



PERINATAL STATISTICS

1993



DEPARTMENT OF
HEALTH AND CHILDREN
AN ROINN SLÁINTE
AGUS LEANAÍ



PERINATAL STATISTICS

1993

Prepared by Information Management Unit,
Department of Health and Children

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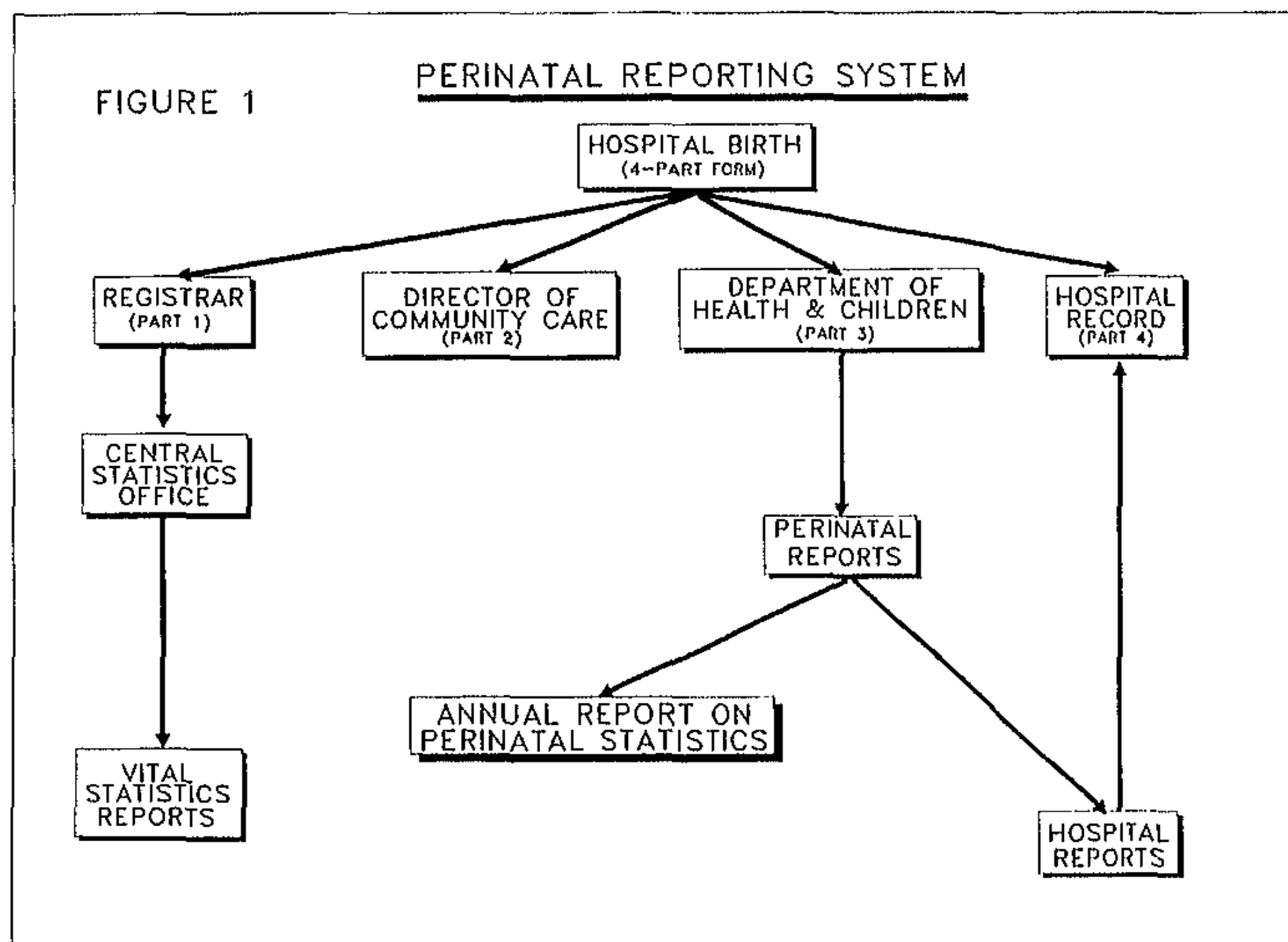
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INTRODUCTION

AIMS

This report of the Perinatal Reporting System (PRS) has as its principal aim the provision of national statistics on perinatal events and follows the same format as previously. More specifically, the purposes of the report are to describe 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 (see Figure 2), 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. The present report refers to the year 1993 and has 100% national coverage of all live and still births.

The report contains what might be considered a minimum national data set and is intended to serve as a foundation for the development of basic time series and to allow for the possible addition of further variables and more extensive analysis in future years. It is hoped that the publication of this data 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 1970's. 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 late fetal deaths to health boards 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 represented 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% of all births; the first report of the PRS which referred to 1984 had 94% coverage; and national coverage has been complete since 1985.

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 of the area of residence of the mother. It serves the dual purpose of notifying the local medical and nursing services which have responsibility for the postnatal care of the mother and child and of providing the basis for the health records used by the health boards. The third part of the form has all identifying information deleted and is sent to the Department of Health and Children. The fourth and final copy is retained by the hospital. Figure 1 gives a diagrammatic view of the information system. Domiciliary births are notified on a special two-part form. Both parts go to the local Registrar of births and the second copy is sent subsequently to the Central Statistics Office and to the Department of Health and Children. All the tables in the present report are based on data contained on the third copy of the standard form and on the second copy of the domiciliary form (see Appendix A) as are the reports which are sent to the maternity hospitals.

DATA PROCESSING

Coding of the forms takes place in the Department of Health and Children. Checks are carried out to ensure the completeness of returns, and special efforts are made in this respect in the case of a stillbirth or early neonatal death. Occupations are coded according to the Central Statistics Office system of socio-economic group classification (see Appendix B). Diseases 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 Information Management Unit for validation, processing and the production of reports (see Figure 1). The system is PC based and reports and analyses are carried out using the Statistical Analysis System (SAS) software.

FORMAT AND CONTENTS

This report presents a basic set of national tabulations for perinatal events for 1993 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 is set out in four main sections: A) Selected Trends B) General Characteristics, C) Perinatal Care and D) Perinatal Outcomes. The first section documents significant trends in the principal variables since 1987. Section B contains tables relating to the following variables: maternal age, parity, marital status, socio-economic group of mother based on occupation of father, distribution of previous stillbirths, birthweight (by sex), twinning rate, gestational age, interval since last birth, and month of birth. Section C deals with variables which fall more naturally into the category of use of health care facilities and type of care received and deals with the following distributions: gestational age at first antenatal contact of the 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 unbooked, type of feeding, transfer of infants between hospitals, and classification of outcome according to size of maternity unit. In Section D 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 postmortem examinations, and the length of infant's stay in hospital. It should be noted that Sections B, C and D are each divided into two parts with 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 D, and many of the graphs in the report are based on data abstracted from these tables. Finally an appendix is included giving an analysis of perinatal deaths for 1993 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 Appendix E.

DEFINITIONS

OUTCOMES AND RATES

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

STILLBIRTH (SB) AND STILLBIRTH RATE: Fetal 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 pregnancy. A fetal death is indicated by the fact that, after separation, the fetus 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 fetus weighing at least 500 grammes. 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 liveborn 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 TERMS

The definitions given below relate to the principal classification variables contained in the main sections 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.

PARITY: Maternal parity indicates a mother's total number of previous live and still births.

MARITAL STATUS: Four categories are recognised as detailed below:

- i) **Married:** includes all married women and women who have been widowed for ten months or less.
- ii) **Single:** including women with civil annulments and women who have been widowed for more than ten months.
- iii) **Separated:** covers the following categories:
 - a) Deserted.
 - b) Legally separated.
 - c) Church decree of nullity.
 - d) Otherwise separated.
- iv) **Divorced:** This means divorced in another country.

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.

BIRTHWEIGHT: Birthweight is given in grammes and hospitals are asked to record the weight within the first hour after birth. In accordance with WHO guidelines, infants weighing under 500 grammes 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 or still birth.

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: Five 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.

HOSPITAL ADMISSION BOOKED OR UNBOOKED: Domiciliary births are not included in the tables relating to this variable.

TYPE OF FEEDING: Indicates whether artificial or breast feeding was being used at the time of discharge.

TRANSFER OF INFANTS: This identifies infants who were transferred to another hospital for medical reasons prior to the completion of the seventh day of life.

SIZE OF MATERNITY UNIT: Size in this context refers to the number of perinatal events occurring during the year.

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 fetus. In assigning causes 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.

POSTMORTEM: This indicates whether or not a postmortem examination was performed. In some cases a return of 'Not Stated' may be due to the notification form being returned prior to postmortem.

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 prior to the completion of seven days of life, 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: Where the frequency for a variable level is zero, that level is not included in the tables. This arises most frequently in relation to multiple births.

COMPLETENESS AND RELIABILITY

COVERAGE

The Perinatal Reporting System has complete national coverage. This statement must however be qualified in relation to late fetal deaths where comparisons with Central Statistics Office figures indicate that approximately 5% of stillbirths may be missed by the system. In addition to the standard notification form (see Appendix A), the CSO collects a separate Late Fetal Notification Form (Form 103), and the present estimate of missing data is based on the number of unmatched cases of Form 103.

MISSING VALUES

No attempt has been made to assign values to missing data, and they are included as a separate category in each table. Certain variables show high proportions of not stated cases, and efforts are continually being made to improve this aspect of the system. These efforts are particularly directed towards missing data associated with high mortality rates. The results for 1993 indicate that further reductions in the levels of missing data have been achieved for a number of variables.

ACCURACY

While computer validation can identify illogical or unacceptable data, it cannot detect information which, though valid, is inaccurate. For example, during the initial stages of the notification scheme, it was found that a question on the smoking habits of the mother yielded very unreliable information and was subsequently dropped from the notification form. Information on the county of residence of the mother can also be inaccurate since in safeguarding confidentiality the copy of the notification form received by the Department of Health and Children does not contain the mother's full

address but only the county designation (see Appendix A). Data entered in this space has been found to be often incorrect referring frequently to the county in which the birth occurred. Analysis of mother's county of residence is therefore not included in this report. Efforts are currently in progress to improve this and other aspects of data quality (see FUTURE REPORTS below).

DISCREPANCIES WITH CSO DATA

Differences between the vital statistics tables compiled by the CSO and the present results arise for a variety of reasons. In the first place, 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 infant or fetus while the Department of Health and Children for its part 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 fetal deaths from which it identifies approximately 5% more late fetal deaths than those notified through the PRS alone. Secondly, differences in definitions and coding procedures can be reflected in the published statistics. The ICD coding procedures are recognised to be particularly difficult and subjective in the area of causes of perinatal mortality and the current separate coding arrangements can therefore lead to significant discrepancies. The CSO also employs a somewhat different definition of a late fetal death from that used by the PRS which is reflected in slightly differing perinatal and late fetal numbers and rates. Ideally the data sources and data coding should be harmonised between the two systems, and it is felt that the best way of attaining this goal is through the computerisation of the birth registration system and the consequent elimination of duplicate paperwork, coding and validation. This project is now in progress.

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. In order to do this effectively the data must be accurate, comprehensive and up-to-date. While the present report can point to further progress in the reduction of levels of 'Not Stated' data, it is only through the implementation of the projected computerised registration and notification system that optimum data quality and timeliness will be achieved.

GENERAL TRENDS AND INTERNATIONAL COMPARISONS*

PERINATAL MORTALITY

The last twenty-five years have witnessed a quite dramatic decline in infant, neonatal, and perinatal mortality in Ireland. Between 1965 and 1981 the perinatal mortality rate fell by more than half from 30 deaths per 1,000 live and still births to 13.4. From 1981 until 1984 the rate remained almost static but since then it resumed its decline to 10.4 in 1987 before rising slightly to 11.3 in 1988. Figures for 1989 to 1992 show a decline

to 10.4, 10.2, 9.5 and 9.3 respectively per 1,000 live and still births and the figure for 1993 indicates a further decline to 9.1 (Figure 2). The factors which determine 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. Tables 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 3. In comparisons between countries it should be remembered that rates can be affected by national policies on abortion as well as by differences in the comprehensiveness and accuracy of registration and notification systems.

BIRTH RATE

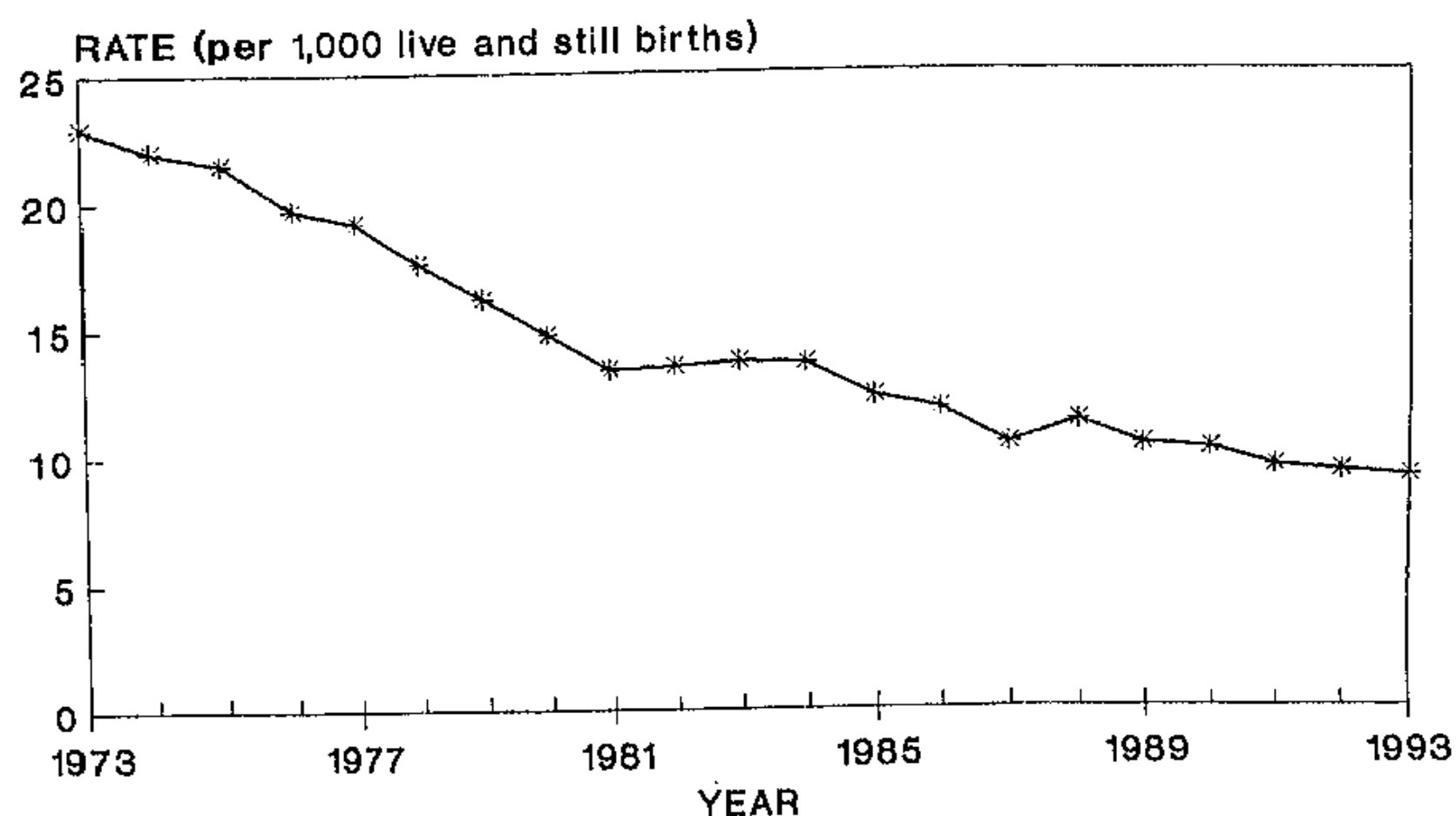
The birth rate for 1989 at 14.8 per 1,000 population was at the time the lowest ever recorded having progressively fallen from a figure of 21.8 in 1980. However in 1990 the rate rose, for the first time in ten years, to 15.1. Provisional data for subsequent years indicate a further decline to 13.4 in 1994 but rising again up to 13.9 in 1996 (Figure 4). Figure 5 shows trends in birth rates for selected EU countries in recent years and provides evidence that Ireland has been gradually approaching rates experienced in other EU countries. Even with the very significant fall in the birth rate during the last decade, the rate for Ireland still remains somewhat higher than any other EU country (Figure 6).

FERTILITY

Figure 7 shows the trend in the Total Period Fertility Rate (TPFR) in Ireland over the past 15 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 TPFR has declined from an average of nearly four children in 1972 to 1.9 in 1993. This is below the level required for the long term replacement of the population in the absence of any net inward migration. Again, as with the crude birth rate, while Ireland has experienced a fairly rapid fall in TPFR over recent years, it still has one of the highest rates in the EU (Figure 8).

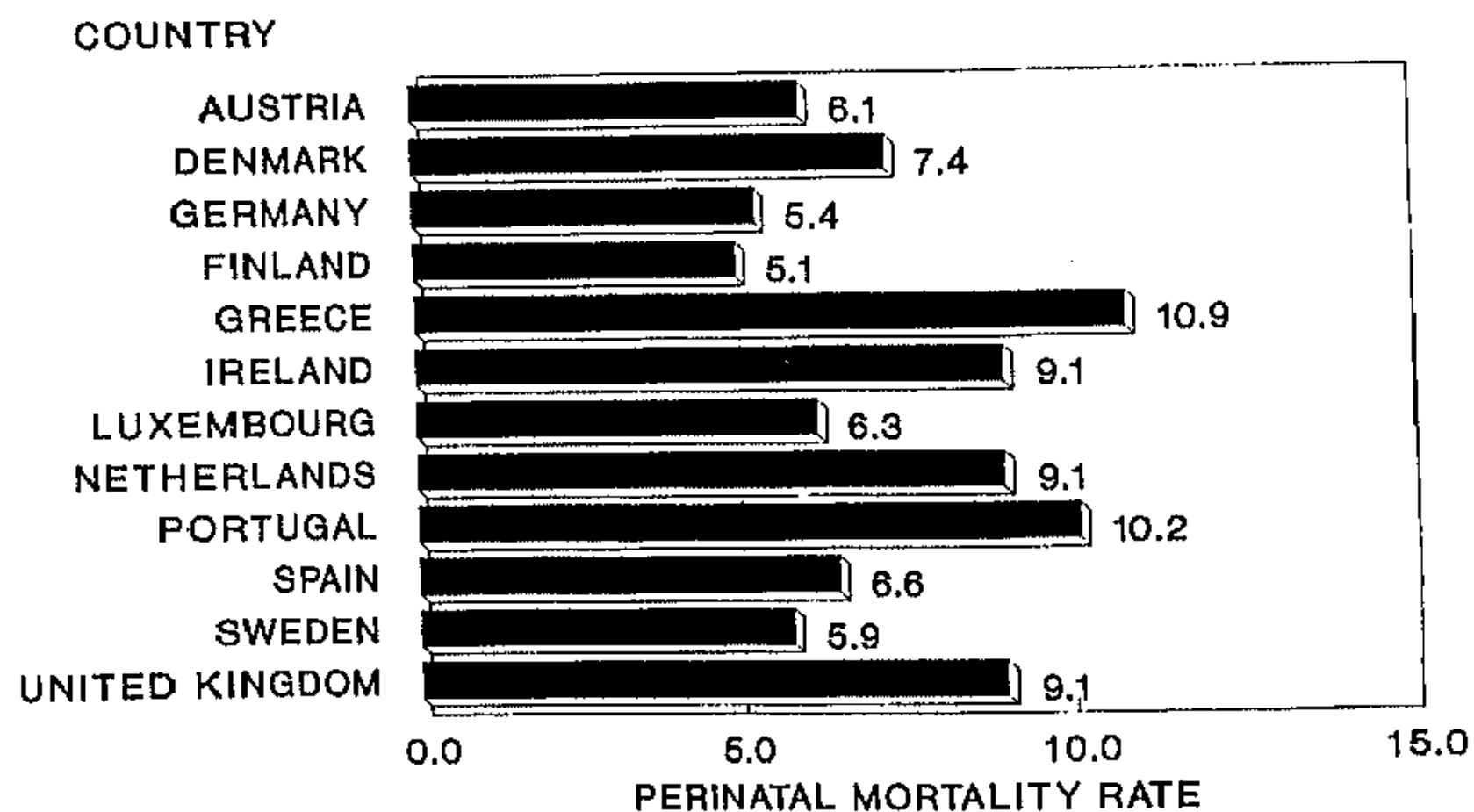
* National figures presented in this section are based on official registration data as compiled by the Central Statistics Office. These figures may differ somewhat from numbers and rates appearing in the Tables of this Report for reasons given in the previous section.

FIGURE 2
PERINATAL MORTALITY RATE, IRELAND:
1973-1993



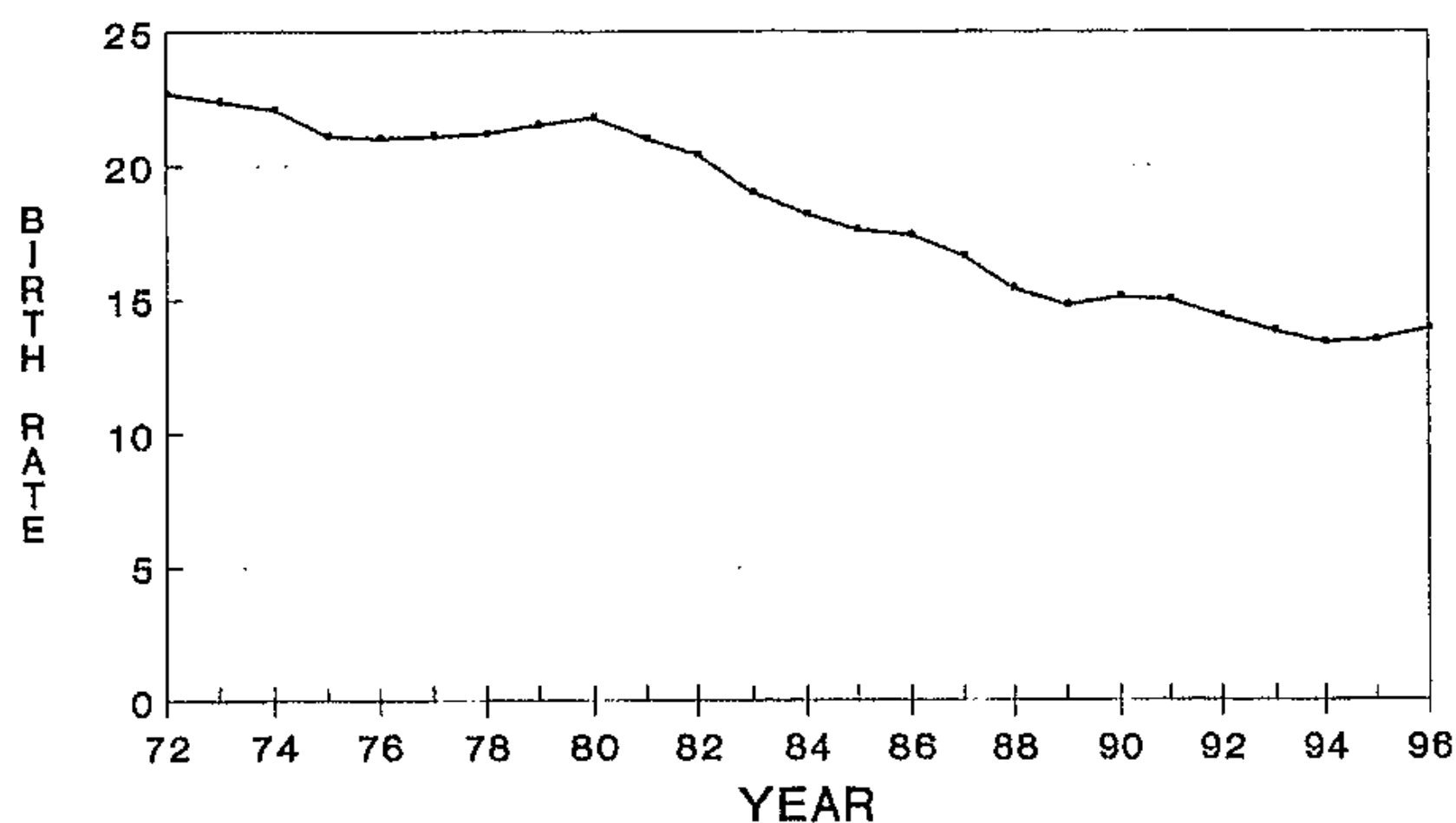
Source: Report on Vital Statistics
1973-1993.

FIGURE 3
PERINATAL MORTALITY RATES, 1993
FOR EU COUNTRIES



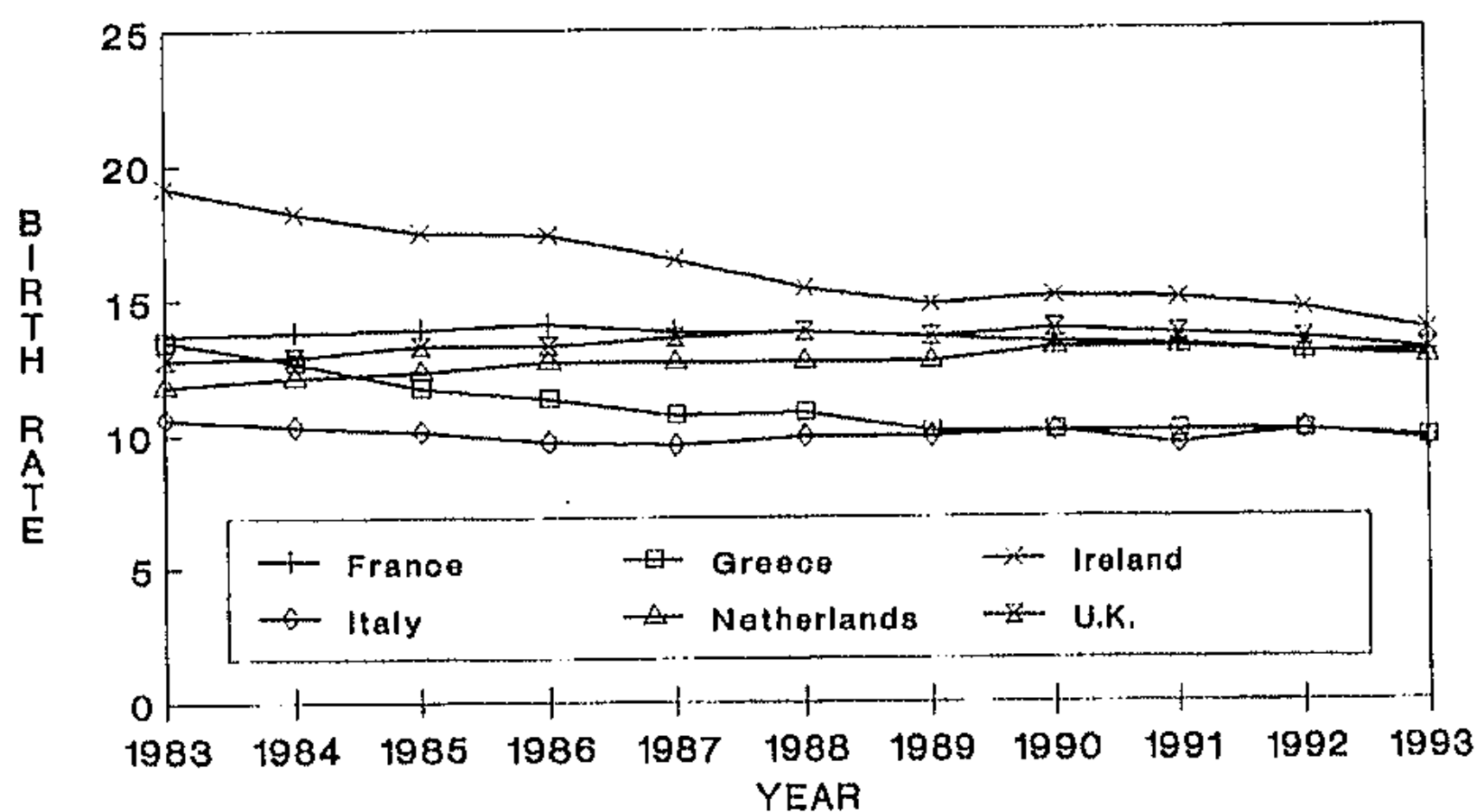
Source: Demographic Statistics, Eurostat, 1995
Note: Data for Belgium, Italy and France
are not sufficiently current to include.

