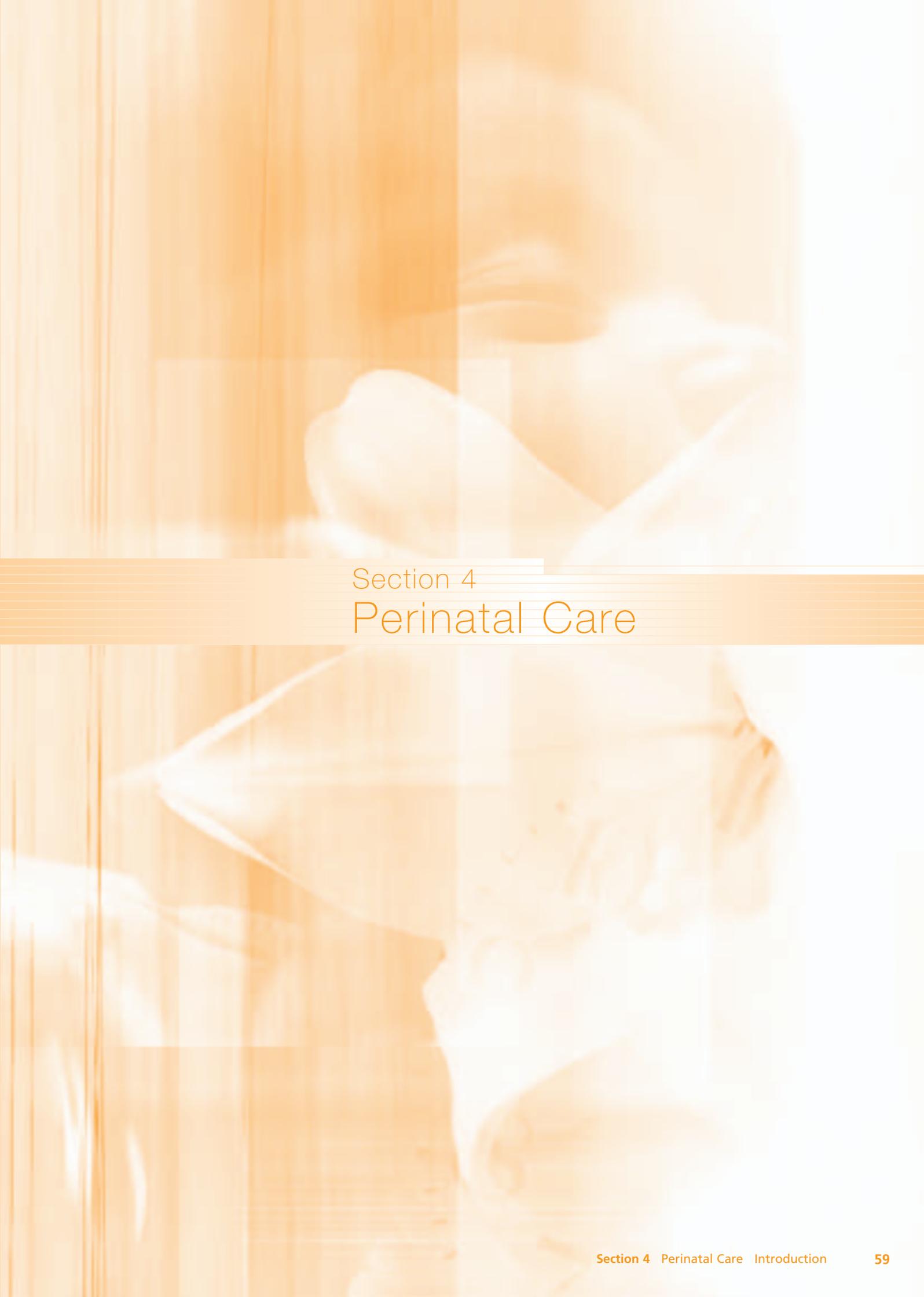
Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

Multiple Births

Mother's Health Board of Residence	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
Eastern	665	37.6	10	14.8	9	13.5	28.1	26.7
Midland	128	7.2	2	15.4	5	39.1	53.8	46.5
Mid-Western	148	8.4	2	13.3	3	20.3	33.3	33.3
North-Eastern	162	9.2	0	0.0	1	6.2	6.2	6.2
North-Western	76	4.3	2	25.6	1	13.2	38.5	38.5
South-Eastern	188	10.6	3	15.7	0	0.0	15.7	15.7
Southern	241	13.6	4	16.3	1	4.1	20.4	20.4
Western	162	9.2	1	6.1	1	6.2	12.3	12.3
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

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





Section 4  
Perinatal Care

## Section 4 Perinatal Care

### Introduction

This section presents a detailed review on aspects of perinatal care for the mother and infant. 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 type of antenatal care; mother's length of stay; method of delivery; mother's immunity to rubella; type of feeding.

## Section 4 Perinatal Care

### Part 1 Singleton Births



## Section 4 Perinatal Care

### Part 1 Singleton Births

**Table 4.1**  
**Type of Antenatal Care**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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 General Practitioner Only	14,064	23.9	81	5.7	43	3.1	8.8	6.1
Hospital and G.P. Combined	168	0.3	2	11.8	0	0.0	11.8	5.9
None	43,603	74.2	225	5.1	97	2.2	7.3	5.6
Midwife Only	791	1.3	11	13.7	8	10.1	23.7	23.7
Unknown	119	0.2	0	0.0	1	8.4	8.4	8.4
	7	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

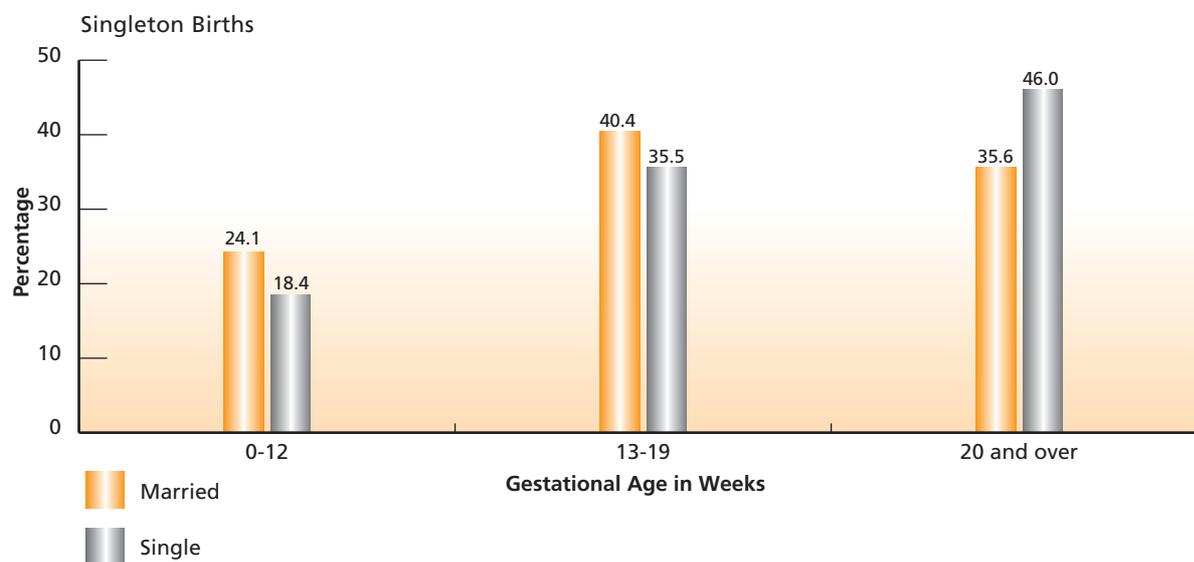
**Table 4.2**  
**Time of First visit to Doctor or Hospital During Pregnancy**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	12,341	21.0	51	4.1	19	1.5	5.6	4.3
13-19	21,500	36.6	108	5.0	51	2.4	7.4	5.0
20 and over	21,602	36.8	141	6.5	65	3.0	9.5	7.6
Not Stated	3,309	5.6	19	5.7	14	4.2	9.9	8.4
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

**Figure 4.1**  
**Percentage Distribution of Time of First Visit to Doctor or Hospital by Marital Status, 2002**



Note: See Appendix E, Table E11 for data. 'Not Stated' data are not included in the calculation of percentages.

**Table 4.3**  
**Mother's Length of Stay in Hospital Prior to Delivery**

Live Births, Stillbirths, Early Neonatal Deaths  
 and Mortality Rates, 2002

Singleton Births

Antenatal Length of Stay (Days)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0-1 Days	52,189	89.3	247	4.7	113	2.2	6.9	5.2
2 Days	3,151	5.4	37	11.6	13	4.1	15.7	11.0
3-5 Days	1,828	3.1	23	12.4	8	4.4	16.7	14.1
6-8 Days	576	1.0	7	12.0	9	15.6	27.4	24.1
9-11 Days	226	0.4	2	8.8	0	0.0	8.8	4.4
12-14 Days	151	0.3	0	0.0	1	6.6	6.6	6.6
2 weeks or more	285	0.5	3	10.4	4	14.0	24.3	17.5
Not Stated	58	0.1	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>58,464</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>148</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

Note:

-'Not Stated' includes 43 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 288, are excluded from this table. See Appendix G for detailed analysis.

**Table 4.4**  
**Mother's Length of Stay in Hospital After Delivery**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

Singleton Births

Postnatal Length of Stay (Days)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0-1 Days	5,682	9.7	158	27.1	57	10.0	36.8	28.8
2 Days	15,449	26.4	76	4.9	32	2.1	7.0	4.8
3-5 Days	33,207	56.8	67	2.0	51	1.5	3.5	2.7
6-8 Days	3,603	6.2	10	2.8	8	2.2	5.0	3.1
9-11 Days	342	0.6	2	5.8	0	0.0	5.8	5.8
12-14 Days	69	0.1	0	0.0	0	0.0	0.0	0.0
2 weeks or more	62	0.1	3	46.2	0	0.0	46.2	46.2
Not Stated	50	0.1	3	56.6	0	0.0	56.6	56.6
<b>Total</b>	<b>58,464</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>148</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

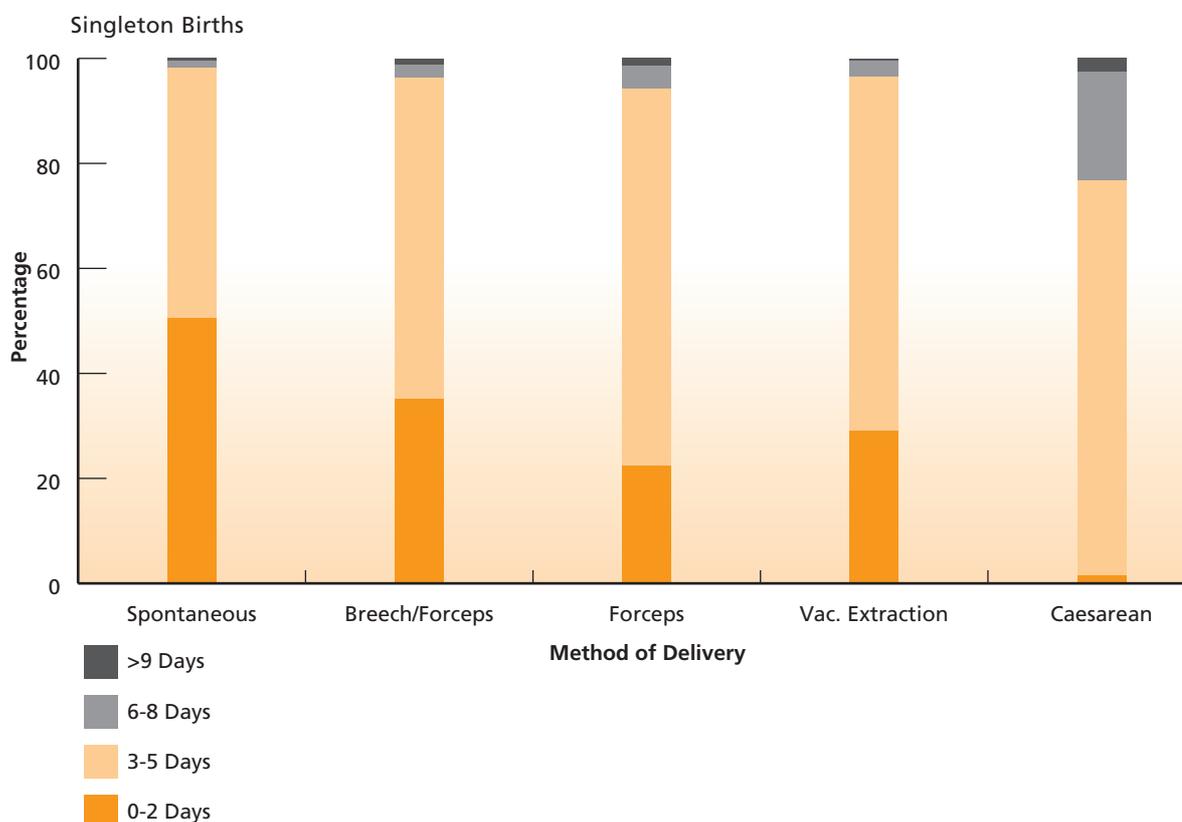
Note:

- 'Not Stated' includes 43 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 288, are excluded from this table. See Appendix G for detailed analysis.

**Figure 4.2**  
**Mother's Postnatal Length of Stay: Cumulative Percentages by Method of Delivery, 2002**



Note: Data are compiled from Appendix E, Table E9. 'Not Stated' data are not included in the calculation of percentages.

**Table 4.5**  
**Method of Delivery**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	37,162	63.3	230	6.2	78	2.1	8.2	6.5
Breech/Forceps	186	0.3	34	154.5	15	80.6	222.7	165.9
Forceps	1,873	3.2	5	2.7	4	2.1	4.8	2.7
Vac. Extraction	6,668	11.3	6	0.9	4	0.6	1.5	1.5
Caesarean	12,692	21.6	38	3.0	47	3.7	6.7	4.5
Other specified & Combined	150	0.3	5	32.3	1	6.7	38.7	26.1
Not Stated	21	0.0	1	45.5	0	0.0	45.5	45.5
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

**Table 4.6**  
**Advance Hospital Bookings**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	57,114	97.7	293	5.1	137	2.4	7.5	5.5
Not Booked	1,324	2.3	26	19.3	11	8.3	27.4	26.0
Not Stated	26	0.0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>58,464</b>	<b>100.0</b>	<b>319</b>	<b>5.4</b>	<b>148</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

Note:

- 'Not Stated' includes 21 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 288, are excluded from this table. See Appendix G for detailed analysis.

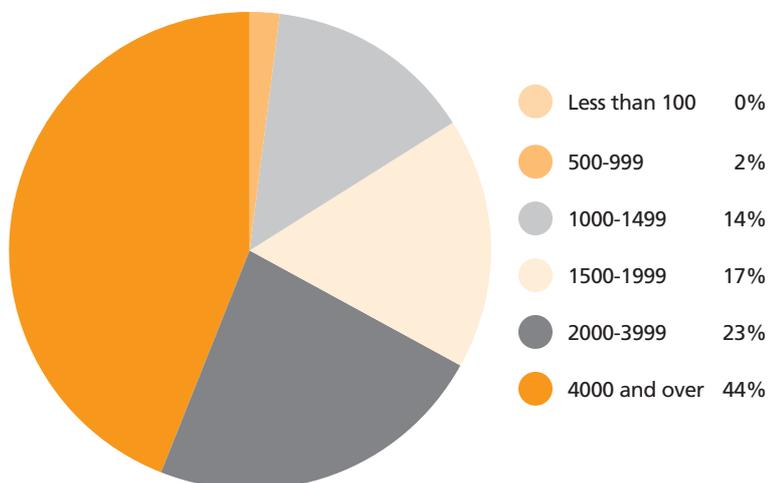
**Table 4.7**  
**Size of Maternity Unit (number of live births and stillbirths annually)**

Live Births, Stillbirths, Early Neonatal Deaths  
 and Mortality Rates, 2002

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	9	15	0.0	0	0.0	0	0.0	0.0	0.0
500-999	1	914	1.5	3	3.3	3	3.3	6.5	5.5
1000-1499	6	8,126	13.5	36	4.4	22	2.7	7.1	4.7
1500-1999	6	10,391	17.3	66	6.3	14	1.3	7.7	5.7
2000-3999	5	13,900	23.1	87	6.2	38	2.7	8.9	7.5
4000 and over	4	26,888	44.6	151	5.6	92	3.4	9.0	7.0
<b>Total</b>	<b>31</b>	<b>60,234</b>	<b>100.0</b>	<b>343</b>	<b>5.7</b>	<b>169</b>	<b>2.8</b>	<b>8.5</b>	<b>6.5</b>

Note: This table includes multiple births but excludes domiciliary births of which there were 288 in total.

**Figure 4.3**  
**Percentage of Live Births by Size of Maternity Unit, 2002**



Note: See Table 4.7 for data. The size of unit refers to the number of live births and stillbirths occurring annually.

**Table 4.8**  
**Inter-Hospital Transfer of Infants**

Live Births, Early Neonatal Deaths  
and Mortality Rate, 2002

Singleton Births

Infant Transfers	Live Births	Per Cent (%) Live Births	Early Neonatal Deaths	Early Neonatal Rate
Transferred	350	0.6	8	22.9
Not Transferred	58,081	99.3	140	2.4
Not Stated	33	0.0	0	0.0
<b>Total</b>	<b>58,464</b>	<b>100.0</b>	<b>148</b>	<b>2.5</b>

Note:

- 'Not Stated' includes 24 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 288, are excluded from this table. See Appendix G for detailed analysis.

**Table 4.9**  
**Rubella: Immune Status of Mother**  
**Numbers and Percentages, 2002**

Singleton Births

Rubella	Frequency	Per Cent (%)
Immune	51,129	86.6
Not Immune	2,282	3.9
Unknown	5,652	9.6
Not Stated	8	0.0
<b>Total</b>	<b>59,071</b>	<b>100.0</b>

**Table 4.10**  
**Age of Mother by Infant's Type of Feeding**  
**Numbers and Percentages, 2002**

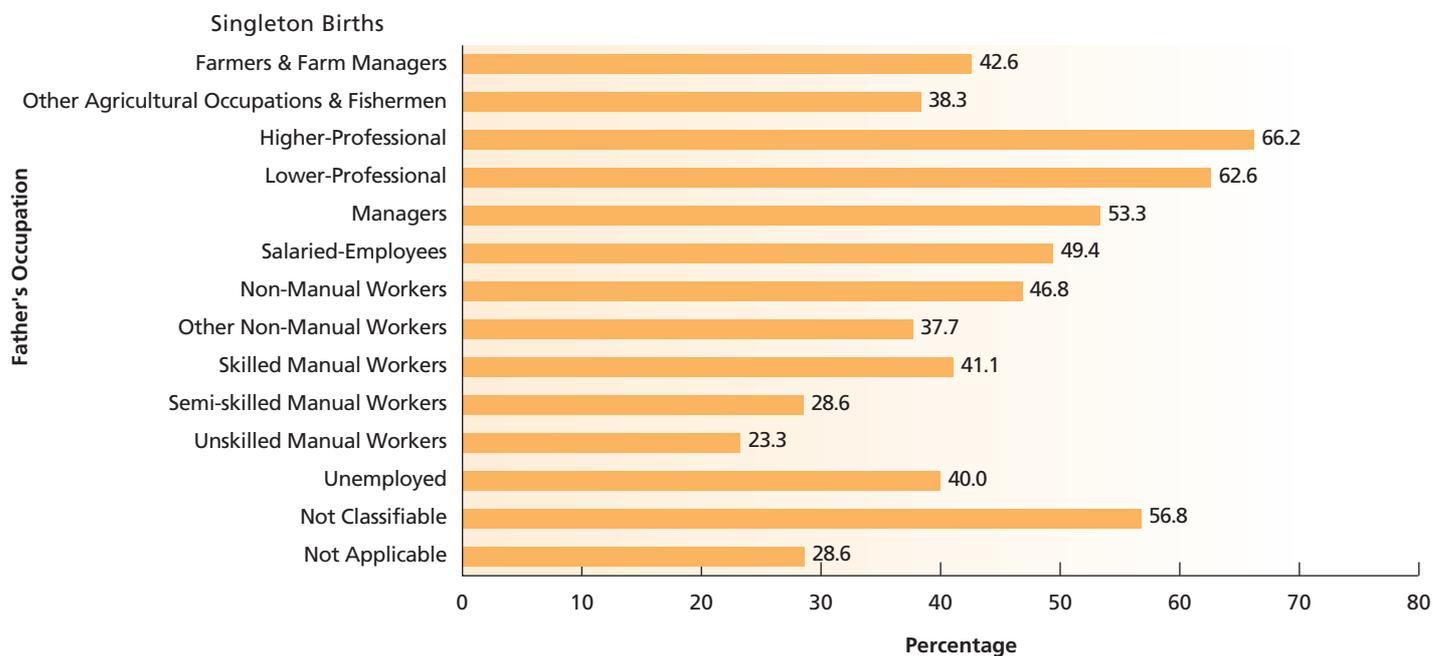
Singleton Births

Age of Mother	Type of Feeding				
	Artificial	Breast	Combined	Not Stated	Total
Under 15	8	2	0	0	10
	80.00	20.00	0.00	0.00	
	0.02	0.01	0.00	0.00	0.02
15-19	2,309	576	40	8	2,933
	78.72	19.64	1.36	0.27	
	7.02	2.38	2.57	11.94	4.99
20-24	5,683	2,592	179	7	8,461
	67.17	30.63	2.12	0.08	
	17.28	10.70	11.48	10.45	14.40
25-29	8,118	5,698	487	17	14,320
	56.69	39.79	3.40	0.12	
	24.68	23.51	31.24	25.37	24.37
30-34	10,239	8,950	523	25	19,737
	51.88	45.35	2.65	0.13	
	31.13	36.93	33.55	37.31	33.59
35-39	5,529	5,441	285	6	11,261
	49.10	48.32	2.53	0.05	
	16.81	22.45	18.28	8.96	19.17
40-44	937	930	45	4	1,916
	48.90	48.54	2.35	0.21	
	2.85	3.84	2.89	5.97	3.26
45 and over	36	30	0	0	66
	54.55	45.45	0.00	0.00	
	0.11	0.12	0.00	0.00	0.11
Not Stated	34	14	0	0	48
	70.83	29.17	0.00	0.00	
	0.10	0.06	0.00	0.00	0.08
<b>Total</b>	<b>32,893</b>	<b>24,233</b>	<b>1,559</b>	<b>67</b>	<b>58,752</b>
	<b>55.99</b>	<b>41.25</b>	<b>2.65</b>	<b>0.11</b>	<b>100.00</b>

