

Congenital malformations

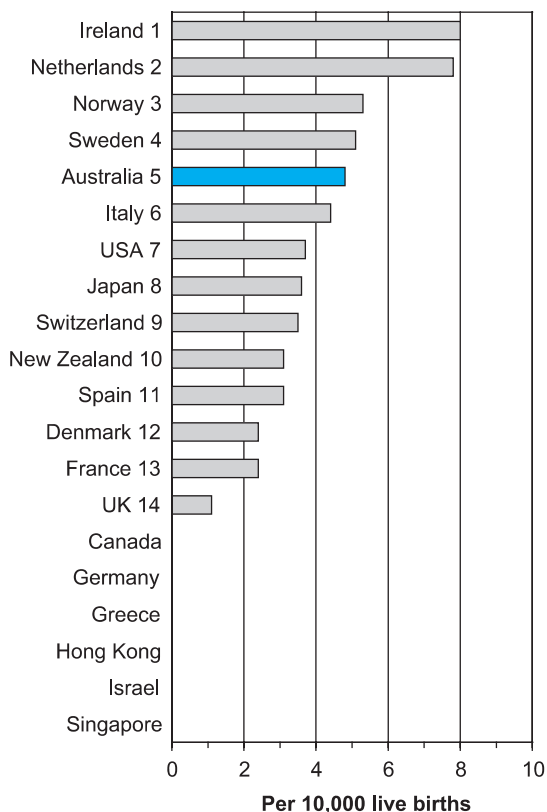


Figure 1: Incidence of spina bifida, 1992

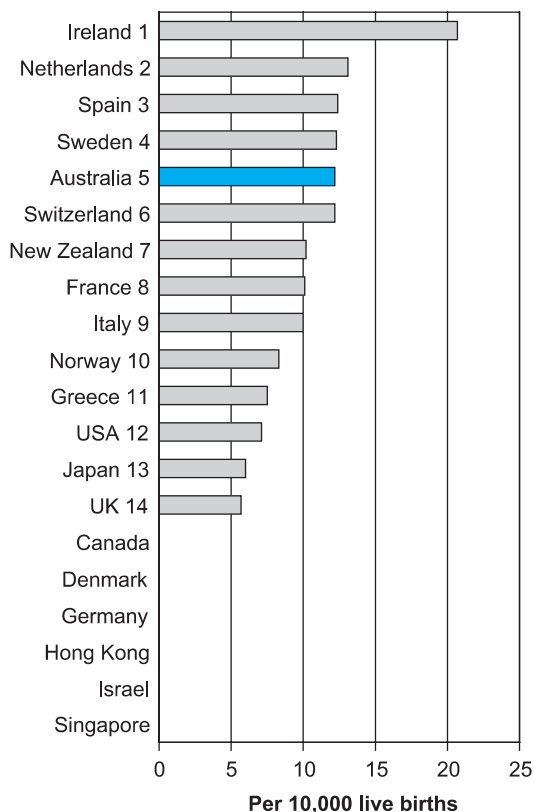


Figure 2: Incidence of Down syndrome, 1992

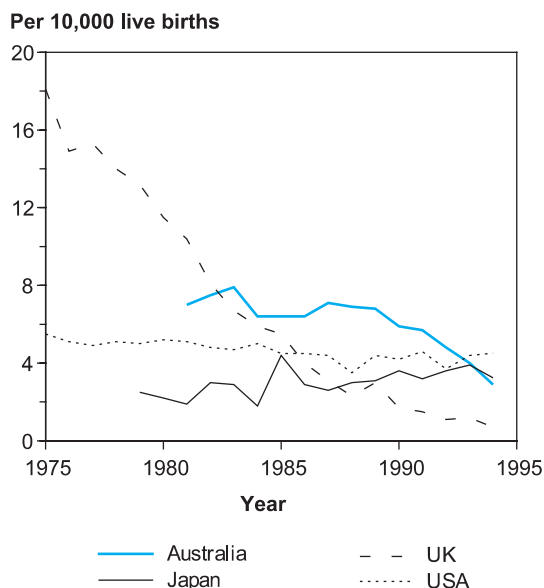


Figure 3: Trends in incidence of spina bifida, 1975 to 1995

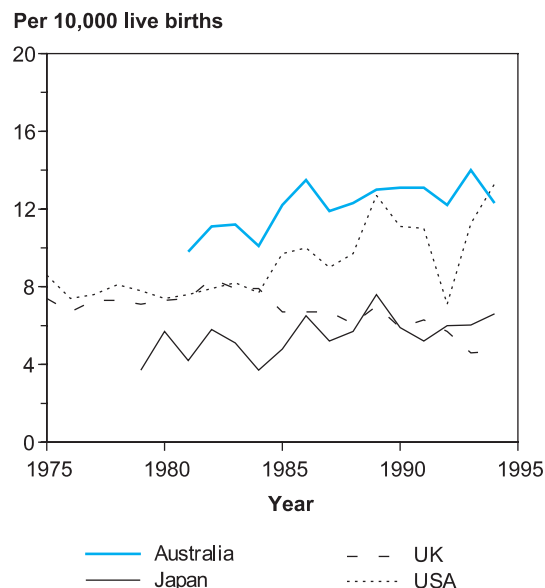


Figure 4: Trends in incidence of Down syndrome, 1975 to 1995

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Selected congenital malformations (per 10,000 live births)

Country	Spina bifida ICD 741	Hydrocephaly ICD 742.3	Transposition of great vessels, ICD 745.1	Limb reduction ICD 755.2-4	Down syndrome ICD 758.0
Australia	1994 2.9	1988 3.9	1994 3.8	1994 3.9	1994 12.3
Canada	1988 8.3	1988 5.1	1988 4.6	1988 4.8	1988 13.8
Denmark	1993 3.1	1988 2.4	1993 0.1	1993 7.4	— —
France	1993 1.0	— —	1995 3.6	1994 3.5	1994 9.6
Germany	1994 2.8	— —	— —	— —	— —
Greece	1990 1.6	— —	1990 0.8	1990 9.1	1992 7.5
Hong Kong	— —	— —	— —	— —	— —
Ireland	1994 5.5	— —	1994 7.2	1994 5.5	1994 22.0
Israel	1988 2.3	1988 2.9	1988 4.0	1988 2.9	1988 10.3
Italy	1993 2.9	1988 4.2	1993 2.9	1994 4.1	1994 12.2
Japan	1994 3.3	1988 5.6	— —	1993 4.5	1994 6.6
Netherlands	1994 4.7	— —	1994 7.8	1994 7.3	1994 10.4
New Zealand	1995 2.8	1988 3.6	1991 2.1	1994 1.4	1994 11.5
Norway	1995 5.6	1988 4.8	1995 2.3	1995 7.4	1995 12.2
Singapore	— —	— —	— —	— —	— —
Spain	1994 2.9	1988 4.0	1994 1.6	1994 7.3	1994 11.9
Sweden	1992 5.1	1988 2.1	1995 2.1	1992 5.3	1992 12.3
Switzerland	1994 3.3	— —	1994 4.7	1994 7.2	1994 12.5
UK	1994 0.7	1988 2.0	1994 0.3	1994 2.9	1994 4.7
USA	1994 4.5	1988 5.8	1994 2.5	1994 4.5	1994 13.3

Sources: OECD 1997; The International Clearinghouse for Birth Defects Monitoring Systems 1991.

- Congenital malformations are abnormalities that are recognised at, or are present since, birth. These include conditions which are genetic or caused by environmental factors. Congenital malformations are a significant public health problem since they are relatively common, frequently lead to disabilities and handicaps, and are a major reason for hospitalisation in infancy and childhood.