FIGURE 4
BIRTH RATE PER 1,000 POPULATION,
IRELAND: 1972-1996



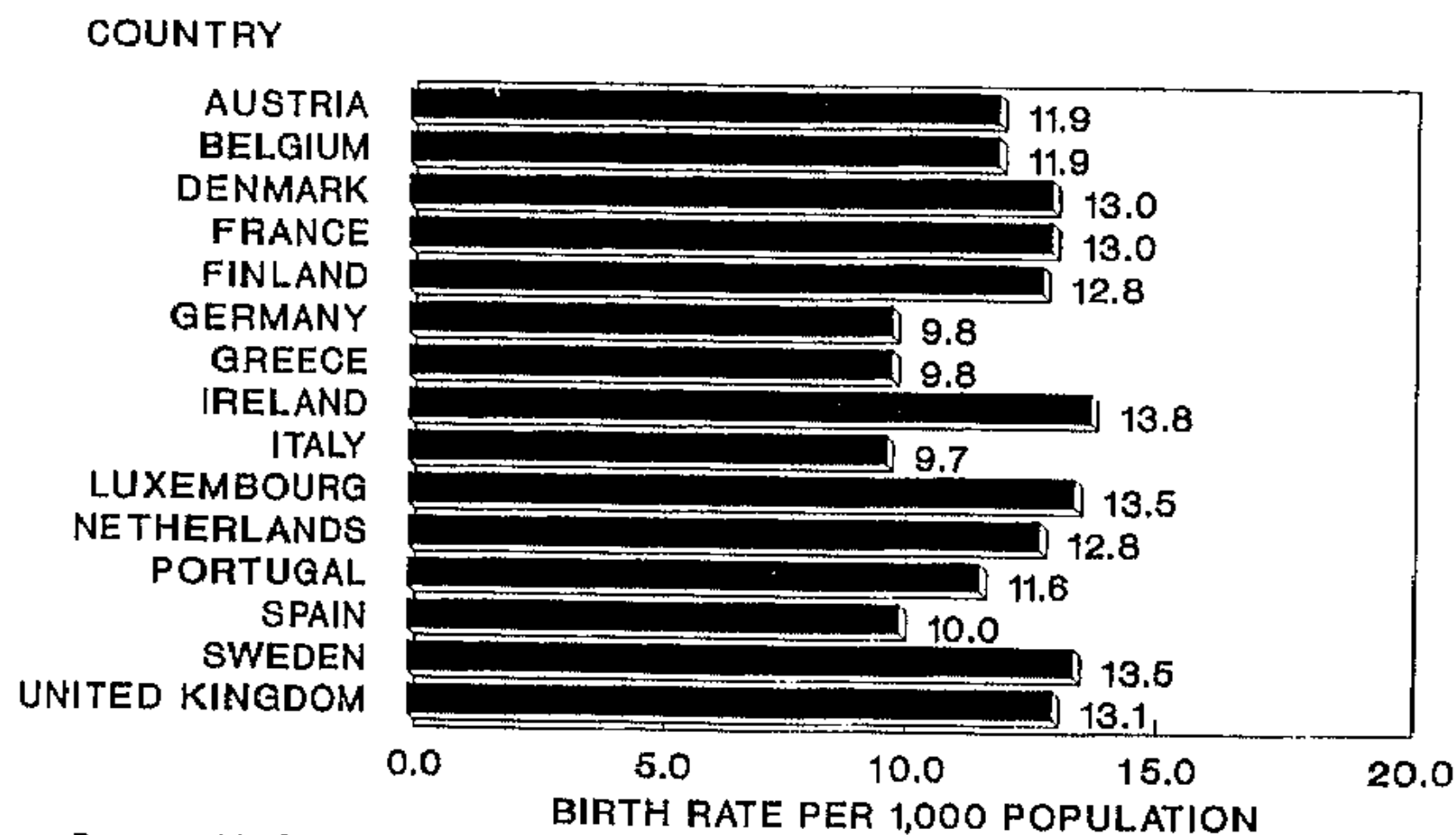
Source: Report on Vital Statistics 1972-1993,
 Yearly Summary, 1994-1995 (based on year of registration).

FIGURE 5
TRENDS IN BIRTH RATES FOR SELECTED EU
COUNTRIES: 1983-1993



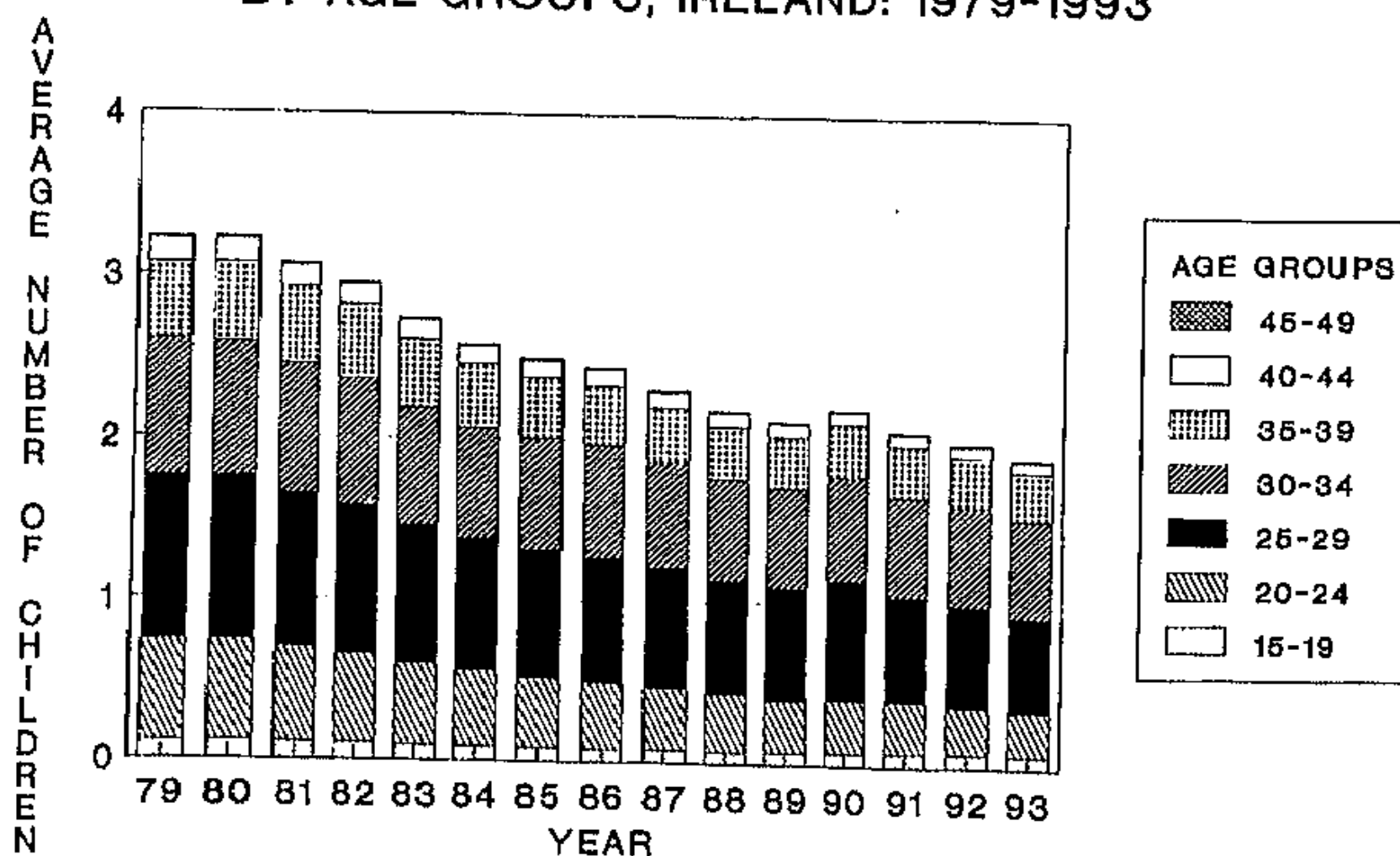
Source: Demographic Statistics,
 Eurostat, 1996.

FIGURE 6
BIRTH RATES PER 1,000 POPULATION
EU: 1993



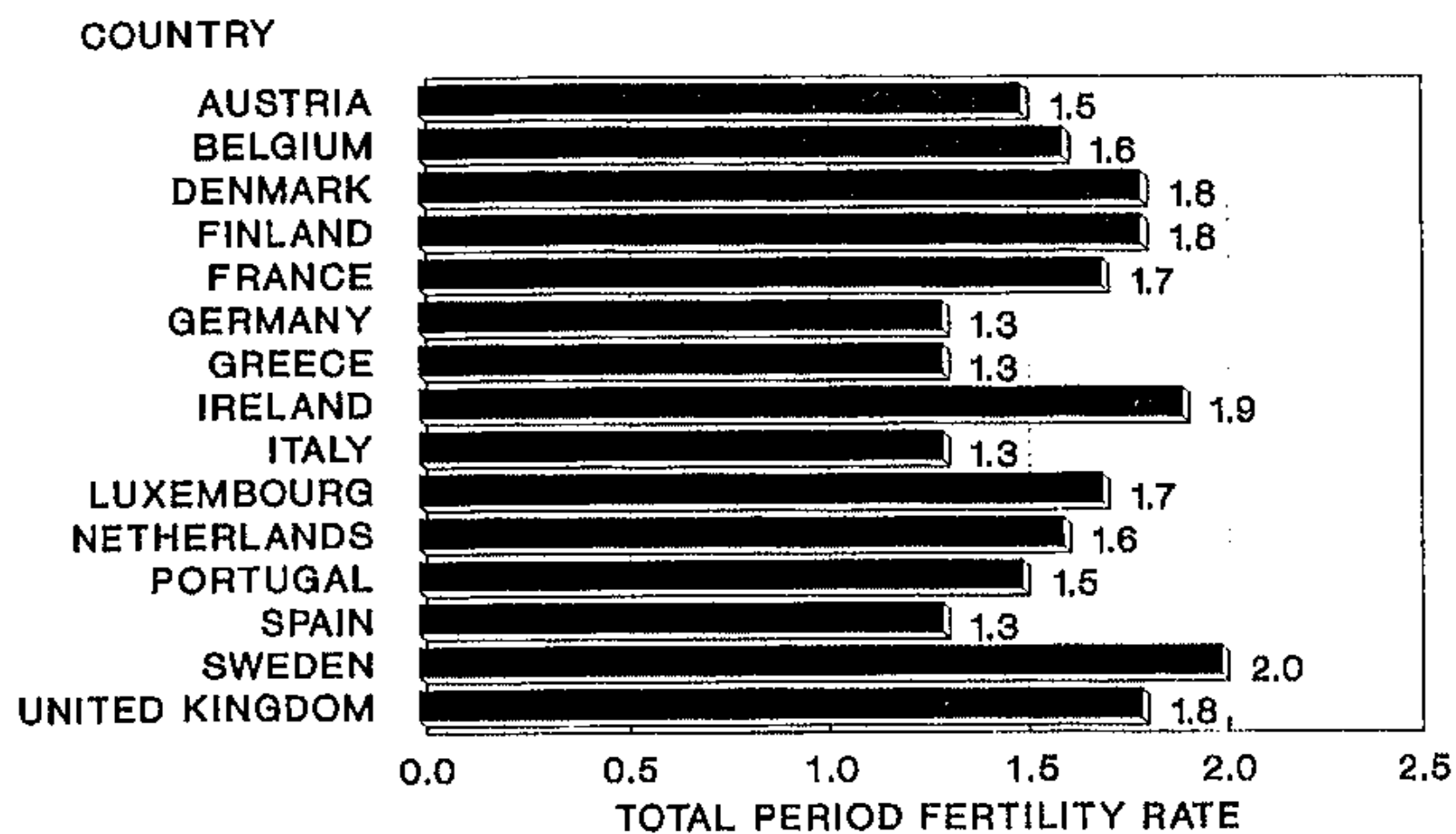
Source: Demographic Statistics,
Eurostat, 1996.

FIGURE 7
TOTAL PERIOD FERTILITY RATE SUBDIVIDED
BY AGE GROUPS, IRELAND: 1979-1993



Source: Report on Vital Statistics
1979-1993.

FIGURE 8
TOTAL PERIOD FERTILITY RATES, 1993
FOR EU COUNTRIES



Source: Demographic Statistics, Eurostat
 1996. Estimated figure for Belgium.

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1993

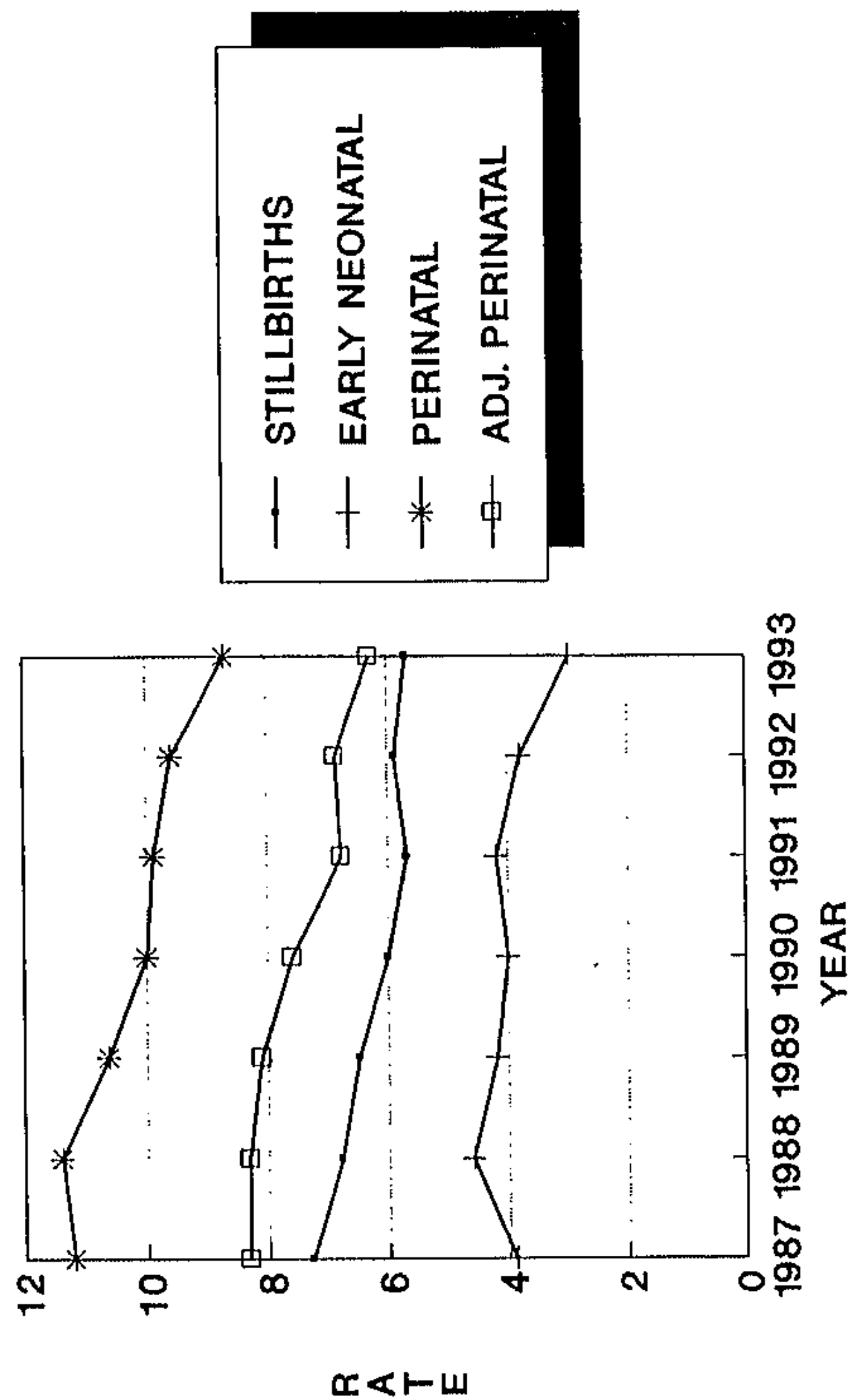
SECTION A:

SELECTED TRENDS

TRENDS IN VITAL EVENTS
SINGLETON AND MULTIPLE BIRTHS, NUMBERS AND RATES FOR
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS AND PERINATAL DEATHS, 1987 TO 1993

Note: Definitions of terms and algorithms for the calculation of mortality rates are given in the introduction to the report.
* Revised figure.

FIGURE A1: TOTAL BIRTHS
RATES FOR STILLBIRTHS, EARLY NEONATAL &
PERINATAL DEATHS 1987-1993



Source: Table 1.

TABLE 2

TRENDS IN SELECTED STATISTICS, 1987 TO 1993

SELECTED STATISTICS	1987	1988	1989	1990	1991	1992	1993
GENERAL CHARACTERISTICS							
Average Age of Mother in Years	28.93	28.97	29.12	29.11	29.11	29.18	29.30
Average Maternal Parity	1.63	1.57	1.54	1.48	1.43	1.37	1.33
Single Mothers (%)	9.99	11.09	11.95	13.56	15.54	16.50	18.14
Average Number of Previous Stillbirths per 1000 Confinements	22.06	20.47	20.02	19.44	17.22	19.82	23.18
Average Weight in Grammes							
- Singleton Births	3501.55	3504.01	3506.58	3509.88	3548.02	3525.01	3520.02
- Multiple Births	2530.11	2545.52	2539.24	2584.04	2653.17	2549.84	2535.38
- Total Births	3481.28	3482.29	3483.19	3488.10	3527.54	3502.37	3499.98
Low Birthweight < 2500 grammes (%)							
- Singleton Births	3.28	3.48	3.30	3.35	3.43	3.24	3.39
- Multiple Births	43.76	41.58	40.90	38.70	38.38	41.38	42.23
- Total Births	4.12	4.34	4.20	4.18	4.23	4.13	4.18
Average Gestational Age at Delivery in Weeks	39.68	39.58	39.63	39.60	39.59	40.23	40.08
Average Interval since Last Birth in Years	3.49	3.56	3.60	3.68	3.68	3.69	3.75
PERINATAL CARE							
Hospital & GP Combined Antenatal Care (%)	61.24	61.86	61.52	60.80	58.97	61.97	63.94
Average Gestational Age at Time of First Visit to Doctor in Weeks	11.91	11.81	11.87	11.46	11.80	11.63	11.58
Mothers' Average Length of Stay in Days	5.78	5.73	5.64	5.47	5.24	5.12	5.15
Immunity to Rubella (%)	88.48	87.33	88.76	88.77	89.40	89.02	89.36
Method of Delivery (%):							
<i>Singleton Births</i>							
- Spontaneous	77.51	76.48	75.36	74.33	73.64	73.72	72.95
- Caesarean	8.78	9.49	9.84	10.39	11.30	11.78	12.57
- Forceps ¹	9.20	9.37	10.00	9.78	9.58	8.30	7.79
<i>Multiple Births</i>							
- Spontaneous	47.01	46.59	42.78	43.06	39.36	40.78	37.99
- Caesarean	20.35	22.00	24.86	24.84	30.70	29.69	34.95
- Forceps ¹	7.97	8.52	8.88	7.18	8.07	6.40	6.48
<i>Total Births</i>							
- Spontaneous	77.30	76.27	75.09	74.07	72.85	72.96	72.24
- Caesarean	8.90	9.62	10.01	10.55	11.75	12.19	13.03
- Forceps ¹	9.19	9.36	10.00	9.75	9.54	8.25	7.77
Booked Hospital Admissions (%)	98.59	99.02	99.15	98.70	98.94	98.99	98.46
Mothers Breastfeeding (%)	33.23	32.26	32.76	31.66	31.85	33.85	33.89
PERINATAL OUTCOMES							
Wigglesworth Classes (Rate) ²							
- Macerated Stillbirths	3.87	3.48	3.79	3.46	2.96	3.48	3.10
- Congenital Anomalies	2.76	3.05	2.51	2.22	2.88	2.74	2.37
- Immaturity	1.55	1.75	1.74	1.73	1.44	1.48	1.20
- Asphyxia	2.51	2.75	2.11	2.32	2.39	1.74	1.91
- Specific Conditions	0.78	0.64	0.65	0.47	0.38	0.47	0.43
- Total	11.47	11.67	10.80	10.20	10.05	9.91	9.00
Infants' Average Length of Stay in Days							
- Singleton Births	4.77	4.74	4.70	4.54	4.41	4.44	4.52
- Multiple Births	7.24	8.28	7.89	7.42	7.83	9.56	11.27
- Total Births	4.81	4.80	4.76	4.60	4.47	4.54	4.59
Postmortems for Early Neonatal Deaths (%)	65.88	61.40	73.33	66.09	66.12	73.78	66.67

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 confinements. Missing values are not included in the calculation of percentages.

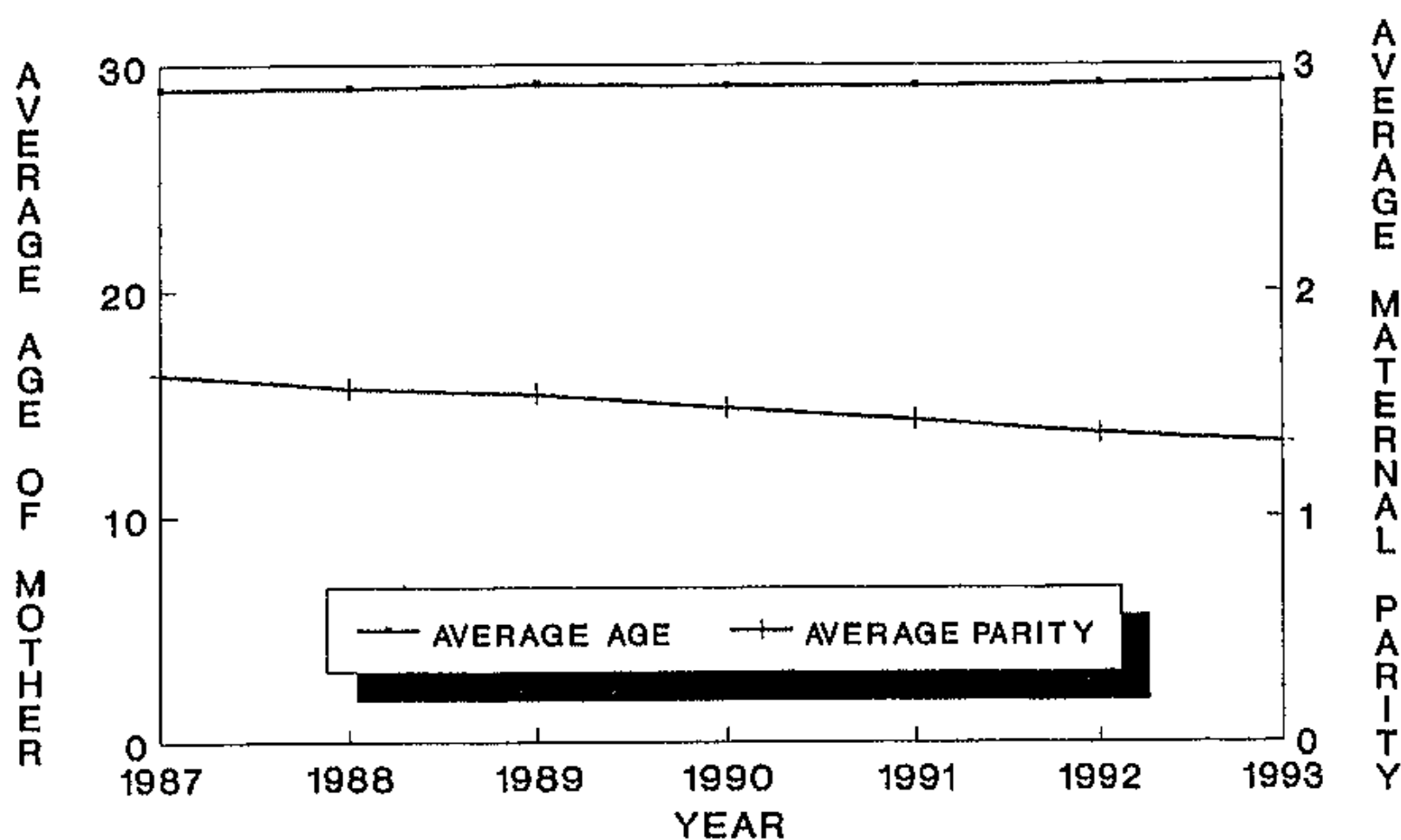
¹ Excludes breech deliveries.

² See Appendix E for details of method.