Note:

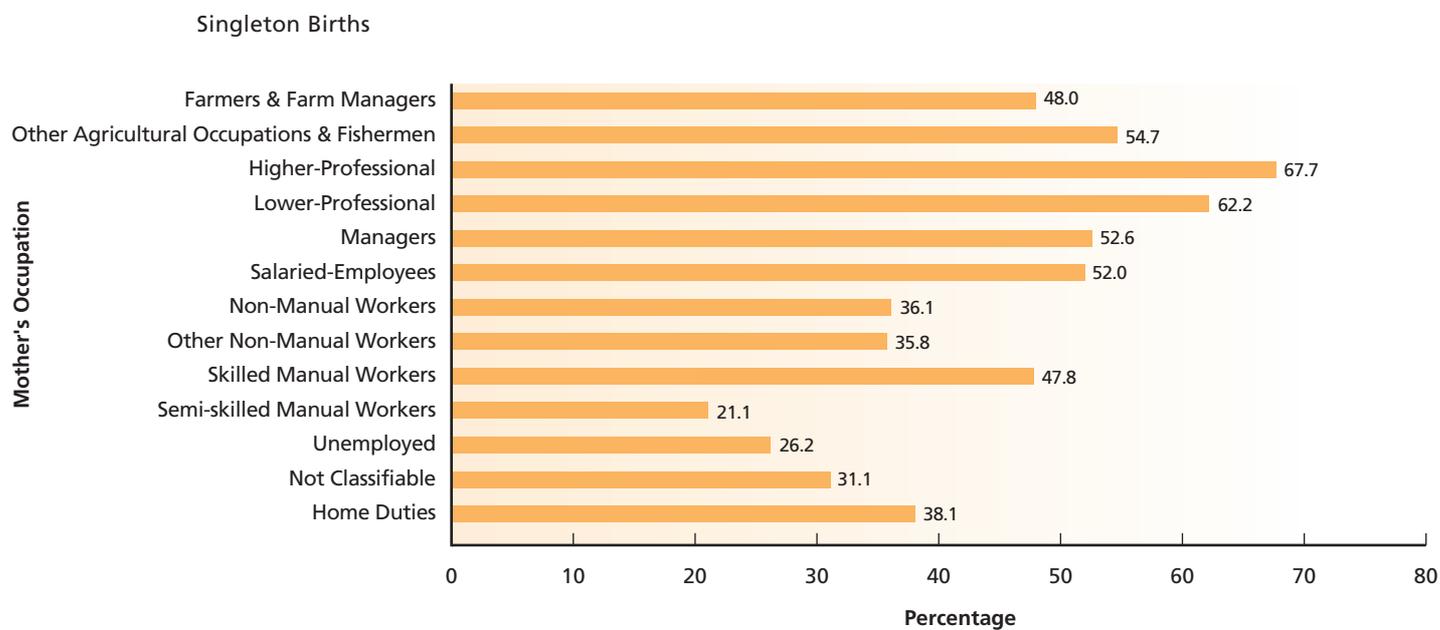
- See Appendix E for an explanation of the table format.
- 'Not Stated' contains 54 Early Neonatal Deaths for which Type of Feeding was not stated.

**Figure 4.4**  
**Percentage of Mothers Breastfeeding by Father's Occupation, 2002**



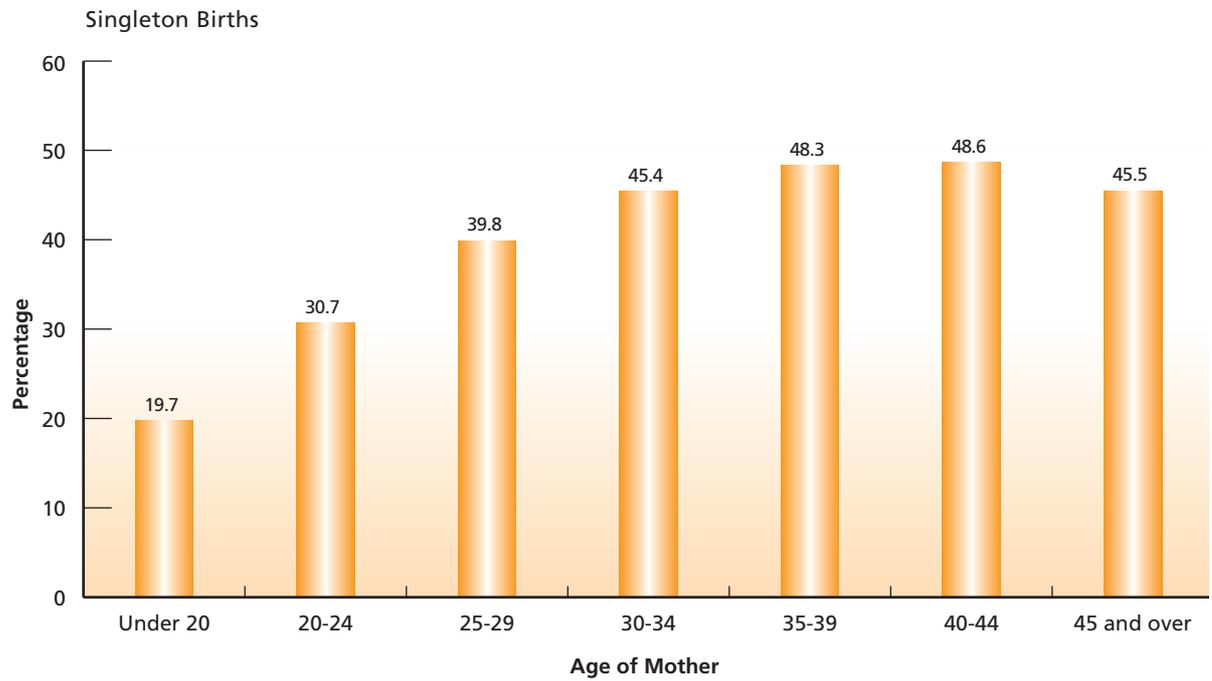
Note: Data are compiled from Appendix E, Table E17. 'Not Stated' data are not included in the calculation of percentages.

**Figure 4.5**  
**Percentage of Mothers Breastfeeding by Mother's Occupation, 2002**



Note:  
 - Data are compiled from Appendix E, Table E18. 'Not Stated' data are not included in the calculation of percentages.  
 - Categories where percentages would be based on <50 births are not included in this graph.

**Figure 4.6**  
**Percentage of Mothers Breastfeeding by Age of Mother, 2002**



Note: See Table 4.10 for data. 'Not Stated' data are not included in the calculation of percentages.



## Section 4 Perinatal Care

### Part 2 Multiple Births



## Section 4 Perinatal Care

### Part 2 Multiple Births

**Table 4.11**  
**Type of Antenatal Care**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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 General Practitioner Only	583	32.9	11	18.5	10	17.2	35.4	35.4
Hospital and G.P. Combined	5	0.3	0	0.0	0	0.0	0.0	0.0
None	1,165	65.8	13	11.0	10	8.6	19.5	17.9
Total	17	1.0	0	0.0	1	58.8	58.8	58.8
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

**Table 4.12**  
**Time of First Visit to Doctor or Hospital During Pregnancy**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	386	21.8	3	7.7	6	15.5	23.1	23.1
13-19	644	36.4	6	9.2	4	6.2	15.4	15.4
20 and over	612	34.6	14	22.4	11	18.0	39.9	36.9
Not Stated	128	7.2	1	7.8	0	0.0	7.8	7.8
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

**Table 4.13**  
**Mother's Length of Stay in Hospital Prior to Delivery**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

Multiple Births

Antenatal Length of Stay (Days)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0-1 Days	1,332	75.3	19	14.1	12	9.0	22.9	21.5
2 Days	93	5.3	1	10.6	2	21.5	31.9	31.9
3-5 Days	139	7.9	2	14.2	3	21.6	35.5	35.5
6-8 Days	72	4.1	1	13.7	3	41.7	54.8	54.8
9-11 Days	31	1.8	0	0.0	1	32.3	32.3	32.3
12-14 Days	38	2.1	0	0.0	0	0.0	0.0	0.0
2 weeks or more	65	3.7	1	15.2	0	0.0	15.2	15.2
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

Note: There were no domiciliary multiple births.

**Table 4.14**  
**Mother's Length of Stay in Hospital After Delivery**

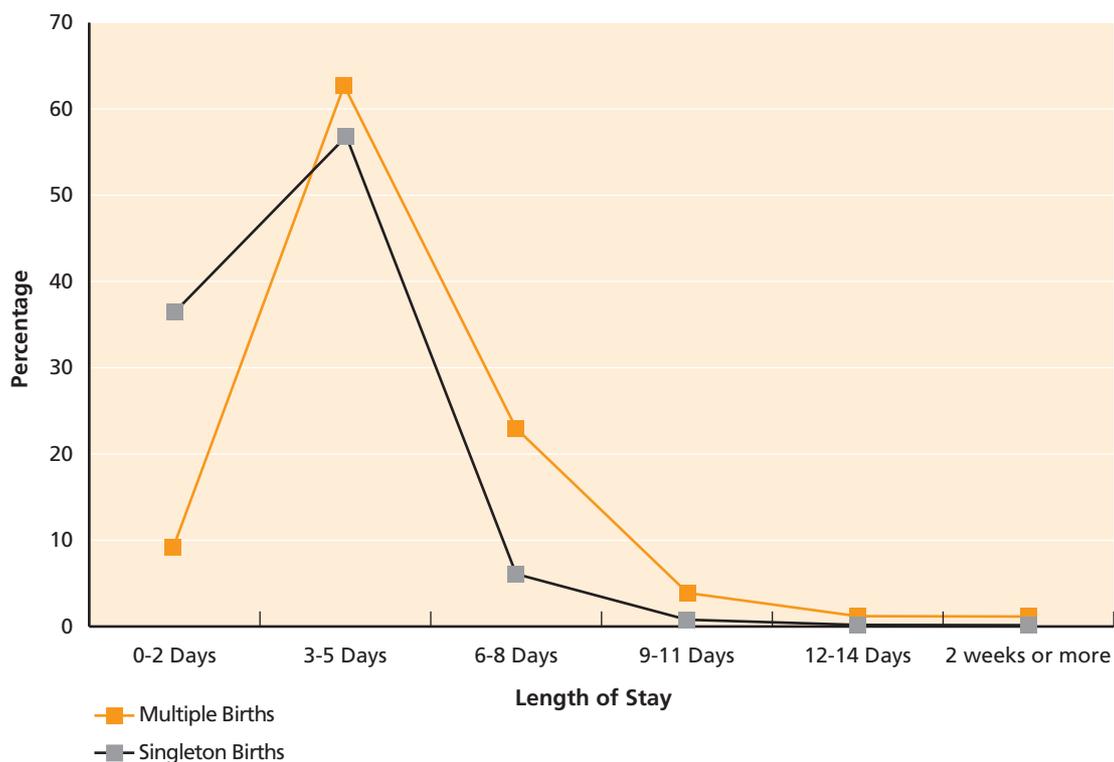
Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

Multiple Births

Postnatal Length of Stay (Days)	Live Births	Per Cent (%) Live Births	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
0-1 Days	47	2.7	3	60.0	4	85.1	140.0	140.0
2 Days	108	6.1	6	52.6	3	27.8	78.9	78.9
3-5 Days	1,104	62.4	13	11.6	13	11.8	23.3	21.5
6-8 Days	411	23.2	1	2.4	1	2.4	4.9	4.9
9-11 Days	67	3.8	0	0.0	0	0.0	0.0	0.0
12-14 Days	14	0.8	0	0.0	0	0.0	0.0	0.0
2 weeks or more	15	0.8	1	62.5	0	0.0	62.5	62.5
Not Stated	4	0.2	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

Note: There were no domiciliary multiple births.

**Figure 4.7**  
**Percentage Distribution of Births by Mother's Postnatal Length of Stay in Days, 2002**



Note: Includes stillbirths. See Tables 4.4 and 4.14 for data. 'Not Stated' data are not included in the calculation of percentages.

**Table 4.15**  
**Method of Delivery**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	595	33.6	12	19.8	8	13.4	32.9	32.9
Breech/Forceps	82	4.6	1	12.0	2	24.4	36.1	24.4
Forceps	53	3.0	0	0.0	1	18.9	18.9	18.9
Vac. Extraction	152	8.6	0	0.0	0	0.0	0.0	0.0
Caesarean	876	49.5	11	12.4	10	11.4	23.7	22.6
Other specified & Combined	12	0.7	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

**Table 4.16**  
**Advance Hospital Bookings**

Live Births, Stillbirths, Early Neonatal Deaths  
and Mortality Rates, 2002

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	1,730	97.7	22	12.6	20	11.6	24.0	22.9
Not Booked	40	2.3	2	47.6	1	25.0	71.4	71.4
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

Note: There were no domiciliary multiple births.

**Table 4.17**  
**Inter-Hospital Transfer of Infants**

Live Births, Early Neonatal Deaths  
and Mortality Rate, 2002

Multiple Births

Infant Transfers	Live Births	Per Cent (%) Live Births	Early Neonatal Deaths	Early Neonatal Rate
Transferred	40	2.3	2	50.0
Not Transferred	1,729	97.7	19	11.0
Not Stated	1	0.1	0	0.0
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>21</b>	<b>11.9</b>

Note: There were no domiciliary multiple births.

**Table 4.18**  
**Rubella: Immune Status of Mother**  
**Numbers and Percentages, 2002**

Multiple Births

Rubella	Frequency	Per Cent (%)
Immune	1,458	81.3
Not Immune	77	4.3
Unknown	259	14.4
<b>Total</b>	<b>1,794</b>	<b>100.0</b>

**Table 4.19**  
**Age of Mother by Infant's Type of Feeding**  
**Numbers and Percentages, 2002**

Multiple Births

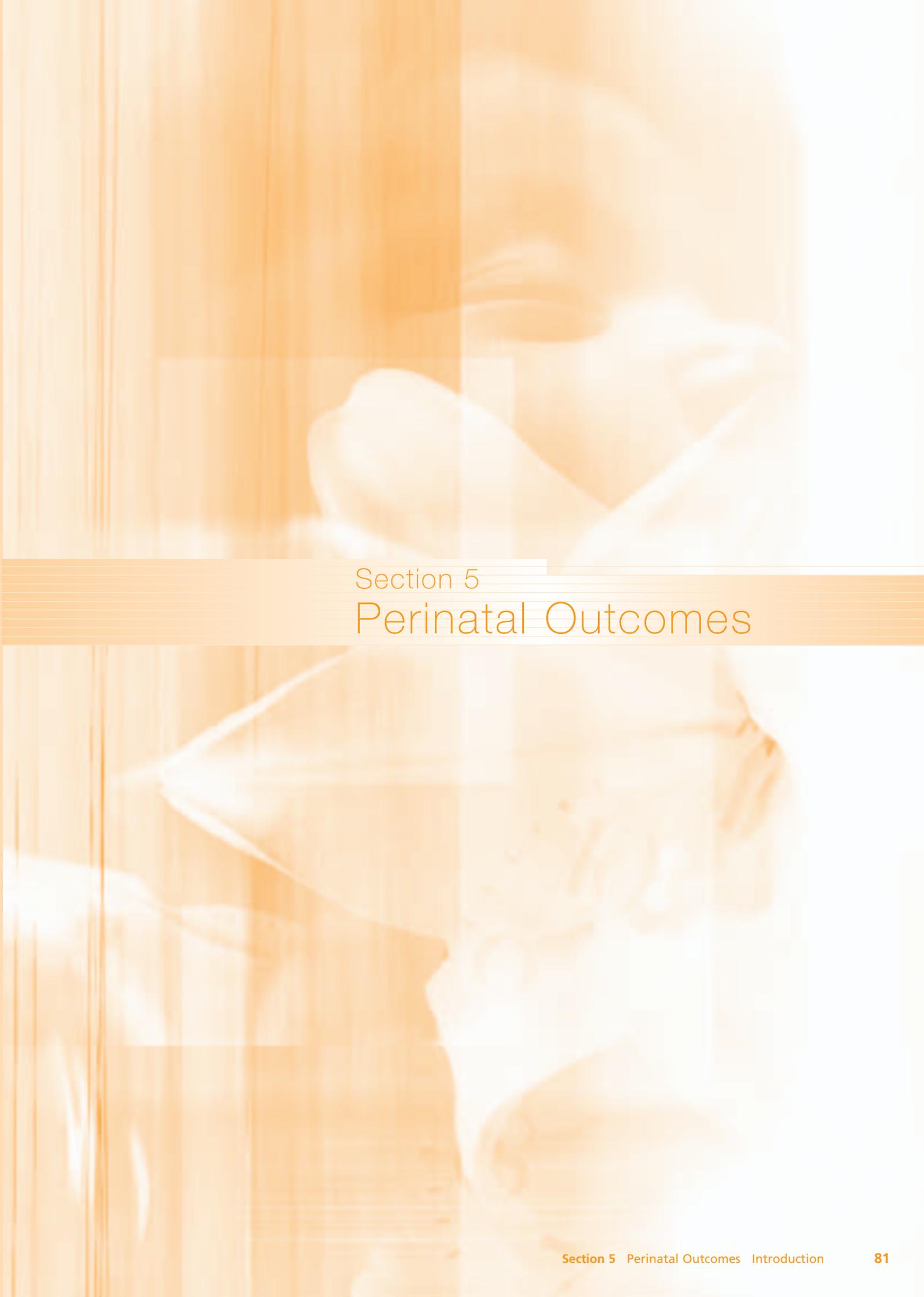
Age of Mother	Type of Feeding				
	Artificial	Breast	Combined	Not Stated	Total
15-19	33	5	2	0	40
	82.50	12.50	5.00	0.00	
	2.90	1.00	1.61	0.00	2.26
20-24	127	28	4	2	161
	78.88	17.39	2.48	1.24	
	11.17	5.58	3.23	28.57	9.10
25-29	219	103	26	1	349
	62.75	29.51	7.45	0.29	
	19.26	20.52	20.97	14.29	19.72
30-34	446	213	48	1	708
	62.99	30.08	6.78	0.14	
	39.23	42.43	38.71	14.29	40.00
35-39	266	134	36	3	439
	60.59	30.52	8.20	0.68	
	23.39	26.69	29.03	42.86	24.80
40-44	46	17	6	0	69
	66.67	24.64	8.70	0.00	
	4.05	3.39	4.84	0.00	3.90
45 and over	0	0	2	0	2
	0.00	0.00	100.00	0.00	
	0.00	0.00	1.61	0.00	0.11
Not Stated	0	2	0	0	2
	0.00	100.00	0.00	0.00	
	0.00	0.40	0.00	0.00	0.11
<b>Total</b>	<b>1,137</b>	<b>502</b>	<b>124</b>	<b>7</b>	<b>1,770</b>
	<b>64.24</b>	<b>28.36</b>	<b>7.01</b>	<b>0.40</b>	<b>100.00</b>

Note:

-See appendix E for an explanation of the table format.

