

The Health of Canada's Children: A CICH Profile

LOW BIRTH WEIGHT

The *Health of Canada's Children: A CICH Profile, 3rd Edition*, is based on a comprehensive review of national and provincial data sources and extensive consultations with experts from many fields. The *CICH Profile* contains ten chapters and 398 charts pertaining to the health and well-being of children and youth. It provides a relevant and clear picture of children today, and gives some direction for assisting them as they explore their futures.

Definitions:

- Infants weighing less than 2,500 grams at birth are considered to be low birth weight. Low birth weight can be the result of preterm birth or restricted intrauterine growth. Infants who have experienced restricted intrauterine growth are referred to as small for their gestational age (SGA).

Trends:

- The rate of low birth weight decreased slightly between 1970 and 1990. Between 1990 and 1995, there was a slight increase in the rate from 5.4% to 5.7%. Overall, the rate of low birth weight has been quite stable over time.
- In 1995, as in previous years, the low birth weight rate was slightly higher for females (6.1%) than for males (5.3%). A total of 6,925 female infants and 6,305 male infants were born with a low birth weight in 1995.
- The rate of preterm birth has risen somewhat since the mid-1980s (from 6.1% of live births in 1985 to 7.1% in 1997). Not all preterm births are low birth weight. Early preterm birth is especially associated with perinatal illness, neonatal death and long-term complications.
- There has been a very dramatic increase in the multiple birth rate. In 1976, the multiple birth rate was 936/100,000 birth events. In 1996, it was 2,469/100,000 birth events. The mean gestational age for multiple births was 36 weeks with approximately 51% of live births being preterm.
- Canada's low birth weight rate has been consistently higher than Norway's rate and consistently lower than the rate in the United Kingdom and the United States.

Consequences:

- Low birth weight substantially contributes to perinatal illness and death. It is associated with a higher rate of long-term health problems, including disabilities such as cerebral palsy and learning difficulties.
- Hospitalization rates for low birth weight infants are much higher than those for infants who were not low birth weight. This difference persists as these children age. The rate of hospitalization for children five years of age is inversely related to their birth weight.

Associated factors:

- Some factors thought related to the recent increase in the preterm birth rate include higher numbers of multiple births from reproductive technology, medically indicated preterm birth for pregnancy complications and the use of ultrasound for estimating gestational age.
- Maternal age is a risk factor for birth weight. The rate goes up slightly but significantly for women aged 35 years and older.
- 17.5% of women consumed alcohol during their pregnancy. 2.5% of these women reported "binge" drinking (more than five drinks on one occasion). The consumption of alcohol during pregnancy is associated with low birth weight.
- Pregnant women who experience abuse are at elevated risk of having a low birth weight infant.
- Smoking and income level are significant factors for small for gestational age births. The rate of SGA for women who smoked during pregnancy was 12%-13% compared with 4% for non-smokers. Women with a low income had an SGA rate of 9% compared with 4% for women with a higher income.

What can be done:

- Prevention of low birth weight is a public health challenge because there is no clearly defined medical at-risk group, there are multiple risk factors, and the underlying causal mechanism responsible for preterm birth and restricted intrauterine growth are not well understood.
- For these reasons, a community-wide, sustained approach that focuses on health promotion may hold the greatest promise.
- New information is needed about the impact of low birth weight prevention programs. Process and outcome evaluation data are required to assess the effectiveness of different strategies and to guide future policy and program development.



For information about the sources of the data, please refer to *The Health of Canada's Children: A CICH Profile, 3rd Edition*. To order your copy of the *CICH Profile*, please contact:



Canadian Institute of Child Health
384 Bank Street, Suite 300
Ottawa, Ontario, K2P 1Y4
Tel: (613) 230-8838 Fax: (613) 230-6654
E-mail: cich@cich.ca Internet: www.cich.ca