1993
29.30
1.33
18.14
23.18
3520.02
2535.38
3499.98
3.39
42.23
4.18
40.08
3.75
63.94
11.58
5.15
89.36
72.95
12.57
7.79
37.99
34.95
6.48
72.24
13.03
7.77
98.46
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1.91
0.43
9.00
4.52
11.27
4.59
66.67

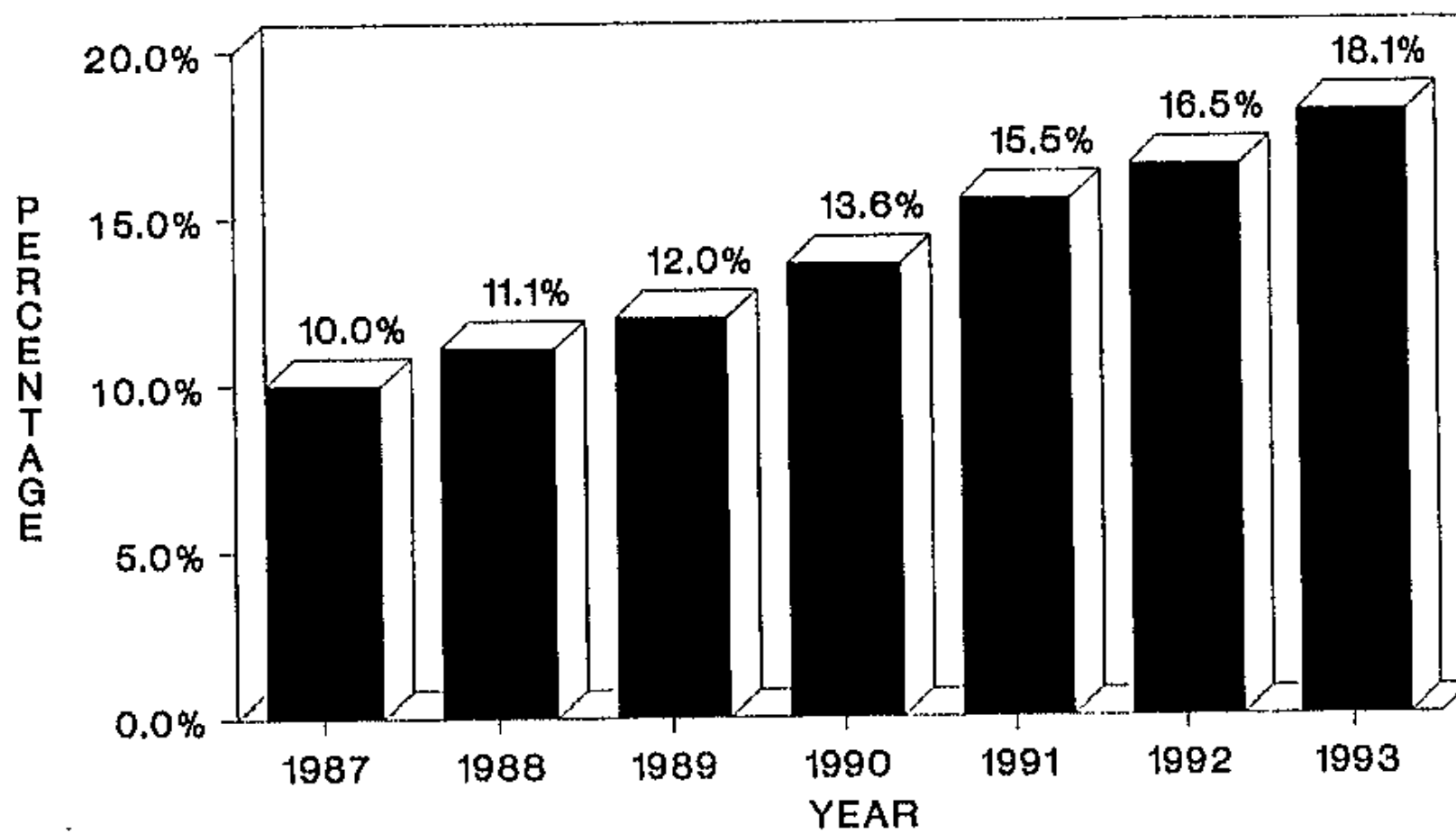
report. Further
istics are based

FIGURE A2
AVERAGE AGE OF MOTHER IN YEARS AND
AVERAGE MATERNAL PARITY, 1987-1993



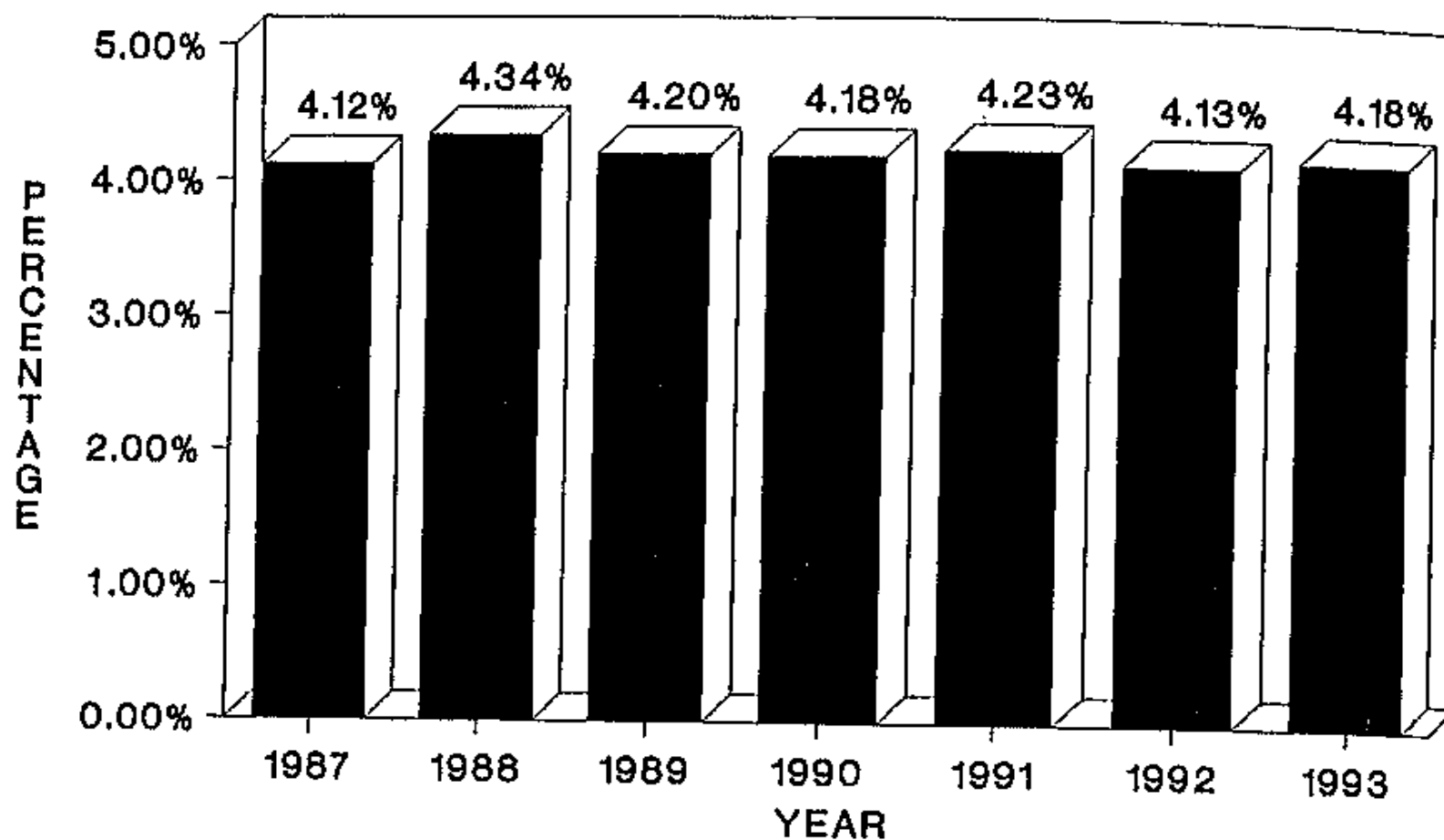
Source: Table 2.

FIGURE A3
PERCENTAGE OF SINGLE MOTHERS,
1987-1993



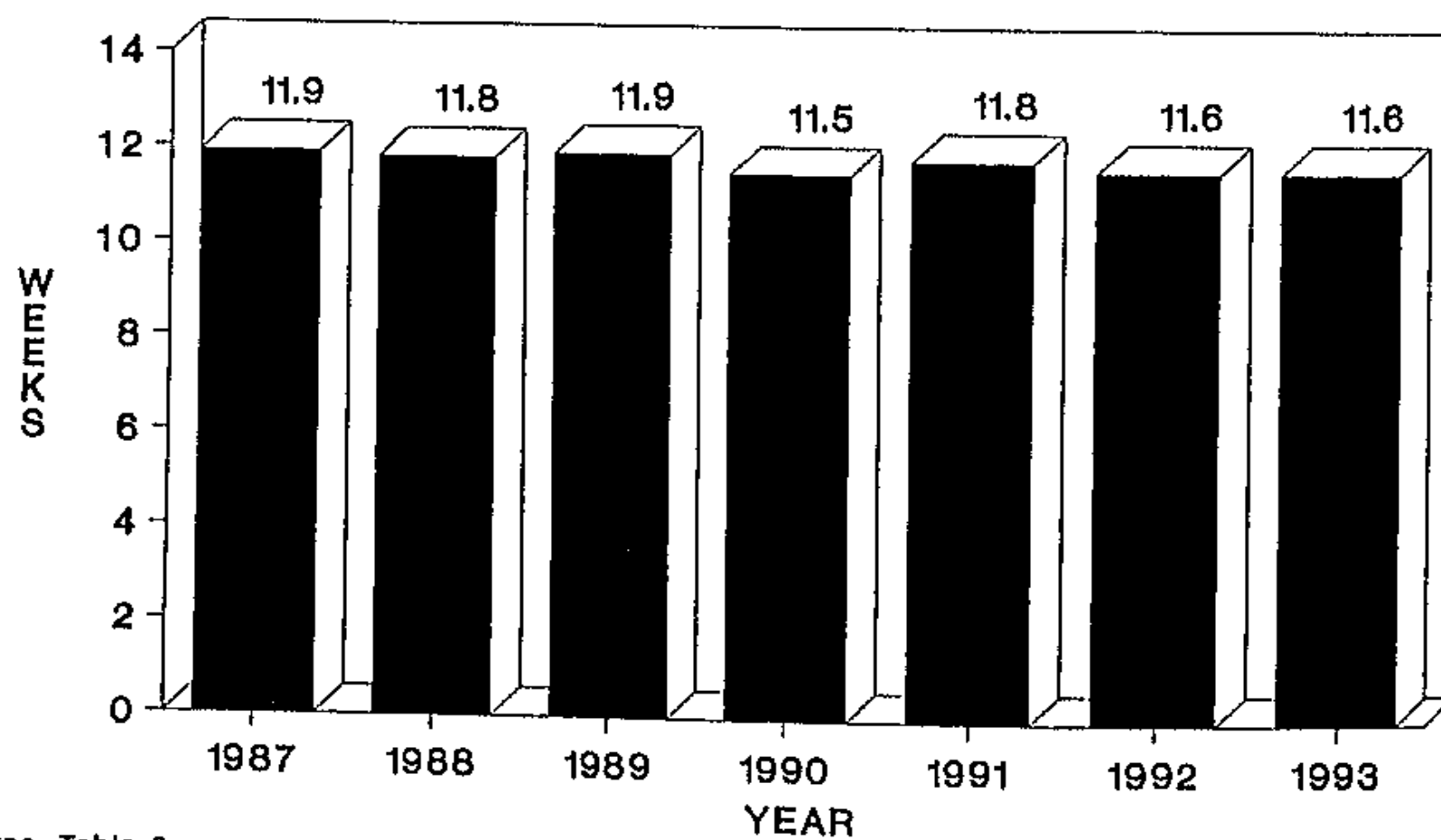
Source: Table 2.

FIGURE A4
PERCENTAGE OF LOW BIRTHWEIGHT BABIES,
1987-1993



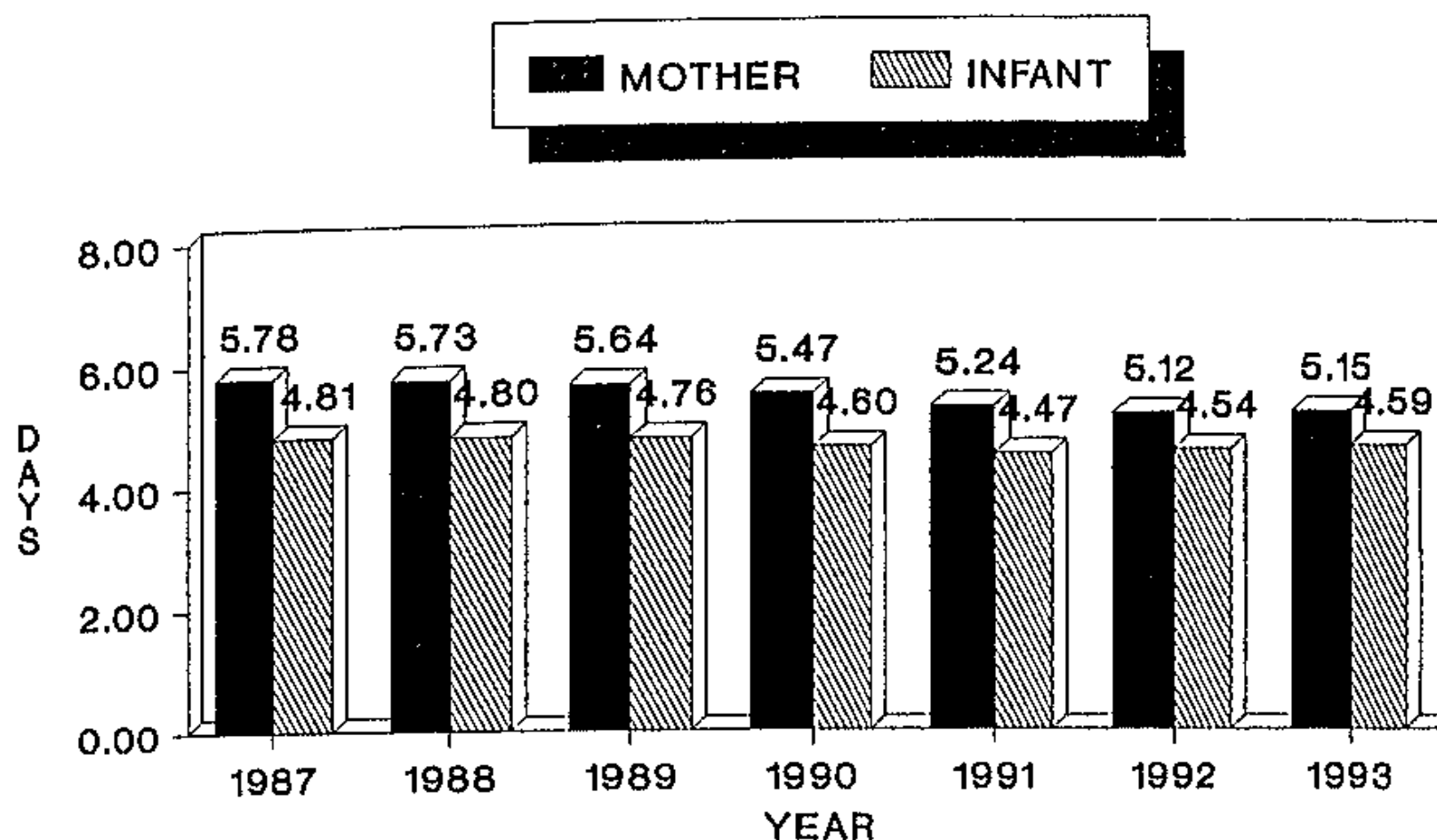
Source: Table 2.

FIGURE A5
AVERAGE GESTATIONAL AGE AT TIME OF FIRST
VISIT TO DOCTOR IN WEEKS, 1987-1993



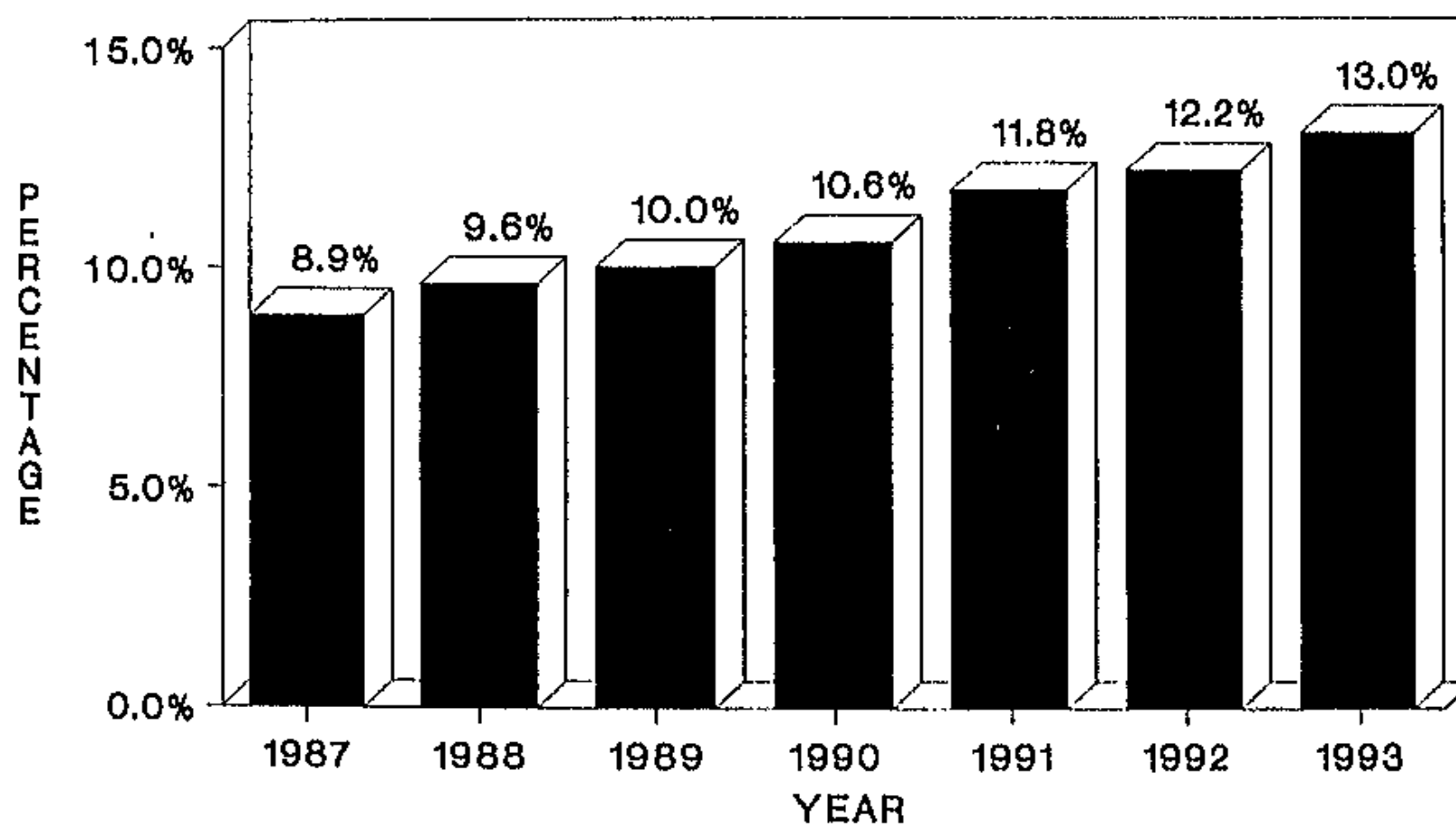
Source: Table 2.

FIGURE A6
AVERAGE LENGTH OF STAY IN DAYS FOR
MOTHERS AND INFANTS, 1987-1993



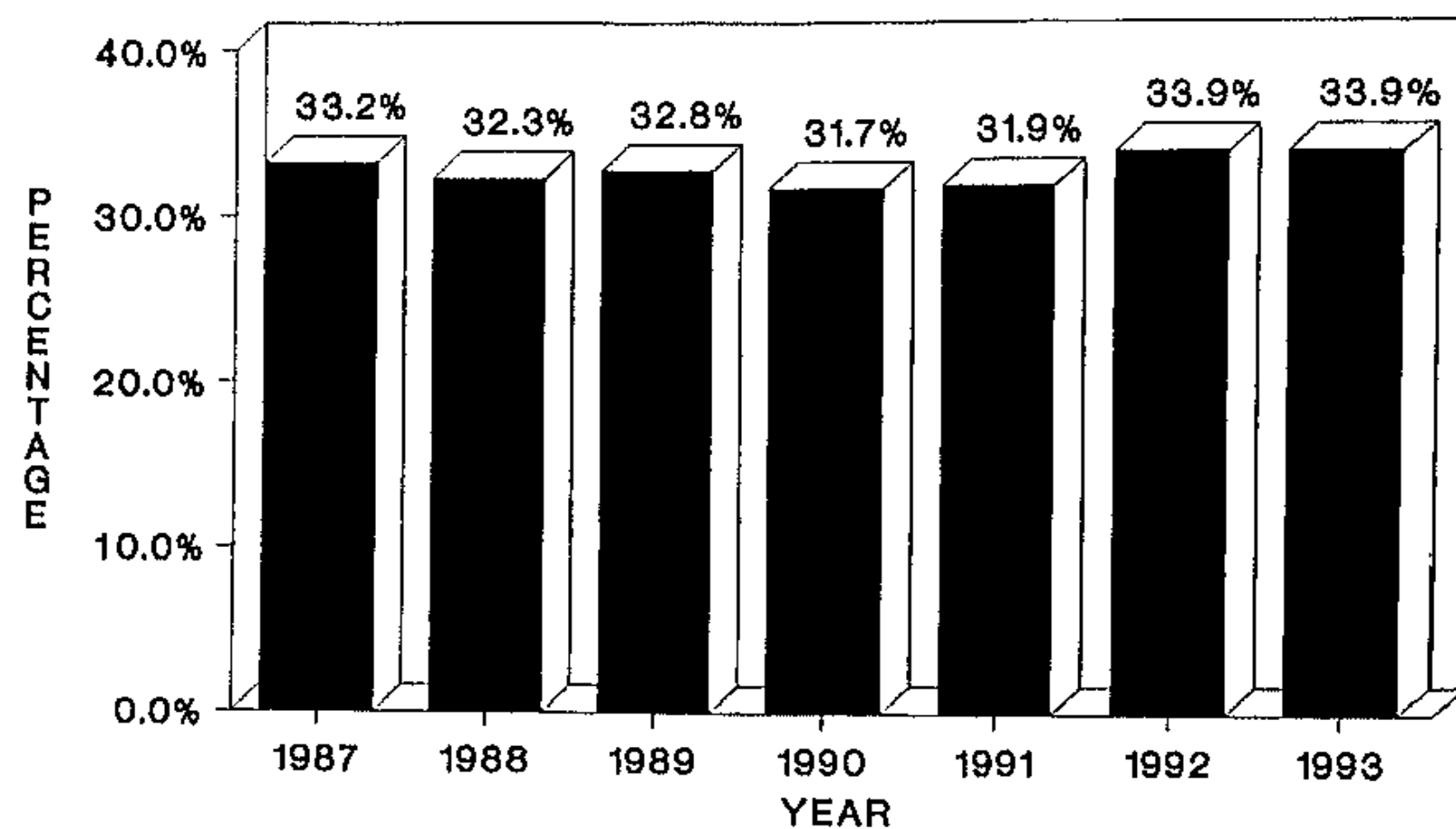
Source: Table 2.

FIGURE A7
PERCENTAGE OF CAESAREAN BIRTHS
1987-1993



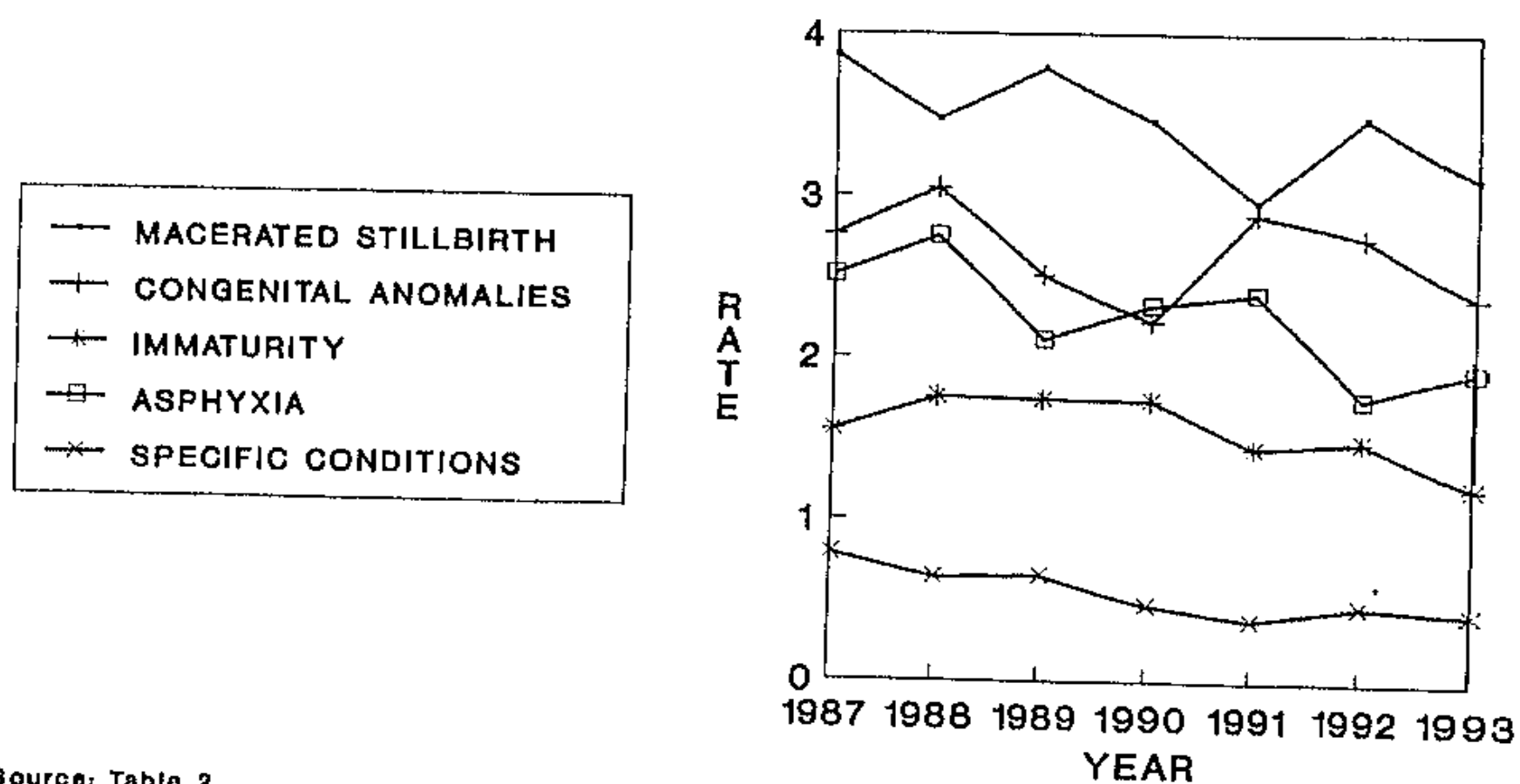
Source: Table 2

FIGURE A8
PERCENTAGE OF MOTHERS BREASTFEEDING,
1987-1993



Source: Table 2.

FIGURE A9
WIGGLESWORTH CLASSES RATES,
1987-1993



Source: Table 2.
 See Appendix E for details of method.

1993

SECTION B:

GENERAL CHARACTERISTICS

GENERAL CHARACTERISTICS, 1993

PART 1: SINGLETON BIRTHS

TABLE 3

AGE OF MOTHER
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

AGE OF MOTHER	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR*
UNDER 15	12	0.0	0	0.0	0	0.0	0.0	0.0
15-19	2555	5.3	18	7.0	10	3.9	10.9	8.6
20-24	7314	15.2	40	5.4	23	3.1	8.6	5.9
25-29	14189	29.5	60	4.2	35	2.5	6.7	4.9
30-34	15238	31.7	71	4.6	43	2.8	7.4	5.6
35-39	7012	14.6	55	7.8	15	2.1	9.9	7.4
40-44	1573	3.3	25	15.6	4	2.5	18.1	13.2
45 AND OVER	89	0.2	3	32.6	1	11.2	43.5	22.2
NOT STATED	48	0.1	0	0.0	0	0.0	0.0	0.0
TOTAL	48030	100.0	272	5.6	131	2.7	8.3	6.1

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

TABLE 4

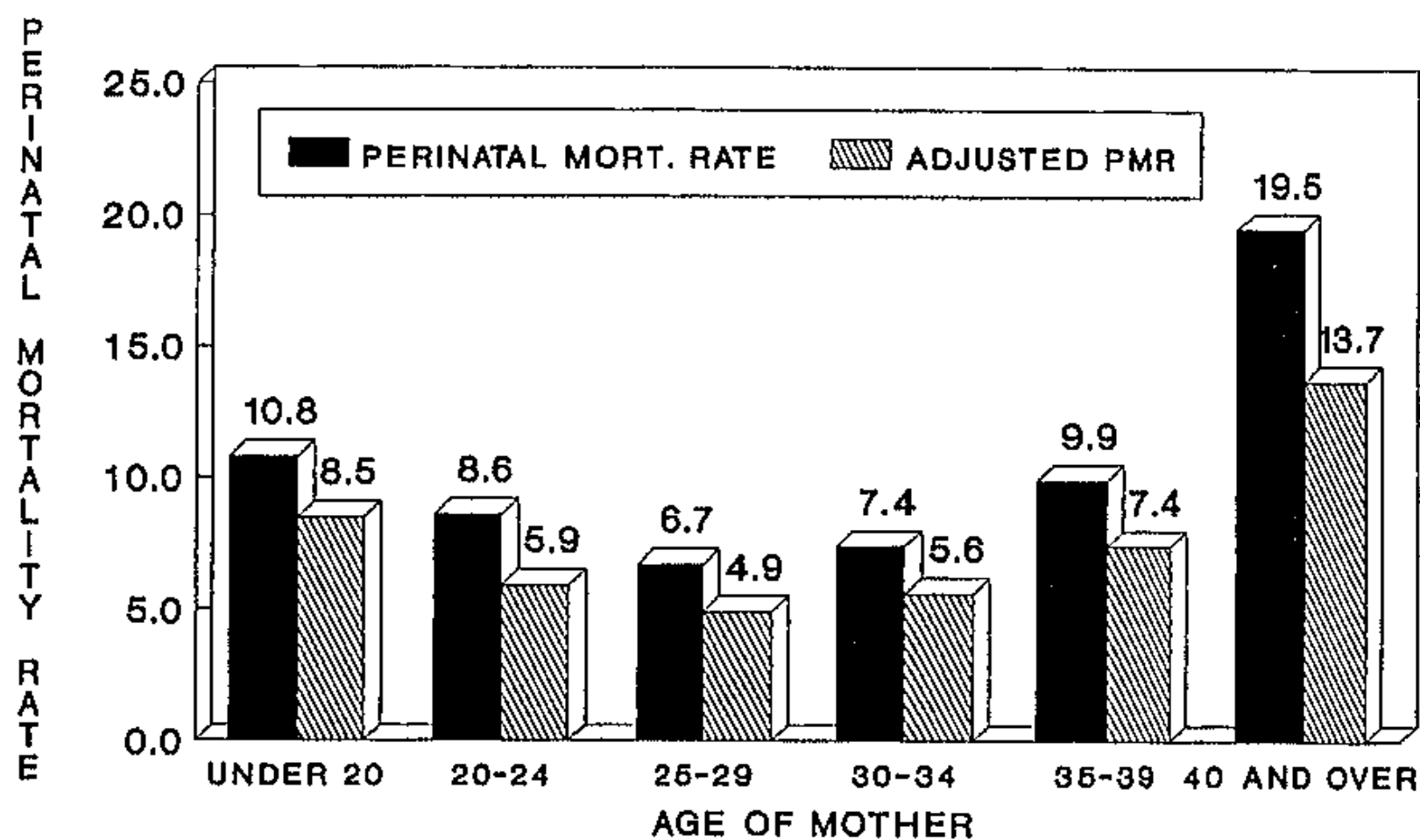
MATERNAL PARITY
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