-'Not Stated' contains 6 Early Neonatal Deaths for which Type of Feeding was not stated.





Section 5  
Perinatal Outcomes

## Section 5 Perinatal Outcomes

### Introduction

This section presents a detailed review on aspects of perinatal outcomes for the infant. Part 1 reports on 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 ninth 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.

Section 5  
Perinatal Outcomes

**Part 1 Singleton Births**



# Section 5 Perinatal Outcomes

## Part 1 Singleton Births

**Table 5.1**  
**Live Births, Antepartum and Intrapartum Stillbirths, Early Neonatal Deaths**  
**and Mortality Rates by Birthweight, 2002**

Singleton Births

Birthweight (grams)	Live Births	Per Cent (%) Live Births	Ante-partum Stillbirths	Intra-partum Stillbirths	Not Stated	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500-749	64	0.1	34	3	8	412.8	29	453.1	678.9	660.2
750-999	70	0.1	23	0	5	285.7	14	200.0	428.6	384.6
1000-1249	103	0.2	17	1	0	148.8	11	106.8	239.7	163.6
1250-1499	133	0.2	16	4	3	147.4	12	90.2	224.4	153.8
1500-1999	411	0.7	34	2	4	88.7	13	31.6	117.5	76.6
2000-2499	1,427	2.4	43	0	5	32.5	12	8.4	40.7	29.5
2500-2999	6,573	11.2	27	1	13	6.2	16	2.4	8.6	6.5
3000-3499	19,118	32.5	35	4	5	2.3	19	1.0	3.3	2.5
3500-3999	20,545	35.0	14	4	3	1.0	12	0.6	1.6	1.2
4000-4499	8,519	14.5	8	0	0	0.9	9	1.1	2.0	1.6
4500 and over	1,779	3.0	2	0	1	1.7	2	1.1	2.8	2.2
Not Stated	10	0.0	0	0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>58,752</b>	<b>100.0</b>	<b>253</b>	<b>19</b>	<b>47</b>	<b>5.4</b>	<b>149</b>	<b>2.5</b>	<b>7.9</b>	<b>6.0</b>

**Table 5.2**  
**Stillbirths, Early Neonatal Deaths**  
**and Mortality Rates by Cause of Death, 2002**

Singleton Births

ICD Codes	Cause of Death	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Total Deaths	Perinatal Mortality Rate
<b>Congenital Anomalies</b>							
740	Anencephalus	16	0.27	14	0.24	30	0.51
741	Spina Bifida	1	0.02	1	0.02	2	0.03
742	Other Central Nervous System Anomalies	2	0.03	12	0.20	14	0.24
743	Other Congenital Anomalies	5	0.08	8	0.14	13	0.22
745	Bulbus Cordis and Septal Closure	1	0.02	0	0.00	1	0.02
746	Other Congenital Anomalies of the Heart	1	0.02	7	0.12	8	0.14
748	Congenital Anomalies of Respiratory System	0	0.00	12	0.20	12	0.20
749.0-751.9	Cleft Palate & Lip, Other Digestive Anomalies	0	0.00	1	0.02	1	0.02
753	Congenital Anomalies of Urinary System	2	0.03	9	0.15	11	0.19
754.0-756.9	Musculoskeletal System	2	0.03	4	0.07	6	0.10
758	Chromosomal Anomalies including Downs Syndrome	11	0.19	6	0.10	17	0.29
<b>Maternal Conditions and Complications in Pregnancy</b>							
760	Maternal Hypertensive Disorders	8	0.14	0	0.00	8	0.14
760.1-761.9	Other Maternal Complications	5	0.08	2	0.03	7	0.12
762	Placenta Praevia	1	0.02	0	0.00	1	0.02
762.1	Other Placental Separation and Haemorrhage	43	0.73	3	0.05	46	0.78
762.2	Other Morphological and Functional Anomalies of Placenta	23	0.39	0	0.00	23	0.39
762.4	Prolapsed Cord	1	0.02	0	0.00	1	0.02
762.5	Other Compression of Umbilical Cord	20	0.34	0	0.00	20	0.34
762.6-762.9	Other Complications of Placenta, Cord & Membrane	6	0.10	0	0.00	6	0.10
763.2-763.9	Other Complications of Labour/Delivery	2	0.03	1	0.02	3	0.05
<b>Slow Foetal Growth, Malnutrition &amp; Immaturity</b>							
764	Slow Foetal Growth & Malnutrition	4	0.07	0	0.00	4	0.07
765	Short Gestation and Low Birthweight	12	0.20	32	0.54	44	0.74
<b>Birth Trauma</b>							
767	Birth Trauma	1	0.02	1	0.02	2	0.03
768	Intrauterine Hypoxia/Anoxia	23	0.39	3	0.05	26	0.44
769	Respiratory Distress Syndrome	0	0.00	3	0.05	3	0.05
770	Respiratory Conditions of Foetus/Newborn	5	0.08	9	0.15	14	0.24
<b>Other Foetal and Neonatal Conditions</b>							
771	Perinatal Infections	2	0.03	3	0.05	5	0.08
772	Neonatal/Foetal Haemorrhage	1	0.02	3	0.05	4	0.07
773	Haemolytic Diseases	1	0.02	1	0.02	2	0.03
778	Integument and Temperature Regulation	9	0.15	4	0.07	13	0.22
<b>Maceration, ill-Defined Conditions &amp; All other Causes</b>							
779.9	Maceration	9	0.15	0	0.00	9	0.15
780-796,799	Symptoms, Signs, and Ill-Defined Conditions	94	1.59	5	0.09	99*	1.68
0-139.9	Infectious Diseases	1	0.02	0	0.00	1	0.02
	All Other Causes	7	0.12	5	0.09	12	0.20
<b>Total</b>		<b>319</b>	<b>5.40</b>	<b>149</b>	<b>2.54</b>	<b>468</b>	<b>7.92</b>

\* Note: The significant increase in this category, compared with the previous year, is due to the absence of information on Principal Diagnosis in relation to 55 Stillbirths in three particular hospitals.

**Table 5.3**  
**Perinatal Mortality, Numbers and Rates, by Birthweight and Cause of Death, 2002**

Singleton Births

Birthweight (grams)	Anencephalus		Spina Bifida		Other Central Nervous System Abnormalities		Congenital Anomalies of the Heart		Chromosomal Anomalies		Other Congenital Anomalies	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
500-749	4	36.7	0	0.0	0	0.0	0	0.0	1	9.2	1	9.2
750-999	1	10.2	0	0.0	0	0.0	0	0.0	3	30.6	3	30.6
1000-1249	4	33.1	1	8.3	1	8.3	0	0.0	1	8.3	4	33.1
1250-1499	6	38.5	0	0.0	2	12.8	1	6.4	2	12.8	2	12.8
1500-1999	5	11.1	0	0.0	0	0.0	2	4.4	4	8.9	9	20.0
2000-2499	4	2.7	0	0.0	2	1.4	0	0.0	3	2.0	8	5.4
2500-2999	1	0.2	1	0.2	3	0.5	0	0.0	0	0.0	9	1.4
3000-3499	4	0.2	0	0.0	1	0.1	4	0.2	1	0.1	5	0.3
3500-3999	1	0.0	0	0.0	3	0.1	1	0.0	2	0.1	1	0.0
4000-4499	0	0.0	0	0.0	2	0.2	1	0.1	0	0.0	0	0.0
4500 and over	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.6
Not Stated	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>30</b>	<b>0.5</b>	<b>2</b>	<b>0.0</b>	<b>14</b>	<b>0.2</b>	<b>9</b>	<b>0.2</b>	<b>17</b>	<b>0.3</b>	<b>43</b>	<b>0.7</b>

**Table 5.3 Continued**  
**Perinatal Mortality, Numbers and Rates, by Birthweight and Cause of Death, 2002**

Singleton Births

Birthweight (grams)	Maternal Complications		Placenta, Cord, Membranes		Other Complications of Labour		Slow Foetal Growth		Birth Trauma		Hypoxia/Anoxia	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
500-749	6	55.0	13	119.3	1	9.2	24	220.2	0	0.0	5	45.9
750-999	4	40.8	6	61.2	0	0.0	10	102.0	0	0.0	4	40.8
1000-1249	1	8.3	6	49.6	0	0.0	4	33.1	0	0.0	2	16.5
1250-1499	0	0.0	5	32.1	0	0.0	3	19.2	0	0.0	3	19.2
1500-1999	0	0.0	10	22.2	0	0.0	2	4.4	0	0.0	4	8.9
2000-2499	1	0.7	17	11.5	0	0.0	4	2.7	0	0.0	5	3.4
2500-2999	2	0.3	15	2.3	0	0.0	0	0.0	0	0.0	4	0.6
3000-3499	0	0.0	15	0.8	0	0.0	0	0.0	1	0.1	8	0.4
3500-3999	1	0.0	6	0.3	2	0.1	0	0.0	1	0.0	7	0.3
4000-4499	0	0.0	2	0.2	0	0.0	1	0.1	0	0.0	1	0.1
4500 and over	0	0.0	2	1.1	0	0.0	0	0.0	0	0.0	0	0.0
Not Stated	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>15</b>	<b>0.3</b>	<b>97</b>	<b>1.6</b>	<b>3</b>	<b>0.1</b>	<b>48</b>	<b>0.8</b>	<b>2</b>	<b>0.0</b>	<b>43</b>	<b>0.7</b>

**Table 5.3 Continued**

**Perinatal Mortality, Numbers and Rates, by Birthweight and Cause of Death, 2002**

Singleton Births

Birthweight (grams)	Perinatal Infections		Foetal/Neonatal Haemorrhage		Haemolytic Disease		Metabolic, Endocrine Disturbances		Integument, Temperature Regulations		Maceration	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
500-749	2	18.3	1	9.2	0	0.0	0	0.0	2	18.3	1	9.2
750-999	0	0.0	1	10.2	0	0.0	0	0.0	3	30.6	0	0.0
1000-1249	1	8.3	0	0.0	0	0.0	0	0.0	1	8.3	0	0.0
1250-1499	0	0.0	1	6.4	0	0.0	0	0.0	0	0.0	1	6.4
1500-1999	1	2.2	0	0.0	0	0.0	0	0.0	2	4.4	1	2.2
2000-2499	1	0.7	0	0.0	1	0.7	0	0.0	1	0.7	0	0.0
2500-2999	0	0.0	0	0.0	0	0.0	0	0.0	1	0.2	3	0.5
3000-3499	0	0.0	1	0.1	1	0.1	0	0.0	1	0.1	2	0.1
3500-3999	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0	0	0.0
4000-4499	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1	1	0.1
4500 and over	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Not Stated	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>5</b>	<b>0.1</b>	<b>4</b>	<b>0.1</b>	<b>2</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>13</b>	<b>0.2</b>	<b>9</b>	<b>0.2</b>

**Table 5.3 Continued**

**Perinatal Mortality, Numbers and Rates, by Birthweight and Cause of Death, 2002**

Singleton Births

Birthweight (grams)	Symptoms, Signs and Ill-Defined Conditions		All Other Causes		Not Stated		All Causes of Perinatal Mortality	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
500-749	11	100.9	2	18.3	0	0.0	74	678.9
750-999	7	71.4	0	0.0	0	0.0	42	428.6
1000-1249	3	24.8	0	0.0	0	0.0	29	239.7
1250-1499	8	51.3	1	6.4	0	0.0	35	224.4
1500-1999	12	26.6	1	2.2	0	0.0	53	117.5
2000-2499	13	8.8	0	0.0	0	0.0	60	40.7
2500-2999	16	2.4	2	0.3	0	0.0	57	8.6
3000-3499	18	0.9	1	0.1	0	0.0	63	3.3
3500-3999	6	0.3	1	0.0	0	0.0	33	1.6
4000-4499	4	0.5	4	0.5	0	0.0	17	2.0
4500 and over	1	0.6	1	0.6	0	0.0	5	2.8
Not Stated	0	0.0	0	0.0	0	0.0	0	0.0
<b>Total</b>	<b>99</b>	<b>1.7</b>	<b>13</b>	<b>0.2</b>	<b>0</b>	<b>0.0</b>	<b>468</b>	<b>7.9</b>

\* Note: See Appendix C for a list of the International Classification of Disease codes corresponding to each cause of death.

**Table 5.4**  
**Age at Death**  
**Early Neonatal Deaths, 2002**

Singleton Births

Time		Frequency	Per Cent
Completed Hours	<1	23	15.4
	1	29	19.5
	2	13	8.7
	3	11	7.4
	4	3	2.0
	5	2	1.3
	6	5	3.4
	7	4	2.7
	8	4	2.7
	9	3	2.0
	10	4	2.7
	11	1	0.7
	22	1	0.7
<b>Total under 1 Day</b>		<b>103</b>	<b>69.1</b>
Days	1	19	12.8
	2	4	2.7
	3	10	6.7
	4	4	2.7
	5	3	2.0
	6	2	1.3
<b>Total under 1 Week</b>		<b>42</b>	<b>28.2</b>
Unknown		4	2.7
<b>Total</b>		<b>149</b>	<b>100.0</b>

**Table 5.5**  
**Percentage Distribution of Live Births**  
**by Infant's Length of Stay in Hospital, 2002**

Singleton Births

Infant's Length of Stay (Days)	Live Births	Per Cent (%) Live Births
0-2	20,750	35.6
3-5	32,215	55.2
6-10	4,005	6.9
11-28	833	1.4
29 or more	341	0.6
Not Stated	172	0.3
<b>Total</b>	<b>58,316</b>	<b>100.0</b>

Note:

-This table does not include domiciliary births and early neonatal deaths.

-'Not Stated' includes 43 births where place of birth was recorded as domiciliary but birth was registered by a hospital. Mother and infant were 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, 2002**

Singleton Births

Post-Mortem	Type of Death		
Frequency Row Per Cent Col. Per Cent	Early Neonatal Deaths	Stillbirths	Total
Post-Mortem	63	151	214
	29.44	70.56	
	42.28	47.34	45.73
No Post-Mortem	80	166	246
	32.52	67.48	
	53.69	52.04	52.56
Not Stated	6	2	8
	75.00	25.00	
	4.03	0.63	1.71
<b>Total</b>	<b>149</b>	<b>319</b>	<b>468</b>
	<b>31.84</b>	<b>68.16</b>	<b>100.00</b>

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

Section 5  
Perinatal Outcomes

**Part 2 Multiple Births**



# Section 5 Perinatal Outcomes

## Part 2 Multiple Births

**Table 5.7**  
**Live Births, Antepartum and Intrapartum Stillbirths, Early Neonatal Deaths**  
**and Mortality Rates by Birthweight, 2002**

Multiple Births

Birthweight (grams)	Live Births	Per Cent (%) Live Births	Ante-partum Stillbirths	Intra-partum Stillbirths	Not Stated	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Perinatal Mortality Rate	Adjusted PMR
500-749	16	0.9	7	1	1	360.0	5	312.5	560.0	560.0
750-999	28	1.6	1	0	0	34.5	5	178.6	206.9	206.9
1000-1249	28	1.6	1	0	2	96.8	4	142.9	225.8	225.8
1250-1499	57	3.2	3	0	0	50.0	2	35.1	83.3	51.7
1500-1999	203	11.5	3	0	1	19.3	2	9.9	29.0	29.0
2000-2499	450	25.4	1	0	0	2.2	1	2.2	4.4	4.4
2500-2999	650	36.7	1	0	0	1.5	0	0.0	1.5	1.5
3000-3499	287	16.2	1	1	0	6.9	2	7.0	13.8	13.8
3500-3999	46	2.6	0	0	0	0.0	0	0.0	0.0	0.0
4000-4499	5	0.3	0	0	0	0.0	0	0.0	0.0	0.0
<b>Total</b>	<b>1,770</b>	<b>100.0</b>	<b>18</b>	<b>2</b>	<b>4</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>25.1</b>	<b>24.0</b>

**Table 5.8**  
**Stillbirths, Early Neonatal Deaths and Mortality Rates by Cause of Death, 2002**

Multiple Births

Cause of Death	Stillbirths	Stillbirth Rate	Early Neonatal Deaths	Early Neonatal Rate	Total Deaths	Perinatal Mortality Rate
Congenital Anomalies of Respiratory System	0	0.0	1	0.6	1	0.6
Musculoskeletal System	1	0.6	0	0.0	1	0.6
Maternal Hypertensive Disorders	1	0.6	0	0.0	1	0.6
Other Maternal Complications	2	1.1	0	0.0	2	1.1
Other Placental Separation and Haemorrhage	1	0.6	1	0.6	2	1.1
Other Complications of Placenta, Cord & Membrane	7	3.9	2	1.1	9	5.0
Prolapsed Cord	1	0.6	1	0.6	2	1.1
Other Complications of Labour/Delivery	1	0.6	0	0.0	1	0.6
Short Gestation and Low Birthweight	4	2.2	9	5.1	13	7.3
Intrauterine Hypoxia/Anoxia	1	0.6	1	0.6	2	1.1
Respiratory Distress Syndrome	0	0.0	2	1.1	2	1.1
Respiratory Conditions of Foetus/Newborn	0	0.0	1	0.6	1	0.6
Neonatal/Foetal Haemorrhage	0	0.0	2	1.1	2	1.1
Integument and Temperature Regulation	1	0.6	0	0.0	1	0.6
Symptoms, Signs, and Ill-Defined Conditions	4	2.2	1	0.6	5	2.8
<b>Total</b>	<b>24</b>	<b>13.4</b>	<b>21</b>	<b>11.9</b>	<b>45</b>	<b>25.1</b>

Note: See Appendix C for a list of the International Classification of Diseases codes corresponding to each cause of death.

**Table 5.9**  
**Number of Perinatal Deaths by Birthweight and Cause of Death, 2002**

Multiple Births

Birthweight (grams)	500-749	750-999	1000-1249	1250-1499	1500-1999	2000-2499	2500-2999	3000-3499	Total
Other Congenital Anomalies	0	0	0	2	0	0	0	0	2
Maternal Complications	0	0	2	0	1	0	0	0	3
Other Complications of Placenta, Cord & Membrane	5	2	2	1	2	1	0	0	13
Other Complications of Labour/Delivery	0	0	0	0	0	0	0	1	1
Slow Fetal Growth	8	2	2	0	1	0	0	0	13
Hypoxia/Anoxia	0	1	0	1	1	0	0	2	5
Neonatal/Foetal Haemorrhage	0	1	1	0	0	0	0	0	2
Integument and Temperature Regulation	0	0	0	0	1	0	0	0	1
Symptoms, Signs, and Ill-Defined Conditions	1	0	0	1	0	1	1	1	5
<b>Total</b>	<b>14</b>	<b>6</b>	<b>7</b>	<b>5</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>45</b>

Note: See Appendix C for a list of the International Classification of Diseases codes corresponding to each cause of death.

**Table 5.10**  
**Age at Death**  
**Early Neonatal Deaths, 2002**

Multiple Births

Time		Frequency	Per Cent
Completed Hours	<1	4	19.0
	1	1	4.8
	2	2	9.5
	4	2	9.5
	7	1	4.8
	22	2	9.5
<b>Total under 1 Day</b>		<b>12</b>	<b>57.1</b>
Days	1	4	19.0
	2	2	9.5
	3	1	4.8
	6	2	9.5
<b>Total under 1 Week</b>		<b>9</b>	<b>42.9</b>
<b>Total</b>		<b>21</b>	<b>100.0</b>

**Table 5.11**  
**Percentage Distribution of Live Births by Infant's Length of Stay in Hospital, 2002**

Multiple Births

Length of Stay (Days)	Live Births	Per Cent (%) Live Births
0-2	103	5.9
3-5	807	46.1
6-10	375	21.4
11-28	300	17.2
29 or more	114	6.5
Not Stated	50	2.9
<b>Total</b>	<b>1,749</b>	<b>100.0</b>

Note:

-There were no domiciliary multiple births.

-Early Neonatal Deaths are not included in this table.

