1.5 Birthweight:

Over this period of 20 years there has been a small but statistically significant decrease (1.2%) in the percentage of birth of babies between 2500g and 3999g (2500 – 3999 vs rest; odds ratio 1.14, 95% confidence limits 1.10, 1.19). There have been concomitant increases in the percentage of babies born with birthweights less than 2500g and 4000g or more (Figure 13, Table 8).

There were 2,578 babies (6.3%) born with birthweights less than 2500g in 1988, increasing to 54,109 babies in 2007 (6.8%) (Figure 14, Table 8). This change is statistically significant (odds ratio 1.09, 95% confidence limits 1.04, 1.15). The increase has occurred in both low birthweight (LBW, less than 2500g) and very low birthweight (VLBW, less than 1500g babies).
1.6 Multiple pregnancies:

A statistically significant increase has occurred in the incidence of multiple pregnancies (odds ratio 1.45, 95% confidence limits 1.30, 1.62) (Figure 15, Table 9).

The increased incidence of multiple pregnancies has occurred in women in the 20 to 34 years age group and 35 years or more. (Figure 16, Tables 10 and 11)
Over this 20 year period the incidence of birth at 37 weeks gestation or more in multiple pregnancies decreased statistically significantly with a concomitant increased incidence of birth at less than 37 weeks gestation in multiple pregnancies (<37 vs 37+; odds ratio 1.74, 95% confidence limits 1.40, 2.17) (Figure 17, Tables 12 and 13).

The increased incidence of preterm birth in multiple pregnancies occurred primarily in the 28-36 week gestation cohort (Figure 18, Tables 12 and 13).
1.7 Assisted conception:

The association of assisted conception techniques with pregnancy\(^1\) was first completely collected in the perinatal data collection in 1995, so 13 years of data is available. In this period 18,713 of 652,539 pregnancies (2.9%) were identified as being conceived with such assistance (Table 14). The rise in the incidence of assisted conception pregnancies, from 2.1% to 3.6% over the 13 year period, is statistically significant (assisted conception vs no assisted conception; odds ratio 1.75; 95% confidence limits 1.62, 1.89).

Over this period, 8.9% of pregnancies conceived with the aid of AIH/AID +/or ovulation induction and 19.8% of pregnancies conceived with the aid of extracorporeal techniques were multiple, compared with 1.2% of pregnancies conceived without the assistance of any reproductive technologies (Figure 19, Tables 15 and 16).

By 2007, the likelihood of a multiple pregnancy when artificial insemination and/or ovulation induction processes are used to assist conception was increased more than 7-fold (artificial insemination and/or ovulation induction vs no assisted reproduction; odds ratio 8.52, 95% confidence limits 6.58, 11.04), and rose to a 13-fold increase with extra-corporeal techniques (extra-corporeal assisted reproduction vs no assisted reproduction; odds ratio 15.50, 95% confidence limits 13.21, 18.18).

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\(^1\) The data collection techniques have combined artificial insemination techniques with ovulation induction techniques since 1999, so they are combined in this report. In-vitro fertilisation and related extra-corporeal techniques are also combined. The data field is a multiple reporting field and only the first reported method is able to be extracted.
Pregnancies conceived with assisted conception were less likely to result in the births of babies within the range 2500g to 3999g than pregnancies conceived without assisted conception (Figure 20, Tables 17 and 18).

The incidence of low birthweight babies (LBW - less than 2500g) being born in pregnancies conceived with the aid of assisted conception techniques, between 1995 and 2007, was 3.0 times more likely than in pregnancies conceived without the aid of assisted conception techniques; this difference is statistically significant - <2500 vs rest; odds ratio 3.92; 95% confidence limits 3.79, 4.05. (Figure 21, Tables 17 and 18)