MATERNAL PARITY	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
0	17030	35.5	93	5.4	58	3.4	8.8	6.7
1	14027	29.2	63	4.5	28	2.0	6.5	4.4
2	8498	17.7	49	5.7	26	3.1	8.8	6.1
3	4424	9.2	21	4.7	6	1.4	6.1	4.5
4	1902	4.0	10	5.2	9	4.7	9.9	6.8
5	936	1.9	14	14.7	2	2.1	16.8	13.7
6	476	1.0	5	10.4	0	0.0	10.4	10.4
MORE THAN 6	611	1.3	9	14.5	0	0.0	14.5	12.9
NOT STATED	126	0.3	8	59.7	2	15.9	74.6	53.4
TOTAL	48030	100.0	272	5.6	131	2.7	8.3	6.1

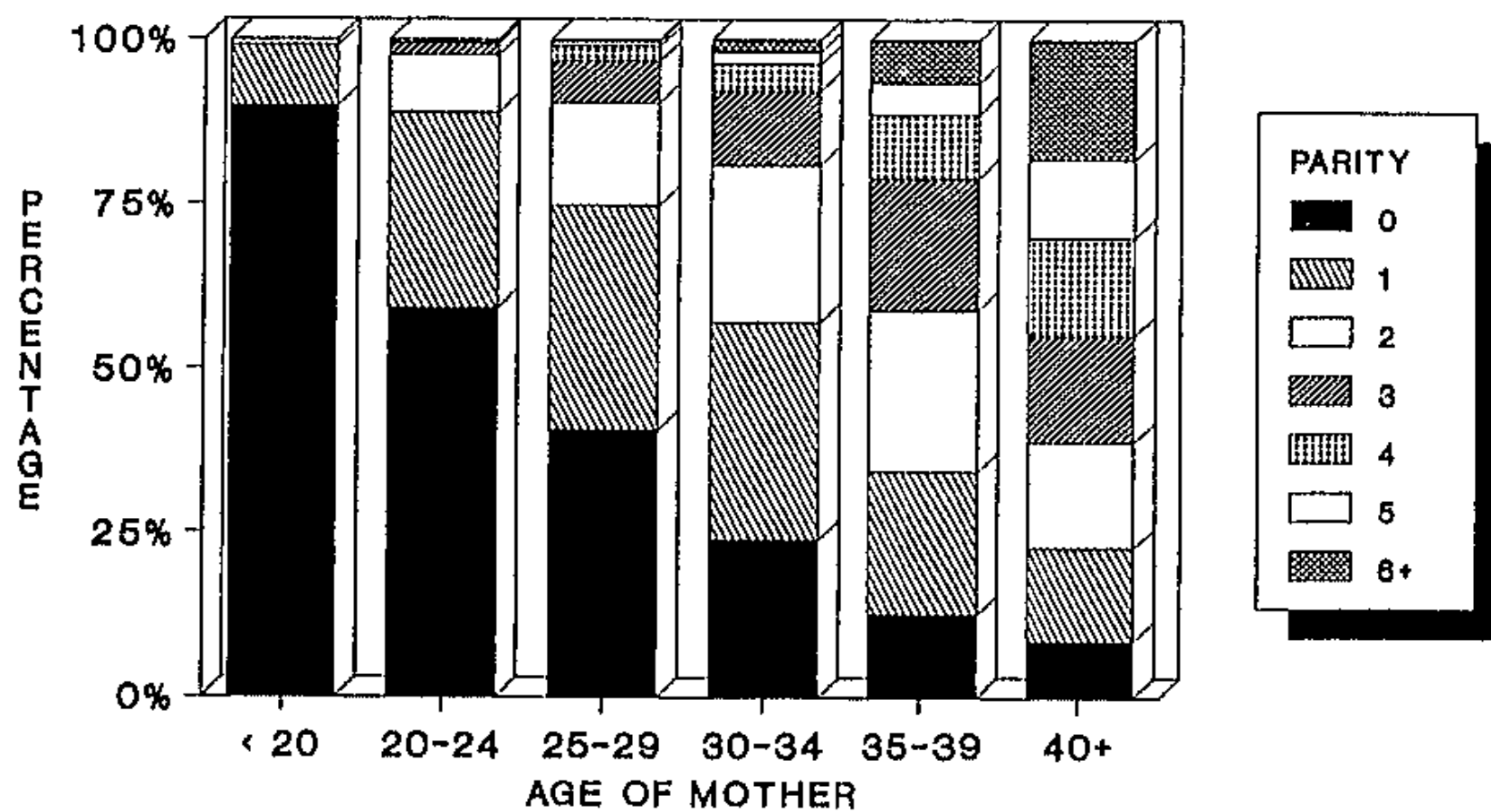
FIGURE B1

PERINATAL MORTALITY RATES
BY AGE OF MOTHER, 1993
SINGLETON BIRTHS



Note: See Table 3 for data. The adjusted rate excludes all deaths due to congenital anomalies.

FIGURE B2
PERCENTAGE DISTRIBUTIONS OF PARITY
FOR AGE OF MOTHER, 1993
SINGLETON BIRTHS



Note: See Appendix D, Table 1 for data. 'Not Stated' data is not included in the calculation of the percentages.

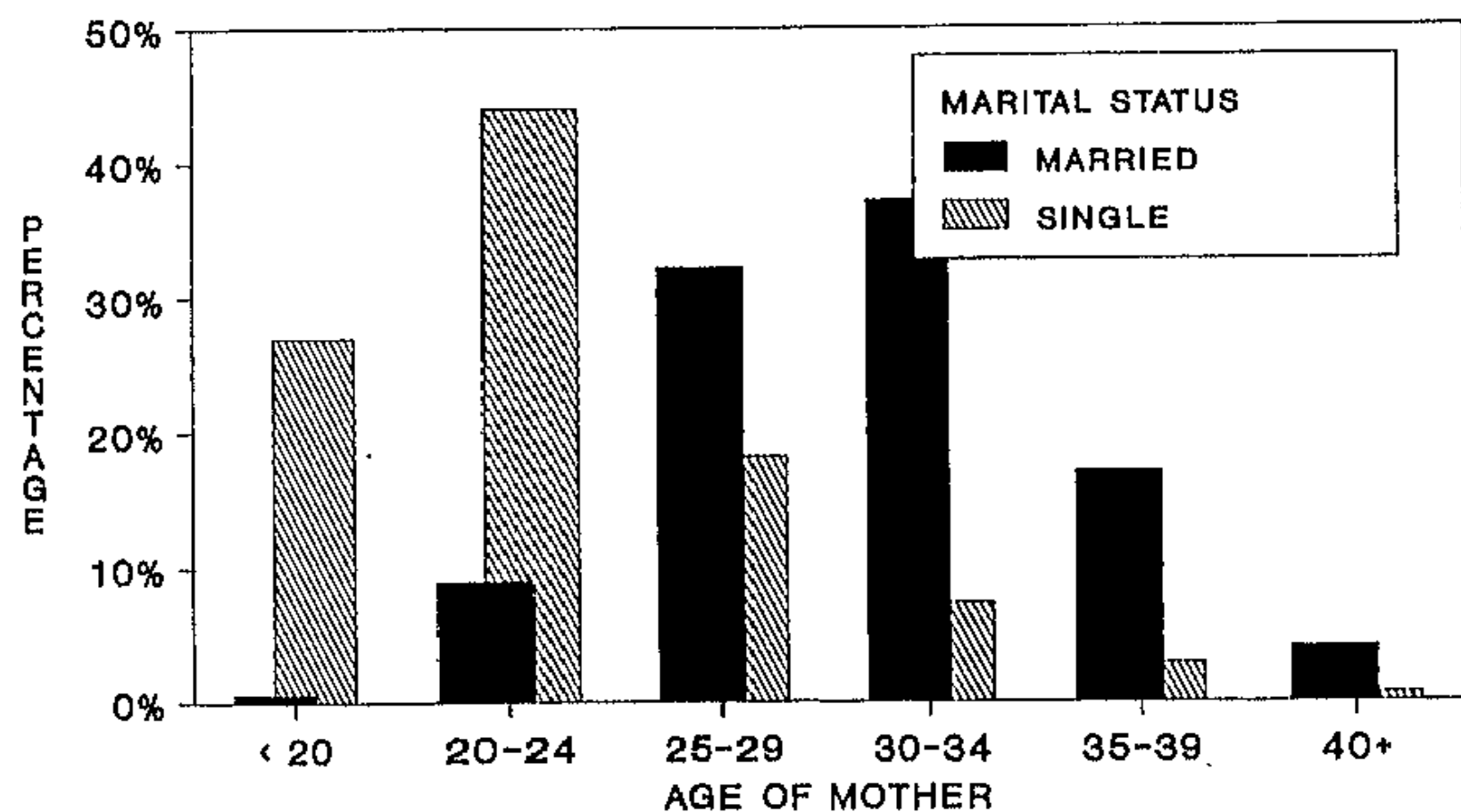
TABLE 5

MARITAL STATUS
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

MARITAL STATUS	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
MARRIED	38360	79.9	202	5.2	99	2.6	7.8	5.8
SINGLE	8708	18.1	63	7.2	28	3.2	10.4	7.3
WIDOWED	72	0.1	0	0.0	1	13.9	13.9	13.9
SEPARATED	810	1.7	6	7.4	2	2.5	9.8	8.6
DIVORCED	53	0.1	0	0.0	1	18.9	18.9	0.0
NOT STATED	27	0.1	1	35.7	0	0.0	35.7	0.0
TOTAL	48030	100.0	272	5.6	131	2.7	8.3	6.1

MOTHER'S AGE: PERCENTAGE DISTRIBUTIONS
FIGURE B3 FOR MARRIED AND SINGLE, 1993
SINGLETON BIRTHS



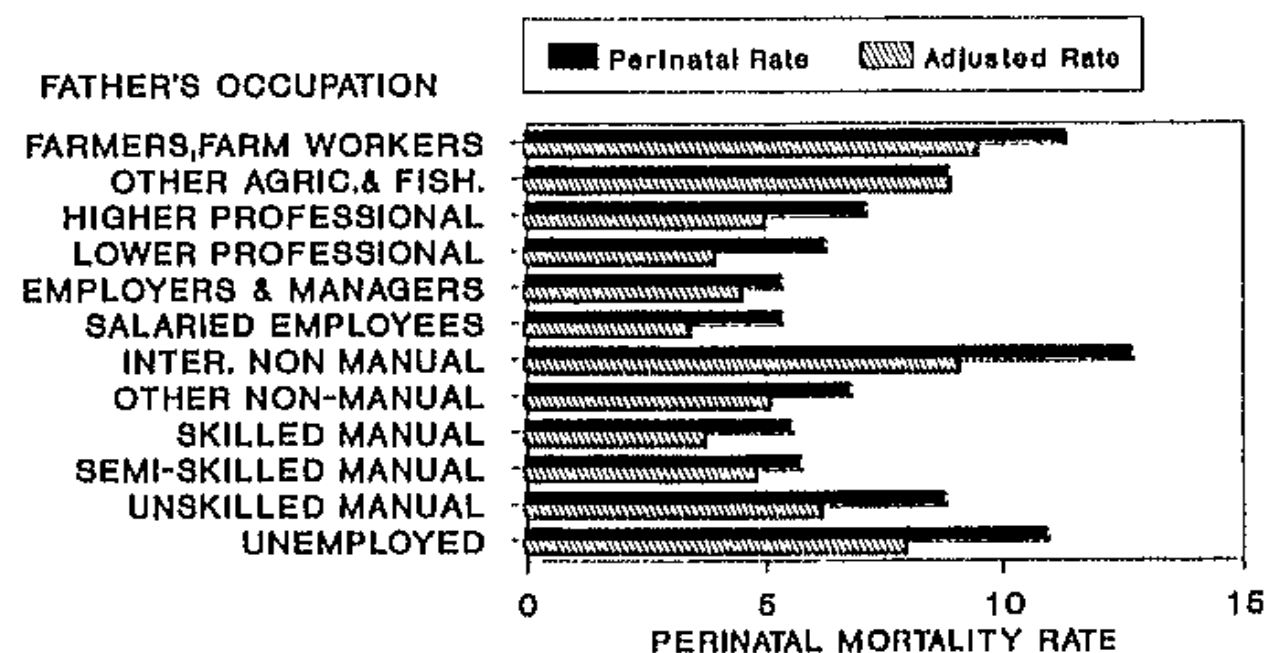
Note: See Appendix D, Table 3 for data.
'Not Stated' data is not included in the calculation of the percentages.

TABLE 6
FATHER'S OCCUPATION
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993
*****SINGLETON BIRTHS*****

FATHER'S OCCUPATION	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
FARMERS & FARM MANAGERS	3958	8.2	29	7.3	16	4.0	11.3	9.5
OTHER AGRICULTURAL OCCUPATIONS AND FISHERMEN	674	1.4	3	4.4	3	4.5	8.9	8.9
HIGHER PROFESSIONAL	1808	3.8	11	6.0	2	1.1	7.1	5.0
LOWER PROFESSIONAL	2056	4.3	8	3.9	5	2.4	6.3	3.9
EMPLOYERS & MANAGERS	4237	8.8	17	4.0	6	1.4	5.4	4.5
SALARIED EMPLOYEES	1482	3.1	5	3.4	3	2.0	5.4	3.4
INTERMEDIATE NON-MANUAL WORKERS	4277	8.9	37	8.6	18	4.2	12.7	9.1
OTHER NON-MANUAL WORKERS	4071	8.5	23	5.6	5	1.2	6.8	5.1
SKILLED MANUAL WORKERS	9239	19.2	29	3.1	23	2.5	5.6	3.7
SEMI-SKILLED MANUAL WORKERS	2915	6.1	12	4.1	5	1.7	5.8	4.8
UNSKILLED MANUAL WORKERS	1913	4.0	13	6.7	4	2.1	8.8	6.2
UNEMPLOYED	1637	3.4	10	6.1	8	4.9	10.9	7.9
NOT CLASSIFIABLE	223	0.5	0	0.0	0	0.0	0.0	0.0
NOT APPLICABLE	9280	19.3	69	7.4	31	3.3	10.7	7.6
NOT STATED	260	0.5	6	22.6	2	7.7	30.1	19.0
TOTAL	48030	100.0	272	5.6	131	2.7	8.3	6.1

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

**FIGURE B4 PERINATAL MORTALITY RATES
BY FATHER'S OCCUPATION, 1993**
*****SINGLETON BIRTHS*****



Note: See Table 6 for data. The adjusted rate excludes all deaths due to congenital anomalies.

TABLE 7

NUMBER OF PREVIOUS STILLBIRTHS
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

PREVIOUS STILLBIRTHS	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
0	29906	96.5	154	5.1	67	2.2	7.4	5.2
1	747	2.4	15	19.7	4	5.4	24.9	18.5
2	73	0.2	2	26.7	0	0.0	26.7	26.7
3 AND OVER	46	0.1	0	0.0	0	0.0	0.0	0.0
NOT STATED	228	0.7	8	33.9	2	8.8	42.4	30.0
TOTAL	31000	100.0	179	5.7	73	2.4	8.1	5.8

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

TABLE 8

BIRTHWEIGHT - ALL BIRTHS
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

BIRTHWEIGHT (GRAMMES)	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
500-749	29	0.1	19	395.8	23	793.1	875.0	860.5
750-999	47	0.1	20	298.5	15	319.1	522.4	475.4
1000-1249	71	0.1	24	252.6	8	112.7	336.8	267.4
1250-1499	84	0.2	19	184.5	5	59.5	233.0	177.1
1500-1999	337	0.7	26	71.6	15	44.5	112.9	66.7
2000-2499	1061	2.2	33	30.2	18	17.0	46.6	28.0
2500-2999	5183	10.8	48	9.2	10	1.9	11.1	8.8
3000-3499	15423	32.1	36	2.3	15	1.0	3.3	2.3
3500-3999	17069	35.5	29	1.7	12	0.7	2.4	2.0
4000-4499	7137	14.9	9	1.3	5	0.7	2.0	1.3
4500 AND OVER	1553	3.2	6	3.8	2	1.3	5.1	4.5
NOT STATED	36	0.1	3	76.9	3	83.3	153.8	83.3
TOTAL	48030	100.0	272	5.6	131	2.7	8.3	6.1

TABLE 9

BIRTHWEIGHT - MALES
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

BIRTHWEIGHT (GRAMMES)	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
500-749	15	0.1	7	318.2	11	733.3	818.2	818.2
750-999	22	0.1	8	266.7	13	590.9	700.0	666.7
1000-1249	36	0.1	13	265.3	5	138.9	367.3	311.1
1250-1499	40	0.2	12	230.8	3	75.0	288.5	212.8
1500-1999	157	0.6	13	76.5	9	57.3	129.4	75.0
2000-2499	507	2.1	20	38.0	8	15.8	53.1	36.7
2500-2999	2238	9.1	27	11.9	5	2.2	14.1	11.1
3000-3499	7180	29.1	22	3.1	6	0.8	3.9	2.9
3500-3999	9089	36.8	12	1.3	5	0.6	1.9	1.4
4000-4499	4346	17.6	6	1.4	4	0.9	2.3	1.6
4500 AND OVER	1015	4.1	3	2.9	1	1.0	3.9	3.9
NOT STATED	20	0.1	1	47.6	1	50.0	95.2	0.0
TOTAL	24665	100.0	144	5.8	71	2.9	8.7	6.5

TABLE 10

BIRTHWEIGHT - FEMALES
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

BIRTHWEIGHT (GRAMMES)	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
500-749	14	0.1	12	461.5	12	857.1	923.1	904.8
750-999	25	0.1	12	324.3	2	80.0	378.4	323.5
1000-1249	35	0.1	11	239.1	3	85.7	304.3	219.5
1250-1499	44	0.2	7	137.3	2	45.5	176.5	142.9
1500-1999	180	0.8	13	67.4	6	33.3	98.4	59.5
2000-2499	554	2.4	13	22.9	10	18.1	40.6	19.8
2500-2999	2943	12.6	21	7.1	5	1.7	8.8	7.1
3000-3499	8240	35.3	14	1.7	9	1.1	2.8	1.8
3500-3999	7977	34.2	17	2.1	7	0.9	3.0	2.6
4000-4499	2790	11.9	3	1.1	1	0.4	1.4	0.7
4500 AND OVER	537	2.3	3	5.6	1	1.9	7.4	5.6
NOT STATED	16	0.1	2	111.1	2	125.0	222.2	176.5
TOTAL	23355	100.0	128	5.5	60	2.6	8.0	5.7

Note: Tables 9 and 10 do not include 10 births for which the sex was recorded as 'indeterminate'.

TABLE 11

GESTATION PERIOD AT DELIVERY
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

GESTATION PERIOD (WEEKS)	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
LESS THAN 22	3	0.0	2	400.0	2	666.7	800.0	750.0
22-27	79	0.2	17	177.1	37	468.4	562.5	533.3
28-31	206	0.4	60	225.6	11	53.4	266.9	220.0
32-36	1606	3.3	65	38.9	28	17.4	55.7	39.0
37-41	42229	87.9	112	2.6	46	1.1	3.7	2.6
42 AND OVER	3900	8.1	16	4.1	7	1.8	5.9	3.6
NOT STATED	7	0.0	0	0.0	0	0.0	0.0	0.0
TOTAL	48030	100.0	272	5.6	131	2.7	8.3	6.1

TABLE 12

INTERVAL IN YEARS SINCE LAST BIRTH
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

TIME SINCE LAST BIRTH	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
NO PREVIOUS BIRTH	17030	35.5	93	5.4	58	3.4	8.8	6.7
1 YEAR OR LESS	522	1.1	4	7.6	0	0.0	7.6	7.6
> 1 YEAR TO 2 YEARS	6968	14.5	31	4.4	23	3.3	7.7	5.4
>2 YEARS TO 3 YEARS	7715	16.1	42	5.4	14	1.8	7.2	5.6
>3 YEARS TO 4 YEARS	5414	11.3	24	4.4	8	1.5	5.9	3.9
>4 YEARS TO 5 YEARS	3304	6.9	9	2.7	7	2.1	4.8	3.3
>5 YEARS TO 6 YEARS	2103	4.4	13	6.1	4	1.9	8.0	5.7
MORE THAN 6 YEARS	4499	9.4	44	9.7	12	2.7	12.3	9.1
NOT STATED	475	1.0	12	24.6	5	10.5	34.9	20.8
TOTAL	48030	100.0	272	5.6	131	2.7	8.3	6.1

TABLE 13

MONTH OF BIRTH
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

ADJUSTED PMR	MONTH OF BIRTH	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
50.0	JANUARY	3965	8.3	23	5.8	16	4.0	9.8	6.5
33.3	FEBRUARY	3718	7.7	22	5.9	15	4.0	9.9	8.3
20.0	MARCH	4052	8.4	25	6.1	12	3.0	9.1	6.6
39.0	APRIL	4048	8.4	29	7.1	9	2.2	9.3	7.4
2.6	MAY	4308	9.0	19	4.4	9	2.1	6.5	3.9
3.6	JUNE	4161	8.7	22	5.3	13	3.1	8.4	5.5
0.0	JULY	4231	8.8	21	4.9	7	1.7	6.6	5.2
6.1	AUGUST	4059	8.5	28	6.9	16	3.9	10.8	5.9
	SEPTEMBER	4188	8.7	24	5.7	6	1.4	7.1	5.5
	OCTOBER	4070	8.5	20	4.9	12	2.9	7.8	6.1
	NOVEMBER	3667	7.6	19	5.2	6	1.6	6.8	6.5
	DECEMBER	3563	7.4	20	5.6	10	2.8	8.4	6.2
	TOTAL	48030	100.0	272	5.6	131	2.7	8.3	6.1

ADJUSTED
PMR

6.7
7.6
5.4
5.6
3.9
3.3
5.7
9.1
20.8
6.1

GENERAL CHARACTERISTICS, 1993

PART 2: MULTIPLE BIRTHS

TABLE 14

MATERNITIES, TWINS, TRIPLETS AND TWINNING RATE FOR 1993

BIRTHS*	MATERNITIES	SETS OF TWINS	SETS OF TRIPLETS	TWINNING RATE
49314	48803	487	12	10.0

* Includes stillbirths.

TABLE 15

AGE OF MOTHER
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

AGE OF MOTHER	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PIR
15-19	57	5.7	0	0.0	2	35.1	35.1	35.1
20-24	104	10.4	3	28.0	2	19.2	46.7	28.6
25-29	297	29.7	4	13.3	6	20.2	33.2	23.5
30-34	360	36.0	3	8.3	3	8.3	16.5	13.8
35-39	151	15.1	1	6.6	3	19.9	26.3	6.7
40-44	30	3.0	0	0.0	0	0.0	0.0	0.0
NOT STATED	2	0.2	0	0.0	0	0.0	0.0	0.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

TABLE 16

MATERNAL PARITY
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

MATERNAL PARITY	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PIR
0	345	34.5	3	8.6	6	17.4	25.9	25.9
1	305	30.5	5	16.1	5	16.4	32.3	19.6
2	163	16.3	0	0.0	1	6.1	6.1	0.0
3	91	9.1	2	21.5	0	0.0	21.5	0.0
4	51	5.1	1	19.2	2	39.2	57.7	20.0
5	28	2.8	0	0.0	0	0.0	0.0	0.0
6	10	1.0	0	0.0	0	0.0	0.0	0.0
MORE THAN 6	8	0.8	0	0.0	2	250.0	250.0	250.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

TABLE 17

MARITAL STATUS
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

MARITAL STATUS	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
MARRIED	823	82.2	11	13.2	10	12.2	25.2	14.5
SINGLE	156	15.6	0	0.0	6	38.5	38.5	38.5
SEPARATED	20	2.0	0	0.0	0	0.0	0.0	0.0
DIVORCED	2	0.2	0	0.0	0	0.0	0.0	0.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

TABLE 18

FATHER'S OCCUPATION
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

FATHER'S OCCUPATION	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
FARMERS & FARM MANAGERS	79	7.9	0	0.0	2	25.3	25.3	0.0
OTHER AGRICULTURAL OCCUPATIONS & FISHERMEN	18	1.8	0	0.0	0	0.0	0.0	0.0
HIGHER PROFESSIONAL	41	4.1	1	23.8	0	0.0	23.8	0.0
LOWER PROFESSIONAL	61	6.1	1	16.1	1	16.4	32.3	32.3
EMPLOYERS & MANAGERS	105	10.5	2	18.7	2	19.0	37.4	37.4
SALARIED EMPLOYEES	24	2.4	1	40.0	1	41.7	80.0	80.0
INTERMEDIATE NON-MANUAL WORKERS	111	11.1	0	0.0	0	0.0	0.0	0.0
OTHER NON-MANUAL WORKERS	92	9.2	2	21.3	0	0.0	21.3	0.0
SKILLED MANUAL WORKERS	165	16.5	3	17.9	0	0.0	17.9	6.0
SEMI-SKILLED MANUAL WORKERS	64	6.4	1	15.4	0	0.0	15.4	15.4
UNSKILLED MANUAL WORKERS	39	3.9	0	0.0	0	0.0	0.0	0.0
UNEMPLOYED	25	2.5	0	0.0	4	160.0	160.0	87.0
NOT CLASSIFIABLE	5	0.5	0	0.0	0	0.0	0.0	0.0
NOT APPLICABLE	170	17.0	0	0.0	6	35.3	35.3	35.3
NOT STATED	2	0.2	0	0.0	0	0.0	0.0	0.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

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

TABLE 19

NUMBER OF PREVIOUS STILLBIRTHS
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

PREVIOUS STILLBIRTHS	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
0	641	97.7	5	7.7	9	14.0	21.7	12.5
1	14	2.1	3	176.5	1	71.4	235.3	71.4
3 AND OVER	1	0.2	0	0.0	0	0.0	0.0	0.0
TOTAL	656	100.0	8	12.0	10	15.2	27.1	13.7

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

TABLE 20

BIRTHWEIGHT - ALL BIRTHS
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

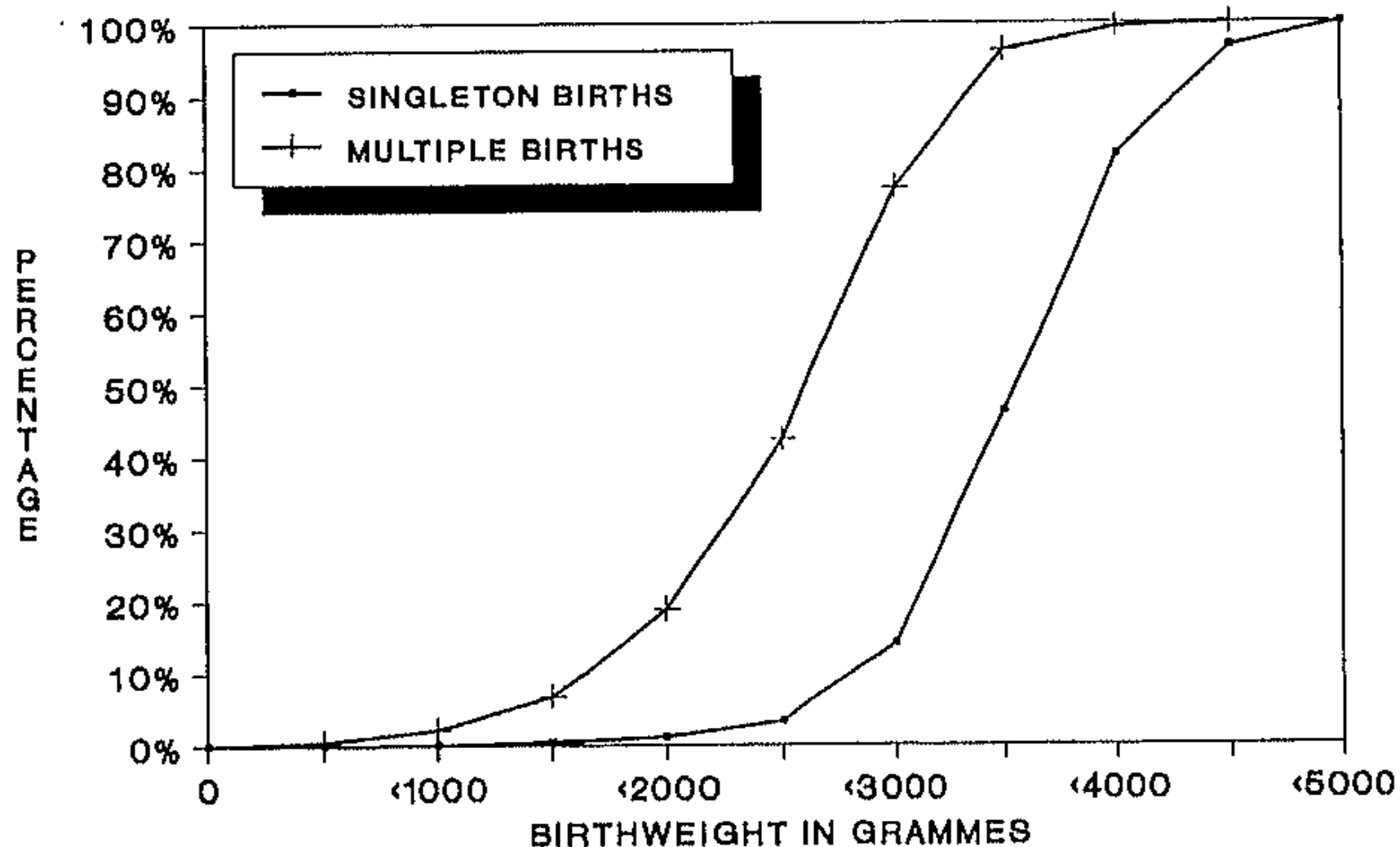
BIRTHWEIGHT (GRAMMES)	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
500-749	9	0.9	1	100.0	7	777.8	800.0	800.0
750-999	9	0.9	3	250.0	3	333.3	500.0	400.0
1000-1249	22	2.2	2	83.3	0	0.0	83.3	43.5
1250-1499	23	2.3	2	80.0	1	43.5	120.0	83.3
1500-1999	122	12.2	1	8.1	0	0.0	8.1	8.1
2000-2499	236	23.6	1	4.2	0	0.0	4.2	0.0
2500-2999	348	34.8	1	2.9	1	2.9	5.7	2.9
3000-3499	191	19.1	0	0.0	1	5.2	5.2	0.0
3500-3999	32	3.2	0	0.0	0	0.0	0.0	0.0
4000-4499	5	0.5	0	0.0	0	0.0	0.0	0.0
NOT STATED	4	0.4	0	0.0	3	750.0	750.0	500.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

TABLE 21
BIRTHWEIGHT - MALES
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

BIRTHWEIGHT (GRAMMES)	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
500-749	3	0.6	1	250.0	3	1000.0	1000.0	1000.0
750-999	3	0.6	1	250.0	1	333.3	500.0	500.0
1000-1249	7	1.4	0	0.0	0	0.0	0.0	0.0
1250-1499	9	1.8	0	0.0	0	0.0	0.0	0.0
1500-1999	56	10.9	1	17.5	0	0.0	17.5	17.5
2000-2499	112	21.8	0	0.0	0	0.0	0.0	0.0
2500-2999	175	34.1	0	0.0	1	5.7	5.7	0.0
3000-3499	122	23.8	0	0.0	1	8.2	8.2	0.0
3500-3999	22	4.3	0	0.0	0	0.0	0.0	0.0
4000-4499	3	0.6	0	0.0	0	0.0	0.0	0.0
NOT STATED	1	0.2	0	0.0	0	0.0	0.0	0.0
TOTAL	513	100.0	3	5.8	6	11.7	17.4	13.6

**BIRTHWEIGHTS: CUMULATIVE PERCENTAGES OF
 SINGLETON AND MULTIPLE LIVE BIRTHS, 1993**
FIGURE B5



Note: See Tables 8 and 20 for data.