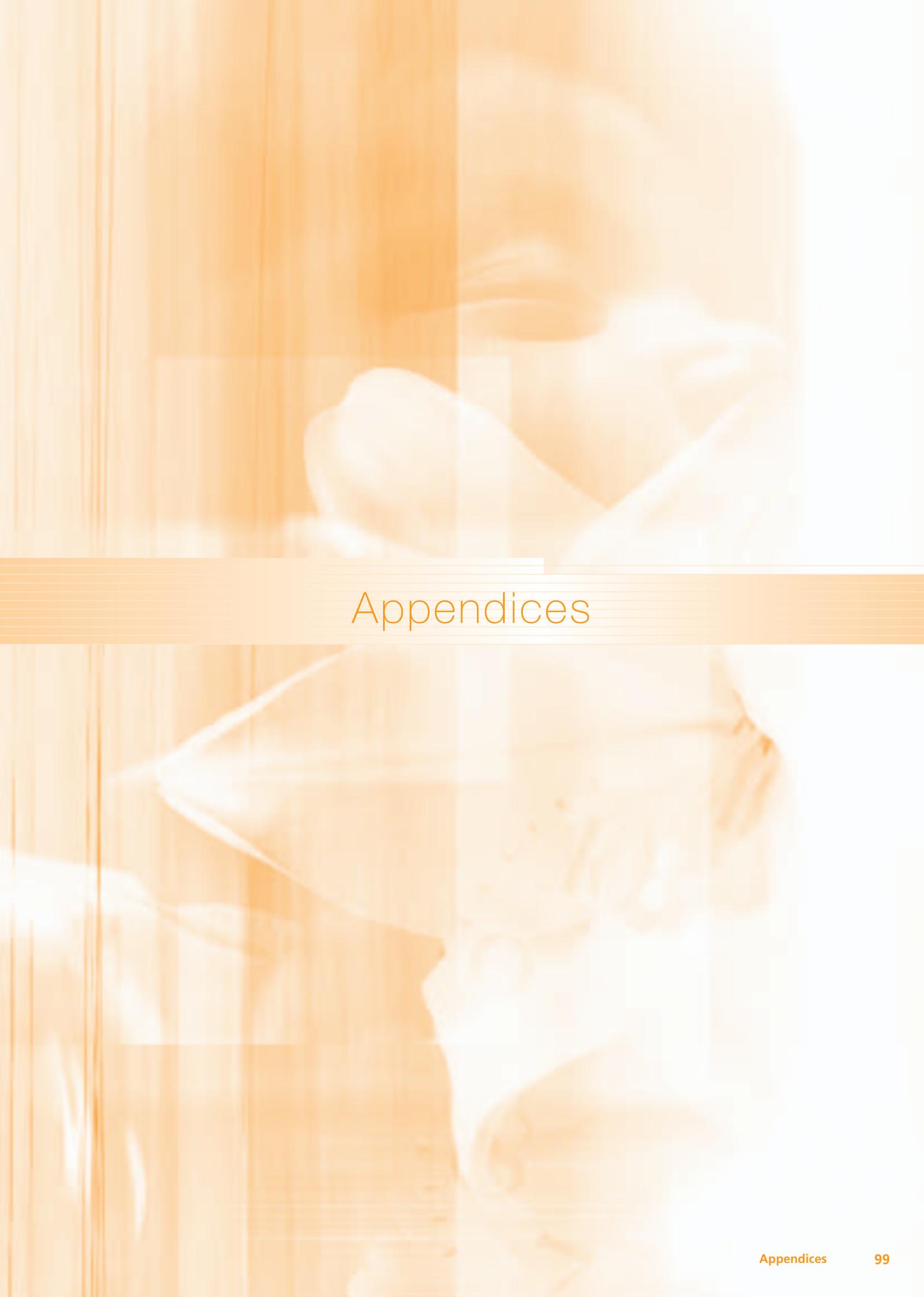
**Table 5.12**  
**Percentage of Stillbirths and Early Neonatal Deaths Undergoing Post-Mortem Examinations, 2002**

Multiple Births

Post-mortem	Type of Death		
Frequency Row Per Cent Col. Per Cent	Early Neonatal Deaths	Stillbirths	Total
Post-Mortem	6	11	17
	35.29	64.71	
	28.57	45.83	37.78
No Post-Mortem	15	13	28
	53.57	46.43	
	71.43	54.17	62.22
<b>Total</b>	<b>21</b>	<b>24</b>	<b>45</b>
	<b>46.67</b>	<b>53.33</b>	<b>100.00</b>

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





# Appendices



# Appendix A

## Copy of Part 3 of the Birth Notification Form

The following format was used for births recorded in 2002

<b>NOTIFICATION OF BIRTH -</b>	
<b>To: The National Perinatal Reporting System, Economic and Social Research Institute, 4 Burlington Road, Dublin 4</b>	
TYPE OF BIRTH (Live = 1, Still = 2) 2 <input type="checkbox"/>	PLACE OF BIRTH (Hospital = 1, BBA = 2, Domiciliary = 3) 3 <input type="checkbox"/>
NAME AND _____	
ADDRESS OF _____	
HOSPITAL NO. 4 <input type="checkbox"/>	CASE NO. 7 <input type="checkbox"/>
HOSPITAL _____	
<b>INFANT</b>	<b>MOTHER'S HEALTH</b>
DATE OF BIRTH 15 <input type="checkbox"/>	ANTE-NATAL CARE THIS PREGNANCY (Hospital / Obstetrician = 1, G.P. Only = 2, Combined = 3, None = 4) 100 <input type="checkbox"/>
IF MULTIPLE BIRTH ORDER OF BIRTH No. <input type="checkbox"/> 23 of <input type="checkbox"/> 24	DATE OF FIRST VISIT TO DOCTOR DURING PREGNANCY 101 <input type="checkbox"/>
TIME OF BIRTH _____	DATE OF FIRST VISIT TO HOSPITAL DURING PREGNANCY 109 <input type="checkbox"/>
SEX (Male = 1, Female = 2, Indeterminate = 3) 25 <input type="checkbox"/>	WAS MOTHER IMMUNE TO RUBELLA (Yes = 1, No = 2, Not Known = 3) 117 <input type="checkbox"/>
BIRTHWEIGHT 26 <input type="checkbox"/> GRAMMES	METHOD OF DELIVERY (Spontaneous = 1, Breech ± Forceps = 2, Forceps = 3, Vac. Extraction = 4, Caesarean Sec. = 5, Other = 6) 118 <input type="checkbox"/>
PERIOD OF GESTATION 30 <input type="checkbox"/> WEEKS	MAIN MATERNAL DISEASE OR CONDITION AFFECTING FETUS OR INFANT _____
<b>FATHER</b>	_____ 119 <input type="checkbox"/>
COUNTY _____ 32 <input type="checkbox"/>	OTHER MATERNAL DISEASE OR CONDITION AFFECTING FETUS OR INFANT _____
OCCUPATION _____ 35 <input type="checkbox"/>	_____ 123 <input type="checkbox"/>
DATE OF BIRTH 37 <input type="checkbox"/>	<b>INFANT'S HEALTH</b>
<b>MOTHER</b>	TYPE OF FEEDING (Artificial = 1, Breast = 2, Combined = 3) 127 <input type="checkbox"/>
COUNTY _____ 45 <input type="checkbox"/>	WAS BCG ADMINISTERED (Yes = 1, No = 2) 128 <input type="checkbox"/>
OCCUPATION _____ 48 <input type="checkbox"/>	MAIN DISEASE OR CONGENITAL MALFORMATION AFFECTING INFANT _____
DATE OF BIRTH 50 <input type="checkbox"/>	_____ 129 <input type="checkbox"/>
MARITAL STATUS (Married = 1, Single = 2, Widowed = 3, Separated = 4, Divorced = 5) 58 <input type="checkbox"/>	OTHER DISEASES OR CONGENITAL MALFORMATIONS AFFECTING INFANT _____
DATE OF PRESENT MARRIAGE 59 <input type="checkbox"/>	_____ 133 <input type="checkbox"/>
DATE OF LAST BIRTH (live or still) 67 <input type="checkbox"/>	<b>HOSPITAL</b>
NO. OF PREVIOUS LIVE BIRTHS 75 <input type="checkbox"/>	WAS ADMISSION BOOKED (Yes = 1, No = 2) 137 <input type="checkbox"/>
CHILDREN STILL LIVING 77 <input type="checkbox"/>	DATE OF MOTHER'S ADMISSION 138 <input type="checkbox"/>
STILL BIRTHS 79 <input type="checkbox"/>	DATE OF MOTHER'S DISCHARGE 146 <input type="checkbox"/>
SPONTANEOUS ABORTIONS 81 <input type="checkbox"/>	DATE OF INFANT'S DISCHARGE 154 <input type="checkbox"/>
<b>PERINATAL DEATH</b>	WAS INFANT TRANSFERRED TO OTHER HOSPITAL FOR MEDICAL REASONS (Yes = 1, No = 2) 162 <input type="checkbox"/>
TYPE OF DEATH (Early Neonatal = 1, Stillbirth = 2) 83 <input type="checkbox"/>	IF 'YES', NAME OF HOSPITAL _____
WAS AUTOPSY PERFORMED (Yes = 1, No = 2) 84 <input type="checkbox"/>	_____ 163 <input type="checkbox"/>
AGE OF DEATH 85 <input type="checkbox"/> DAYS 86 <input type="checkbox"/> HOURS	<b>GENERAL PRACTITIONER ATTENDED BY MOTHER</b>
PLACE OF DEATH _____ 88 <input type="checkbox"/>	_____
IF STILLBIRTH, DID DEATH OCCUR BEFORE LABOUR (1) DURING LABOUR (2) NOT KNOWN (3) 91 <input type="checkbox"/>	_____
<b>CAUSE OF DEATH</b>	_____
MAIN DISEASE OR CONDITION IN FETUS OR INFANT _____ 92 <input type="checkbox"/>	_____
OTHER DISEASES OR CONDITIONS IN FETUS OR INFANT _____ 96 <input type="checkbox"/>	_____
SIGNATURE _____	DATE _____

The following format outlines the new format form effective January 1st 2004.

Notification of Birth - To: National Perinatal Reporting System, The Economic & Social Research Institute, 4 Burlington Rd. Dublin 4			
TYPE OF BIRTH (Live = 1, Still = 2)	PLACE OF BIRTH (Hospital = 1, BBA = 2, Domiciliary = 3)	NAME AND _____	
<input type="checkbox"/>	<input type="checkbox"/>	ADDRESS OF _____	
HOSPITAL NO. 3 _____	CASE NO. 6 _____	HOSPITAL _____	
<b>INFANT'S DETAILS</b>		<b>MOTHER'S HEALTH</b>	
DATE OF BIRTH (DD/MM/YYYY) 14 _____	TIME OF BIRTH _____	ANTENATAL CARE THIS PREGNANCY (Hospital / Obstetrician = 1, G.P. Only = 2, Combined = 3, None = 4, Midwife Only=5)	117 <input type="checkbox"/>
IF MULTIPLE BIRTH	ORDER OF BIRTH No. _____ 22 of _____ 23	DATE OF FIRST VISIT TO DOCTOR DURING PREGNANCY (DDMMYYYY)	118 _____
SEX (Male = 1, Female = 2, Indeterminate = 3)	24 <input type="checkbox"/>	DATE OF FIRST VISIT TO HOSPITAL DURING PREGNANCY (DDMMYYYY)	126 _____
BIRTHWEIGHT 25 _____	GRAMMES	WAS MOTHER IMMUNE TO RUBELLA (Yes = 1, No = 2, Not Known = 3)	134 <input type="checkbox"/>
PERIOD OF GESTATION 29 _____	WEEKS	METHOD OF DELIVERY (Spontaneous = 1, Breech ± Forceps = 2, Forceps = 3, Vac. Extraction = 4, Caesarean Sec. = 5, Other = 6)	135 <input type="checkbox"/>
<b>FATHER'S DETAILS</b>		MAIN MATERNAL DISEASE OR CONDITION AFFECTING FOETUS OR INFANT	
COUNTY _____	31 _____	_____ 136 _____	
COUNTRY _____	34 _____	OTHER MATERNAL DISEASES OR CONDITIONS AFFECTING FOETUS OR INFANT	
NATIONALITY _____	38 _____	_____ 141 _____	
OCCUPATION _____	42 _____	<b>INFANT'S HEALTH</b>	
DATE OF BIRTH (DDMMYYYY) 44 _____		TYPE OF FEEDING (Artificial = 1, Breast = 2, Combined = 3)	146 <input type="checkbox"/>
<b>MOTHER'S DETAILS</b>		WAS BCG ADMINISTERED (Yes = 1, No = 2)	147 <input type="checkbox"/>
COUNTY _____	52 _____	MAIN DISEASE OR CONGENITAL MALFORMATION AFFECTING INFANT	
COUNTRY _____	55 _____	_____ 148 _____	
NATIONALITY _____	59 _____	OTHER DISEASES OR CONGENITAL MALFORMATIONS AFFECTING INFANT	
OCCUPATION _____	63 _____	_____ 153 _____	
DATE OF BIRTH (DDMMYYYY) 65 _____		<b>HOSPITAL</b>	
MARITAL STATUS (Married = 1, Never Married = 2, Widowed = 3, Married but Separated = 4, Divorced, = 5)	73 <input type="checkbox"/>	WAS ADMISSION BOOKED (Yes = 1, No = 2)	158 <input type="checkbox"/>
DATE OF PRESENT MARRIAGE (DDMMYYYY) 74 _____		DATE OF MOTHER'S ADMISSION (DDMMYYYY)	159 _____
DATE OF LAST BIRTH (live or still) (DDMMYYYY) 82 _____		DATE OF MOTHER'S DISCHARGE (DDMMYYYY)	167 _____
NO. OF PREVIOUS LIVE BIRTHS 90 _____		DATE OF INFANT'S DISCHARGE (DDMMYYYY)	175 _____
CHILDREN STILL LIVING 92 _____		WAS INFANT TRANSFERRED TO OTHER HOSPITAL FOR MEDICAL REASONS (Yes = 1, No = 2)	183 <input type="checkbox"/>
STILLBIRTHS 94 _____		IF 'YES', NAME OF HOSPITAL _____	_____ 184 _____
SPONTANEOUS ABORTIONS 96 _____		<b>GENERAL PRACTITIONER ATTENDED BY MOTHER</b>	
<b>PERINATAL DEATH</b>		_____	
TYPE OF DEATH (Early Neonatal = 1, Stillbirth = 2)	98 <input type="checkbox"/>	_____	
WAS AUTOPSY PERFORMED (Yes = 1, No = 2)	99 <input type="checkbox"/>	_____	
AGE AT DEATH 100 _____	DAYS	101 _____	HOURS
PLACE OF DEATH _____	103 _____	_____	
IF STILLBIRTH, DID DEATH OCCUR BEFORE LABOUR (1) DURING LABOUR (2) NOT KNOWN (3)	106 <input type="checkbox"/>	_____	
<b>CAUSE OF DEATH</b>		_____	
MAIN DISEASE OR CONDITION IN FOETUS OR INFANT _____		_____ 107 _____	
OTHER DISEASES OR CONDITIONS IN FOETUS OR INFANT _____		_____ 112 _____	
Signature _____		Date _____	

BNF01/2003

# Appendix B

## 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 5 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 or the father's occupation has been left blank.

Under Father's occupation, the following applies;

'Not Applicable' is entered when the marital status of the mother has been given as single, 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. 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 given below:

- 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 C

## 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 ninth revision of the International Classification of Diseases (ICD).<sup>6</sup> Briefly, the principal coding criteria are as follows:

1. 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.
2. If heart or cardiac failure, asphyxia or anoxia (any condition in 768) or prematurity (any condition in 765) is entered as the main cause and other conditions of the infant or foetus are entered as secondary causes, then the first-mentioned of these other conditions is entered as the main cause of death.
3. If two or more conditions are entered as the main cause of death then the first mentioned condition is coded as if it had been mentioned alone and the second-mentioned cause is coded as the secondary condition.
4. If there is no entry for a main cause, then any secondary condition of the infant is coded as the main cause.
5. If a maternal condition is entered in the section reserved for the infant's conditions or if an infant's condition is entered in the section provided for maternal conditions then the conditions are coded as if they had been entered in the respective correct section.
6. If the foetus died before the onset of labour, then obstetrical complications that could not have affected the outcome are ignored as causes of death.

For the purpose of the cause of death tables included in this report, one further criterion has been applied. This is to the effect that where heart failure, asphyxia or anoxia (any condition in 768) or prematurity (any condition in 765) is coded as the main cause of death or where no infant's condition is given then, where a specific maternal condition is given, the main cause of death is classified under the maternal condition.

<sup>6</sup> World Health Organisation. 1978. *Manual of the International Classification of Diseases, Injuries and Causes of Death*, 9th Revision. Vol. 1. Geneva: WHO.

In Table 5.2, which contains a detailed classification of cause of death, the corresponding ICD numbers are listed in the left hand column of that table. For the less detailed tables (i.e., Tables 5.3, 5.8, and 5.9), the ICD codes relating to each cause of death category are given below:

ICD Codes	Cause of Death
740	Anencephalus and similar anomalies
741	Spina Bifida
742	Other congenital anomalies of the nervous system
745-747	Congenital anomalies of the heart
758	Chromosomal anomalies (including Down's Syndrome)
743-744, 748-757, 759	Other congenital anomalies
760-761	Maternal conditions and complications
762	Complications of the placenta, cord and membranes
763	Other complications of labour and delivery
764-765	Slow foetal growth, foetal malnutrition, and immaturity
766	Disorders relating to long gestation and high birthweight
767	Birth trauma
768-770	Intrauterine hypoxia and birth asphyxia and other respiratory conditions of foetus or newborn
771	Infections specific to the perinatal period
772	Foetal and neonatal haemorrhage
773	Haemolytic disease of foetus or newborn, due to iso-immunisation
775	Endocrine and metabolic disturbances specific to the foetus and newborn
778	Conditions involving the integument and temperature regulation of foetus and newborn
779.9	Maceration
780-799	Symptoms, signs and ill-defined conditions

All other codes have been classified to the category 'all other causes'. Where no cause has been given, perinatal deaths are categorised as 'cause not stated'.

# Appendix D

## Classification of County of Residence

The following codes are applied to mother 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. Where county of residence is recorded as Tipperary and North or South Riding is not specified, then the assignment of the code is based on the Health Board in which the birth occurred. For births occurring in the South-Eastern or Southern Health Boards where Tipperary is recorded as county of residence then a code of 62, Tipperary South Riding is applied. For births occurring in other Health Boards where Tipperary is recorded as county of residence then a code of 32, Tipperary North Riding is applied. Where a mother 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
11	Dublin county
12	Kildare
13	Wicklow
20	Laois
21	Offaly
22	Longford
23	Westmeath
30	Clare
31	Limerick
32	Tipperary North Riding
40	Meath
41	Cavan
42	Monaghan
43	Louth
50	Donegal
51	Sligo
52	Leitrim
60	Carlow
61	Kilkenny
62	Tipperary South Riding
63	Waterford
64	Wexford
70	Cork
71	Kerry
80	Galway
81	Mayo
82	Roscommon
90	Other – all other places outside Republic of Ireland
99	Not Stated



# Appendix E

## Cross-Tabulations of Selected Variables: 2002

This appendix contains a range of cross-tabulations relating to live and still singleton births. 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 and left. 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 E1**  
**Age of Mother by Maternal Parity, Live Births and Stillbirths, 2002**

Singleton Births

Age of Mother	Maternal Parity									Total
	0	1	2	3	4	5	6	More than 6	Not Stated	
Under 15	10	0	0	0	0	0	0	0	0	10
	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
15-19	2,684	251	17	0	0	0	0	0	0	2,952
	90.92	8.50	0.58	0.00	0.00	0.00	0.00	0.00	0.00	
	11.11	1.36	0.17	0.00	0.00	0.00	0.00	0.00	0.00	5.00
20-24	5,417	2,277	627	151	31	4	1	0	1	8,509
	63.66	26.76	7.37	1.77	0.36	0.05	0.01	0.00	0.01	
	22.42	12.37	6.24	3.79	2.12	0.75	0.41	0.00	16.67	14.40
25-29	6,735	4,754	1,963	619	231	66	15	5	2	14,390
	46.80	33.04	13.64	4.30	1.61	0.46	0.10	0.03	0.01	
	27.88	25.82	19.54	15.55	15.82	12.31	6.17	2.17	33.33	24.36
30-34	6,684	7,167	3,802	1,402	475	166	70	67	3	19,836
	33.70	36.13	19.17	7.07	2.39	0.84	0.35	0.34	0.02	
	27.67	38.92	37.85	35.23	32.53	30.97	28.81	29.13	50.00	33.58
35-39	2,279	3,499	3,160	1,452	530	214	103	91	0	11,328
	20.12	30.89	27.90	12.82	4.68	1.89	0.91	0.80	0.00	
	9.43	19.00	31.46	36.48	36.30	39.93	42.39	39.57	0.00	19.18
40-44	319	448	460	339	180	82	48	55	0	1,931
	16.52	23.20	23.82	17.56	9.32	4.25	2.49	2.85	0.00	
	1.32	2.43	4.58	8.52	12.33	15.30	19.75	23.91	0.00	3.27
45 and over	10	4	9	12	13	3	6	9	0	66
	15.15	6.06	13.64	18.18	19.70	4.55	9.09	13.64	0.00	
	0.04	0.02	0.09	0.30	0.89	0.56	2.47	3.91	0.00	0.11
Not Stated	19	14	7	5	0	1	0	3	0	49
	38.78	28.57	14.29	10.20	0.00	2.04	0.00	6.12	0.00	
	0.08	0.08	0.07	0.13	0.00	0.19	0.00	1.30	0.00	0.08
<b>Total</b>	<b>24,157</b>	<b>18,414</b>	<b>10,045</b>	<b>3,980</b>	<b>1,460</b>	<b>536</b>	<b>243</b>	<b>230</b>	<b>6</b>	<b>59,071</b>
	<b>40.89</b>	<b>31.17</b>	<b>17.00</b>	<b>6.74</b>	<b>2.47</b>	<b>0.91</b>	<b>0.41</b>	<b>0.39</b>	<b>0.01</b>	<b>100.00</b>