- In Australia, 1.6% of infants born in 1994 had a major congenital malformation (Lancaster et al. 1997). These malformations include spina bifida, hydrocephaly (a malformation due to obstruction of the cerebrospinal fluid pathways and often accompanied by enlargement of the head), transposition of great vessels (a congenital heart defect), limb reduction defects (characterised by the absence of limb skeletal structures) and Down syndrome.
- Prenatal screening by ultrasound or amniocentesis has increased the likelihood of detecting congenital malformations before birth. Termination of pregnancy following the diagnosis of a congenital malformation is increasing, resulting in a decreased recorded incidence of some malformations.
- The most common indication for terminations include Down syndrome, other chromosomal anomalies, and neural tube defects such as anencephalus and spina bifida. There is an increased risk of malformation for mothers aged 40 years and over.
- In 1992, Australian rates of several important congenital malformations, including spina bifida and Down syndrome, ranked in the top half of rates for developed countries (Figures 1 and 2). Ireland and the Netherlands had higher reported rates, and the United Kingdom had lower reported rates. Rates in different countries, however, are partially determined by the availability, access and use of screening technologies.
- The reported incidence of congenital malformations has increased in Australia since the mid-1980s. This is due in part to increased and improved detection by new birth defect registers in some States and Territories (Abraham, d'Espaignet & Stevenson 1995).

For more information, see:

Lancaster P et al. 1997. Congenital malformations Australia, 1993 and 1994. Sydney: AIHW National Perinatal Statistics Unit.

The International Clearinghouse for Birth Defects Monitoring Systems 1991. Congenital malformations worldwide. Amsterdam: Elsevier.