TABLE 22

BIRTHWEIGHT - FEMALES
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

BIRTHWEIGHT (GRAMMES)	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
500-749	6	1.2	0	0.0	4	666.7	666.7	666.7
750-999	6	1.2	2	250.0	2	333.3	500.0	333.3
1000-1249	15	3.1	2	117.6	0	0.0	117.6	62.5
1250-1499	14	2.9	2	125.0	1	71.4	187.5	133.3
1500-1999	66	13.5	0	0.0	0	0.0	0.0	0.0
2000-2499	124	25.4	1	8.0	0	0.0	8.0	0.0
2500-2999	173	35.5	1	5.7	0	0.0	5.7	5.7
3000-3499	69	14.1	0	0.0	0	0.0	0.0	0.0
3500-3999	10	2.0	0	0.0	0	0.0	0.0	0.0
4000-4499	2	0.4	0	0.0	0	0.0	0.0	0.0
NOT STATED	3	0.6	0	0.0	3	1000.0	1000.0	1000.0
TOTAL	488	100.0	8	16.1	10	20.5	36.3	22.5

TABLE 23

GESTATION PERIOD AT DELIVERY
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

GESTATION PERIOD (WEEKS)	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
22-27	21	2.1	0	0.0	8	381.0	381.0	381.0
28-31	61	6.1	4	61.5	5	82.0	138.5	96.8
32-36	305	30.5	6	19.3	0	0.0	19.3	6.5
37-41	610	60.9	1	1.6	3	4.9	6.5	3.3
42 AND OVER	4	0.4	0	0.0	0	0.0	0.0	0.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

TABLE 24

INTERVAL IN YEARS SINCE LAST BIRTH
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

TIME SINCE LAST BIRTH	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
NO PREVIOUS BIRTH	345	34.5	3	8.6	6	17.4	25.9	25.9
1 YEAR OR LESS	14	1.4	1	66.7	1	71.4	133.3	133.3
> 1 YEAR TO 2 YEARS	153	15.3	3	19.2	1	6.5	25.6	0.0
>2 YEARS TO 3 YEARS	157	15.7	1	6.3	3	19.1	25.3	19.1
>3 YEARS TO 4 YEARS	113	11.3	0	0.0	1	8.8	8.8	8.8
>4 YEARS TO 5 YEARS	70	7.0	0	0.0	1	14.3	14.3	14.3
>5 YEARS TO 6 YEARS	48	4.8	1	20.4	1	20.8	40.8	0.0
MORE THAN 6 YEARS	90	9.0	1	11.0	0	0.0	11.0	11.0
NOT STATED	11	1.1	1	83.3	2	181.8	250.0	100.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

TABLE 25

MONTH OF BIRTH
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

MONTH OF BIRTH	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
JANUARY	87	8.7	2	22.5	1	11.5	33.7	11.5
FEBRUARY	66	6.6	1	14.9	0	0.0	14.9	0.0
MARCH	62	6.2	0	0.0	2	32.3	32.3	16.4
APRIL	71	7.1	0	0.0	0	0.0	0.0	0.0
MAY	78	7.8	1	12.7	4	51.3	63.3	39.0
JUNE	92	9.2	2	21.3	9	97.8	117.0	107.5
JULY	87	8.7	1	11.4	0	0.0	11.4	11.4
AUGUST	81	8.1	1	12.2	0	0.0	12.2	0.0
SEPTEMBER	100	10.0	0	0.0	0	0.0	0.0	0.0
OCTOBER	80	8.0	2	24.4	0	0.0	24.4	12.3
NOVEMBER	110	11.0	1	9.0	0	0.0	9.0	9.0
DECEMBER	87	8.7	0	0.0	0	0.0	0.0	0.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

1993
SECTION C:
PERINATAL CARE

PERINATAL CARE, 1993

PART 1: SINGLETON BIRTHS

TABLE 26

TYPE OF ANTENATAL CARE
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

TYPE OF ANTENATAL CARE	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
HOSPITAL/ OBSTETRICAL GENERAL PRACTITIONER ONLY	16396	34.1	102	6.2	44	2.7	8.8	6.4
HOSPITAL AND G.P. COMBINED	228	0.5	4	17.2	2	8.8	25.9	13.1
NONE	30018	62.5	153	5.1	75	2.5	7.6	5.5
NOT STATED	201	0.4	9	42.9	7	34.8	76.2	62.8
	1187	2.5	4	3.4	3	2.5	5.9	5.0
TOTAL	48030	100.0	272	5.6	131	2.7	8.3	6.1

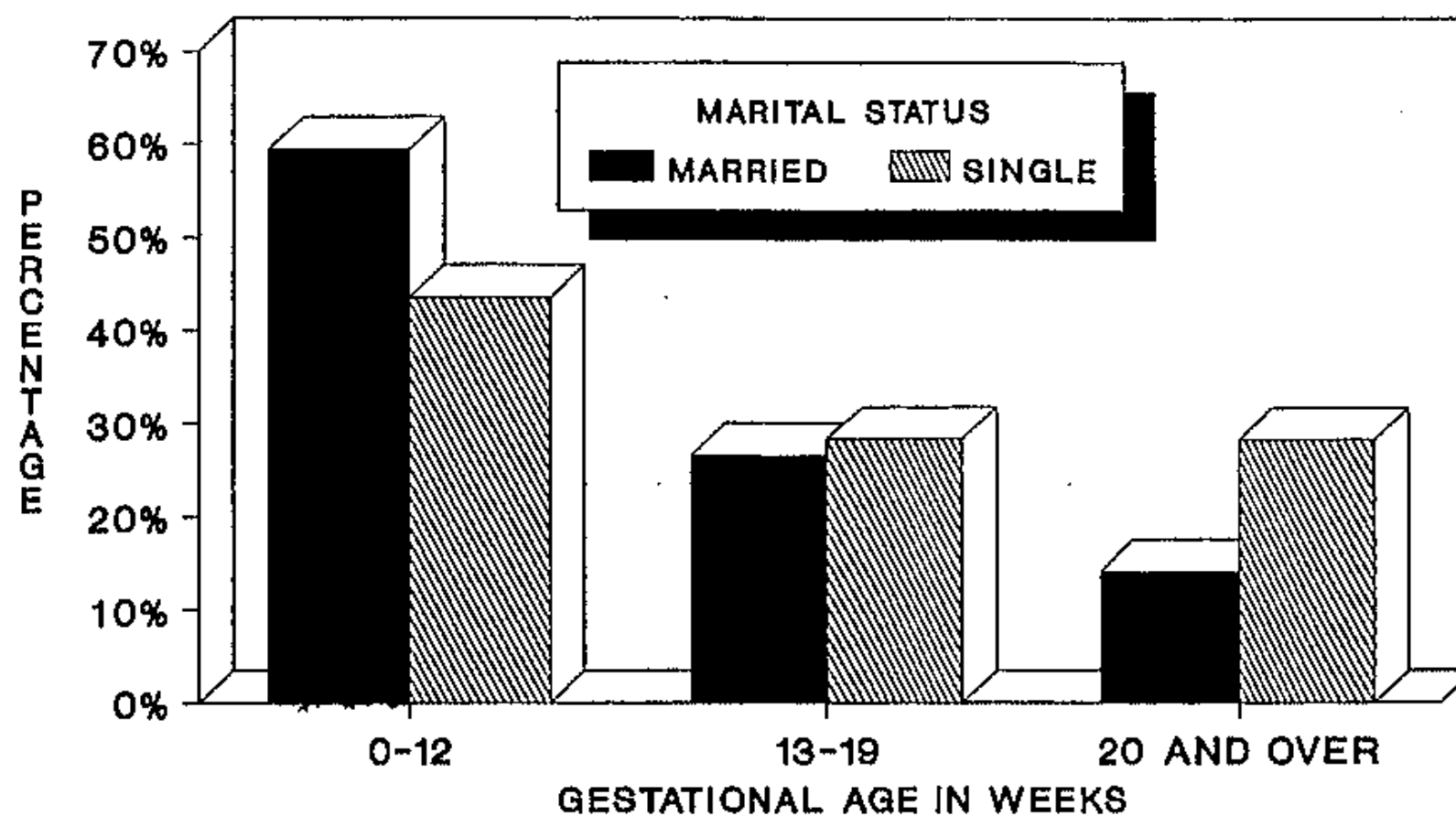
TABLE 27

TIME OF FIRST VISIT TO HOSPITAL OR DOCTOR DURING PREGNANCY
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

TIME OF FIRST VISIT (WEEKS)	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
0-12	25506	53.1	120	4.7	63	2.5	7.1	5.2
13-19	12182	25.4	58	4.7	27	2.2	6.9	4.7
20 AND OVER	7625	15.9	69	9.0	27	3.5	12.5	8.9
NOT STATED	2717	5.7	25	9.1	14	5.2	14.2	12.4
TOTAL	48030	100.0	272	5.6	131	2.7	8.3	6.1

**FIGURE C1 TIME OF FIRST VISIT TO HOSPITAL/DOCTOR
BY MARITAL STATUS, % DISTRIBUTIONS, 1993
SINGLETON BIRTHS**



Note: See Appendix D, Table 10 for data.
'Not Stated' data is not included in the calculation of the percentages.

TABLE 28

**MOTHER'S LENGTH OF STAY IN HOSPITAL PRIOR TO DELIVERY
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993**

*****SINGLETON BIRTHS*****

ANTENATAL LENGTH OF STAY	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
0-2 DAYS	44927	93.8	243	5.4	110	2.4	7.8	5.8
3-5 DAYS	1525	3.2	16	10.4	11	7.2	17.5	12.4
6-8 DAYS	519	1.1	4	7.6	4	7.7	15.3	3.9
9-11 DAYS	267	0.6	2	7.4	3	11.2	18.6	14.9
12-14 DAYS	160	0.3	2	12.3	1	6.3	18.5	12.4
2 WEEKS OR MORE	481	1.0	5	10.3	2	4.2	14.4	12.4
NOT STATED	9	0.0	0	0.0	0	0.0	0.0	0.0
TOTAL	47888	100.0	272	5.6	131	2.7	8.4	6.1

Note: Domiciliary births of which there were 142 are excluded from this table.

TABLE 29

MOTHER'S LENGTH OF STAY IN HOSPITAL AFTER DELIVERY
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

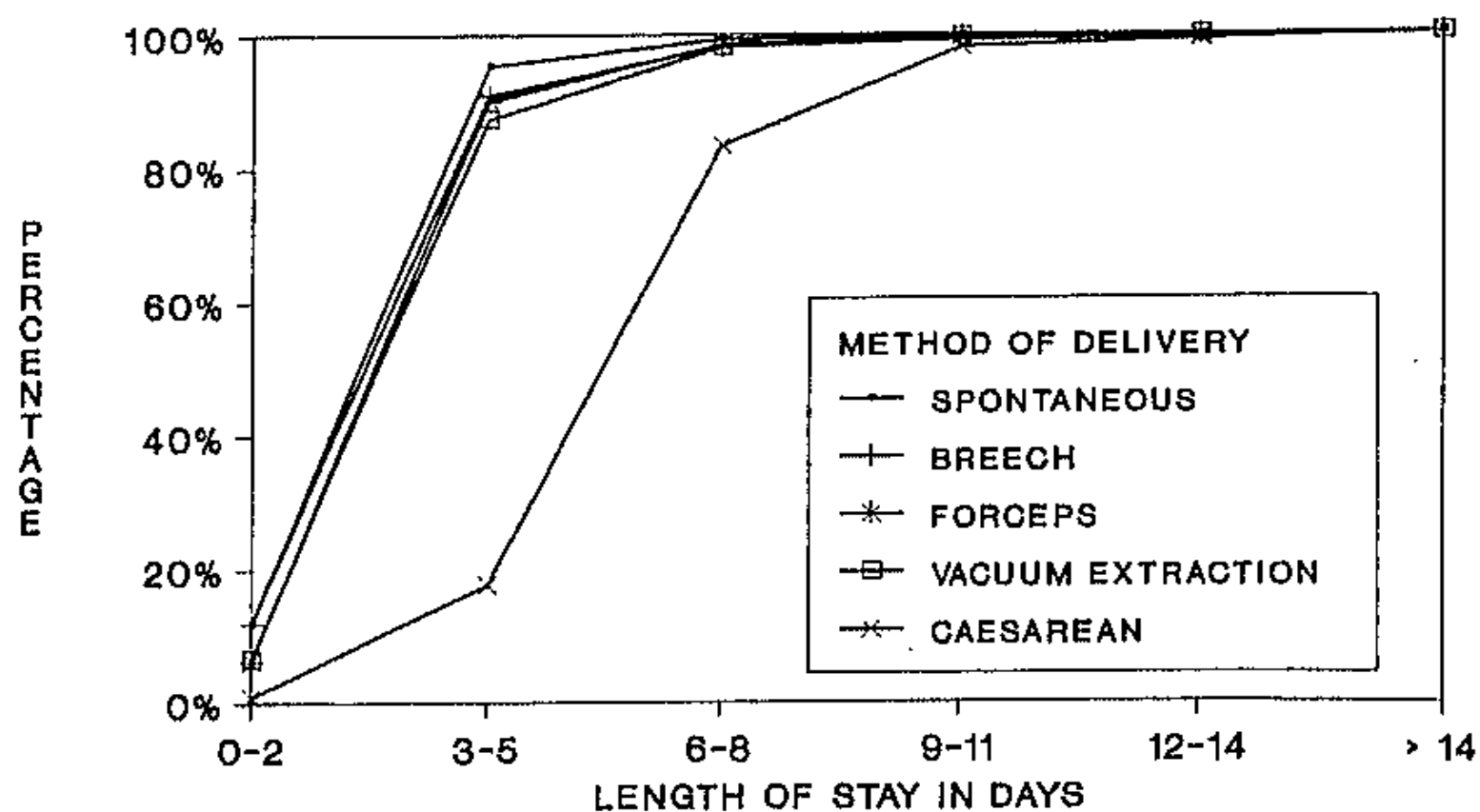
SINGLETON BIRTHS

POSTNATAL LENGTH OF STAY	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
0-2 DAYS	4542	9.5	155	33.0	59	13.0	45.6	33.6
3-5 DAYS	35920	75.0	84	2.3	48	1.3	3.7	2.6
6-8 DAYS	6040	12.6	22	3.6	17	2.8	6.4	4.8
9-11 DAYS	1095	2.3	1	0.9	4	3.7	4.6	3.7
12-14 DAYS	127	0.3	2	15.5	0	0.0	15.5	15.5
2 WEEKS OR MORE	106	0.2	6	53.6	1	9.4	62.5	54.1
NOT STATED	58	0.1	2	33.3	2	34.5	66.7	50.8
TOTAL	47888	100.0	272	5.6	131	2.7	8.4	6.1

Note: Domiciliary births of which there were 142 are excluded from this table.

POSTNATAL LENGTH OF STAY: CUMULATIVE
PERCENTAGES BY METHOD OF DELIVERY, 1993
SINGLETON BIRTHS

FIGURE C2



Note: See Appendix D, Table 8 for data.
'Not Stated' data is not included in the
calculation of the percentages.

TABLE 30

RUBELLA: IMMUNE STATUS OF MOTHER
NUMBERS AND PERCENTAGES, 1993

SINGLETON BIRTHS

RUBELLA	FREQUENCY	PERCENT
IMMUNE	42925	88.9
NOT IMMUNE	1009	2.1
UNKNOWN	4099	8.5
NOT STATED	269	0.6
TOTAL	48302	100.0

TABLE 31

METHOD OF DELIVERY
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

METHOD OF DELIVERY	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
SPONTANEOUS	34818	72.5	192	5.5	67	1.9	7.4	5.2
BREECH/FORCEPS	664	1.4	42	59.5	19	28.6	86.4	71.9
FORCEPS	3719	7.7	8	2.1	2	0.5	2.7	2.4
VACUUM EXTRACTION	2525	5.3	3	1.2	1	0.4	1.6	1.2
CAESAREAN	6001	12.5	26	4.3	40	6.7	11.0	8.0
OTHER, UNSPECIFIED & NOT STATED	303	0.6	1	3.3	2	6.6	9.9	3.3
TOTAL	48030	100.0	272	5.6	131	2.7	8.3	6.1

TABLE 32

ADVANCE HOSPITAL BOOKINGS
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

ADVANCE HOSPITAL BOOKINGS	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
BOOKED	47086	98.3	252	5.3	116	2.5	7.8	5.6
NOT BOOKED	682	1.4	20	28.5	14	20.5	48.4	40.2
NOT STATED	120	0.3	0	0.0	1	8.3	8.3	0.0
TOTAL	47888	100.0	272	5.6	131	2.7	8.4	6.1

Note: Domiciliary births of which there were 142 are excluded from this table.

TABLE 33

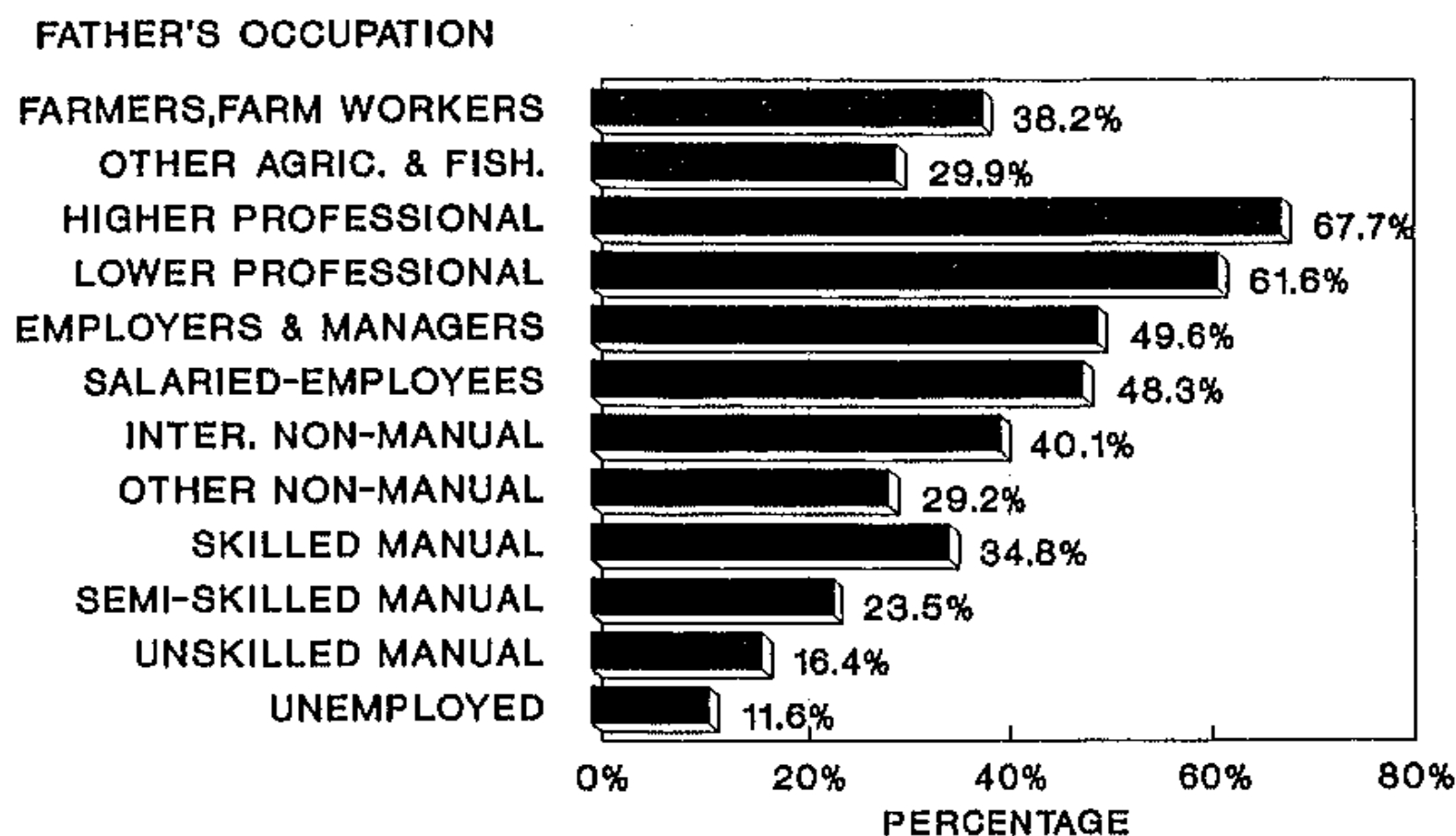
AGE OF MOTHER BY INFANT'S TYPE OF FEEDING, 1993

SINGLETON BIRTHS

AGE OF MOTHER	TYPE OF FEEDING			
FREQUENCY ROW PERCENT COL PERCENT	NOT STATED	ARTIFICIAL	BREAST	TOTAL
UNDER 15	0 0.00 0.00	12 100.00 0.04	0 0.00 0.00	12 0.02
15-19	23 0.90 5.68	2258 88.38 7.18	274 10.72 1.69	2555 5.32
20-24	72 0.98 17.78	5726 78.29 18.22	1516 20.73 9.36	7314 15.23
25-29	88 0.62 21.73	9258 65.25 29.46	4843 34.13 29.90	14189 29.54
30-34	139 0.91 34.32	8853 58.10 28.17	6246 40.99 38.57	15238 31.73
35-39	60 0.86 14.81	4191 59.77 13.33	2761 39.38 17.05	7012 14.60
40-44	16 1.02 3.95	1039 66.05 3.31	518 32.93 3.20	1573 3.28
45 AND OVER	1 1.12 0.25	63 70.79 0.20	25 28.09 0.15	89 0.19
NOT STATED	6 12.50 1.48	30 62.50 0.10	12 25.00 0.07	48 0.10
TOTAL	405 0.84	31430 65.44	16195 33.72	48030 100.00

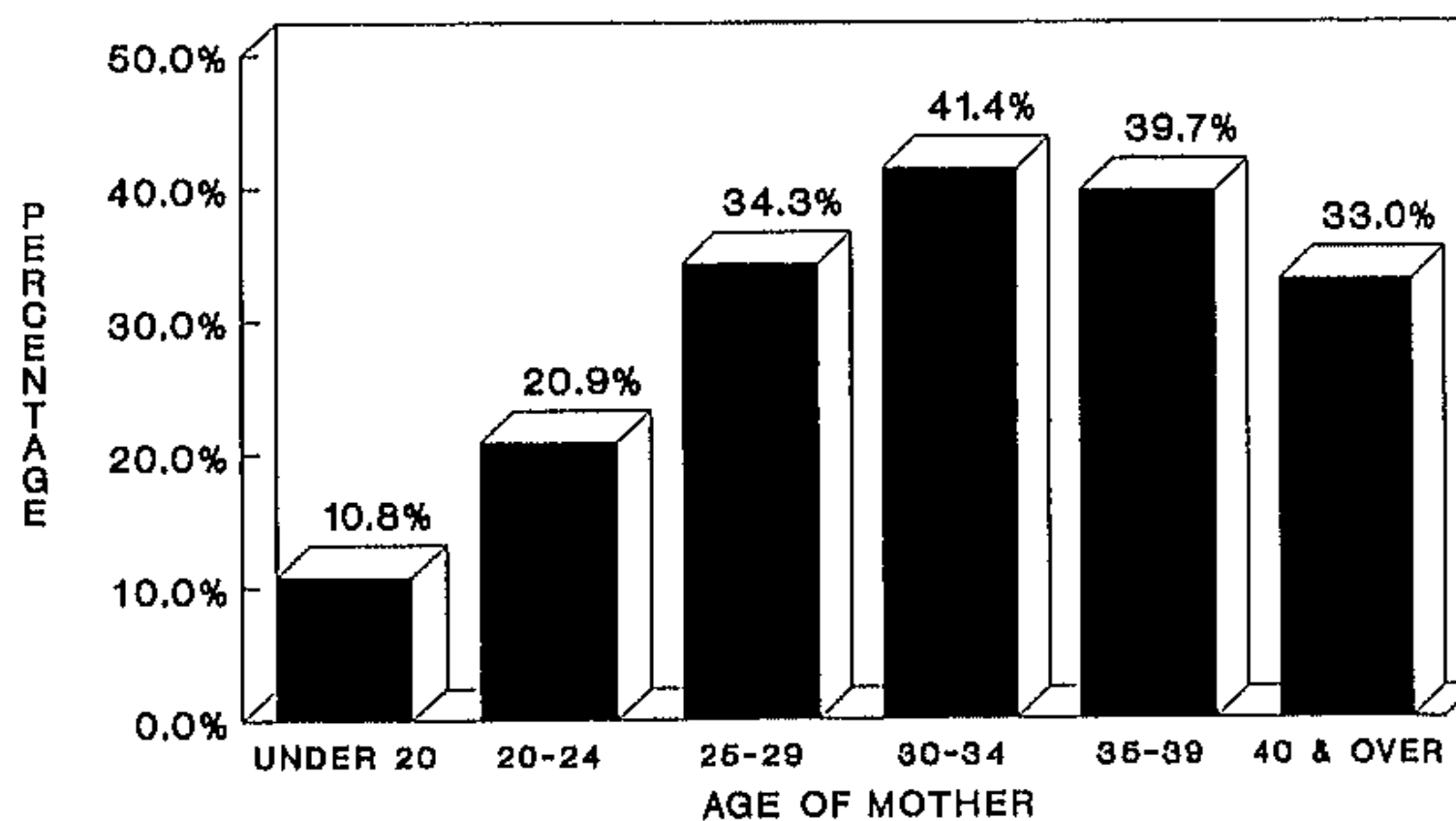
Note: See Appendix D for an explanation of the table format.