**Table E2**  
**Method of Delivery by Maternal Parity, Live Births and Stillbirths, 2002**

Singleton Births

Method of Delivery	Maternal Parity									
	0	1	2	3	4	5	6	More than 6	Not Stated	Total
Spontaneous	12,074	12,686	7,582	3,104	1,143	430	187	181	5	37,392
	32.29	33.93	20.28	8.30	3.06	1.15	0.50	0.48	0.01	
	49.98	68.89	75.48	77.99	78.29	80.22	76.95	78.70	83.33	63.30
Breech/Forceps	129	42	26	9	8	3	0	3	0	220
	58.64	19.09	11.82	4.09	3.64	1.36	0.00	1.36	0.00	
	0.53	0.23	0.26	0.23	0.55	0.56	0.00	1.30	0.00	0.37
Forceps	1,505	292	48	20	7	3	2	1	0	1,878
	80.14	15.55	2.56	1.06	0.37	0.16	0.11	0.05	0.00	
	6.23	1.59	0.48	0.50	0.48	0.56	0.82	0.43	0.00	3.18
Vac. Extraction	4,744	1,315	421	135	38	10	5	5	1	6,674
	71.08	19.70	6.31	2.02	0.57	0.15	0.07	0.07	0.01	
	19.64	7.14	4.19	3.39	2.60	1.87	2.06	2.17	16.67	11.30
Caesarean	5,640	4,014	1,944	699	258	89	47	39	0	12,730
	44.30	31.53	15.27	5.49	2.03	0.70	0.37	0.31	0.00	
	23.35	21.80	19.35	17.56	17.67	16.60	19.34	16.96	0.00	21.55
Other specified & Combined	57	60	20	11	4	1	2	0	0	155
	36.77	38.71	12.90	7.10	2.58	0.65	1.29	0.00	0.00	
	0.24	0.33	0.20	0.28	0.27	0.19	0.82	0.00	0.00	0.26
Not Stated	8	5	4	2	2	0	0	1	0	22
	36.36	22.73	18.18	9.09	9.09	0.00	0.00	4.55	0.00	
	0.03	0.03	0.04	0.05	0.14	0.00	0.00	0.43	0.00	0.04
<b>Total</b>	<b>24,157</b>	<b>18,414</b>	<b>10,045</b>	<b>3,980</b>	<b>1,460</b>	<b>536</b>	<b>243</b>	<b>230</b>	<b>6</b>	<b>59,071</b>
	<b>40.89</b>	<b>31.17</b>	<b>17.00</b>	<b>6.74</b>	<b>2.47</b>	<b>0.91</b>	<b>0.41</b>	<b>0.39</b>	<b>0.01</b>	<b>100.00</b>

**Table E3**  
**Marital Status by Age of Mother, Live Births and Stillbirths, 2002**

Singleton Births

Marital Status	Age of Mother									
	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45 and over	Not Stated	Total
Married	1	255	2,081	9,495	16,858	9,919	1,613	53	34	40,309
	0.00	0.63	5.16	23.56	41.82	24.61	4.00	0.13	0.08	
	10.00	8.64	24.46	65.98	84.99	87.56	83.53	80.30	69.39	68.24
Single	9	2,693	6,389	4,771	2,656	1,070	194	9	14	17,805
	0.05	15.12	35.88	26.80	14.92	6.01	1.09	0.05	0.08	
	90.00	91.23	75.09	33.15	13.39	9.45	10.05	13.64	28.57	30.14
Widowed	0	0	1	8	31	24	15	0	0	79
	0.00	0.00	1.27	10.13	39.24	30.38	18.99	0.00	0.00	
	0.00	0.00	0.01	0.06	0.16	0.21	0.78	0.00	0.00	0.13
Separated	0	2	33	99	244	239	87	4	1	709
	0.00	0.28	4.65	13.96	34.41	33.71	12.27	0.56	0.14	
	0.00	0.07	0.39	0.69	1.23	2.11	4.51	6.06	2.04	1.20
Divorced	0	2	4	17	45	72	22	0	0	162
	0.00	1.23	2.47	10.49	27.78	44.44	13.58	0.00	0.00	
	0.00	0.07	0.05	0.12	0.23	0.64	1.14	0.00	0.00	0.27
Not Stated	0	0	1	0	2	4	0	0	0	7
	0.00	0.00	14.29	0.00	28.57	57.14	0.00	0.00	0.00	
	0.00	0.00	0.01	0.00	0.01	0.04	0.00	0.00	0.00	0.01
Total	10	2,952	8,509	14,390	19,836	11,328	1,931	66	49	59,071
	0.02	5.00	14.40	24.36	33.58	19.18	3.27	0.11	0.08	100.00

**Table E4**  
**Marital Status by Age of Father, Live Births and Stillbirths, 2002**

Singleton Births

Marital Status	Age of Father									Total
	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45 and over	Not Stated	
Married	0	49	635	4,630	12,530	9,904	3,409	872	8,280	40,309
	0.00	0.12	1.58	11.49	31.08	24.57	8.46	2.16	20.54	
	0.00	32.89	54.69	87.31	95.80	97.29	96.74	92.47	33.48	68.24
Single	1	98	519	639	496	229	93	58	15,672	17,805
	0.01	0.55	2.91	3.59	2.79	1.29	0.52	0.33	88.02	
	100.00	65.77	44.70	12.05	3.79	2.25	2.64	6.15	63.37	30.14
Widowed	0	0	0	2	5	11	2	1	58	79
	0.00	0.00	0.00	2.53	6.33	13.92	2.53	1.27	73.42	
	0.00	0.00	0.00	0.04	0.04	0.11	0.06	0.11	0.23	0.13
Separated	0	1	7	20	34	27	15	9	596	709
	0.00	0.14	0.99	2.82	4.80	3.81	2.12	1.27	84.06	
	0.00	0.67	0.60	0.38	0.26	0.27	0.43	0.95	2.41	1.20
Divorced	0	1	0	12	13	7	4	3	122	162
	0.00	0.62	0.00	7.41	8.02	4.32	2.47	1.85	75.31	
	0.00	0.67	0.00	0.23	0.10	0.07	0.11	0.32	0.49	0.27
Not Stated	0	0	0	0	1	2	1	0	3	7
	0.00	0.00	0.00	0.00	14.29	28.57	14.29	0.00	42.86	
	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.00	0.01	0.01
Total	1	149	1,161	5,303	13,079	10,180	3,524	943	24,731	59,071
	0.00	0.25	1.97	8.98	22.14	17.23	5.97	1.60	41.87	100.00

Table E5

## Gestation Period at Delivery by Maternal Parity, Live Births and Stillbirths, 2002

## Singleton Births

Gestation Period (weeks)	Maternal Parity									Total
	0	1	2	3	4	5	6	More than 6	Not Stated	
Less than 22	1	0	0	0	0	0	0	0	0	1
	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22-27	89	48	28	8	10	4	3	3	0	193
	46.11	24.87	14.51	4.15	5.18	2.07	1.55	1.55	0.00	
	0.37	0.26	0.28	0.20	0.68	0.75	1.23	1.30	0.00	0.33
28-31	165	85	41	27	12	4	1	1	0	336
	49.11	25.30	12.20	8.04	3.57	1.19	0.30	0.30	0.00	
	0.68	0.46	0.41	0.68	0.82	0.75	0.41	0.43	0.00	0.57
32-36	1,023	584	295	161	70	27	10	18	0	2,188
	46.76	26.69	13.48	7.36	3.20	1.23	0.46	0.82	0.00	
	4.23	3.17	2.94	4.05	4.79	5.04	4.12	7.83	0.00	3.70
37-41	21,237	16,903	9,286	3,603	1,306	468	220	195	5	53,223
	39.90	31.76	17.45	6.77	2.45	0.88	0.41	0.37	0.01	
	87.91	91.79	92.44	90.53	89.45	87.31	90.53	84.78	83.33	90.10
42 and over	1,636	792	392	180	62	33	9	13	1	3,118
	52.47	25.40	12.57	5.77	1.99	1.06	0.29	0.42	0.03	
	6.77	4.30	3.90	4.52	4.25	6.16	3.70	5.65	16.67	5.28
Not Stated	6	2	3	1	0	0	0	0	0	12
	50.00	16.67	25.00	8.33	0.00	0.00	0.00	0.00	0.00	
	0.02	0.01	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.02
<b>Total</b>	<b>24,157</b>	<b>18,414</b>	<b>10,045</b>	<b>3,980</b>	<b>1,460</b>	<b>536</b>	<b>243</b>	<b>230</b>	<b>6</b>	<b>59,071</b>
	<b>40.89</b>	<b>31.17</b>	<b>17.00</b>	<b>6.74</b>	<b>2.47</b>	<b>0.91</b>	<b>0.41</b>	<b>0.39</b>	<b>0.01</b>	<b>100.00</b>

**Table E6**  
**Age of Mother by Gestation Period at Delivery, Live Births and Stillbirths, 2002**

Singleton Births

Age of Mother	Gestation Period (weeks)							Total
	Less than 22	22-27	28-31	32-36	37-41	42 and over	Not Stated	
<b>Frequency</b>								
<b>Row Per Cent</b>								
<b>Col. Per Cent</b>								
Under 15	0	1	0	4	5	0	0	10
	0.00	10.00	0.00	40.00	50.00	0.00	0.00	
	0.00	0.52	0.00	0.18	0.01	0.00	0.00	0.02
15-19	1	25	34	164	2,521	205	2	2,952
	0.03	0.85	1.15	5.56	85.40	6.94	0.07	
	100.00	12.95	10.12	7.50	4.74	6.57	16.67	5.00
20-24	0	29	61	376	7,492	549	2	8,509
	0.00	0.34	0.72	4.42	88.05	6.45	0.02	
	0.00	15.03	18.15	17.18	14.08	17.61	16.67	14.40
25-29	0	40	68	503	12,896	881	2	14,390
	0.00	0.28	0.47	3.50	89.62	6.12	0.01	
	0.00	20.73	20.24	22.99	24.23	28.26	16.67	24.36
30-34	0	60	102	671	18,037	963	3	19,836
	0.00	0.30	0.51	3.38	90.93	4.85	0.02	
	0.00	31.09	30.36	30.67	33.89	30.89	25.00	33.58
35-39	0	26	53	378	10,416	452	3	11,328
	0.00	0.23	0.47	3.34	91.95	3.99	0.03	
	0.00	13.47	15.77	17.28	19.57	14.50	25.00	19.18
40-44	0	11	17	89	1,751	63	0	1,931
	0.00	0.57	0.88	4.61	90.68	3.26	0.00	
	0.00	5.70	5.06	4.07	3.29	2.02	0.00	3.27
45 and over	0	0	1	3	59	3	0	66
	0.00	0.00	1.52	4.55	89.39	4.55	0.00	
	0.00	0.00	0.30	0.14	0.11	0.10	0.00	0.11
Not Stated	0	1	0	0	46	2	0	49
	0.00	2.04	0.00	0.00	93.88	4.08	0.00	
	0.00	0.52	0.00	0.00	0.09	0.06	0.00	0.08
<b>Total</b>	<b>1</b>	<b>193</b>	<b>336</b>	<b>2,188</b>	<b>53,223</b>	<b>3,118</b>	<b>12</b>	<b>59,071</b>
	<b>0.00</b>	<b>0.33</b>	<b>0.57</b>	<b>3.70</b>	<b>90.10</b>	<b>5.28</b>	<b>0.02</b>	<b>100.00</b>

**Table E7**  
**Method of Delivery by Age of Mother, Live Births and Stillbirths, 2002**

Singleton Births

Method of Delivery	Age of Mother									
	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45 and over	Not Stated	Total
Spontaneous	6	2,047	5,921	9,259	12,017	6,931	1,139	35	37	37,392
	0.02	5.47	15.83	24.76	32.14	18.54	3.05	0.09	0.10	
	60.00	69.34	69.59	64.34	60.58	61.18	58.98	53.03	75.51	63.30
Breech/Forceps	0	12	33	50	82	39	4	0	0	220
	0.00	5.45	15.00	22.73	37.27	17.73	1.82	0.00	0.00	
	0.00	0.41	0.39	0.35	0.41	0.34	0.21	0.00	0.00	0.37
Forceps	1	101	215	473	735	308	44	0	1	1,878
	0.05	5.38	11.45	25.19	39.14	16.40	2.34	0.00	0.05	
	10.00	3.42	2.53	3.29	3.71	2.72	2.28	0.00	2.04	3.18
Vac. Extraction	0	417	1,037	1,725	2,303	1,025	162	3	2	6,674
	0.00	6.25	15.54	25.85	34.51	15.36	2.43	0.04	0.03	
	0.00	14.13	12.19	11.99	11.61	9.05	8.39	4.55	4.08	11.30
Caesarean	3	370	1,290	2,843	4,649	2,973	566	27	9	12,730
	0.02	2.91	10.13	22.33	36.52	23.35	4.45	0.21	0.07	
	30.00	12.53	15.16	19.76	23.44	26.24	29.31	40.91	18.37	21.55
Other specified & Combined	0	4	8	34	45	47	16	1	0	155
	0.00	2.58	5.16	21.94	29.03	30.32	10.32	0.65	0.00	
	0.00	0.14	0.09	0.24	0.23	0.41	0.83	1.52	0.00	0.26
Not Stated	0	1	5	6	5	5	0	0	0	22
	0.00	4.55	22.73	27.27	22.73	22.73	0.00	0.00	0.00	
	0.00	0.03	0.06	0.04	0.03	0.04	0.00	0.00	0.00	0.04
Total	10	2,952	8,509	14,390	19,836	11,328	1,931	66	49	59,071
	0.02	5.00	14.40	24.36	33.58	19.18	3.27	0.11	0.08	100.00

**Table E8**  
**Birthweight by Gestation Period at Delivery, Live Births and Stillbirths, 2002**

Singleton Births

Birthweight (grams)	Gestation Period (weeks)							Total
	Less than 22	22-27	28-31	32-36	37-41	42 and over	Not Stated	
500-749	1	86	21	1	0	0	0	109
	0.92	78.90	19.27	0.92	0.00	0.00	0.00	
	100.00	44.56	6.25	0.05	0.00	0.00	0.00	0.18
750-999	0	59	35	4	0	0	0	98
	0.00	60.20	35.71	4.08	0.00	0.00	0.00	
	0.00	30.57	10.42	0.18	0.00	0.00	0.00	0.17
1000-1249	0	37	67	17	0	0	0	121
	0.00	30.58	55.37	14.05	0.00	0.00	0.00	
	0.00	19.17	19.94	0.78	0.00	0.00	0.00	0.20
1250-1499	0	5	79	67	5	0	0	156
	0.00	3.21	50.64	42.95	3.21	0.00	0.00	
	0.00	2.59	23.51	3.06	0.01	0.00	0.00	0.26
1500-1999	0	4	108	275	64	0	0	451
	0.00	0.89	23.95	60.98	14.19	0.00	0.00	
	0.00	2.07	32.14	12.57	0.12	0.00	0.00	0.76
2000-2499	0	0	15	618	832	9	1	1,475
	0.00	0.00	1.02	41.90	56.41	0.61	0.07	
	0.00	0.00	4.46	28.24	1.56	0.29	8.33	2.50
2500-2999	0	1	6	748	5,724	134	1	6,614
	0.00	0.02	0.09	11.31	86.54	2.03	0.02	
	0.00	0.52	1.79	34.19	10.75	4.30	8.33	11.20
3000-3499	0	0	3	344	18,081	729	5	19,162
	0.00	0.00	0.02	1.80	94.36	3.80	0.03	
	0.00	0.00	0.89	15.72	33.97	23.38	41.67	32.44
3500-3999	0	0	0	100	19,219	1,245	2	20,566
	0.00	0.00	0.00	0.49	93.45	6.05	0.01	
	0.00	0.00	0.00	4.57	36.11	39.93	16.67	34.82
4000-4499	0	1	0	12	7,720	794	0	8,527
	0.00	0.01	0.00	0.14	90.54	9.31	0.00	
	0.00	0.52	0.00	0.55	14.51	25.47	0.00	14.44
4500 and over	0	0	1	1	1,573	207	0	1,782
	0.00	0.00	0.06	0.06	88.27	11.62	0.00	
	0.00	0.00	0.30	0.05	2.96	6.64	0.00	3.02
Not Stated	0	0	1	1	5	0	3	10
	0.00	0.00	10.00	10.00	50.00	0.00	30.00	
	0.00	0.00	0.30	0.05	0.01	0.00	25.00	0.02
<b>Total</b>	<b>1</b>	<b>193</b>	<b>336</b>	<b>2,188</b>	<b>53,223</b>	<b>3,118</b>	<b>12</b>	<b>59,071</b>
	<b>0.00</b>	<b>0.33</b>	<b>0.57</b>	<b>3.70</b>	<b>90.10</b>	<b>5.28</b>	<b>0.02</b>	<b>100.00</b>

**Table E9**  
**Method of Delivery by Mother's Length of Stay in Hospital after Delivery, 2002**

Singleton Births

Method of Delivery	Postnatal Length of Stay								
	0-1 Days	2 Days	3-5 Days	6-8 Days	9-11 Days	12-14 Days	2 weeks or more	Not Stated	Total
Spontaneous	5,324	13,384	17,645	592	65	19	30	48	37,107
	14.35	36.07	47.55	1.60	0.18	0.05	0.08	0.13	
	91.16	86.21	53.03	16.39	18.90	27.54	46.15	90.57	63.13
Breech/Forceps	40	37	134	6	0	0	2	0	219
	18.26	16.89	61.19	2.74	0.00	0.00	0.91	0.00	
	0.68	0.24	0.40	0.17	0.00	0.00	3.08	0.00	0.37
Forceps	65	355	1,352	80	19	5	2	0	1,878
	3.46	18.90	71.99	4.26	1.01	0.27	0.11	0.00	
	1.11	2.29	4.06	2.21	5.52	7.25	3.08	0.00	3.19
Vac. Extraction	361	1,578	4,493	212	24	1	5	0	6,674
	5.41	23.64	67.32	3.18	0.36	0.01	0.07	0.00	
	6.18	10.16	13.50	5.87	6.98	1.45	7.69	0.00	11.35
Caesarean	35	158	9,573	2,662	229	44	26	3	12,730
	0.27	1.24	75.20	20.91	1.80	0.35	0.20	0.02	
	0.60	1.02	28.77	73.68	66.57	63.77	40.00	5.66	21.66
Other specified & Combined	9	7	72	60	7	0	0	0	155
	5.81	4.52	46.45	38.71	4.52	0.00	0.00	0.00	
	0.15	0.05	0.22	1.66	2.03	0.00	0.00	0.00	0.26
Not Stated	6	6	5	1	0	0	0	2	20
	30.00	30.00	25.00	5.00	0.00	0.00	0.00	10.00	
	0.10	0.04	0.02	0.03	0.00	0.00	0.00	3.77	0.03
<b>Total</b>	<b>5,840</b>	<b>15,525</b>	<b>33,274</b>	<b>3,613</b>	<b>344</b>	<b>69</b>	<b>65</b>	<b>53</b>	<b>58,783</b>
	<b>9.93</b>	<b>26.41</b>	<b>56.60</b>	<b>6.15</b>	<b>0.59</b>	<b>0.12</b>	<b>0.11</b>	<b>0.09</b>	<b>100.00</b>

Note:

-'Not Stated' includes 43 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 288, are excluded from this table. See Appendix G for detailed analysis.

**Table E10**  
**Maternal Parity by Mother's Length of Stay in Hospital after Delivery, 2002**

Singleton Births

Maternal Parity	Postnatal Length of Stay								
	0-1 Days	2 Days	3-5 Days	6-8 Days	9-11 Days	12-14 Days	2 weeks or more	Not Stated	Total
0	995	4,292	16,615	1,934	191	35	33	16	24,111
	4.13	17.80	68.91	8.02	0.79	0.15	0.14	0.07	
	17.04	27.65	49.93	53.53	55.52	50.72	50.77	30.19	41.02
1	2,222	5,841	9,236	905	73	15	16	13	18,321
	12.13	31.88	50.41	4.94	0.40	0.08	0.09	0.07	
	38.05	37.62	27.76	25.05	21.22	21.74	24.62	24.53	31.17
2	1,493	3,282	4,622	488	46	10	10	12	9,963
	14.99	32.94	46.39	4.90	0.46	0.10	0.10	0.12	
	25.57	21.14	13.89	13.51	13.37	14.49	15.38	22.64	16.95
3	654	1,323	1,745	184	19	5	1	8	3,939
	16.60	33.59	44.30	4.67	0.48	0.13	0.03	0.20	
	11.20	8.52	5.24	5.09	5.52	7.25	1.54	15.09	6.70
4	267	456	638	68	10	0	3	3	1,445
	18.48	31.56	44.15	4.71	0.69	0.00	0.21	0.21	
	4.57	2.94	1.92	1.88	2.91	0.00	4.62	5.66	2.46
5	108	187	213	15	3	0	2	0	528
	20.45	35.42	40.34	2.84	0.57	0.00	0.38	0.00	
	1.85	1.20	0.64	0.42	0.87	0.00	3.08	0.00	0.90
6	48	80	104	8	1	1	0	0	242
	19.83	33.06	42.98	3.31	0.41	0.41	0.00	0.00	
	0.82	0.52	0.31	0.22	0.29	1.45	0.00	0.00	0.41
More than 6	51	63	100	11	1	3	0	0	229
	22.27	27.51	43.67	4.80	0.44	1.31	0.00	0.00	
	0.87	0.41	0.30	0.30	0.29	4.35	0.00	0.00	0.39
Not Stated	2	1	1	0	0	0	0	1	5
	40.00	20.00	20.00	0.00	0.00	0.00	0.00	20.00	
	0.03	0.01	0.00	0.00	0.00	0.00	0.00	1.89	0.01
Total	5,840	15,525	33,274	3,613	344	69	65	53	58,783
	9.93	26.41	56.60	6.15	0.59	0.12	0.11	0.09	100.00

Note:

- 'Not Stated' includes 43 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 288, are excluded from this table. See Appendix G for detailed analysis.

**Table E11**  
**Marital Status by Gestation Period at Time of First Visit to Doctor or Hospital During Pregnancy, Live Births and Stillbirths, 2002**

Singleton Births

Marital Status	Gestational Age at First Visit (weeks)				
	0-12	13-19	20 and over	Not Stated	Total
<b>Frequency</b>					
<b>Row Per Cent</b>					
<b>Col. Per Cent</b>					
Married	8,993	15,066	13,278	2,972	40,309
	22.31	37.38	32.94	7.37	
	72.57	69.72	61.07	89.30	68.24
Single	3,222	6,206	8,042	335	17,805
	18.10	34.86	45.17	1.88	
	26.00	28.72	36.99	10.07	30.14
Widowed	18	20	40	1	79
	22.78	25.32	50.63	1.27	
	0.15	0.09	0.18	0.03	0.13
Separated	133	245	318	13	709
	18.76	34.56	44.85	1.83	
	1.07	1.13	1.46	0.39	1.20
Divorced	26	71	60	5	162
	16.05	43.83	37.04	3.09	
	0.21	0.33	0.28	0.15	0.27
Not Stated	0	0	5	2	7
	0.00	0.00	71.43	28.57	
	0.00	0.00	0.02	0.06	0.01
<b>Total</b>	<b>12,392</b>	<b>21,608</b>	<b>21,743</b>	<b>3,328</b>	<b>59,071</b>
	<b>20.98</b>	<b>36.58</b>	<b>36.81</b>	<b>5.63</b>	<b>100.00</b>

**Table E12**  
**Interval in Years Since Last Birth by Gestation Period at Time of First Visit to Doctor or Hospital**  
**During Pregnancy, Live Births and Stillbirths, 2002**

Singleton Births

Interval Since Last Birth	Gestational Age at First Visit (weeks)				
	0-12	13-19	20 and over	Not Stated	Total
<b>Frequency</b>					
<b>Row Per Cent</b>					
<b>Col. Per Cent</b>					
No Previous Births	5,633	8,619	8,610	1,295	24,157
	23.32	35.68	35.64	5.36	
	45.46	39.89	39.60	38.91	40.89
1 year or less	67	154	261	38	520
	12.88	29.62	50.19	7.31	
	0.54	0.71	1.20	1.14	0.88
>1 year to 2 years	1,293	2,888	3,358	486	8,025
	16.11	35.99	41.84	6.06	
	10.43	13.37	15.44	14.60	13.59
>2 years to 3 years	1,807	3,274	3,036	540	8,657
	20.87	37.82	35.07	6.24	
	14.58	15.15	13.96	16.23	14.66
>3 years to 4 years	1,191	2,261	1,880	311	5,643
	21.11	40.07	33.32	5.51	
	9.61	10.46	8.65	9.34	9.55
>4 years to 5 years	787	1,434	1,317	184	3,722
	21.14	38.53	35.38	4.94	
	6.35	6.64	6.06	5.53	6.30
>5 years to 6 years	465	899	910	98	2,372
	19.60	37.90	38.36	4.13	
	3.75	4.16	4.19	2.94	4.02
More than 6 years	1,117	1,931	2,154	200	5,402
	20.68	35.75	39.87	3.70	
	9.01	8.94	9.91	6.01	9.14
Number of Previous Births Unknown	0	0	0	2	2
	0.00	0.00	0.00	100.00	
	0.00	0.00	0.00	0.06	0.00
Not Stated	32	148	217	174	571
	5.60	25.92	38.00	30.47	
	0.26	0.68	1.00	5.23	0.97
<b>Total</b>	<b>12,392</b>	<b>21,608</b>	<b>21,743</b>	<b>3,328</b>	<b>59,071</b>
	<b>20.98</b>	<b>36.58</b>	<b>36.81</b>	<b>5.63</b>	<b>100.00</b>

**Table E13**  
**Father's Occupation by Infant's Birthweight, Live Births and Stillbirths, 2002**

Singleton Births

Father's Occupation	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	2 0.07 1.83	3 0.11 3.06	5 0.18 4.13	5 0.18 3.21	11 0.40 2.44	44 1.62 2.98	192 7.06 2.90	783 28.78 4.09	1,050 38.59 5.11	502 18.45 5.89	122 4.48 6.85	2 0.07 20.00	2,721 4.61
Other Agricultural Occupations & Fishermen	0 0.00 0.00	1 0.18 1.02	1 0.18 0.83	0 0.00 0.00	4 0.72 0.89	11 1.98 0.75	47 8.45 0.71	166 29.86 0.87	213 38.31 1.04	97 17.45 1.14	16 2.88 0.90	0 0.00 0.00	556 0.94
Higher-Professional	7 0.18 6.42	5 0.13 5.10	5 0.13 4.13	6 0.16 3.85	18 0.47 3.99	66 1.74 4.47	370 9.74 5.59	1,223 32.18 6.38	1,372 36.11 6.67	606 15.95 7.11	122 3.21 6.85	0 0.00 0.00	3,800 6.43
Lower-Professional	4 0.15 3.67	2 0.07 2.04	1 0.04 0.83	2 0.07 1.28	17 0.62 3.77	47 1.72 3.19	256 9.35 3.87	863 31.51 4.50	1,016 37.09 4.94	439 16.03 5.15	91 3.32 5.11	1 0.04 10.00	2,739 4.64
Managers	6 0.12 5.50	7 0.14 7.14	5 0.10 4.13	6 0.12 3.85	25 0.51 5.54	75 1.54 5.08	381 7.84 5.76	1,468 30.22 7.66	1,835 37.78 8.92	850 17.50 9.97	199 4.10 11.17	0 0.00 0.00	4,857 8.22
Salaried-Employees	0 0.00 0.00	1 0.07 1.02	4 0.29 3.31	2 0.15 1.28	8 0.58 1.77	25 1.82 1.69	123 8.95 1.86	473 34.43 2.47	480 34.93 2.33	214 15.57 2.51	43 3.13 2.41	1 0.07 10.00	1,374 2.33
Non-Manual Workers	11 0.26 10.09	3 0.07 3.06	6 0.14 4.96	6 0.14 3.85	28 0.65 6.21	94 2.19 6.37	421 9.82 6.37	1,320 30.81 6.89	1,584 36.97 7.70	665 15.52 7.80	146 3.41 8.19	1 0.02 10.00	4,285 7.25
Other Non-Manual Workers	5 0.11 4.59	4 0.09 4.08	10 0.22 8.26	15 0.33 9.62	27 0.60 5.99	101 2.24 6.85	479 10.60 7.24	1,442 31.92 7.53	1,588 35.15 7.72	697 15.43 8.17	150 3.32 8.42	0 0.00 0.00	4,518 7.65
Skilled Manual Workers	11 0.11 10.09	12 0.12 12.24	14 0.14 11.57	34 0.33 21.79	73 0.71 16.19	225 2.18 15.25	967 9.36 14.62	3,280 31.76 17.12	3,696 35.79 19.51	1,664 16.11 19.51	348 3.37 19.53	2 0.02 20.00	10,326 17.48
Semi-skilled Manual Workers	2 0.07 1.83	6 0.22 6.12	4 0.15 3.31	6 0.22 3.85	13 0.47 2.88	53 1.92 3.59	285 10.33 4.31	910 32.99 4.75	976 35.39 4.75	405 14.68 4.75	98 3.55 5.50	0 0.00 0.00	2,758 4.67
Unskilled Manual Workers	0 0.00 0.00	2 0.34 2.04	0 0.00 0.00	5 0.85 3.21	5 0.85 1.11	19 3.24 1.29	73 12.44 1.10	201 34.24 1.05	183 31.18 0.89	78 13.29 0.91	21 3.58 1.18	0 0.00 0.00	587 0.99
Unemployed	12 0.62 11.01	3 0.15 3.06	7 0.36 5.79	4 0.21 2.56	15 0.77 3.33	56 2.87 3.80	270 13.85 4.08	686 35.20 3.58	628 32.22 3.05	227 11.65 2.66	41 2.10 2.30	0 0.00 0.00	1,949 3.30
Not Classifiable	3 0.46 2.75	2 0.31 2.04	1 0.15 0.83	2 0.31 1.28	4 0.62 0.89	14 2.16 0.95	85 13.10 1.29	218 33.59 1.14	223 34.36 1.08	77 11.86 0.90	19 2.93 1.07	1 0.15 10.00	649 1.10
Not Applicable	39 0.24 35.78	44 0.27 44.90	54 0.33 44.63	58 0.35 37.18	185 1.12 41.02	599 3.64 40.61	2,488 15.10 37.62	5,659 34.35 29.53	5,210 31.63 25.33	1,815 11.02 21.29	321 1.95 18.01	1 0.01 10.00	16,473 27.89
Not Stated	7 0.47 6.42	3 0.20 3.06	4 0.27 3.31	5 0.34 3.21	18 1.22 3.99	46 3.11 3.12	177 11.97 2.68	470 31.78 2.45	512 34.62 2.49	191 12.91 2.24	45 3.04 2.53	1 0.07 10.00	1,479 2.50
<b>Total</b>	109 0.18	98 0.17	121 0.20	156 0.26	451 0.76	1,475 2.50	6,614 11.20	19,162 32.44	20,566 34.82	8,527 14.44	1,782 3.02	10 0.02	59,071 100.00

Note: In this table 'Not Classifiable' includes 67 Fathers whose occupation was recorded as 'Home Duties'.

**Table E14**  
**Mother's Occupation by Infant's Birthweight, Live Births and Stillbirths, 2002**

Singleton Births

Mother's Occupation	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 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	1 0.80 0.22	5 4.00 0.34	9 7.20 0.14	34 27.20 0.18	44 35.20 0.21	26 20.80 0.30	6 4.80 0.34	0 0.00 0.00	125 0.21
Other Agricultural Occupations & Fishermen	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	1 1.16 0.64	1 1.16 0.22	2 2.33 0.14	10 11.63 0.15	23 26.74 0.12	33 38.37 0.16	13 15.12 0.15	3 3.49 0.17	0 0.00 0.00	86 0.15
Higher-Professional	3 0.12 2.75	2 0.08 2.04	5 0.20 4.13	5 0.20 3.21	10 0.41 2.22	39 1.58 2.64	204 8.28 3.08	797 32.35 4.16	909 36.89 4.42	411 16.68 4.82	79 3.21 4.43	0 0.00 0.00	2,464 4.17
Lower-Professional	9 0.13 8.26	9 0.13 9.18	8 0.11 6.61	12 0.17 7.69	39 0.55 8.65	130 1.82 8.81	609 8.51 9.21	2,189 30.60 11.42	2,740 38.30 13.32	1,170 16.35 13.72	235 3.28 13.19	4 0.06 40.00	7,154 12.11
Managers	6 0.18 5.50	3 0.09 3.06	2 0.06 1.65	8 0.23 5.13	27 0.79 5.99	74 2.17 5.02	304 8.89 4.60	1,063 31.10 5.55	1,264 36.98 6.15	550 16.09 6.45	117 3.42 6.57	0 0.00 0.00	3,418 5.79
Salaried-Employees	2 0.25 1.83	2 0.25 2.04	1 0.13 0.83	6 0.76 3.85	7 0.88 1.55	19 2.40 1.29	82 10.37 1.24	254 32.11 1.33	259 32.74 1.26	142 17.95 1.67	17 2.15 0.95	0 0.00 0.00	791 1.34
Non-Manual Workers	15 0.11 13.76	21 0.15 21.43	26 0.19 21.49	28 0.20 17.95	83 0.61 18.40	305 2.23 20.68	1,365 9.99 20.64	4,429 32.40 23.11	4,895 35.81 23.80	2,089 15.28 24.50	414 3.03 23.23	0 0.00 0.00	13,670 23.14
Other Non-Manual Workers	12 0.21 11.01	13 0.22 13.27	12 0.21 9.92	17 0.29 10.90	48 0.83 10.64	169 2.91 11.46	719 12.38 10.87	1,940 33.41 10.12	1,974 33.99 9.60	747 12.86 8.76	156 2.69 8.75	0 0.00 0.00	5,807 9.83
Skilled Manual Workers	2 0.27 1.83	0 0.00 0.00	1 0.13 0.83	2 0.27 1.28	4 0.53 0.89	11 1.46 0.75	86 11.42 1.30	215 28.55 1.12	286 37.98 1.39	119 15.80 1.40	26 3.45 1.46	1 0.13 10.00	753 1.27
Semi-skilled Manual Workers	7 0.23 6.42	4 0.13 4.08	9 0.30 7.44	7 0.23 4.49	28 0.93 6.21	71 2.36 4.81	369 12.28 5.58	1,015 33.78 5.30	1,053 35.04 5.12	370 12.31 4.34	72 2.40 4.04	0 0.00 0.00	3,005 5.09
Unskilled Manual Workers	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	2 25.00 0.03	4 50.00 0.02	1 12.50 0.00	0 0.00 0.00	1 12.50 0.06	0 0.00 0.00	8 0.01
Unemployed	8 0.31 7.34	6 0.23 6.12	3 0.12 2.48	8 0.31 5.13	29 1.12 6.43	118 4.55 8.00	428 16.51 6.47	933 36.00 4.87	742 28.63 3.61	269 10.38 3.15	48 1.85 2.69	0 0.00 0.00	2,592 4.39
Not Classifiable	5 0.27 4.59	4 0.21 4.08	10 0.53 8.26	10 0.53 6.41	27 1.43 5.99	47 2.50 3.19	280 14.87 4.23	658 34.94 3.43	618 32.82 3.00	189 10.04 2.22	35 1.86 1.96	0 0.00 0.00	1,883 3.19
Home Duties	33 0.20 30.28	28 0.17 28.57	41 0.25 33.88	50 0.31 32.05	132 0.81 29.27	453 2.77 30.71	2,020 12.34 30.54	5,278 32.24 27.54	5,464 33.37 26.57	2,323 14.19 27.24	548 3.35 30.75	3 0.02 30.00	16,373 27.72
Not Stated	7 0.74 6.42	6 0.64 6.12	3 0.32 2.48	2 0.21 1.28	15 1.59 3.33	32 3.40 2.17	127 13.48 1.92	330 35.03 1.72	284 30.15 1.38	109 11.57 1.28	25 2.65 1.40	2 0.21 20.00	942 1.59
<b>Total</b>	<b>109 0.18</b>	<b>98 0.17</b>	<b>121 0.20</b>	<b>156 0.26</b>	<b>451 0.76</b>	<b>1,475 2.50</b>	<b>6,614 11.20</b>	<b>19,162 32.44</b>	<b>20,566 34.82</b>	<b>8,527 14.44</b>	<b>1,782 3.02</b>	<b>10 0.02</b>	<b>59,071 100.00</b>

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

Table E15

## Father's Occupation by Interval in Years Since Last Birth, Live Births and Stillbirths, 2002

## Singleton Births

Father's Occupation	Interval 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	No. of Previous Births Unknown	Not Stated	Total
Frequency Row Per Cent	Col. Per Cent										
Farmers & Farm Managers	784	29	540	564	313	185	99	179	0	28	2,721
	28.81	1.07	19.85	20.73	11.50	6.80	3.64	6.58	0.00	1.03	
	3.25	5.58	6.73	6.51	5.55	4.97	4.17	3.31	0.00	4.90	4.61
Other Agricultural Occupations & Fishermen	165	6	97	92	68	44	15	64	0	5	556
	29.68	1.08	17.45	16.55	12.23	7.91	2.70	11.51	0.00	0.90	
	0.68	1.15	1.21	1.06	1.21	1.18	0.63	1.18	0.00	0.88	0.94
Higher-Professional	1,438	21	682	716	420	206	93	198	0	26	3,800
	37.84	0.55	17.95	18.84	11.05	5.42	2.45	5.21	0.00	0.68	
	5.95	4.04	8.50	8.27	7.44	5.53	3.92	3.67	0.00	4.55	6.43
Lower-Professional	1,064	18	405	496	297	160	99	182	0	18	2,739
	38.85	0.66	14.79	18.11	10.84	5.84	3.61	6.64	0.00	0.66	
	4.40	3.46	5.05	5.73	5.26	4.30	4.17	3.37	0.00	3.15	4.64
Managers	1,691	28	761	921	565	343	187	331	0	30	4,857
	34.82	0.58	15.67	18.96	11.63	7.06	3.85	6.81	0.00	0.62	
	7.00	5.38	9.48	10.64	10.01	9.22	7.88	6.13	0.00	5.25	8.22
Salaried-Employees	530	7	190	251	150	93	47	96	0	10	1,374
	38.57	0.51	13.83	18.27	10.92	6.77	3.42	6.99	0.00	0.73	
	2.19	1.35	2.37	2.90	2.66	2.50	1.98	1.78	0.00	1.75	2.33
Non-Manual Workers	1,506	32	593	752	476	277	200	402	0	47	4,285
	35.15	0.75	13.84	17.55	11.11	6.46	4.67	9.38	0.00	1.10	
	6.23	6.15	7.39	8.69	8.44	7.44	8.43	7.44	0.00	8.23	7.25
Other Non-Manual Workers	1,482	41	608	686	517	359	240	546	0	39	4,518
	32.80	0.91	13.46	15.18	11.44	7.95	5.31	12.08	0.00	0.86	
	6.13	7.88	7.58	7.92	9.16	9.65	10.12	10.11	0.00	6.83	7.65
Skilled Manual Workers	3,587	88	1,547	1,745	1,123	720	442	975	1	98	10,326
	34.74	0.85	14.98	16.90	10.88	6.97	4.28	9.44	0.01	0.95	
	14.85	16.92	19.28	20.16	19.90	19.34	18.63	18.05	50.00	17.16	17.48
Semi-skilled Manual Workers	930	21	336	448	330	219	162	291	0	21	2,758
	33.72	0.76	12.18	16.24	11.97	7.94	5.87	10.55	0.00	0.76	
	3.85	4.04	4.19	5.18	5.85	5.88	6.83	5.39	0.00	3.68	4.67
Unskilled Manual Workers	161	9	81	109	67	60	21	72	0	7	587
	27.43	1.53	13.80	18.57	11.41	10.22	3.58	12.27	0.00	1.19	
	0.67	1.73	1.01	1.26	1.19	1.61	0.89	1.33	0.00	1.23	0.99
Unemployed	607	52	394	293	151	132	78	190	0	52	1,949
	31.14	2.67	20.22	15.03	7.75	6.77	4.00	9.75	0.00	2.67	
	2.51	10.00	4.91	3.38	2.68	3.55	3.29	3.52	0.00	9.11	3.30
Not Classifiable	300	9	103	76	45	46	16	47	0	7	649
	46.22	1.39	15.87	11.71	6.93	7.09	2.47	7.24	0.00	1.08	
	1.24	1.73	1.28	0.88	0.80	1.24	0.67	0.87	0.00	1.23	1.10
Not Applicable	9,444	148	1,453	1,259	964	784	611	1,671	0	139	16,473
	57.33	0.90	8.82	7.64	5.85	4.76	3.71	10.14	0.00	0.84	
	39.09	28.46	18.11	14.54	17.08	21.06	25.76	30.93	0.00	24.34	27.89
Not Stated	468	11	235	249	157	94	62	158	1	44	1,479
	31.64	0.74	15.89	16.84	10.62	6.36	4.19	10.68	0.07	2.97	
	1.94	2.12	2.93	2.88	2.78	2.53	2.61	2.92	50.00	7.71	2.50
<b>Total</b>	<b>24,157</b>	<b>520</b>	<b>8,025</b>	<b>8,657</b>	<b>5,643</b>	<b>3,722</b>	<b>2,372</b>	<b>5,402</b>	<b>2</b>	<b>571</b>	<b>59,071</b>
	<b>40.89</b>	<b>0.88</b>	<b>13.59</b>	<b>14.66</b>	<b>9.55</b>	<b>6.30</b>	<b>4.02</b>	<b>9.14</b>	<b>0.00</b>	<b>0.97</b>	<b>100.00</b>

Note: In this table 'not Classifiable' includes 67 Fathers whose occupation was recorded as 'Home Duties'.