**PERCENTAGE OF MOTHERS BREASTFEEDING
BY FATHER'S OCCUPATION, 1993**
FIGURE C3 *SINGLETON BIRTHS*****



Note: See Appendix D, Table 13 for data.
'Not Stated' data is not included in the
calculation of the percentages.

**PERCENTAGE OF MOTHERS BREASTFEEDING
BY AGE OF MOTHER, 1993**
FIGURE C4 *SINGLETON BIRTHS*****



Note: See Table 33, for data. 'Not Stated'
data is not included in the calculation
of the percentages.

TABLE 34

INTER-HOSPITAL TRANSFER OF INFANTS
LIVE BIRTHS, EARLY NEONATAL DEATHS AND MORTALITY RATES, 1993

SINGLETON BIRTHS

INFANT TRANSFERS	LIVE BIRTHS	PERCENT LIVE BIRTHS	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE
TRANSFERRED	346	0.7	11	31.8
NOT TRANSFERRED	47504	99.2	120	2.5
NOT STATED	38	0.1	0	0.0
TOTAL	47888	100.0	131	2.7

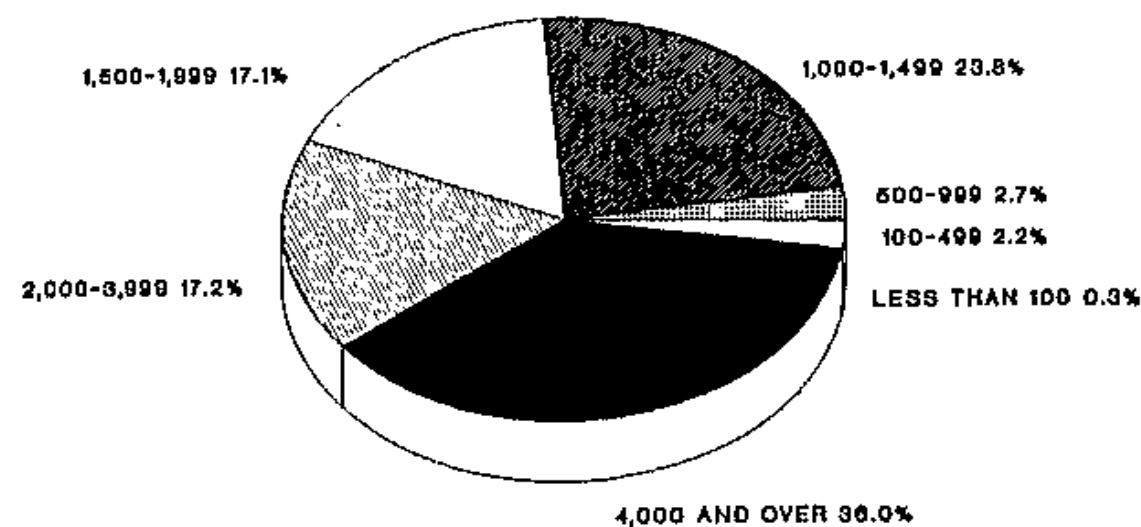
Note: Domiciliary births of which there were 142 are excluded from this table.

TABLE 35

SIZE OF MATERNITY UNIT
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SIZE OF MATERNITY UNIT	NUMBER OF HOSPITALS	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
LESS THAN 100	14	165	0.3	0	0.0	0	0.0	0.0	0.0
100-499	4	1056	2.2	5	4.7	1	0.9	5.7	3.8
500-999	2	1339	2.7	11	8.1	5	3.7	11.9	6.0
1000-1499	10	11654	23.8	77	6.6	40	3.4	10.0	7.7
1500-1999	5	8338	17.1	39	4.7	24	2.9	7.5	5.9
2000-3999	3	8386	17.2	44	5.2	17	2.0	7.2	5.8
4000 AND OVER	3	17951	36.7	107	5.9	60	3.3	9.2	6.2
TOTAL	41	48889	100.0	283	5.8	147	3.0	8.7	6.4

Note: This table includes multiple births but excludes domiciliary births of which there were 142. The size of the unit refers to the number of live and still births annually.

FIGURE C5 PERCENTAGE OF LIVE BIRTHS
BY SIZE OF MATERNITY UNIT, 1993

Note: See Table 35 for data. The size of unit refers to the number of live and still births occurring annually.

PERINATAL CARE, 1993

PART 2: MULTIPLE BIRTHS

TABLE 36

TYPE OF ANTENATAL CARE
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

TYPE OF ANTENATAL CARE	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
HOSPITAL/ OBSTETRICAL GENERAL PRACTITIONER ONLY	436	43.6	3	6.8	9	20.6	27.3	16.1
HOSPITAL AND G.P. COMBINED	6	0.6	0	0.0	0	0.0	0.0	0.0
NONE	539	53.8	8	14.6	7	13.0	27.4	20.3
NOT STATED	10	1.0	0	0.0	0	0.0	0.0	0.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

TABLE 37

TIME OF FIRST VISIT TO HOSPITAL OR DOCTOR DURING PREGNANCY
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

TIME OF FIRST VISIT (WEEKS)	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
0-12	586	58.5	5	8.5	10	17.1	25.4	20.4
13-19	240	24.0	5	20.4	1	4.2	24.5	16.5
20 AND OVER	138	13.8	1	7.2	5	36.2	43.2	14.8
NOT STATED	37	3.7	0	0.0	0	0.0	0.0	0.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

TABLE 38

MOTHER'S LENGTH OF STAY IN HOSPITAL PRIOR TO DELIVERY
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

ANTENATAL LENGTH OF STAY	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
0-2 DAYS	783	78.2	7	8.9	13	16.6	25.3	19.1
3-5 DAYS	72	7.2	1	13.7	1	13.9	27.4	27.4
6-8 DAYS	35	3.5	1	27.8	2	57.1	83.3	29.4
9-11 DAYS	24	2.4	1	40.0	0	0.0	40.0	0.0
12-14 DAYS	20	2.0	0	0.0	0	0.0	0.0	0.0
2 WEEKS OR MORE	67	6.7	1	14.7	0	0.0	14.7	0.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

Note: There were no domiciliary multiple births.

TABLE 39

MOTHER'S LENGTH OF STAY IN HOSPITAL AFTER DELIVERY
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

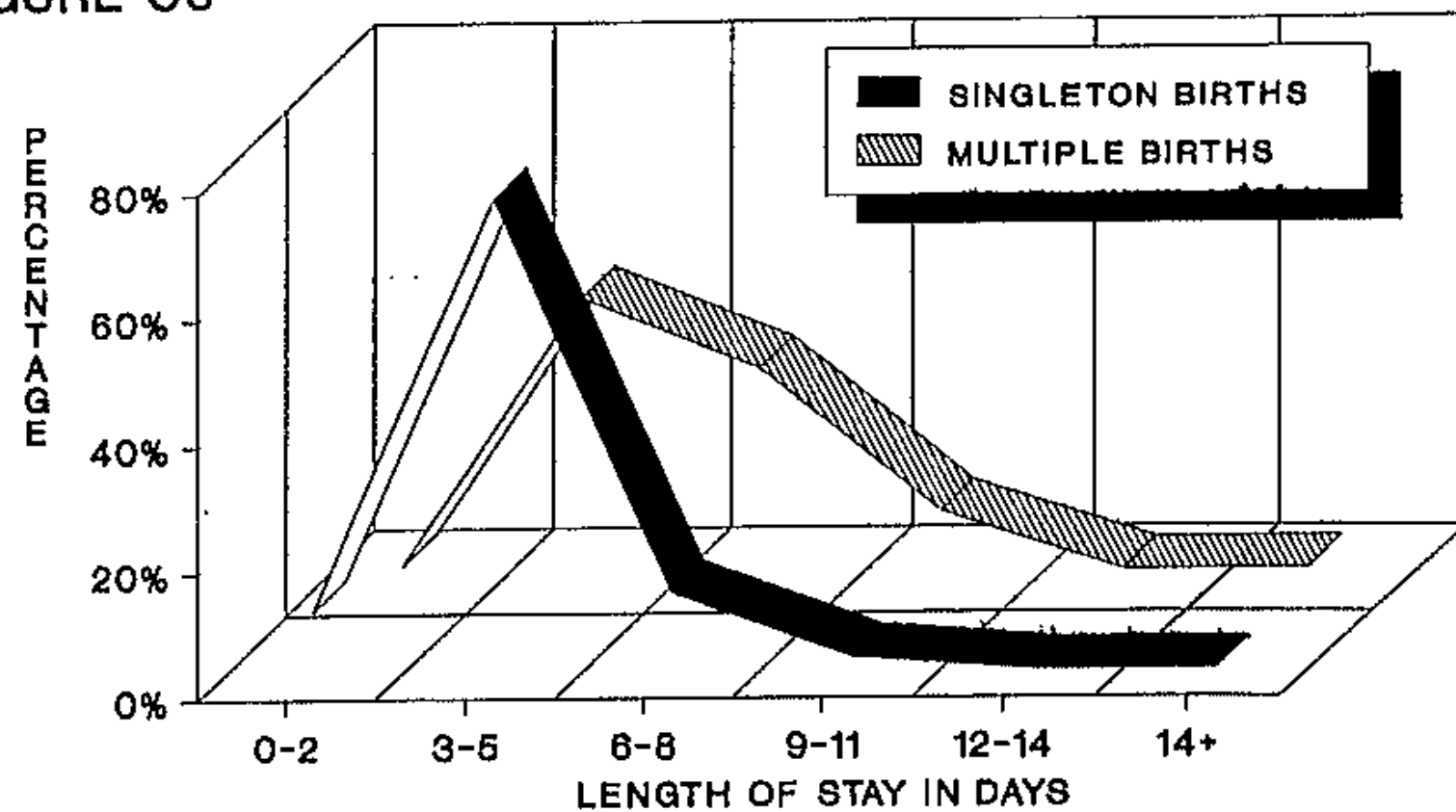
MULTIPLE BIRTHS

POSTNATAL LENGTH OF STAY	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
0-2 DAYS	34	3.4	1	28.6	4	117.6	142.9	117.6
3-5 DAYS	455	45.5	5	10.9	8	17.6	28.3	13.2
6-8 DAYS	343	34.3	3	8.7	4	11.7	20.2	20.2
9-11 DAYS	116	11.6	1	8.5	0	0.0	8.5	8.5
12-14 DAYS	24	2.4	0	0.0	0	0.0	0.0	0.0
2 WEEKS OR MORE	25	2.5	1	38.5	0	0.0	38.5	0.0
NOT STATED	4	0.4	0	0.0	0	0.0	0.0	0.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

Note: There were no domiciliary multiple births.

PERCENTAGE DISTRIBUTION OF BIRTHS
BY MOTHER'S POSTNATAL LENGTH
OF STAY, 1993

FIGURE C6



Note: Includes stillbirths. See Tables 29
& 39. 'Not Stated' data is not included
in the calculation of the percentages.

TABLE 40

RUBELLA: IMMUNE STATUS OF MOTHER
NUMBERS AND PERCENTAGES, 1993

MULTIPLE BIRTHS

RUBELLA	FREQUENCY	PERCENT
IMMUNE	897	88.6
NOT IMMUNE	16	1.6
UNKNOWN	93	9.2
NOT STATED	6	0.6
TOTAL	1012	100.0

TABLE 41

METHOD OF DELIVERY
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

METHOD OF DELIVERY	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
SPONTANEOUS	375	37.5	5	13.2	8	21.3	34.2	23.9
BREECH/FORCEPS	146	14.6	0	0.0	3	20.5	20.5	13.8
FORCEPS	64	6.4	2	30.3	0	0.0	30.3	15.4
VACUUM EXTRACTION	57	5.7	0	0.0	0	0.0	0.0	0.0
CAESAREAN	345	34.5	4	11.5	3	8.7	20.1	17.2
OTHER, UNSPECIFIED & NOT STATED	14	1.4	0	0.0	2	142.9	142.9	0.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

TABLE 42

ADVANCE HOSPITAL BOOKINGS
LIVE BIRTHS, STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

ADVANCE HOSPITAL BOOKINGS	LIVE BIRTHS	PERCENT LIVE BIRTHS	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
BOOKED	966	96.5	10	10.2	14	14.5	24.6	18.6
NOT BOOKED	33	3.3	1	29.4	2	60.6	88.2	0.0
NOT STATED	2	0.2	0	0.0	0	0.0	0.0	0.0
TOTAL	1001	100.0	11	10.9	16	16.0	26.7	17.9

Note: There were no domiciliary multiple births.

TABLE 43

AGE OF MOTHER BY INFANT'S TYPE OF FEEDING, 1993

MULTIPLE BIRTHS

AGE OF MOTHER	TYPE OF FEEDING			
FREQUENCY ROW PERCENT COL PERCENT	NOT STATED	ARTIFICIAL	BREAST	TOTAL
15-19	2 3.51 8.33	51 89.47 6.65	4 7.02 1.90	57 5.69
20-24	2 1.92 8.33	92 88.46 11.99	10 9.62 4.76	104 10.39
25-29	8 2.69 33.33	227 76.43 29.60	62 20.88 29.52	297 29.67
30-34	6 1.67 25.00	263 73.06 34.29	91 25.28 43.33	360 35.96
35-39	4 2.65 16.67	110 72.85 14.34	37 24.50 17.62	151 15.08
40-44	0 0.00 0.00	24 80.00 3.13	6 20.00 2.86	30 3.00
NOT STATED	2 100.00 8.33	0 0.00 0.00	0 0.00 0.00	2 0.20
TOTAL	24 2.40	767 76.62	210 20.98	1001 100.00

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

TABLE 44

INTER-HOSPITAL TRANSFER OF INFANTS
LIVE BIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

INFANT TRANSFERS	LIVE BIRTHS	PERCENT LIVE BIRTHS	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE
TRANSFERRED	34	3.4	2	58.8
NOT TRANSFERRED	964	96.3	14	14.5
NOT STATED	3	0.3	0	0.0
TOTAL	1001	100.0	16	16.0

Note: There were no domiciliary multiple births.

1993
SECTION D:
PERINATAL OUTCOMES

PERINATAL OUTCOMES, 1993

PART 1: SINGLETON BIRTHS

TABLE 45

BIRTHWEIGHT - ALL SINGLETON BIRTHS
LIVE BIRTHS, ANTE AND INTRAPARTUM STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES, 1993

SINGLETON BIRTHS

BIRTHWEIGHT (GRAMMES)	LIVE BIRTHS	PERCENT LIVE BIRTHS	ANTEPARTUM STILL BIRTHS	INTRAPARTUM STILL BIRTHS	NOT STATED	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
500-749	29	0.1	7	6	6	395.8	23	793.1	875.0	860.5
750-999	47	0.1	10	4	6	298.5	15	319.1	522.4	475.4
1000-1249	71	0.1	17	1	6	252.6	8	112.7	336.8	267.4
1250-1499	84	0.2	14	2	3	184.5	5	59.5	233.0	177.1
1500-1999	337	0.7	15	5	6	71.6	15	44.5	112.9	66.7
2000-2499	1061	2.2	21	8	4	30.2	18	17.0	46.6	28.0
2500-2999	5183	10.8	34	8	6	9.2	10	1.9	11.1	8.8
3000-3499	15423	32.1	21	10	5	2.3	15	1.0	3.3	2.3
3500-3999	17069	35.5	16	11	2	1.7	12	0.7	2.4	2.0
4000-4499	7137	14.9	4	2	3	1.3	5	0.7	2.0	1.3
4500 AND OVER	1553	3.2	1	4	1	3.8	2	1.3	5.1	4.5
NOT STATED	36	0.1	0	0	3	76.9	3	83.3	153.8	83.3
TOTAL	48030	100.0	160	61	51	5.6	131	2.7	8.3	6.1

TABLE 46

STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES BY CAUSE OF DEATH, 1993

SINGLETON BIRTHS

ICD CODES	CAUSE OF DEATH	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	TOTAL DEATHS	PERINATAL MORTALITY RATE
	CONGENITAL ANOMALIES						
740	ANENCEPHALUS	8	0.17	13	0.27	21	0.43
741	SPINA BIFIDA	5	0.10	1	0.02	6	0.12
742	OTHER CENTRAL NERVOUS SYSTEM ANOMALIES	2	0.04	2	0.04	4	0.08
745	BULBUS CORDIS AND SEPTAL CLOSURE	2	0.04	1	0.02	3	0.06
746	OTHER CONGENITAL ANOMALIES OF HEART	1	0.02	9	0.19	10	0.21
748	CONGENITAL ANOMALIES OF RESPIRATORY SYSTEM	0	0.00	8	0.17	8	0.17
753	CONGENITAL ANOMALIES OF URINARY SYSTEM	3	0.06	13	0.27	16	0.33
754-756	CONGENITAL ANOMALIES OF MUSCULOSKELETAL SYSTEM	4	0.08	8	0.17	12	0.25
758	CHROMOSOMAL ANOMALIES INCLUDING DOWN'S SYNDROME	11	0.23	3	0.06	14	0.29
743-744, 752, 757, 759	OTHER CONGENITAL ANOMALIES	8	0.17	7	0.15	15	0.31
	MATERNAL CONDITIONS AND COMPLICATIONS IN PREGNANCY						
760.0	MATERNAL HYPERTENSIVE DISORDERS	11	0.23	3	0.06	14	0.29
760.1-761.9	OTHER MATERNAL COMPLICATIONS	4	0.08	2	0.04	6	0.12
762.1	OTHER PLACENTAL SEPARATION AND HAEMORRHAGE	32	0.66	4	0.08	36	0.75
762.2	OTHER MORPHOLOGICAL AND FUNCTIONAL ABNORMALITIES OF PLACENTA	28	0.58	4	0.08	32	0.66
762.5	OTHER COMPRESSION OF UMBILICAL CORD	13	0.27	0	0.00	13	0.27
762.6-762.9	OTHER COMPLICATIONS OF PLACENTA, CORD & MEMBRANES	2	0.04	0	0.00	2	0.04
763.2-763.9	OTHER COMPLICATIONS OF LABOUR AND DELIVERY	2	0.04	2	0.04	4	0.08

TABLE 46 - continued

STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES BY CAUSE OF DEATH, 1993

SINGLETON BIRTHS

ICD CODES	CAUSE OF DEATH	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	TOTAL DEATHS	PERINATAL MORTALITY RATE
764	SLOW FETAL GROWTH, FETAL MALNUTRITION AND IMMATUREITY	3	0.06	0	0.00	3	0.06
765	SLOW FETAL GROWTH & FETAL MALNUTRITION SHORT GESTATION AND UNSPECIFIED LOW BIRTHWEIGHT DISORDERS	12	0.25	13	0.27	25	0.52
767	BIRTH TRAUMA	1	0.02	1	0.02	2	0.04
768	BIRTH TRAUMA	41	0.85	5	0.10	46	0.95
769	INTRAUTERINE HYPOXIA AND BIRTH ASPHYXIA	0	0.00	6	0.12	6	0.12
770	RESPIRATORY DISTRESS SYNDROME RESPIRATORY CONDITIONS OF FETUS OR NEWBORN	0	0.00	5	0.10	5	0.10
771	OTHER FETAL AND NEONATAL CONDITIONS	2	0.04	4	0.08	6	0.12
772	INFECTIONS SPECIFIC TO PERINATAL PERIOD	0	0.00	2	0.04	2	0.04
775	FETAL AND NEONATAL HAEMORRHAGE	2	0.04	1	0.02	3	0.06
778	METABOLIC AND ENDOCRINE DISTURBANCES INTEGUMENT AND TEMPERATURE REGULATION CONDITIONS	4	0.08	5	0.10	9	0.19
779.9	MACERATION, ILL-DEFINED CONDITIONS AND ALL OTHER CAUSES	45	0.93	0	0.00	45	0.93
780-796.799	MACERATION SYMPTOMS, SIGNS, AND ILL-DEFINED CONDITIONS ALL OTHER CAUSES	23	0.48	2	0.04	25	0.52
		3	0.06	7	0.15	10	0.21
	TOTAL	272	5.63	131	2.73	403	8.34

TOTAL	2/2	5.63	131	2.73	400	8.87
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TABLE 47

CAUSE OF DEATH BY BIRTHWEIGHT, NUMBERS AND RATES, 1993

SINGLETON BIRTHS

BIRTHWEIGHT (GRAMMES)	ANENCEPHALUS		SPINA BIFIDA		OTHER CENTRAL NERVOUS SYSTEMS ABNORMALITIES		CONGENITAL ANOMALIES OF THE HEART		CHROMOSOMAL ANOMALIES	
	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
500-749	3	62.5	0	0.0	0	0.0	0	0.0	1	20.8
750-999	1	14.9	1	14.9	0	0.0	1	14.9	2	29.9
1000-1249	3	31.6	1	10.5	0	0.0	0	0.0	1	10.5
1250-1499	0	0.0	0	0.0	0	0.0	1	9.7	3	29.1
1500-1999	4	11.0	2	5.5	0	0.0	1	2.8	2	5.5
2000-2499	5	4.6	1	0.9	1	0.9	1	0.9	2	1.8
2500-2999	2	0.4	0	0.0	0	0.0	2	0.4	1	0.2
3000-3499	2	0.1	1	0.1	1	0.1	3	0.2	1	0.1
3500-3999	0	0.0	0	0.0	1	0.1	3	0.2	0	0.0
4000-4499	1	0.1	0	0.0	0	0.0	1	0.1	0	0.0
4500 AND OVER	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0
NOT STATED	0	0.0	0	0.0	0	0.0	0	0.0	1	25.6
TOTAL	21	0.4	6	0.1	4	0.1	13	0.3	14	0.3

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

TABLE 47 - continued

CAUSE OF DEATH BY BIRTHWEIGHT, NUMBERS AND RATES, 1993

SINGLETON BIRTHS

BIRTHWEIGHT (GRAMMES)	OTHER CONGENITAL ANOMALIES		MATERNAL COMPLICATIONS		PLACENTA, CORD, MEMBRANES		OTHER COMPLICATIONS OF LABOUR		SLOW FETAL GROWTH		BIRTH TRAUMA	
	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
500-749	1	20.8	3	62.5	9	187.5	1	20.8	14	291.7	0	0.0
750-999	1	14.9	2	29.9	7	104.5	1	14.9	5	74.6	0	0.0
1000-1249	4	42.1	3	31.6	5	52.6	0	0.0	2	21.1	0	0.0
1250-1499	3	29.1	1	9.7	6	58.3	0	0.0	2	19.4	0	0.0
1500-1999	9	24.8	3	8.3	7	19.3	0	0.0	2	5.5	0	0.0
2000-2499	11	10.1	1	0.9	11	10.1	1	0.9	1	0.9	0	0.0
2500-2999	7	1.3	3	0.6	13	2.5	1	0.2	2	0.4	0	0.0
3000-3499	7	0.5	1	0.1	15	1.0	0	0.0	0	0.0	0	0.0
3500-3999	3	0.2	3	0.2	7	0.4	0	0.0	0	0.0	0	0.0
4000-4499	3	0.4	0	0.0	2	0.3	0	0.0	0	0.0	0	0.0
4500 AND OVER	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	1	0.6
NOT STATED	2	51.3	0	0.0	0	0.0	0	0.0	0	0.0	1	25.6
TOTAL	51	1.1	20	0.4	83	1.7	4	0.1	28	0.6	2	0.0

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

TABLE 47 - continued

CAUSE OF DEATH BY BIRTHWEIGHT, NUMBERS AND RATES, 1993

SINGLETON BIRTHS

BIRTHWEIGHT (GRAMMES)	HYPOXIA/ANOXIA		PERINATAL INFECTIONS		FETAL/NEONATAL HAEMORRHAGE		METABOLIC, ENDOCRINE DISTURBANCES		INTEGUMENT, TEMPERATURE REGULATION	
	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
500-749	5	104.2	0	0.0	0	0.0	1	20.8	0	0.0
750-999	5	74.6	0	0.0	2	29.9	0	0.0	1	14.9
1000-1249	3	31.6	1	10.5	0	0.0	0	0.0	0	0.0
1250-1499	3	29.1	0	0.0	0	0.0	0	0.0	1	9.7
1500-1999	5	13.8	0	0.0	0	0.0	0	0.0	0	0.0
2000-2499	3	2.7	1	0.9	0	0.0	1	0.9	3	2.7
2500-2999	13	2.5	1	0.2	0	0.0	0	0.0	0	0.0
3000-3499	6	0.4	1	0.1	0	0.0	0	0.0	1	0.0
3500-3999	9	0.5	1	0.1	0	0.0	0	0.0	1	0.1
4000-4499	2	0.3	0	0.0	0	0.0	0	0.0	2	0.3
4500 AND OVER	1	0.6	1	0.6	0	0.0	1	0.6	0	0.0
NOT STATED	2	51.3	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL	57	1.2	6	0.1	2	0.0	3	0.1	9	0.2

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

TABLE 47 - continued

CAUSE OF DEATH BY BIRTHWEIGHT, NUMBERS AND RATES, 1993

SINGLETON BIRTHS

BIRTHWEIGHT (GRAMMES)	MACERATION		SYMPTOMS, ILL-DEFINED CONDITIONS		ALL OTHER CAUSES		ALL CAUSES OF PERINATAL MORTALITY	
	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
500-749	2	41.7	2	41.7	0	0.0	42	875.0
750-999	4	59.7	1	14.9	1	14.9	35	522.4
1000-1249	5	52.6	3	31.6	1	10.5	32	336.8
1250-1499	4	38.8	0	0.0	0	0.0	24	233.0
1500-1999	4	11.0	0	0.0	2	5.5	41	112.9
2000-2499	3	2.7	2	1.8	3	2.7	51	46.6
2500-2999	9	1.7	3	0.6	1	0.2	58	11.1
3000-3499	6	0.4	5	0.3	1	0.1	51	3.3
3500-3999	5	0.3	8	0.5	0	0.0	41	2.4
4000-4499	1	0.1	1	0.1	1	0.1	14	2.0
4500 AND OVER	2	1.3	0	0.0	0	0.0	8	5.1
NOT STATED	0	0.0	0	0.0	0	0.0	6	153.8
TOTAL	45	0.9	25	0.5	10	0.2	403	8.3

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

TABLE 48

AGE AT DEATH
EARLY NEONATAL DEATHS, 1993

SINGLETON BIRTHS

TIME		FREQUENCY	PERCENT
HOURS	1	42	32.1
	2	11	8.4
	3	5	3.8
	4	8	6.1
	5	4	3.1
	6	2	1.5
	7	1	0.8
	9	1	0.8
	10	3	2.3
	11	5	3.8
	13	1	0.8
	14	4	3.1
	15	2	1.5
	17	1	0.8
	18	1	0.8
	19	2	1.5
	20	1	0.8
	22	1	0.8
TOTAL UNDER 1 DAY		95	72.5
DAYS	1	12	9.2
	2	9	6.9
	3	4	3.1
	4	9	6.9
	5	1	0.8
	6	1	0.8
TOTAL		36	27.5
GRAND TOTAL		131	100.0

TABLE 49

PERCENTAGE DISTRIBUTION OF LIVE BIRTHS
BY INFANT'S LENGTH OF STAY IN HOSPITAL, 1993

SINGLETON BIRTHS

INFANT'S LENGTH OF STAY(DAYS)	LIVE BIRTHS	PERCENT LIVE BIRTHS
0-2	4413	9.2
3-5	34878	73.0
6-10	6978	14.6
11-28	825	1.7
29 OR MORE	232	0.5
NOT STATED	431	0.9
TOTAL	47757	100.0

Note: This table excludes domiciliary births and early neonatal deaths.