Table E16

## Mother's Occupation by Interval in Years Since Last Birth, Live Births and Stillbirths, 2002

## Singleton Births

Mother's Occupation	Interval Since Last Birth											
	Frequency Row Per Cent Col. Per Cent	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	No. of Previous Births Unknown	Not Stated	Total
Farmers & Farm Managers	49 39.20 0.20	0 0.00 0.00	27 21.60 0.34	20 16.00 0.23	8 6.40 0.14	5 4.00 0.13	5 4.00 0.21	5 8.80 0.20	11 0.00 0.00	0 0.00 0.00	0 0.00 0.00	125 0.21
Other Agricultural Occupations & Fishermen	46 53.49 0.19	0 0.00 0.00	10 11.63 0.12	11 12.79 0.13	4 4.65 0.07	5 5.81 0.13	0 0.00 0.00	10 11.63 0.19	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	86 0.15
Higher-Professional	1,180 47.89 4.88	13 0.53 2.50	327 13.27 4.07	431 17.49 4.98	216 8.77 3.83	104 4.22 2.79	63 2.56 2.66	113 4.59 2.09	0 0.00 0.00	17 0.69 2.98	0 0.00 0.00	2,464 4.17
Lower-Professional	2,950 41.24 12.21	53 0.74 10.19	1,195 16.70 14.89	1,246 17.42 14.39	686 9.59 12.16	360 5.03 9.67	211 2.95 8.90	400 5.59 7.40	0 0.00 0.00	53 0.74 9.28	0 0.00 0.00	7,154 12.11
Managers	1,838 53.77 7.61	20 0.59 3.85	373 10.91 4.65	439 12.84 5.07	264 7.72 4.68	149 4.36 4.00	96 2.81 4.05	223 6.52 4.13	0 0.00 0.00	16 0.47 2.80	0 0.00 0.00	3,418 5.79
Salaried-Employees	441 55.75 1.83	2 0.25 0.38	79 9.99 0.98	90 11.38 1.04	49 6.19 0.87	34 4.30 0.91	23 2.91 0.97	68 8.60 1.26	0 0.00 0.00	5 0.63 0.88	0 0.00 0.00	791 1.34
Non-Manual Workers	6,673 48.81 27.62	82 0.60 15.77	1,397 10.22 17.41	1,759 12.87 20.32	1,246 9.11 22.08	776 5.68 20.85	508 3.72 21.42	1,145 8.38 21.20	0 0.00 0.00	84 0.61 14.71	0 0.00 0.00	13,670 23.14
Other Non-Manual Workers	2,754 47.43 11.40	38 0.65 7.31	546 9.40 6.80	665 11.45 7.68	488 8.40 8.65	337 5.80 9.05	256 4.41 10.79	681 11.73 12.61	0 0.00 0.00	42 0.72 7.36	0 0.00 0.00	5,807 9.83
Skilled Manual Workers	378 50.20 1.56	1 0.13 0.19	97 12.88 1.21	92 12.22 1.06	53 7.04 0.94	44 5.84 1.18	26 3.45 1.10	56 7.44 1.04	0 0.00 0.00	6 0.80 1.05	0 0.00 0.00	753 1.27
Semi-skilled Manual Workers	1,510 50.25 6.25	13 0.43 2.50	263 8.75 3.28	330 10.98 3.81	245 8.15 4.34	177 5.89 4.76	135 4.49 5.69	312 10.38 5.78	0 0.00 0.00	20 0.67 3.50	0 0.00 0.00	3,005 5.09
Unskilled Manual Workers	4 50.00 0.02	0 0.00 0.00	0 0.00 0.00	2 25.00 0.02	0 0.00 0.00	1 12.50 0.03	0 0.00 0.00	1 12.50 0.02	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	8 0.01
Unemployed	1,267 48.88 5.24	46 1.77 8.85	338 13.04 4.21	271 10.46 3.13	173 6.67 3.07	134 5.17 3.60	94 3.63 3.96	219 8.45 4.05	0 0.00 0.00	50 1.93 8.76	0 0.00 0.00	2,592 4.39
Not Classifiable	1,485 78.86 6.15	9 0.48 1.73	85 4.51 1.06	81 4.30 0.94	43 2.28 0.76	49 2.60 1.32	41 2.18 1.73	81 4.30 1.50	0 0.00 0.00	9 0.48 1.58	0 0.00 0.00	1,883 3.19
Home Duties	3,126 19.09 12.94	236 1.44 45.38	3,176 19.40 39.58	3,132 19.13 36.18	2,092 12.78 37.07	1,510 9.22 40.57	881 5.38 37.14	1,996 12.19 36.95	2 0.01 100.00	222 1.36 38.88	0 0.00 0.00	16,373 27.72
Not Stated	456 48.41 1.89	7 0.74 1.35	112 11.89 1.40	88 9.34 1.02	76 8.07 1.35	37 3.93 0.99	33 3.50 1.39	86 9.13 1.59	0 0.00 0.00	47 4.99 8.23	0 0.00 0.00	942 1.59
<b>Total</b>	<b>24,157</b> <b>40.89</b>	<b>520</b> <b>0.88</b>	<b>8,025</b> <b>13.59</b>	<b>8,657</b> <b>14.66</b>	<b>5,643</b> <b>9.55</b>	<b>3,722</b> <b>6.30</b>	<b>2,372</b> <b>4.02</b>	<b>5,402</b> <b>9.14</b>	<b>2</b> <b>0.00</b>	<b>571</b> <b>0.97</b>	<b>0</b> <b>0.00</b>	<b>59,071</b> <b>100.00</b>

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

**Table E17**  
**Father's Occupation by Infant's Type of Feeding, Live Births Only, 2002**

Singleton Births

Father's Occupation	Type of Feeding				
	Artificial	Breast	Combined	Not Stated	Total
<b>Frequency</b>					
<b>Row Per Cent</b>					
<b>Col. Per Cent</b>					
Farmers & Farm Managers	1,501	1,154	52	2	2,709
	55.41	42.60	1.92	0.07	
	4.56	4.76	3.34	2.99	4.61
Other Agricultural Occupations & Fishermen	324	212	17	0	553
	58.59	38.34	3.07	0.00	
	0.99	0.87	1.09	0.00	0.94
Higher-Professional	1,151	2,506	127	2	3,786
	30.40	66.19	3.35	0.05	
	3.50	10.34	8.15	2.99	6.44
Lower-Professional	936	1,706	82	5	2,729
	34.30	62.51	3.00	0.18	
	2.85	7.04	5.26	7.46	4.64
Managers	2,155	2,578	101	2	4,836
	44.56	53.31	2.09	0.04	
	6.55	10.64	6.48	2.99	8.23
Salaried-Employees	652	678	42	0	1,372
	47.52	49.42	3.06	0.00	
	1.98	2.80	2.69	0.00	2.34
Non-Manual Workers	2,124	1,997	145	3	4,269
	49.75	46.78	3.40	0.07	
	6.46	8.24	9.30	4.48	7.27
Other Non-Manual Workers	2,673	1,689	122	5	4,489
	59.55	37.63	2.72	0.11	
	8.13	6.97	7.83	7.46	7.64
Skilled Manual Workers	5,792	4,216	253	15	10,276
	56.36	41.03	2.46	0.15	
	17.61	17.40	16.23	22.39	17.49
Semi-skilled Manual Workers	1,908	784	53	0	2,745
	69.51	28.56	1.93	0.00	
	5.80	3.24	3.40	0.00	4.67
Unskilled Manual Workers	440	136	8	1	585
	75.21	23.25	1.37	0.17	
	1.34	0.56	0.51	1.49	1.00
Unemployed	1,050	771	107	5	1,933
	54.32	39.89	5.54	0.26	
	3.19	3.18	6.86	7.46	3.29
Not Classifiable	230	365	48	2	645
	35.66	56.59	7.44	0.31	
	0.70	1.51	3.08	2.99	1.10
Not Applicable	11,414	4,681	246	23	16,364
	69.75	28.61	1.50	0.14	
	34.70	19.32	15.78	34.33	27.85
Not Stated	543	760	156	2	1,461
	37.17	52.02	10.68	0.14	
	1.65	3.14	10.01	2.99	2.49
<b>Total</b>	<b>32,893</b>	<b>24,233</b>	<b>1,559</b>	<b>67</b>	<b>58,752</b>
	<b>55.99</b>	<b>41.25</b>	<b>2.65</b>	<b>0.11</b>	<b>100.00</b>

Note:

-In this table 'Not Classifiable' includes 67 fathers whose occupation was recorded as 'Home Duties'.

-'Not Stated' contains 54 Early Neonatal Deaths for which Type of Feeding was not stated.

**Table E18**  
**Mother's Occupation by Infant's Type of Feeding, Live Births Only, 2002**

Singleton Births

Mother's Occupation	Type of Feeding				
	Artificial	Breast	Combined	Not Stated	Total
<b>Frequency</b>					
<b>Row Per Cent</b>					
<b>Col. Per Cent</b>					
Farmers & Farm Managers	62	59	2	0	123
	50.41	47.97	1.63	0.00	
	0.19	0.24	0.13	0.00	0.21
Other Agricultural Occupations & Fishermen	35	47	4	0	86
	40.70	54.65	4.65	0.00	
	0.11	0.19	0.26	0.00	0.15
Higher-Professional	719	1,660	73	1	2,453
	29.31	67.67	2.98	0.04	
	2.19	6.85	4.68	1.49	4.18
Lower-Professional	2,503	4,433	186	6	7,128
	35.12	62.19	2.61	0.08	
	7.61	18.29	11.93	8.96	12.13
Managers	1,549	1,790	65	2	3,406
	45.48	52.55	1.91	0.06	
	4.71	7.39	4.17	2.99	5.80
Salaried-Employees	358	409	20	0	787
	45.49	51.97	2.54	0.00	
	1.09	1.69	1.28	0.00	1.34
Non-Manual Workers	8,444	4,914	238	11	13,607
	62.06	36.11	1.75	0.08	
	25.67	20.28	15.27	16.42	23.16
Other Non-Manual Workers	3,550	2,063	152	8	5,773
	61.49	35.74	2.63	0.14	
	10.79	8.51	9.75	11.94	9.83
Skilled Manual Workers	374	358	17	1	750
	49.87	47.73	2.27	0.13	
	1.14	1.48	1.09	1.49	1.28
Semi-skilled Manual Workers	2,313	631	44	2	2,990
	77.36	21.10	1.47	0.07	
	7.03	2.60	2.82	2.99	5.09
Unskilled Manual Workers	5	2	0	0	7
	71.43	28.57	0.00	0.00	
	0.02	0.01	0.00	0.00	0.01
Unemployed	1,810	674	84	7	2,575
	70.29	26.17	3.26	0.27	
	5.50	2.78	5.39	10.45	4.38
Not Classifiable	1,238	581	52	2	1,873
	66.10	31.02	2.78	0.11	
	3.76	2.40	3.34	2.99	3.19
Home Duties	9,515	6,184	539	21	16,259
	58.52	38.03	3.32	0.13	
	28.93	25.52	34.57	31.34	27.67
Not Stated	418	428	83	6	935
	44.71	45.78	8.88	0.64	
	1.27	1.77	5.32	8.96	1.59
<b>Total</b>	<b>32,893</b>	<b>24,233</b>	<b>1,559</b>	<b>67</b>	<b>58,752</b>
	<b>55.99</b>	<b>41.25</b>	<b>2.65</b>	<b>0.11</b>	<b>100.00</b>

Note:

- 'Not Applicable' is not used in the classification of maternal occupation. See Appendix B for a description of the classification system for occupations.

- 'Not Stated' contains 54 Early Neonatal Deaths for which Type of Feeding was not stated.

**Table E19**  
**Infant's Type of Feeding by Maternal Parity, Live Births Only, 2002**

Singleton Births

Type of Feeding	Maternal Parity									
	0	1	2	3	4	5	6	More than 6	Not Stated	Total
Artificial	12,532	10,719	5,805	2,280	873	343	174	162	5	32,893
	38.10	32.59	17.65	6.93	2.65	1.04	0.53	0.49	0.02	
	52.18	58.50	58.07	57.56	60.25	64.72	72.80	70.74	83.33	55.99
Breast	10,813	7,163	3,921	1,531	523	165	57	59	1	24,233
	44.62	29.56	16.18	6.32	2.16	0.68	0.24	0.24	0.00	
	45.02	39.09	39.23	38.65	36.09	31.13	23.85	25.76	16.67	41.25
Combined	651	421	259	144	49	20	8	7	0	1,559
	41.76	27.00	16.61	9.24	3.14	1.28	0.51	0.45	0.00	
	2.71	2.30	2.59	3.64	3.38	3.77	3.35	3.06	0.00	2.65
Not Stated	23	20	11	6	4	2	0	1	0	67
	34.33	29.85	16.42	8.96	5.97	2.99	0.00	1.49	0.00	
	0.10	0.11	0.11	0.15	0.28	0.38	0.00	0.44	0.00	0.11
<b>Total</b>	<b>24,019</b>	<b>18,323</b>	<b>9,996</b>	<b>3,961</b>	<b>1,449</b>	<b>530</b>	<b>239</b>	<b>229</b>	<b>6</b>	<b>58,752</b>
	<b>40.88</b>	<b>31.19</b>	<b>17.01</b>	<b>6.74</b>	<b>2.47</b>	<b>0.90</b>	<b>0.41</b>	<b>0.39</b>	<b>0.01</b>	<b>100.00</b>

# Appendix F

## Wigglesworth Classification, 2002

### Basis of System

In this section perinatal deaths are classified according to the system devised by Dr. J.S. Wigglesworth. The system is designed to be relatively straightforward and to overcome some of the inherent difficulties of subjectivity and lack of uniformity in the assignment of causes of perinatal death.<sup>7</sup> With the aim of identifying areas with implications for perinatal care, five mutually exclusive and clinically relevant categories are suggested. Cross-classification of these categories by birthweight can then be used to highlight areas of particular concern.<sup>8</sup>

### Method of Classification

The five broad pathological subgroups employed in the Wigglesworth classification are as follows:

1. Normally formed macerated stillbirth.
2. Congenital malformations (stillbirth or early neonatal death).
3. Conditions associated with immaturity (early neonatal death).
4. Asphyxial conditions developing in labour (stillbirth or early neonatal death).
5. Specific conditions other than the above.

The assignment of a unique Wigglesworth class to each perinatal death presents a number of difficulties. The first and most general of these results from the fact that no standard system has yet been devised for the translation of the ICD codes relating to main cause of death into the corresponding categories suggested by Wigglesworth. In most cases the assignment is straightforward, but in certain instances (for example, preterm births where asphyxia is indicated or stillbirths where antepartum haemorrhage is recorded), the appropriate classification is not immediately obvious and additional variables require consideration. For these reasons, gestational age and type of stillbirth (i.e. antepartum or intrapartum) are taken into account in the classification system described below. In adopting this system, note has also been taken of a number of pilot schemes carried out in Britain as well as the guidelines set out by Dr. Wigglesworth.<sup>9</sup>

<sup>7</sup> Wigglesworth, J.S., 1980, "Monitoring Perinatal Mortality", *The Lancet*, Vol. 2, pp.684-686.

<sup>8</sup> The analysis by Wigglesworth's categories, unlike the main report, includes 60 births that weighed less than 500 grams. The outcomes of these births were 42 stillbirths and 18 early neonatal deaths.

<sup>9</sup> a) South East Thames Perinatal Monitoring Group, *Confidential Enquiry into Perinatal Deaths*, 1986.  
b) Unpublished report, "Scottish Stillbirth and Neonatal Death Enquiry", based on 1985 data.

Wigglesworth Classes	Assignment Criteria	ICD Codes (where appropriate)
Macerated stillbirth	<ul style="list-style-type: none"> <li>All intrapartum deaths where maceration is indicated as main cause of death.</li> <li>Antepartum deaths not due to antepartum haemorrhage and not assigned to any other category.</li> </ul>	-
Congenital malformations (stillbirth or early neonatal death)	<ul style="list-style-type: none"> <li>All major congenital anomalies (stillbirth or early neonatal deaths).</li> </ul>	740-742, 745-748, 750.3, 750.6, 751.1-751.8, 753, 756.0, 756.6, 756.7, 758-759
Immaturity (early neonatal death)	<ul style="list-style-type: none"> <li>All first week deaths due to structural lung immaturity and Hyaline Membrane Disease.</li> <li>First week deaths of less than 37 weeks gestation period where cause of death is not stated or does not fall into any other category.</li> </ul>	765, 769.0, 770.4, 772.1, 777.5
Asphyxia (stillbirth or early neonatal death)	<ul style="list-style-type: none"> <li>All first week deaths due to birth trauma and birth asphyxia.</li> <li>First week deaths of 37 or more weeks gestation or gestation unknown where cause is not stated or does not fall into any other category.</li> <li>Antepartum deaths due to antepartum haemorrhage.</li> <li>All intrapartum stillbirths except those due to specific conditions or congenital malformations.</li> </ul>	762.0, 762.1, 762.4, 762.5, 767-768
Specific conditions (stillbirth or early neonatal death)	<ul style="list-style-type: none"> <li>Infection, isoimmunisation or other haemorrhage in the newborn.</li> </ul>	760.1-760.5, 762.3, 770.0, 771, 773, 775, 777.0, 778.0

## Results

Tabulations based on the Wigglesworth classification are presented in the following pages. Table F1 indicates the percentage of perinatal deaths attributable to each cause for 2002. Table F2 provides a classification of cause of death by birthweight and indicates cause and weight specific perinatal mortality rates for 2002. It is this table that shows the practical clinical implications of the Wigglesworth coding. Figure F1 is derived from the data contained in Table F2 and shows how the percentage contribution to perinatal mortality of each cause changes with birthweight group. Table F3 provides the same cross tabulations as Table F2 but uses a different definition of stillbirth based on 28 weeks gestation period. This is provided to facilitate possible local or international comparisons

**Table F1**  
**Wigglesworth Classification for All Perinatal Deaths, 2002**

Class	Frequency	Per Cent	Cumulative Frequency	Cumulative Per Cent
Macerated Stillbirths	258	45.03	258	45.03
Congenital Malformations	114	19.90	372	64.92
Immaturity	75	13.09	447	78.01
Asphyxial Conditions	87	15.18	534	93.19
Specific Conditions	39	6.81	573	100.00