TABLE 50

PERCENTAGE OF STILLBIRTHS AND EARLY NEONATAL DEATHS
UNDERGOING POSTMORTEMS, 1993

SINGLETON BIRTHS

POSTMORTEM	TYPE OF DEATH		
FREQUENCY ROW PERCENT COL PERCENT	EARLY NEONATAL DEATHS	STILL BIRTHS	TOTAL
POSTMORTEM	63 26.36 48.09	176 73.64 64.71	239 59.31
NO POSTMORTEM	34 34.69 25.95	64 65.31 23.53	98 24.32
NOT STATED	34 51.52 25.95	32 48.48 11.76	66 16.38
TOTAL	131 32.51	272 67.49	403 100.00

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

PERINATAL OUTCOMES, 1993 PART 2: MULTIPLE BIRTHS

TABLE 51

BIRTHWEIGHT - ALL MULTIPLE BIRTHS

LIVE BIRTHS, ANTE AND INTRAPARTUM STILLBIRTHS, EARLY NEONATAL DEATHS AND MORTALITY RATES, 1993

MULTIPLE BIRTHS

BIRTHWEIGHT (GRAMMES)	LIVE BIRTHS	PERCENT LIVE BIRTHS	ANTEPARTUM STILL BIRTHS	INTRAPARTUM STILL BIRTHS	NOT STATED	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	PERINATAL MORTALITY RATE	ADJUSTED PMR
500-749	9	0.9	1	0	0	100.0	7	777.8	800.0	800.0
750-999	9	0.9	3	0	0	250.0	3	333.3	500.0	400.0
1000-1249	22	2.2	0	1	1	83.3	0	0.0	83.3	43.5
1250-1499	23	2.3	1	0	1	80.0	1	43.5	120.0	83.3
1500-1999	122	12.2	1	0	0	8.1	0	0.0	8.1	8.1
2000-2499	236	23.6	0	0	1	4.2	0	0.0	4.2	0.0
2500-2999	348	34.8	1	0	0	2.9	1	2.9	5.7	2.9
3000-3499	191	19.1	0	0	0	0.0	1	5.2	5.2	0.0
3500-3999	32	3.2	0	0	0	0.0	0	0.0	0.0	0.0
4000-4499	5	0.5	0	0	0	0.0	0	0.0	0.0	0.0
NOT STATED	4	0.4	0	0	0	0.0	3	750.0	750.0	500.0
TOTAL	1001	100.0	7	1	3	10.9	16	16.0	26.7	17.9

TABLE 52
CAUSE OF DEATH
STILLBIRTHS, EARLY NEONATAL DEATHS
AND MORTALITY RATES BY CAUSE OF DEATH, 1993

MULTIPLE BIRTHS

CAUSE OF DEATH	STILL BIRTHS	STILL BIRTH RATE	EARLY NEONATAL DEATHS	EARLY NEONATAL RATE	TOTAL DEATHS	PERINATAL MORTALITY RATE
ANENCEPHALUS	2	1.98	1	1.00	3	2.96
OTHER CONGENITAL ANOMALIES	3	2.96	3	3.00	6	5.93
MATERNAL CONDITIONS AND COMPLICATIONS	1	0.99	1	1.00	2	1.98
COMPLICATIONS OF PLACENTA, CORD AND MEMBRANES	1	0.99	2	2.00	3	2.96
SLOW FETAL GROWTH, MALNUTRITION AND IMMATURITY	1	0.99	8	7.99	9	8.89
INTRAUTERINE HYPOXIA, BIRTH ASPHYXIA AND OTHER						
RESPIRATORY CONDITIONS OF FETUS OR NEWBORN	1	0.99	0	0.00	1	0.99
MACERATION	2	1.98	0	0.00	2	1.98
ALL OTHER CAUSES	0	0.00	1	1.00	1	0.99
TOTAL	11	10.87	16	15.98	27	26.68

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

TABLE 53

CAUSE OF DEATH BY BIRTHWEIGHT AND CAUSE, 1993

MULTIPLE BIRTHS

CAUSE OF DEATH	BIRTHWEIGHT(GRAMMES)										NOT STATED	TOTAL
	500-749	750-999	1000-1249	1250-1499	1500-1999	2000-2499	2500-2999	3000-3499				
ANENCEPHALUS	0	2	0	0	0	0	1	0	0	0	3	
OTHER CONGENITAL ANOMALIES	0	0	1	1	0	1	0	1	2	6		
MATERNAL COMPLICATIONS	0	0	1	0	0	0	0	0	1	2		
COMPLICATIONS OF PLACENTA, CORD AND MEMBRANES	2	0	0	1	0	0	0	0	0	3		
SLOW FETAL GROWTH, MALNUTRITION AND IMMATURITY	4	3	0	1	1	0	0	0	0	9		
INTRAUTERINE HYPOXIA, BIRTH ASPHYXIA AND OTHER RESPIRATORY CONDITIONS OF FETUS OR NEWBORN	0	0	0	0	0	0	1	0	0	1		
MACERATION	1	1	0	0	0	0	0	0	0	2		
ALL OTHER CAUSES	1	0	0	0	0	0	0	0	0	1		
TOTAL	8	6	2	3	1	1	2	1	3	27		

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

TABLE 54

AGE AT DEATH
EARLY NEONATAL DEATHS, 1993

MULTIPLE BIRTHS

TIME		FREQUENCY	PERCENT
HOURS	1	4	25.0
	2	3	18.8
	3	1	6.3
	4	2	12.5
	12	1	6.3
TOTAL	UNDER 1 DAY	11	68.8
	2	1	6.3
	3	1	6.3
	4	1	6.3
	5	1	6.3
	6	1	6.3
GRAND TOTAL		16	100.0

TABLE 55

PERCENTAGE DISTRIBUTION OF LIVE BIRTHS
BY INFANT'S LENGTH OF STAY IN HOSPITAL, 1993

MULTIPLE BIRTHS

INFANT'S LENGTH OF STAY (DAYS)	LIVE BIRTHS	PERCENT LIVE BIRTHS
0-2	29	2.9
3-5	304	30.9
6-10	309	31.4
11-28	185	18.8
29 OR MORE	58	5.9
NOT STATED	100	10.2
TOTAL	985	100.0

Note: This table excludes domiciliary births and early neonatal deaths.

TABLE 56

PERCENTAGE OF STILLBIRTHS AND EARLY NEONATAL DEATHS
UNDERGOING POSTMORTEMS, 1993

MULTIPLE BIRTHS

POSTMORTEM	TYPE OF DEATH		
FREQUENCY ROW PERCENT COL PERCENT	EARLY NEONATAL DEATHS	STILL BIRTHS	TOTAL
POSTMORTEM	11 64.71 68.75	6 35.29 54.55	17 62.96
NO POSTMORTEM	3 42.86 18.75	4 57.14 36.36	7 25.93
NOT STATED	2 66.67 12.50	1 33.33 9.09	3 11.11
Total	16 59.26	11 40.74	27 100.00

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

APPENDICES

APPENDIX A

COPIES OF NOTIFICATION OF BIRTH FORMS 1) Part 3 of the Standard Notification Form.

NOTIFICATION OF BIRTH—

1 To: The Planning Unit, Department of Health, Hawkins House, Dublin 2. 12

LIVE BIRTH ☐ HOSPITAL No. 3 CASE No. 4 NAME AND ADDRESS OF HOSPITAL

INFANT
DATE OF BIRTH 12
IF MULTIPLE BIRTH ORDER OF BIRTH No. 13 14
TIME OF BIRTH

SEX (Male = 1, Female = 2, Indeterminate = 3) 20
BIRTH WEIGHT 21 GRAMMES
PERIOD OF GESTATION 22 WEEKS

FATHER
COUNTY: 23
OCCUPATION 24

MOTHER
COUNTY: 25

DATE OF BIRTH 26
MARITAL STATUS (Married = 1, Single = 2, Widowed = 3, Separated = 4, Divorced = 5) 27
DATE OF MARRIAGE 28
DATE OF LAST BIRTH 29
NO. OF PREVIOUS LIVE BIRTHS 30
NO. OF PREVIOUS CHILDREN STILL LIVING 31
NO. OF PREVIOUS LATE FETAL DEATHS 32
NO. OF PREVIOUS ABORTIONS 33

PERINATAL DEATH
TYPE OF DEATH (Early Neonatal = 1, Late Fetal = 2) 34
WAS AUTOPSY PERFORMED (Yes = 1, No = 2) 35
AGE AT DEATH 36 DAYS 37 HOURS
PLACE OF DEATH 38
IF LFD, DID DEATH OCCUR BEFORE LABOUR (1) DURING LABOUR (2) NOT KNOWN (3) 39

CAUSE OF DEATH
MAIN DISEASE OR CONDITION IN FETUS OR INFANT 40

OTHER DISEASES OR CONDITIONS IN FETUS OR INFANT 41

MAIN MATERNAL DISEASE OR CONDITION AFFECTING FETUS OR INFANT 42

OTHER MATERNAL DISEASE OR CONDITION AFFECTING FETUS OR INFANT 43

SIGNATURE

2 DUPLICATE 2-11 FROM CARD 1

MOTHER'S HEALTH

ANTE NATAL CARE THIS PREGNANCY (Hosp./Obstet. = 1, G.P. Only = 2, Combined = 3, None = 4) 12

DATE OF FIRST VISIT TO DOCTOR

DURING PREGNANCY 13

DATE OF FIRST VISIT TO HOSPITAL

DURING PREGNANCY 14

WAS MOTHER IMMUNE TO RUBELLA (Yes = 1, No = 2, Unknown = 3) 15

METHOD OF DELIVERY (Spontaneous = 1, Breech/Forceps = 2, Forceps = 3, Vac. Extraction = 4, Caesarian Sec. = 5, Other = 6) 16

MAIN MATERNAL DISEASE OR CONDITION AFFECTING FETUS OR INFANT 17

OTHER MATERNAL DISEASE OR CONDITION AFFECTING FETUS OR INFANT 18

INFANT'S HEALTH

TYPE OF FEEDING (Artificial = 1, Breast = 2) 19

WAS BCG ADMINISTERED (Yes = 1, No = 2) 20

MAIN DISEASE OR CONGENITAL MALFORMATION AFFECTING INFANT 21

OTHER DISEASES OR CONGENITAL MALFORMATIONS AFFECTING INFANT 22

HOSPITAL

WAS ADMISSION BOOKED (Yes = 1, No = 2) 23

DATE OF MOTHER'S ADMISSION 24

DATE OF MOTHER'S DISCHARGE 25

DATE OF INFANT'S DISCHARGE 26

WAS INFANT TRANSFERRED TO OTHER HOSPITAL FOR MEDICAL REASONS (Yes = 1, No = 2) 27

IF 'YES', NAME OF HOSPITAL 28

DATE

2) Part 2 of the Domiciliary Notification Form.

NOTIFICATION OF BIRTH--To: The Registrar of Births

1

12

LIVE BIRTH ☐ DOMICILIARY CASE NO. 6 ADDRESS WHERE BIRTH OCCURRED
LATE FETAL DEATH ☐ 2 ☐ NO. 3 ☐

INFANT

DATE OF BIRTH: 13

IF MULTIPLE BIRTH

ORDER OF BIRTH No. 19 of 20

TIME OF BIRTH:

NAME

SEX: (Male = 1, Female = 2, Indeterminate = 3)

21

BIRTH WEIGHT:

22 GRAMMES

PERIOD OF GESTATION

26 WEEKS

FATHER

FULL NAME AND ADDRESS

COUNTY 28

OCCUPATION 32

MOTHER

NAME, SURNAME

MAIDEN SURNAME

ADDRESS

COUNTY 34

DATE OF BIRTH: 38

MARITAL STATUS (Married = 1, Single = 2, Widowed = 3, Separated = 4, Divorced = 5)

44

DATE OF MARRIAGE 45

DATE OF LAST BIRTH: 51

NO. OF PREVIOUS LIVE BIRTHS 57

NO. OF PREVIOUS CHILDREN STILL LIVING 59

NO. OF PREVIOUS LATE FETAL DEATHS 61

NO. OF PREVIOUS ABORTIONS 63

FOR OFFICIAL USE ONLY

65

66

67 DAYS 68 HOURS

70

73

74

78

CONFIDENTIAL - This form is required for registration and statistical purposes and will be treated as strictly confidential. It should be filled in by the person requiring the birth to be registered and handed to the Registrar in accordance with the Vital Statistics Regulations, 1954 and the Vital Statistics (Amendment) Regulations 1957.

THIS SECTION TO BE COMPLETED BY THE REGISTRAR OF BIRTHS ONLY

DATE OF REGISTRATION 82

ENTRY NO. IN REGISTER 86

REGISTRAR'S
STAMP

SIGNATURE OF REGISTRAR OF BIRTHS

The Registrar should check that this return pertains to a live birth, enter the appropriate details in the Register and then forward the form to the Central Statistics Office.

SIGNATURE

DATE

APPENDIX B

CLASSIFICATION OF FATHER'S OCCUPATION

Occupations have been coded and classified into a set of socio-economic groups according to the system employed by the Central Statistics Office in the analysis of the 1991 Census of Population (see Census 1991, vol.6). The final CSO category of 'Unknown' has been differentiated into four distinct groups for the purposes of the Perinatal Reporting System. These are 'Unemployed', 'Not Classifiable', 'Not Applicable', and 'Not Stated'. Father's 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 father's 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. '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. If an occupation is given for the father then the appropriate occupational code has been used. '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. 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

NOT STATED

A variable for mother's occupation has been incorporated onto the revised birth notification form which is to be used from 1 January 1998.

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). 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 fetus 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 fetus 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 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 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 fetus died before the onset of labour, then obstetrical complications that could not have affected the outcome are ignored as causes of death.

For the purposes 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.

In Table 46 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 47, 52 and 53), 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 nervous system
745-747	Congenital anomalies of heart
758	Chromosomal anomalies (Including Down's syndrome)
743-744	Other congenital anomalies
748-757,759	Maternal conditions and complications
760	Complications of placenta, cord and membranes
762	Other complications of labour and delivery
763	Slow fetal growth, fetal malnutrition, and immaturity
764-765	Disorders relating to long gestation and high birthweight
766	Birth trauma
767	Intrauterine hypoxia and birth asphyxia and
768-770	other respiratory conditions of fetus or newborn
771	Infections specific to the perinatal period
772	Fetal and neonatal haemorrhage
773	Haemolytic disease of fetus or newborn, due to Isoimmunisation
775	Endocrine and metabolic disturbances specific to the fetus and newborn
778	Conditions involving the integument and temperature regulation of fetus 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

CROSS-TABULATIONS OF SELECTED VARIABLES: 1993

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 1
AGE OF MOTHER BY MATERNAL PARITY, 1993
*****SINGLETON BIRTHS*****

AGE OF MOTHER	MATERNAL PARITY										
	FREQUENCY ROW PERCENT COL PERCENT	NOT STATED	0	1	2	3	4	5	6	MORE THAN 6	TOTAL
UNDER 15		0	12	0	0	0	0	0	0	0	12
		0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
15-19		19	2293	235	24	2	0	0	0	0	2573
		0.74	89.12	9.13	0.93	0.08	0.00	0.00	0.00	0.00	
		14.18	13.39	1.67	0.28	0.04	0.00	0.00	0.00	0.00	5.33
20-24		24	4330	2180	634	142	37	4	2	1	7354
		0.33	58.88	29.64	8.62	1.93	0.50	0.05	0.03	0.01	
		17.91	25.29	15.47	7.42	3.19	1.94	0.42	0.42	0.16	15.23
25-29		34	5771	4855	2215	896	319	106	22	31	14249
		0.24	40.50	34.07	15.54	6.29	2.24	0.74	0.15	0.22	
		25.37	33.70	34.46	25.92	20.16	16.68	11.16	4.57	5.00	29.50
30-34		35	3663	5038	3664	1712	619	297	144	137	15309
		0.23	23.93	32.91	23.93	11.18	4.04	1.94	0.94	0.89	
		26.12	21.39	35.76	42.87	38.52	32.37	31.26	29.94	22.10	31.69
35-39		12	889	1532	1736	1415	686	340	196	261	7067
		0.17	12.58	21.68	24.56	20.02	9.71	4.81	2.77	3.69	
		8.96	5.19	10.87	20.31	31.83	35.88	35.79	40.75	42.10	14.63
40-44		6	137	235	265	256	241	187	105	166	1598
		0.38	8.57	14.71	16.58	16.02	15.08	11.70	6.57	10.39	
		4.48	0.80	1.67	3.10	5.76	12.60	19.68	21.83	26.77	3.31
45 AND OVER		0	8	3	6	17	9	15	12	22	92
		0.00	8.70	3.26	6.52	18.48	9.78	16.30	13.04	23.91	
		0.00	0.05	0.02	0.07	0.38	0.47	1.58	2.49	3.55	0.19
NOT STATED		4	20	12	3	5	1	1	0	2	48
		8.33	41.67	25.00	6.25	10.42	2.08	2.08	0.00	4.17	
		2.99	0.12	0.09	0.04	0.11	0.05	0.11	0.00	0.32	0.10
TOTAL		134	17123	14090	8547	4445	1912	950	481	620	48302
		0.28	35.45	29.17	17.69	9.20	3.96	1.97	1.00	1.28	100.00

TABLE 2

METHOD OF DELIVERY BY MATERNAL PARITY, 1993

SINGLETON BIRTHS

METHOD OF DELIVERY	MATERNAL PARITY									
	NOT STATED	0	1	2	3	4	5	6	MORE THAN 6	TOTAL
FREQUENCY ROW PERCENT COL PERCENT										
SPONTANEOUS	83 0.24 61.94	9831 28.08 57.41	11021 31.48 78.22	7047 20.13 82.45	3761 10.74 84.61	1585 4.53 82.90	795 2.27 83.68	401 1.15 83.37	486 1.39 78.39	35010 72.48
BREECH/FORCEPS	3 0.42 2.24	331 46.88 1.93	168 23.80 1.19	87 12.32 1.02	50 7.08 1.12	33 4.67 1.73	16 2.27 1.68	7 0.99 1.46	11 1.56 1.77	706 1.46
FORCEPS	18 0.48 13.43	2713 72.79 15.84	662 17.76 4.70	208 5.58 2.43	70 1.88 1.57	31 0.83 1.62	12 0.32 1.26	5 0.13 1.04	8 0.21 1.29	3727 7.72
VACUUM EXTRACTION	8 0.32 5.97	1475 58.35 8.61	577 22.82 4.10	244 9.65 2.85	117 4.63 2.63	51 2.02 2.67	30 1.19 3.16	12 0.47 2.49	14 0.55 2.26	2528 5.23
CAESAREAN	19 0.32 14.18	2672 44.33 15.60	1566 25.98 11.11	898 14.90 10.51	425 7.05 9.56	200 3.32 10.46	96 1.59 10.11	54 0.90 11.23	97 1.61 15.65	6027 12.48
OTHER, UNSPECIFIED AND NOT STATED	3 0.99 2.24	101 33.22 0.59	96 31.58 0.68	63 20.72 0.74	22 7.24 0.49	12 3.95 0.63	1 0.33 0.11	2 0.66 0.42	4 1.32 0.65	304 0.63
TOTAL	134 0.28	17123 35.45	14090 29.17	8547 17.69	4445 9.20	1912 3.96	950 1.97	481 1.00	620 1.28	48302 100.00

TABLE 3

MARITAL STATUS BY AGE OF MOTHER, 1993

SINGLETON BIRTHS

MARITAL STATUS	FREQUENCY ROW PERCENT COL PERCENT	AGE OF MOTHER									
		NOT STATED	UNDER 15	15-19	20-24	25-29	30-34	35-39	40-44	45 AND OVER	TOTAL
MARRIED		33 0.09 68.75	0 0.00 0.00	212 0.55 8.24	3440 8.90 46.78	12421 32.15 87.17	14373 37.20 93.89	6589 17.05 93.24	1482 3.84 92.74	84 0.22 91.30	38634 79.98
SINGLE		11 0.13 22.92	12 0.14 100.00	2355 26.85 91.53	3855 43.95 52.42	1594 18.17 11.19	642 7.32 4.19	251 2.86 3.55	49 0.56 3.07	2 0.02 2.17	8771 18.16
SEPARATED		1 0.12 2.08	0 0.00 0.00	1 0.12 0.04	53 6.50 0.72	213 26.10 1.49	277 33.95 1.81	201 24.63 2.84	65 7.97 4.07	5 0.61 5.43	816 1.69
DIVORCED		0 0.00 0.00	0 0.00 0.00	1 1.89 0.04	1 1.89 0.01	14 26.42 0.10	14 26.42 0.09	20 37.74 0.28	2 3.77 0.13	1 1.89 1.09	53 0.11
NOT STATED		3 10.71 6.25	0 0.00 0.00	4 14.29 0.16	5 17.86 0.07	7 25.00 0.05	3 10.71 0.02	6 21.43 0.08	0 0.00 0.00	0 0.00 0.00	28 0.06
TOTAL		48 0.10	12 0.02	2573 5.33	7354 15.23	14249 29.50	15309 31.69	7067 14.63	1598 3.31	92 0.19	48302 100.00

TABLE 4

GESTATION PERIOD AT DELIVERY BY MATERNAL PARITY, 1993

SINGLETON BIRTHS

GESTATION PERIOD (WEEKS)	MATERNAL PARITY									
	NOT STATED	0	1	2	3	4	5	6	MORE THAN 6	TOTAL
FREQUENCY										
ROW PERCENT										
COL PERCENT										
LESS THAN 22	0	3	1	0	1	0	0	0	0	5
	0.00	60.00	20.00	0.00	20.00	0.00	0.00	0.00	0.00	
	0.00	0.02	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.01
22-27	3	53	17	11	4	3	1	3	1	96
	3.13	55.21	17.71	11.46	4.17	3.13	1.04	3.13	1.04	
	2.24	0.31	0.12	0.13	0.09	0.16	0.11	0.62	0.16	0.20
28-31	1	113	68	39	18	10	8	3	6	266
	0.38	42.48	25.56	14.66	6.77	3.76	3.01	1.13	2.26	
	0.75	0.66	0.48	0.46	0.40	0.52	0.84	0.62	0.97	0.55
32-36	7	703	395	259	136	78	28	28	37	1671
	0.42	42.07	23.64	15.50	8.14	4.67	1.68	1.68	2.21	
	5.22	4.11	2.80	3.03	3.06	4.08	2.95	5.82	5.97	3.46
37-41	111	14533	12602	7658	3984	1694	833	411	515	42341
	0.26	34.32	29.76	18.09	9.41	4.00	1.97	0.97	1.22	
	82.84	84.87	89.44	89.60	89.63	88.60	87.68	85.45	83.06	87.66
42 AND OVER	12	1715	1007	577	301	127	80	36	61	3916
	0.31	43.79	25.72	14.73	7.69	3.24	2.04	0.92	1.56	
	8.96	10.02	7.15	6.75	6.77	6.64	8.42	7.48	9.84	8.11
NOT STATED	0	3	0	3	1	0	0	0	0	7
	0.00	42.86	0.00	42.86	14.29	0.00	0.00	0.00	0.00	
	0.00	0.02	0.00	0.04	0.02	0.00	0.00	0.00	0.00	0.11
TOTAL	134	17123	14090	8547	4445	1912	950	481	620	48302
	0.28	35.45	29.17	17.69	9.20	3.96	1.97	1.00	1.28	100.00

TABLE 5
AGE OF MOTHER BY GESTATION PERIOD AT DELIVERY, 1993
*****SINGLETON BIRTHS*****

AGE OF MOTHER		GESTATION PERIOD (WEEKS)							
FREQUENCY ROW PERCENT COL PERCENT	NOT STATED	LESS THAN 22	22-27	28-31	32-36	37-41	42 AND OVER	TOTAL	
UNDER 15	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	1 8.33 0.06	11 91.67 0.03	0 0.00 0.00	12 0.02	
15-19	0 0.00 0.00	1 0.04 20.00	11 0.43 11.46	29 1.13 10.90	132 5.13 7.90	2129 82.74 5.03	271 10.53 6.92	2573 5.33	
20-24	2 0.03 28.57	2 0.03 40.00	24 0.33 25.00	50 0.68 18.80	316 4.30 18.91	6236 84.80 14.73	724 9.84 18.49	7354 15.23	
25-29	2 0.01 28.57	0 0.00 0.00	23 0.16 23.96	63 0.44 23.68	461 3.24 27.59	12458 87.43 29.42	1242 8.72 31.72	14249 29.50	
30-34	2 0.01 28.57	1 0.01 20.00	23 0.15 23.96	70 0.46 26.32	442 2.89 26.45	13619 88.96 32.17	1152 7.52 29.42	15309 31.69	
35-39	1 0.01 14.29	0 0.00 0.00	10 0.14 10.42	35 0.50 13.16	236 3.34 14.12	6364 90.05 15.03	421 5.96 10.75	7067 14.63	
40-44	0 0.00 0.00	1 0.06 20.00	3 0.19 3.13	16 1.00 6.02	76 4.76 4.55	1410 88.24 3.33	92 5.76 2.35	1598 3.31	
45 AND OVER	0 0.00 0.00	0 0.00 0.00	1 1.09 1.04	3 3.26 1.13	6 6.52 0.36	77 83.70 0.18	5 5.43 0.13	92 0.19	
NOT STATED	0 0.00 0.00	0 0.00 0.00	1 2.08 1.04	0 0.00 0.00	1 2.08 0.06	37 77.08 0.09	9 18.75 0.23	48 0.10	
TOTAL	7 0.01	5 0.01	96 0.20	266 0.55	1671 3.46	42341 87.66	3916 8.11	48302 100.00	

TABLE 6

METHOD OF DELIVERY BY AGE OF MOTHER, 1993

SINGLETON BIRTHS

METHOD OF DELIVERY	AGE OF MOTHER									
	NOT STATED	UNDER 15	15-19	20-24	25-29	30-34	35-39	40-44	45 AND OVER	TOTAL
FREQUENCY										
ROW PERCENT										
COL PERCENT										
SPONTANEOUS	37 0.11 77.08	7 0.02 58.33	1946 5.56 75.63	5629 16.08 76.54	10264 29.32 72.03	10936 31.24 71.44	5081 14.51 71.90	1045 2.98 65.39	65 0.19 70.65	35010 72.48
BREECH/FORCEPS	0 0.00 0.00	0 0.00 0.00	40 5.67 1.55	108 15.30 1.47	228 32.29 1.60	212 30.03 1.38	94 13.31 1.33	23 3.26 1.44	1 0.14 1.09	706 1.46
FORCEPS	2 0.05 4.17	3 0.08 25.00	238 6.39 9.25	534 14.33 7.26	1216 32.63 8.53	1215 32.60 7.94	431 11.56 6.10	83 2.23 5.19	5 0.13 5.43	3727 7.72
VACUUM EXTRACTION	3 0.12 6.25	0 0.00 0.00	131 5.18 5.09	358 14.16 4.87	773 30.58 5.42	848 33.54 5.54	332 13.13 4.70	80 3.16 5.01	3 0.12 3.26	2528 5.23
CAESAREAN	2 0.03 4.17	2 0.03 16.67	207 3.43 8.05	689 11.43 9.37	1687 27.99 11.84	2000 33.18 13.06	1067 17.70 15.10	355 5.89 22.22	18 0.30 19.57	6027 12.48
OTHER, UNSPECIFIED AND NOT STATED	4 1.32 8.33	0 0.00 0.00	11 3.62 0.43	36 11.84 0.49	81 26.64 0.57	98 32.24 0.64	62 20.39 0.88	12 3.95 0.75	0 0.00 0.00	304 0.63
TOTAL	48 0.10	12 0.02	2573 5.33	7354 15.23	14249 29.50	15309 31.69	7067 14.63	1598 3.31	92 0.19	48302 100.00

TABLE 7

BIRTHWEIGHT BY GESTATION PERIOD AT DELIVERY, 1993

SINGLETON BIRTHS

BIRTHWEIGHT (GRAMMES)	GESTATION PERIOD (WEEKS)							
FREQUENCY COL PERCENT ROW PERCENT	NOT STATED	LESS THAN 22	22-27	28-31	32-36	37-41	42 AND OVER	TOTAL
500-749	0 0.00 0.00	3 6.25 60.00	35 72.92 36.46	9 18.75 3.38	0 0.00 0.00	0 0.00 0.00	1 2.08 0.03	48 0.10
750-999	0 0.00 0.00	0 0.00 0.00	34 50.75 35.42	24 35.82 9.02	7 10.45 0.42	2 2.99 0.00	0 0.00 0.00	67 0.14
1000-1249	0 0.00 0.00	1 1.05 20.00	18 18.95 18.75	49 51.58 18.42	24 25.26 1.44	2 2.11 0.00	1 1.05 0.03	95 0.20
1250-1499	0 0.00 0.00	1 0.97 20.00	3 2.91 3.13	58 56.31 21.80	34 33.01 2.03	7 6.80 0.02	0 0.00 0.00	103 0.21
1500-1999	0 0.00 0.00	0 0.00 0.00	3 0.83 3.13	76 20.94 28.57	205 56.47 12.27	72 19.83 0.17	7 1.93 0.18	363 0.75
2000-2499	0 0.00 0.00	0 0.00 0.00	3 0.27 3.13	14 1.28 5.26	444 40.59 26.57	617 56.40 1.46	16 1.46 0.41	1094 2.26
2500-2999	1 0.02 14.29	0 0.00 0.00	0 0.00 0.00	4 0.08 1.50	596 11.39 35.67	4452 85.11 10.51	178 3.40 4.55	5231 10.83
3000-3499	1 0.01 14.29	0 0.00 0.00	0 0.00 0.00	17 0.11 6.39	263 1.70 15.74	14224 92.01 33.59	954 6.17 24.36	15459 32.00
3500-3999	3 0.02 42.86	0 0.00 0.00	0 0.00 0.00	13 0.08 4.89	78 0.46 4.67	15483 90.55 36.57	1521 8.90 38.84	17098 35.40
4000-4499	1 0.01 14.29	0 0.00 0.00	0 0.00 0.00	2 0.03 0.75	14 0.20 0.84	6160 86.20 14.55	969 13.56 24.74	7146 14.79
4500 AND OVER	1 0.06 14.29	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	5 0.32 0.30	1299 83.32 3.07	254 16.29 6.49	1559 3.23
NOT STATED	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	1 2.56 0.06	23 58.97 0.05	15 38.46 0.38	39 0.08
TOTAL	7 0.01	5 0.01	96 0.20	266 0.55	1671 3.46	42341 87.66	3916 8.11	48302 100.00

TABLE 8

METHOD OF DELIVERY BY MOTHER'S LENGTH OF STAY
IN HOSPITAL AFTER DELIVERY, 1993

SINGLETON BIRTHS

METHOD OF DELIVERY	POSTNATAL LENGTH OF STAY							
	NOT STATED	0-2 DAYS	3-5 DAYS	6-8 DAYS	9-11 DAYS	12-14 DAYS	2 WEEKS OR MORE	TOTAL
SPONTANEOUS	29 0.08 48.33	4160 11.92 88.57	29124 83.48 80.89	1382 3.96 22.80	107 0.31 9.76	36 0.10 27.91	51 0.15 45.54	34889 72.44
BREECH/ FORCEPS	0 0.00 0.00	84 11.93 1.79	557 79.12 1.55	51 7.24 0.84	6 0.85 0.55	3 0.43 2.33	3 0.43 2.68	704 1.46
FORCEPS	1 0.03 1.67	235 6.31 5.00	3129 83.95 8.69	309 8.29 5.10	38 1.02 3.47	4 0.11 3.10	11 0.30 9.82	3727 7.74
VACUUM EXTRACTION	6 0.24 10.00	164 6.49 3.49	2041 80.74 5.67	269 10.64 4.44	35 1.38 3.19	8 0.32 6.20	5 0.20 4.46	2528 5.25
CAESAREAN	15 0.25 25.00	44 0.73 0.94	1058 17.55 2.94	3910 64.87 64.50	882 14.63 80.47	76 1.26 58.91	42 0.70 37.50	6027 12.51
OTHER, UNSPECIFIED AND NOT STATED	9 3.16 15.00	10 3.51 0.21	95 33.33 0.26	141 49.47 2.33	28 9.82 2.55	2 0.70 1.55	0 0.00 0.00	285 0.59
TOTAL	60 0.12	4697 9.75	36004 74.76	6062 12.59	1096 2.28	129 0.27	112 0.23	48160 100.00

Note: Domiciliary births of which there were 142 are excluded from this table.