**Table F2**  
**Birthweight Specific Perinatal Mortality Rates, 2002**

Wigglesworth Classification

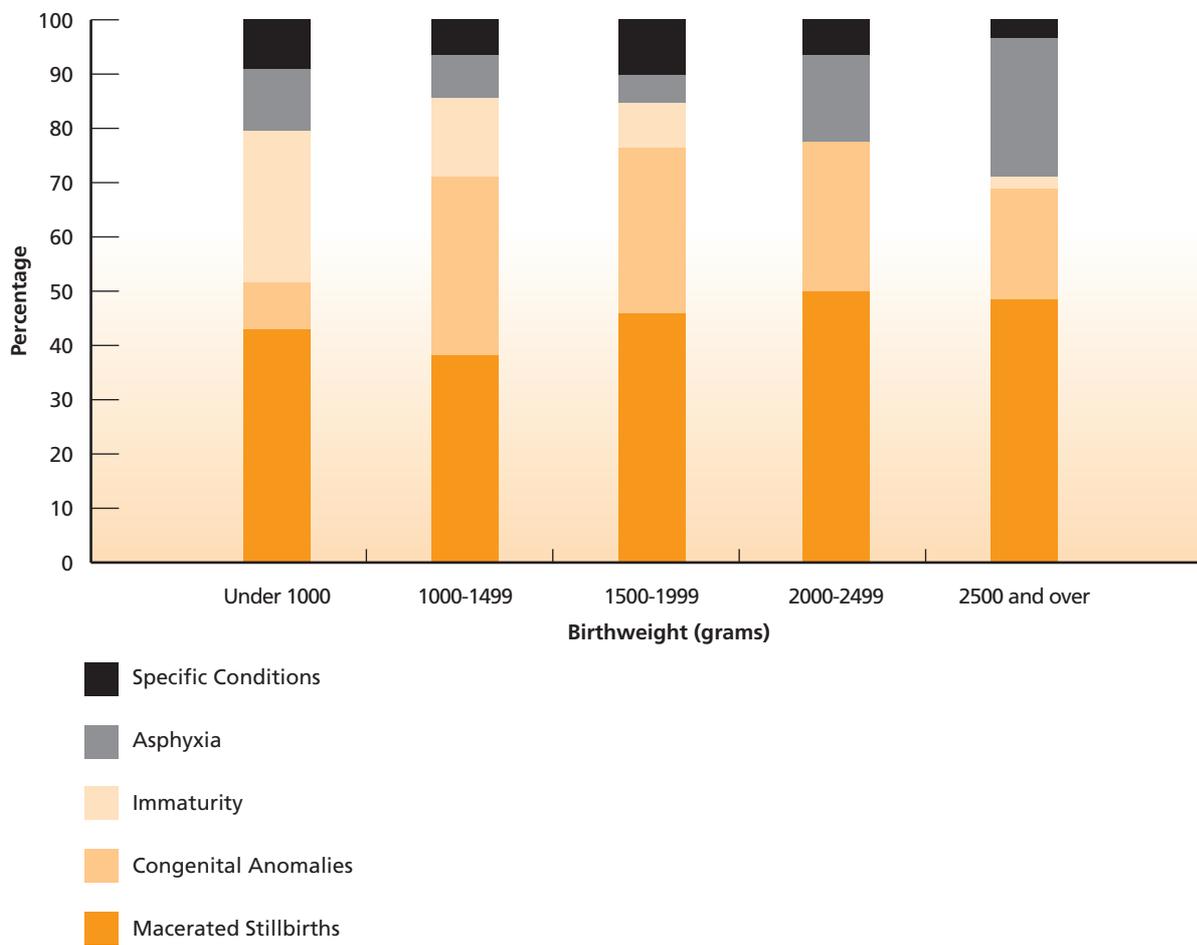
Birthweight (grams)	Macerated Stillbirths		Congenital Anomalies		Immaturity		Asphyxia		Specific Conditions		Total	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Under 1000	84	257.67	17	52.15	55	168.71	22	67.48	18	55.21	196	601.23
1000-1499	29	78.80	25	67.93	11	29.89	6	16.30	5	13.59	76	206.52
1500-1999	27	41.03	18	27.36	5	7.60	3	4.56	6	9.12	59	89.67
2000-2499	31	16.10	17	8.83	0	0.00	10	5.19	4	2.08	62	32.19
2500 and over	87	1.51	37	0.64	4	0.07	46	0.80	6	0.10	180	3.12
Not Stated	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
<b>Total</b>	<b>258</b>	<b>4.23</b>	<b>114</b>	<b>1.87</b>	<b>75</b>	<b>1.23</b>	<b>87</b>	<b>1.43</b>	<b>39</b>	<b>0.64</b>	<b>573</b>	<b>9.40</b>

**Table F3**  
**Numbers of Perinatal Deaths and Mortality Rates by Cause of Death and Birthweight, 2002**

Wigglesworth Classification  
using the  $\geq 28$  weeks definition of a Stillbirth

Birthweight (grams)	Macerated Stillbirths		Congenital Anomalies		Immaturity		Asphyxia		Specific Conditions		Total	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Under 1000	25	102.46	12	49.18	55	225.41	12	49.18	10	40.98	114	467.21
1000-1499	26	71.63	25	68.87	11	30.30	5	13.77	4	11.02	71	195.59
1500-1999	25	38.11	18	27.44	5	7.62	3	4.57	6	9.15	57	86.89
2000-2499	31	16.10	17	8.83	0	0.00	10	5.19	4	2.08	62	32.19
2500 and over	87	1.51	37	0.64	4	0.07	46	0.80	6	0.10	180	3.12
Not Stated	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
<b>Total</b>	<b>194</b>	<b>3.19</b>	<b>109</b>	<b>1.79</b>	<b>75</b>	<b>1.23</b>	<b>76</b>	<b>1.25</b>	<b>30</b>	<b>0.49</b>	<b>484</b>	<b>7.96</b>

**Figure F1**  
**Wigglesworth Classification: Percentage Distribution of Perinatal Cause of Death by Birthweight Groups, 2002**



Note: See Appendix F, Table F2 for data. 'Not Stated' data are not included in the calculation of percentages.

# Appendix G

## Domiciliary Births: 1999-2002 Cross-Tabulations of Selected Variables: 2002

These births have been included, where appropriate, 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. For 2000 the number of domiciliary births fell to 216 and again reported 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 continues 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.

The tables that follow (G1-G8) present selected statistics on domiciliary births for 1999-2002 and contain a range of cross-tabulations relating to all domiciliary births for 2002. 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 and left. 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 G1**  
**Trends in Selected Statistics, Domiciliary Births, 1999 - 2002**

Selected Statistics	1999	2000	2001	2002
<b>General Characteristics</b>				
Average Age of Mother in years	33.47	33.33	33.18	34.07
Average Maternal Parity	1.52	1.62	1.40	2.07
Single Mothers (%)	25.20	29.63	31.56	22.57
Average weight in grams				
-Total Live Births	3699.46	3726.71	3686.75	3730.06
Low birthweight <2500 grams (%)				
-Total Live Births	0.43	1.86	0.00	0.35
Average Gestational Age at delivery in weeks	40.04	39.92	40.02	40.14
Average interval since last birth in years	3.46	3.40	3.82	3.74
<b>Perinatal Care</b>				
Midwife and Hospital/GP combined antenatal care (%)*	59.76	57.87	55.33	57.29
Average Gestational Age at time of first visit to doctor in weeks*	19.10	17.71	18.14	17.54
Immunity to Rubella (%)	92.34	90.70	93.44	91.61
Mother's breastfeeding (%)	98.25	96.63	95.02	94.04

\*This applies to the % homebirths where antenatal care is stated as combined, rather than Antenatal Care with midwife only.

Note:

- There were no domiciliary multiple births in either 1999 or 2000.
- There was 1 set of domiciliary Twin births in 2001.
- There were no domiciliary multiple births in 2002.
- Missing values are not included in the calculation of percentages.

**Table G2**  
**Age of Mother by Maternal Parity, 2002**

Domiciliary Births

Age of Mother	Maternal Parity									
	0	1	2	3	4	5	6	More than 6	Not Stated	Total
15-19	2	2	0	0	0	0	0	0	0	4
	50.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	4.35	2.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.39
20-24	5	2	0	0	0	0	0	0	0	7
	71.43	28.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	10.87	2.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.43
25-29	15	16	9	3	0	0	0	0	0	43
	34.88	37.21	20.93	6.98	0.00	0.00	0.00	0.00	0.00	
	32.61	17.20	10.98	7.32	0.00	0.00	0.00	0.00	0.00	14.93
30-34	17	38	25	13	4	2	0	0	1	100
	17.00	38.00	25.00	13.00	4.00	2.00	0.00	0.00	1.00	
	36.96	40.86	30.49	31.71	26.67	25.00	0.00	0.00	100.00	34.72
35-39	6	28	38	24	5	4	1	0	0	106
	5.66	26.42	35.85	22.64	4.72	3.77	0.94	0.00	0.00	
	13.04	30.11	46.34	58.54	33.33	50.00	100.00	0.00	0.00	36.81
40-44	1	7	8	1	5	2	0	1	0	25
	4.00	28.00	32.00	4.00	20.00	8.00	0.00	4.00	0.00	
	2.17	7.53	9.76	2.44	33.33	25.00	0.00	100.00	0.00	8.68
45 and over	0	0	1	0	1	0	0	0	0	2
	0.00	0.00	50.00	0.00	50.00	0.00	0.00	0.00	0.00	
	0.00	0.00	1.22	0.00	6.67	0.00	0.00	0.00	0.00	0.69
Not Stated	0	0	1	0	0	0	0	0	0	1
	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.35
<b>Total</b>	<b>46</b>	<b>93</b>	<b>82</b>	<b>41</b>	<b>15</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>288</b>
	<b>15.97</b>	<b>32.29</b>	<b>28.47</b>	<b>14.24</b>	<b>5.21</b>	<b>2.78</b>	<b>0.35</b>	<b>0.35</b>	<b>0.35</b>	<b>100.00</b>

**Table G3**  
**Age of Mother by Gestation Period at Delivery, 2002**

Domiciliary Births

Age of Mother	Gestation Period (weeks)			
	32-36	37-41	42 and over	Total
15-19	0	2	2	4
	0.00	50.00	50.00	
	0.00	0.77	7.14	1.39
20-24	0	7	0	7
	0.00	100.00	0.00	
	0.00	2.70	0.00	2.43
25-29	1	38	4	43
	2.33	88.37	9.30	
	100.00	14.67	14.29	14.93
30-34	0	95	5	100
	0.00	95.00	5.00	
	0.00	36.68	17.86	34.72
35-39	0	91	15	106
	0.00	85.85	14.15	
	0.00	35.14	53.57	36.81
40-44	0	23	2	25
	0.00	92.00	8.00	
	0.00	8.88	7.14	8.68
45 and over	0	2	0	2
	0.00	100.00	0.00	
	0.00	0.77	0.00	0.69
Not Stated	0	1	0	1
	0.00	100.00	0.00	
	0.00	0.39	0.00	0.35
<b>Total</b>	<b>1</b>	<b>259</b>	<b>28</b>	<b>288</b>
	<b>0.35</b>	<b>89.93</b>	<b>9.72</b>	<b>100.00</b>

**Table G4**  
**Birthweight by Gestation Period at Delivery, 2002**

Domiciliary Births

Birthweight (grams)	Gestation Period (weeks)			
	32-36	37-41	42 and over	Total
<b>Frequency</b>				
<b>Row Per Cent</b>				
<b>Col. Per Cent</b>				
2000-2499	0	1	0	1
	0.00	100.00	0.00	
	0.00	0.39	0.00	0.35
2500-2999	0	11	0	11
	0.00	100.00	0.00	
	0.00	4.25	0.00	3.82
3000-3499	0	65	5	70
	0.00	92.86	7.14	
	0.00	25.10	17.86	24.31
3500-3999	0	118	7	125
	0.00	94.40	5.60	
	0.00	45.56	25.00	43.40
4000-4499	1	48	7	56
	1.79	85.71	12.50	
	100.00	18.53	25.00	19.44
4500 and over	0	15	9	24
	0.00	62.50	37.50	
	0.00	5.79	32.14	8.33
Not Stated	0	1	0	1
	0.00	100.00	0.00	
	0.00	0.39	0.00	0.35
<b>Total</b>	<b>1</b>	<b>259</b>	<b>28</b>	<b>288</b>
	<b>0.35</b>	<b>89.93</b>	<b>9.72</b>	<b>100.00</b>

**Table G5**  
**Mother's Occupation by Birthweight, 2002**

Domiciliary Births

Mother's Occupation	Birthweight (grams)							Total
	2000-2499	2500-2999	3000-3499	3500-3999	4000-4499	4500 and over	Not Stated	
Frequency Row Per Cent Col. Per Cent								
Farmers & Farm Managers	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	1 100.00 1.79	0 0.00 0.00	0 0.00 0.00	1 0.35
Other Agricultural Occupations & Fishermen	0 0.00 0.00	0 0.00 0.00	1 33.33 1.43	2 66.67 1.60	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	3 1.04
Higher-Professional	0 0.00 0.00	1 3.85 9.09	5 19.23 7.14	11 42.31 8.80	5 19.23 8.93	4 15.38 16.67	0 0.00 0.00	26 9.03
Lower-Professional	0 0.00 0.00	4 5.19 36.36	17 22.08 24.29	34 44.16 27.20	18 23.38 32.14	3 3.90 12.50	1 1.30 100.00	77 26.74
Managers	0 0.00 0.00	0 0.00 0.00	3 17.65 4.29	6 35.29 4.80	5 29.41 8.93	3 17.65 12.50	0 0.00 0.00	17 5.90
Salaried-Employees	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	1 25.00 0.80	2 50.00 3.57	1 25.00 4.17	0 0.00 0.00	4 1.39
Non-Manual Workers	0 0.00 0.00	2 9.52 18.18	9 42.86 12.86	6 28.57 4.80	1 4.76 1.79	3 14.29 12.50	0 0.00 0.00	21 7.29
Other Non-Manual Workers	0 0.00 0.00	2 11.76 18.18	7 41.18 10.00	5 29.41 4.00	2 11.76 3.57	1 5.88 4.17	0 0.00 0.00	17 5.90
Skilled Manual Workers	0 0.00 0.00	0 0.00 0.00	2 66.67 2.86	0 0.00 0.00	1 33.33 1.79	0 0.00 0.00	0 0.00 0.00	3 1.04
Semi-skilled Manual Workers	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	1 100.00 0.80	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	1 0.35
Unemployed	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	1 100.00 0.80	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	1 0.35
Not Classifiable	0 0.00 0.00	0 0.00 0.00	2 20.00 2.86	7 70.00 5.60	0 0.00 0.00	1 10.00 4.17	0 0.00 0.00	10 3.47
Home Duties	1 0.99 100.00	2 1.98 18.18	21 20.79 30.00	49 48.51 39.20	20 19.80 35.71	8 7.92 33.33	0 0.00 0.00	101 35.07
Not Stated	0 0.00 0.00	0 0.00 0.00	3 50.00 4.29	2 33.33 1.60	1 16.67 1.79	0 0.00 0.00	0 0.00 0.00	6 2.08
<b>Total</b>	<b>1</b> <b>0.35</b>	<b>11</b> <b>3.82</b>	<b>70</b> <b>24.31</b>	<b>125</b> <b>43.40</b>	<b>56</b> <b>19.44</b>	<b>24</b> <b>8.33</b>	<b>1</b> <b>0.35</b>	<b>288</b> <b>100.00</b>

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

**Table G6**  
**Marital Status by Age of Mother, 2002**

Domiciliary Births

Marital Status	Age of Mother								Total
	15-19	20-24	25-29	30-34	35-39	40-44	45 and over	Not Stated	
Married	0	2	27	72	87	20	1	1	210
	0.00	0.95	12.86	34.29	41.43	9.52	0.48	0.48	
	0.00	28.57	62.79	72.00	82.08	80.00	50.00	100.00	72.92
Single	4	5	14	24	15	2	1	0	65
	6.15	7.69	21.54	36.92	23.08	3.08	1.54	0.00	
	100.00	71.43	32.56	24.00	14.15	8.00	50.00	0.00	22.57
Widowed	0	0	0	2	0	1	0	0	3
	0.00	0.00	0.00	66.67	0.00	33.33	0.00	0.00	
	0.00	0.00	0.00	2.00	0.00	4.00	0.00	0.00	1.04
Separated	0	0	1	1	1	2	0	0	5
	0.00	0.00	20.00	20.00	20.00	40.00	0.00	0.00	
	0.00	0.00	2.33	1.00	0.94	8.00	0.00	0.00	1.74
Divorced	0	0	1	1	1	0	0	0	3
	0.00	0.00	33.33	33.33	33.33	0.00	0.00	0.00	
	0.00	0.00	2.33	1.00	0.94	0.00	0.00	0.00	1.04
Not Stated	0	0	0	0	2	0	0	0	2
	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	1.89	0.00	0.00	0.00	0.69
Total	4	7	43	100	106	25	2	1	288
	1.39	2.43	14.93	34.72	36.81	8.68	0.69	0.35	100.00

**Table G7**  
**Father's Occupation by Infant's Type of Feeding, Live Births Only, 2002**

Domiciliary Births

Father's Occupation	Type of Feeding				
	Artificial	Breast	Combined	Not Stated	Total
<b>Frequency</b>					
<b>Row Per Cent</b>					
<b>Col. Per Cent</b>					
Farmers & Farm Managers	1 6.67 7.14	14 93.33 5.22	0 0.00 0.00	0 0.00 0.00	15  5.21
Other Agricultural Occupations & Fishermen	0 0.00 0.00	8 100.00 2.99	0 0.00 0.00	0 0.00 0.00	8  2.78
Higher-Professional	1 2.50 7.14	39 97.50 14.55	0 0.00 0.00	0 0.00 0.00	40  13.89
Lower-Professional	3 5.88 21.43	46 90.20 17.16	0 0.00 0.00	2 3.92 66.67	51  17.71
Managers	4 9.09 28.57	40 90.91 14.93	0 0.00 0.00	0 0.00 0.00	44  15.28
Salaried-Employees	0 0.00 0.00	6 100.00 2.24	0 0.00 0.00	0 0.00 0.00	6  2.08
Non-Manual Workers	0 0.00 0.00	16 94.12 5.97	1 5.88 33.33	0 0.00 0.00	17  5.90
Other Non-Manual Workers	1 4.17 7.14	22 91.67 8.21	1 4.17 33.33	0 0.00 0.00	24  8.33
Skilled Manual Workers	1 1.75 7.14	54 94.74 20.15	1 1.75 33.33	1 1.75 33.33	57  19.79
Semi-skilled Manual Workers	1 20.00 7.14	4 80.00 1.49	0 0.00 0.00	0 0.00 0.00	5  1.74
Unskilled Manual Workers	0 0.00 0.00	1 100.00 0.37	0 0.00 0.00	0 0.00 0.00	1  0.35
Unemployed	0 0.00 0.00	1 100.00 0.37	0 0.00 0.00	0 0.00 0.00	1  0.35
Not Classifiable	0 0.00 0.00	4 100.00 1.49	0 0.00 0.00	0 0.00 0.00	4  1.39
Not Applicable	2 16.67 14.29	10 83.33 3.73	0 0.00 0.00	0 0.00 0.00	12  4.17
Not Stated	0 0.00 0.00	3 100.00 1.12	0 0.00 0.00	0 0.00 0.00	3  1.04
<b>Total</b>	<b>14</b> <b>4.86</b>	<b>268</b> <b>93.06</b>	<b>3</b> <b>1.04</b>	<b>3</b> <b>1.04</b>	<b>288</b> <b>100.00</b>

**Table G8**  
**Mother's Occupation by Infant's Type of Feeding, Live Births Only, 2002**

Domiciliary Births

Mother's Occupation	Type of Feeding				
	Artificial	Breast	Combined	Not Stated	Total
<b>Frequency</b>					
<b>Row Per Cent</b>					
<b>Col. Per Cent</b>					
Farmers & Farm Managers	0	1	0	0	1
	0.00	100.00	0.00	0.00	
	0.00	0.37	0.00	0.00	0.35
Other Agricultural Occupations & Fishermen	0	3	0	0	3
	0.00	100.00	0.00	0.00	
	0.00	1.12	0.00	0.00	1.04
Higher-Professional	2	24	0	0	26
	7.69	92.31	0.00	0.00	
	14.29	8.96	0.00	0.00	9.03
Lower-Professional	0	77	0	0	77
	0.00	100.00	0.00	0.00	
	0.00	28.73	0.00	0.00	26.74
Managers	1	16	0	0	17
	5.88	94.12	0.00	0.00	
	7.14	5.97	0.00	0.00	5.90
Salaried-Employees	0	4	0	0	4
	0.00	100.00	0.00	0.00	
	0.00	1.49	0.00	0.00	1.39
Non-Manual Workers	3	18	0	0	21
	14.29	85.71	0.00	0.00	
	21.43	6.72	0.00	0.00	7.29
Other Non-Manual Workers	0	16	1	0	17
	0.00	94.12	5.88	0.00	
	0.00	5.97	33.33	0.00	5.90
Skilled Manual Workers	1	2	0	0	3
	33.33	66.67	0.00	0.00	
	7.14	0.75	0.00	0.00	1.04
Semi-skilled Manual Workers	0	1	0	0	1
	0.00	100.00	0.00	0.00	
	0.00	0.37	0.00	0.00	0.35
Unemployed	0	1	0	0	1
	0.00	100.00	0.00	0.00	
	0.00	0.37	0.00	0.00	0.35
Not Classifiable	0	10	0	0	10
	0.00	100.00	0.00	0.00	
	0.00	3.73	0.00	0.00	3.47
Home Duties	6	90	2	3	101
	5.94	89.11	1.98	2.97	
	42.86	33.58	66.67	100.00	35.07
Not Stated	1	5	0	0	6
	16.67	83.33	0.00	0.00	
	7.14	1.87	0.00	0.00	2.08
<b>Total</b>	<b>14</b>	<b>268</b>	<b>3</b>	<b>3</b>	<b>288</b>
	<b>4.86</b>	<b>93.06</b>	<b>1.04</b>	<b>1.04</b>	<b>100.00</b>

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