TABLE 9

MATERNAL PARITY BY MOTHER'S LENGTH OF STAY
IN HOSPITAL AFTER DELIVERY, 1993

SINGLETON BIRTHS

MATERNAL PARITY	POSTNATAL LENGTH OF STAY							
FREQUENCY ROW PERCENT COL PERCENT	NOT STATED	0-2 DAYS	3-5 DAYS	6-8 DAYS	9-11 DAYS	12-14 DAYS	2 WEEKS OR MORE	TOTAL
0	22 0.13 36.67	747 4.37 15.90	12636 73.96 35.10	3056 17.89 50.41	524 3.07 47.81	62 0.36 48.06	39 0.23 34.82	17086 35.48
1	20 0.14 33.33	1662 11.84 35.38	10636 75.77 29.54	1392 9.92 22.96	278 1.98 25.36	19 0.14 14.73	30 0.21 26.79	14037 29.15
2	8 0.09 13.33	1061 12.45 22.59	6473 75.97 17.98	805 9.45 13.28	133 1.56 12.14	26 0.31 20.16	15 0.18 13.39	8521 17.69
3	2 0.05 3.33	638 14.40 13.58	3301 74.48 9.17	396 8.94 6.53	76 1.71 6.93	8 0.18 6.20	11 0.25 9.82	4432 9.20
4	3 0.16 5.00	286 15.00 6.09	1391 72.94 3.86	177 9.28 2.92	36 1.89 3.28	8 0.42 6.20	6 0.31 5.36	1907 3.96
5	2 0.21 3.33	140 14.78 2.98	688 72.65 1.91	92 9.71 1.52	19 2.01 1.73	1 0.11 0.78	5 0.53 4.46	947 1.97
6	0 0.00 0.00	58 12.08 1.23	359 74.79 1.00	48 10.00 0.79	11 2.29 1.00	2 0.42 1.55	2 0.42 1.79	480 1.00
MORE THAN 6	0 0.00 0.00	98 15.88 2.09	424 68.72 1.18	73 11.83 1.20	15 2.43 1.37	3 0.49 2.33	4 0.65 3.57	617 1.28
NOT STATED	3 2.26 5.00	7 5.26 0.15	96 72.18 0.27	23 17.29 0.38	4 3.01 0.36	0 0.00 0.00	0 0.00 0.00	133 0.28
TOTAL	60 0.12	4697 9.75	36004 74.76	6062 12.59	1096 2.28	129 0.27	112 0.23	48160 100.00

Note: Domiciliary births of which there were 142 are excluded from this table.

TABLE 10

MARITAL STATUS BY GESTATION PERIOD AT TIME OF FIRST VISIT
TO HOSPITAL OR DOCTOR DURING PREGNANCY, 1993

SINGLETON BIRTHS

MARITAL STATUS	TIME OF FIRST VISIT (WEEKS)				
	NOT STATED	0-12	13-19	20 AND OVER	TOTAL
FREQUENCY					
ROW PERCENT					
COL PERCENT					
MARRIED	2386 6.18 87.02	21531 55.73 84.02	9620 24.90 78.59	5097 13.19 66.25	38634 79.98
SINGLE	313 3.57 11.42	3683 41.99 14.37	2392 27.27 19.54	2383 27.17 30.97	8771 18.16
SEPARATED	31 3.80 1.13	368 45.10 1.44	208 25.49 1.70	209 25.61 2.72	816 1.69
DIVORCED	2 3.77 0.07	35 66.04 0.14	12 22.64 0.10	4 7.55 0.05	53 0.11
NOT STATED	10 35.71 0.36	9 32.14 0.04	8 28.57 0.07	1 3.57 0.01	28 0.06
TOTAL	2742 5.68	25626 53.05	12240 25.34	7694 15.93	48302 100.00

TABLE 11

INTERVAL IN YEARS SINCE LAST BIRTH BY GESTATION PERIOD AT TIME
OF FIRST VISIT TO HOSPITAL OR DOCTOR DURING PREGNANCY, 1993

SINGLETON BIRTHS

TIME SINCE LAST BIRTH	TIME OF FIRST VISIT (WEEKS)				
FREQUENCY ROW PERCENT COL PERCENT	NOT STATED	0-12	13-19	20 AND OVER	TOTAL
NO PREVIOUS BIRTH	939 5.48 34.25	9707 56.69 37.88	3923 22.91 32.05	2554 14.92 33.19	17123 35.45
1 YEAR OR LESS	26 4.94 0.95	194 36.88 0.76	143 27.19 1.17	163 30.99 2.12	526 1.09
> 1 YEAR TO 2 YEARS	429 6.13 15.65	3090 44.15 12.06	1962 28.03 16.03	1518 21.69 19.73	6999 14.49
>2 YEARS TO 3 YEARS	456 5.88 16.63	3978 51.28 15.52	2134 27.51 17.43	1189 15.33 15.45	7757 16.06
>3 YEARS TO 4 YEARS	291 5.35 10.61	2952 54.28 11.52	1439 26.46 11.76	756 13.90 9.83	5438 11.26
>4 YEARS TO 5 YEARS	168 5.07 6.13	1829 55.21 7.14	822 24.81 6.72	494 14.91 6.42	3313 6.86
>5 YEARS TO 6 YEARS	93 4.40 3.39	1213 57.33 4.73	533 25.19 4.35	277 13.09 3.60	2116 4.38
MORE THAN 6 YEARS	208 4.58 7.59	2485 54.70 9.70	1187 26.13 9.70	663 14.59 8.62	4543 9.41
NOT STATED	132 27.10 4.81	178 36.55 0.69	97 19.92 0.79	80 16.43 1.04	487 1.01
TOTAL	2742 5.68	25626 53.05	12240 25.34	7694 15.93	48302 100.00

TABLE 12

FATHER'S OCCUPATION BY INTERVAL IN YEARS SINCE LAST BIRTH, 1993

SINGLETON BIRTHS

FATHER'S OCCUPATION	TIME SINCE LAST BIRTH										TOTAL
	NOT STATED	NO PREVIOUS BIRTH	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		
FREQUENCY ROW PERCENT COL PERCENT											
FARMERS AND FARM MANAGERS	58 1.45 11.91	1027 25.76 6.00	63 1.58 11.98	810 20.32 11.57	784 19.66 10.11	490 12.29 9.01	292 7.32 8.81	172 4.31 8.13	291 7.30 6.41	3987 8.25 677	
OTHER AGRICULTURAL OCCUPATIONS AND FISHERMEN	4 0.59 0.82	177 26.14 1.03	13 1.92 2.47	118 17.43 1.69	131 19.35 1.69	75 11.08 1.38	61 9.01 1.84	37 5.47 1.75	61 9.01 1.34	1819 1.40 1819	
HIGHER PROFESSIONAL	17 0.93 3.49	623 34.25 3.64	14 0.77 2.66	321 17.65 4.59	347 19.08 4.47	208 11.43 3.82	120 6.60 3.62	56 3.08 2.65	113 6.21 2.49	377 3.77 2064	
LOWER PROFESSIONAL	23 1.11 4.72	689 33.38 4.02	17 0.82 3.23	331 16.04 4.73	370 17.93 4.77	260 12.60 4.78	135 6.54 4.07	91 4.41 4.30	148 7.17 3.26	427 4.27 4254	
EMPLOYERS AND MANAGERS	26 0.61 5.34	1305 30.68 7.62	36 0.85 6.84	629 14.79 8.99	791 18.59 10.20	524 12.32 9.64	337 7.92 10.17	206 4.84 9.74	400 9.40 8.80	881 8.81 1487	
SALARIED EMPLOYEES	15 1.01 3.08	502 33.76 2.93	9 0.61 1.71	196 13.18 2.80	293 19.70 3.78	188 12.64 3.46	94 6.32 2.84	57 3.83 2.69	133 8.94 2.93	308 3.08 4314	
INTERMEDIATE NON- MANUAL WORKERS	37 0.86 7.60	1306 30.27 7.63	40 0.93 7.60	590 13.68 8.43	829 19.22 10.69	573 13.28 10.54	326 7.56 9.84	217 5.03 10.26	396 9.18 8.72	893 8.93 8.93	

TABLE 12 – continued
FATHER'S OCCUPATION BY INTERVAL IN YEARS SINCE LAST BIRTH, 1993
*****SINGLETON BIRTHS*****

FATHER'S OCCUPATION	TIME SINCE LAST BIRTH									
	NOT STATED	NO PREVIOUS BIRTH	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	TOTAL
FREQUENCY ROW PERCENT COL PERCENT										
OTHER NON-MANUAL WORKERS	28 0.68 5.75	1163 28.41 6.79	49 1.20 9.32	572 13.97 8.17	715 17.46 9.22	508 12.41 9.34	350 8.55 10.56	211 5.15 9.97	498 12.16 10.96	4094 8.48
SKILLED MANUAL WORKERS	83 0.90 17.04	2700 29.13 15.77	83 0.90 15.78	1344 14.50 19.20	1633 17.62 21.05	1250 13.49 22.99	723 7.80 21.82	473 5.10 22.35	979 10.56 21.55	9268 19.19
SEMI-SKILLED MANUAL WORKERS	31 1.06 6.37	820 28.02 4.79	29 0.99 5.51	432 14.76 6.17	519 17.73 6.69	380 12.98 6.99	251 8.58 7.58	133 4.54 6.29	332 11.34 7.31	2927 6.06
UNSKILLED MANUAL WORKERS	16 0.83 3.29	400 20.77 2.34	24 1.25 4.56	346 17.96 4.94	307 15.94 3.96	272 14.12 5.00	163 8.46 4.92	128 6.65 6.05	270 14.02 5.94	1926 3.99
UNEMPLOYED	40 2.43 8.21	307 18.64 1.79	49 2.98 9.32	374 22.71 5.34	312 18.94 4.02	189 11.48 3.48	112 6.80 3.38	75 4.55 3.54	189 11.48 4.16	1647 3.41
NOT CLASSIFIABLE	0 0.00 0.00	74 33.18 0.43	3 1.35 0.57	39 17.49 0.56	32 14.35 0.41	26 11.66 0.48	11 4.93 0.33	12 5.38 0.57	26 11.66 0.57	223 0.46
NOT APPLICABLE	103 1.10 21.15	5952 63.66 34.76	95 1.02 18.06	850 9.09 12.14	657 7.03 8.47	457 4.89 8.40	320 3.42 9.66	234 2.50 11.06	681 7.28 14.99	9349 19.36
NOT STATED	6 2.26 1.23	78 29.32 0.46	2 0.75 0.38	47 17.67 0.67	37 13.91 0.48	38 14.29 0.70	18 6.77 0.54	14 5.26 0.66	26 9.77 0.57	266 0.55
TOTAL	487 1.01	17123 35.45	526 1.09	6999 14.49	7757 16.06	5438 11.26	3313 6.86	2116 4.38	4543 9.41	48302 100.00

TABLE 13
FATHER'S OCCUPATION BY INFANT'S TYPE OF FEEDING, 1993
*****SINGLETON BIRTHS*****

FATHER'S OCCUPATION FREQUENCY ROW PERCENT COL PERCENT	TYPE OF FEEDING			
	NOT STATED	ARTIFICIAL	BREAST	TOTAL
FARMERS AND FARM MANAGERS	43 1.09 10.62	2418 61.09 7.69	1497 37.82 9.24	3958 8.24 674
OTHER AGRICULTURAL OCCUPATIONS AND FISHERMEN	4 0.59 0.99	470 69.73 1.50	200 29.67 1.23	1808 1.40
HIGHER PROFESSIONAL	9 0.50 2.22	581 32.13 1.85	1218 67.37 7.52	2056 3.76
LOWER PROFESSIONAL	17 0.83 4.20	784 38.13 2.49	1255 61.04 7.75	4237 4.28
EMPLOYERS AND MANAGERS	27 0.64 6.67	2123 50.11 6.75	2087 49.26 12.89	1482 8.82
SALARIED EMPLOYEES	8 0.54 1.98	762 51.42 2.42	712 48.04 4.40	4277 3.09
INTERMEDIATE NON- MANUAL WORKERS	38 0.89 9.38	2538 59.34 8.08	1701 39.77 10.50	4071 8.90
OTHER NON-MANUAL WORKERS	24 0.59 5.93	2867 70.42 9.12	1180 28.99 7.29	9239 8.48
SKILLED MANUAL WORKERS	72 0.78 17.78	5977 64.69 19.02	3190 34.53 19.70	2915 19.24
SEMI-SKILLED MANUAL WORKERS	22 0.75 5.43	2212 75.88 7.04	681 23.36 4.21	1913 6.07
UNSKILLED MANUAL WORKERS	13 0.68 3.21	1589 83.06 5.06	311 16.26 1.92	1637 3.98
UNEMPLOYED	36 2.20 8.89	1416 86.50 4.51	185 11.30 1.14	223 3.41
NOT CLASSIFIABLE	1 0.45 0.25	129 57.85 0.41	93 41.70 0.57	9280 0.46
NOT APPLICABLE	84 0.91 20.74	7389 79.62 23.51	1807 19.47 11.16	260 19.32
NOT STATED	7 2.69 1.73	175 67.31 0.56	78 30.00 0.48	48030 0.54
TOTAL	405 0.84	31430 65.44	16195 33.72	100.00

TABLE 14

INFANT'S TYPE OF FEEDING BY MATERNAL PARITY, 1993

SINGLETON BIRTHS

TYPE OF FEEDING	MATERNAL PARITY									
	NOT STATED	0	1	2	3	4	5	6	MORE THAN 6	TOTAL
FREQUENCY ROW PERCENT COL PERCENT ARTIFICIAL	73 0.23 57.94	10612 33.76 62.31	9003 28.64 64.18	5645 17.96 66.43	3041 9.68 68.74	1433 4.56 75.34	725 2.31 77.46	370 1.18 77.73	528 1.68 86.42	31430 65.44
BREAST	28 0.17 22.22	6266 38.69 36.79	4918 30.37 35.06	2789 17.22 32.82	1358 8.39 30.70	451 2.78 23.71	207 1.28 22.12	103 0.64 21.64	75 0.46 12.27	16195 33.72
NOT STATED	25 6.17 19.84	152 37.53 0.89	106 26.17 0.76	64 15.80 0.75	25 6.17 0.57	18 4.44 0.95	4 0.99 0.43	3 0.74 0.63	8 1.98 1.31	405 0.84
TOTAL	126 0.26	17030 35.46	14027 29.20	8498 17.69	4424 9.21	1902 3.96	936 1.95	476 0.99	611 1.27	48030 100.00

APPENDIX E

WIGGLESWORTH CLASSIFICATION, 1993

1) BASIS OF SYSTEM

In this section perinatal deaths are classified according to the system devised by Dr. Jonathan 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.³ 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.⁴

2) METHOD OF CLASSIFICATION

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

NORMALLY FORMED MACERATED STILLBIRTH
CONGENITAL MALFORMATIONS (STILLBIRTH OR EARLY NEONATAL DEATH)
CONDITIONS ASSOCIATED WITH IMMATURITY (EARLY NEONATAL DEATH)
ASPHYXIAL CONDITIONS DEVELOPING IN LABOUR (STILLBIRTH OR EARLY NEONATAL DEATH)
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 of the guidelines set out by Dr. Wigglesworth.⁵

Wigglesworth Classes

Assignment Criteria

MACERATED (SB)

ALL ANTEPARTUM STILLBIRTHS WHERE MACERATION IS INDICATED AS MAIN CAUSE OF DEATH. ANTEPARTUM DEATHS NOT DUE TO ANTEPARTUM HAEMORRHAGE AND NOT ASSIGNED TO ANY OTHER CATEGORY.

CONGENITAL MALFORMATIONS (SB AND ENND)

ALL MAJOR CONGENITAL ANOMALIES (STILLBIRTHS AND EARLY NEONATAL DEATHS).⁶

³ Wigglesworth, J.S., "Monitoring Perinatal Mortality," *The Lancet*, 1980, 2, pp. 684-686.

⁴ The analysis by Wigglesworth's categories, unlike the main report, includes 14 live births which weighed under 500 grammes and all of which resulted in early neonatal deaths.

⁵ 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.

⁶ This category includes the following I.C.D. codes: 740-742, 745-748, 750.3, 750.6, 751.1-751.8, 753, 756.0, 756.6, 756.7, 758-759.

Wigglesworth Classes**Assignment Criteria****IMMATURITY (ENND)**

ALL FIRST WEEK DEATHS DUE TO STRUCTURAL LUNG IMMATURITY AND HYALINE MEMBRANE DISEASE.⁷ FIRST WEEK DEATHS OF LESS THAN 37 WEEKS GESTATION PERIOD WHERE CAUSE IS NOT STATED OR DOES NOT FALL INTO ANY OTHER CATEGORY.

ASPHYXIA

ALL FIRST WEEK DEATHS DUE TO BIRTH TRAUMA AND BIRTH ASPHYXIA.⁸ 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. ANTEPARTUM DEATHS DUE TO ANTEPARTUM HAEMORRHAGE. ALL INTRAPARTUM STILLBIRTHS EXCEPT THOSE DUE TO SPECIFIC CONDITIONS OR CONGENITAL MALFORMATIONS.

SPECIFIC CONDITIONS (SB AND ENND)

INFECTION, ISOIMMUNISATION, OR OTHER HAEMORRHAGE IN THE NEWBORN.⁹

3) RESULTS

Tabulations based on the Wigglesworth classification are given below. Table 1 indicates the percentage of perinatal deaths attributable to each cause for 1993. Congenital malformations accounted for over a quarter of all deaths which is a high figure in comparison with other European countries. Table 2 provides a classification of cause of death by birthweight and indicates cause and weight specific perinatal mortality rates for 1993. It is this table which shows the practical clinical implications of the Wigglesworth coding. Figure 1 is derived from the data contained in Table 2 and shows how the percentage contribution to the perinatal mortality rate of each cause changes with birthweight group. Table 3 provides the same cross-tabulations as Table 2 but uses the definition of stillbirth based on 28 weeks gestation period. This is provided to facilitate possible local or international comparisons.

TABLE 1**WIGGLESWORTH CLASSIFICATION FOR ALL PERINATAL DEATHS, 1993**

WIGGLESWORTH CLASSIFICATION	FREQUENCY	PERCENT	CUMULATIVE FREQUENCY	CUMULATIVE PERCENT
MACERATED STILLBIRTHS	153	34.5	153	34.5
CONGENITAL MALFORMATIONS	117	26.4	270	60.8
IMMATURITY	59	13.3	329	74.1
ASPHYXIAL CONDITIONS	94	21.2	423	95.3
SPECIFIC CONDITIONS	21	4.7	444	100.0

7 This category includes the following I.C.D. codes: 765, 769.0, 770.4, 772.1, 777.5

8 This category includes the following I.C.D. codes: 762.0, 762.1, 762.4, 762.5, 767-768.

9 The I.C.D. codes for specific conditions are as follows: 760.1-760.5, 762.3, 770.0, 771, 773, 775, 777.0, 778.0.

TABLE 2

WIGGLESWORTH CLASSIFICATION
NUMBER OF PERINATAL DEATHS AND MORTALITY RATES BY CAUSE AND BIRTHWEIGHT, 1993

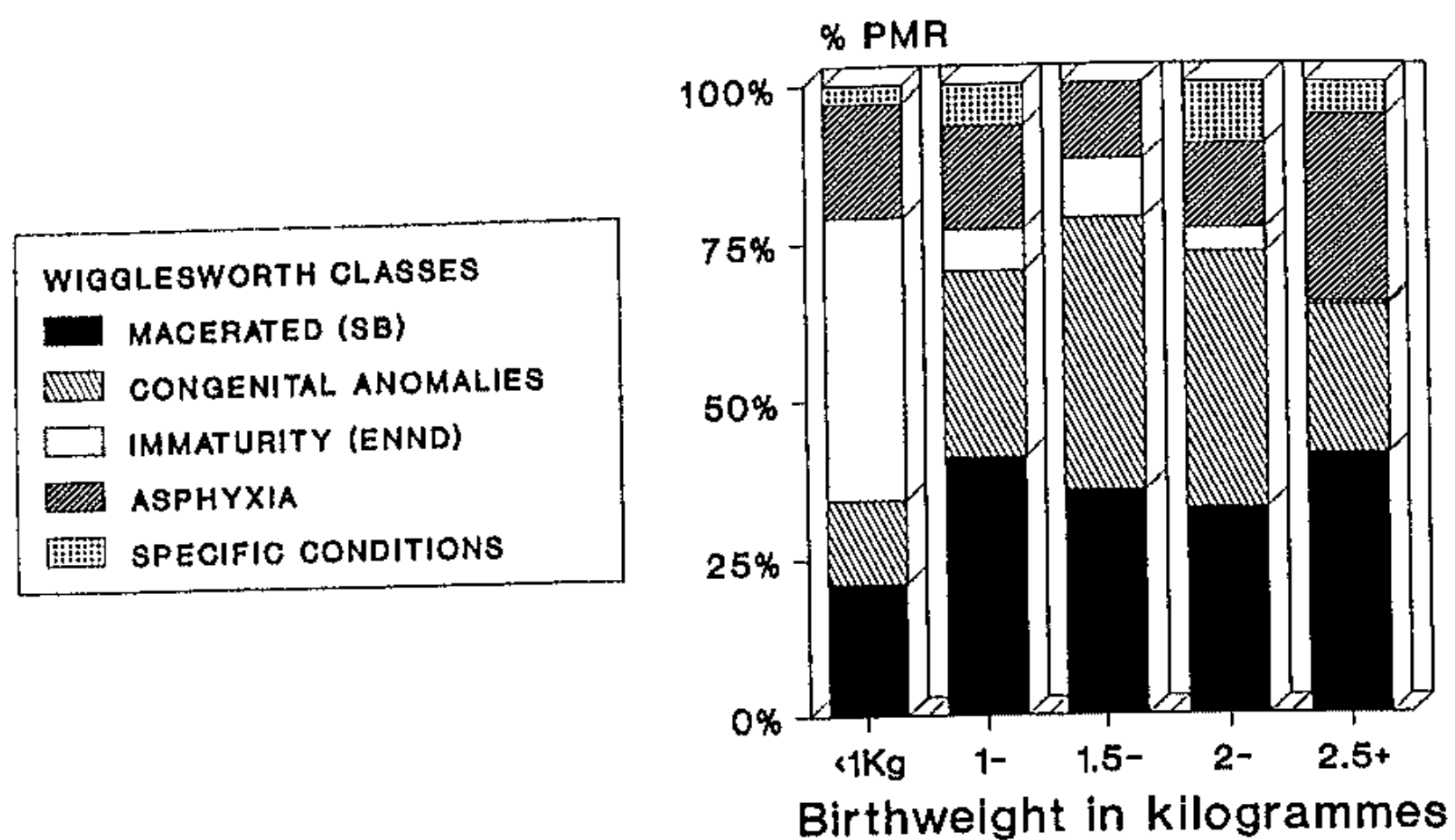
BIRTHWEIGHT (GRAMMES)	MACERATED STILLBIRTHS		CONGENITAL ANOMALIES		IMMATURITY		ASPHYXIA		SPECIFIC CONDITIONS		TOTAL	
	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
UNDER 1000	22	145.70	14	92.72	47	311.26	19	125.83	3	19.87	105	695.36
1000-1499	25	101.21	18	72.87	4	16.19	10	40.49	4	16.19	61	246.96
1500-1999	15	30.86	18	37.04	4	8.23	5	10.29	0	0.00	42	86.42
2000-2499	17	12.77	21	15.78	2	1.50	7	5.26	5	3.76	52	39.07
2500 AND OVER	72	1.53	41	0.87	1	0.02	52	1.10	9	0.19	175	3.72
NOT STATED	2	46.51	5	116.28	1	23.26	1	23.26	0	0.00	9	209.30
TOTAL	153	3.10	117	2.37	59	1.20	94	1.91	21	0.43	444	9.00

TABLE 3

WIGGLESWORTH CLASSIFICATION USING THE 28 WEEKS DEFINITION OF A STILLBIRTH
NUMBER OF PERINATAL DEATHS AND MORTALITY RATES BY CAUSE AND BIRTHWEIGHT, 1993

BIRTHWEIGHT (GRAMMES)	MACERATED STILLBIRTHS		CONGENITAL ANOMALIES		IMMATURITY		ASPHYXIA		SPECIFIC CONDITIONS		TOTAL	
	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE	NUMBER	RATE
UNDER 1000	16	117.65	11	80.88	47	345.59	13	95.59	3	22.06	90	661.76
1000-1499	24	98.36	18	73.77	4	16.39	9	36.89	3	12.30	58	237.70
1500-1999	15	30.93	17	35.05	4	8.25	5	10.31	0	0.00	41	84.54
2000-2499	17	12.77	21	15.78	2	1.50	7	5.26	5	3.76	52	39.07
2500 AND OVER	72	1.53	41	0.87	1	0.02	52	1.10	9	0.19	175	3.72
NOT STATED	2	46.51	5	116.28	1	23.26	1	23.26	0	0.00	9	209.30
TOTAL	146	2.96	113	2.29	59	1.20	87	1.76	20	0.41	425	8.62

**FIG E1 WIGGLESWORTH CLASSIFICATION:
PERCENT DISTRIBUTION OF PERINATAL DEATHS
BY CAUSE OF DEATH AND WEIGHT, 1993**



Source: Appendix E, Table 2.