

PHYSICAL HEALTH & WELL-BEING

INDICATOR #1 Low Birth Weight

DEFINITION

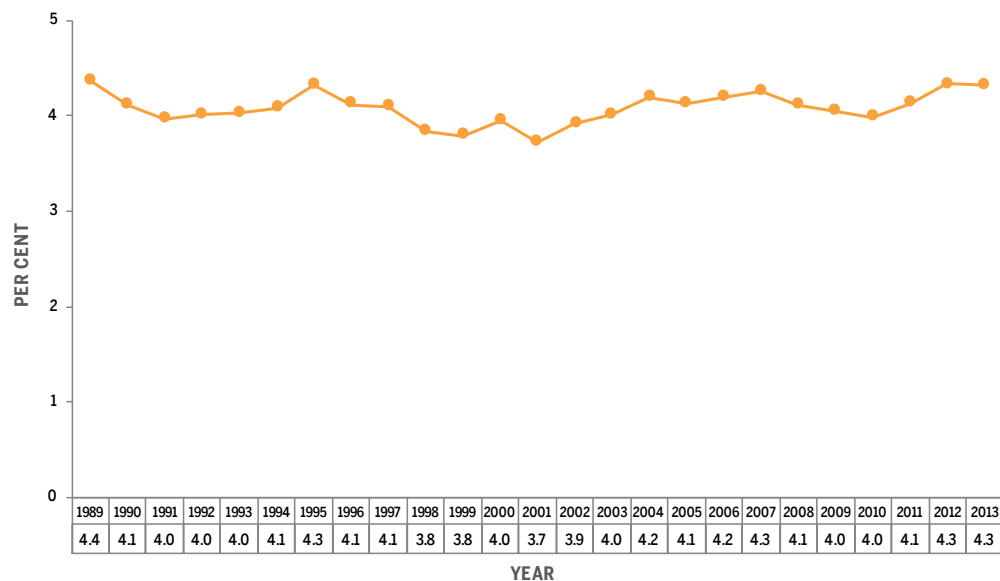
INDICATOR #1 — The proportion of singleton births, including preterm births, with a low birth weight (less than 2,500 grams).^{4,1}

KEY MESSAGES

- ▶ **Low birth weight (LBW)** is defined as singleton births weighing less than 2,500 grams and including preterm births. It is used around the world as an indicator of the health status of newborns and as a predictor of health and developmental outcomes in later life.² “**Singleton**” means one child was carried and born with the pregnancy.³ “**Preterm birth**” refers to an infant born before 37 weeks of pregnancy.⁴
- ▶ In Canada, the proportion of LBW babies increased slightly, from 5.7 per cent in 1994–98 to 6.0 per cent in 2004–08.⁵ LBW is associated with a high maternal age (35 years or older⁶), low maternal pre-pregnancy weight, smaller maternal stature, and other factors.^{1,7}
- ▶ Some modifiable predictors of LBW include low socio-economic status, poor maternal weight gain, smoking during pregnancy, consumption of alcohol and other drugs during pregnancy, overall maternal health, and experiencing abuse during pregnancy.⁷
- ▶ LBW births occur more frequently among vulnerable or disadvantaged subpopulations,⁸ which makes LBW an important marker of population health disparities (i.e., differences in the health status among sub-populations).
- ▶ As shown in Figure 1.1, overall, the percentage of LBW infants among singleton births in BC has been relatively stable over the last 25 years.
- ▶ **High birth weight (HBW)** is defined as singleton births weighing more than 4,000 grams. HBW is associated with lower socio-economic status, lower level of education, and other factors, and is an issue that needs to be considered as it has implications for healthy development among children and youth (e.g., weight issues, diabetes).^{9–11} HBW data are not presented here but will be considered in future updates and analyses.

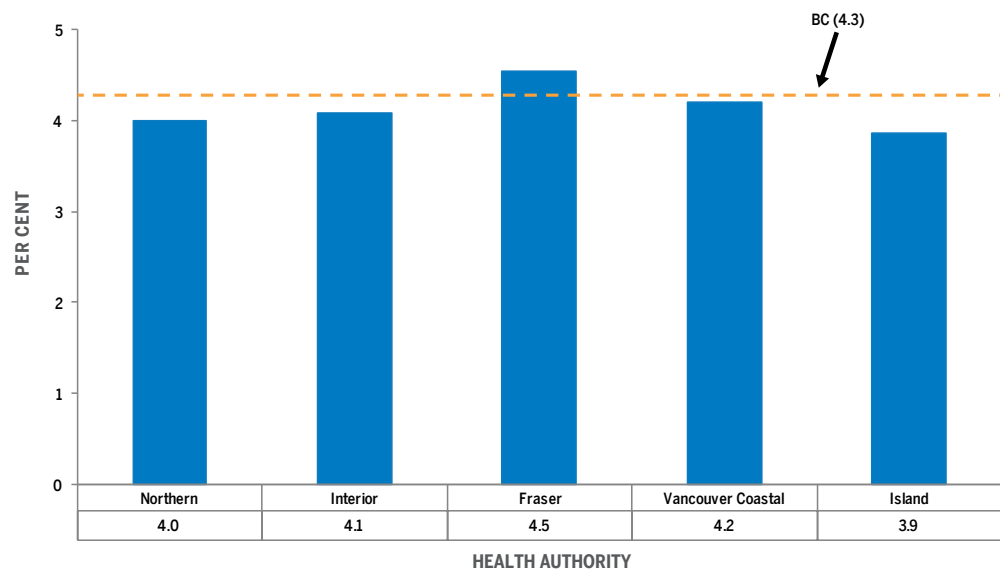
⁴It should be noted that the original indicator was only inclusive of term births; however, evidence shows that low birth weight has implications for babies’ health and well-being whether they were delivered at term or preterm.¹ As such, during the development of the current report the Advisory Committee revised the indicator to include all low birth weight singleton births (both term and preterm).

FIG 1.1 Percentage of Low Birth Weight Babies among Singleton Births, BC, 1989 to 2013



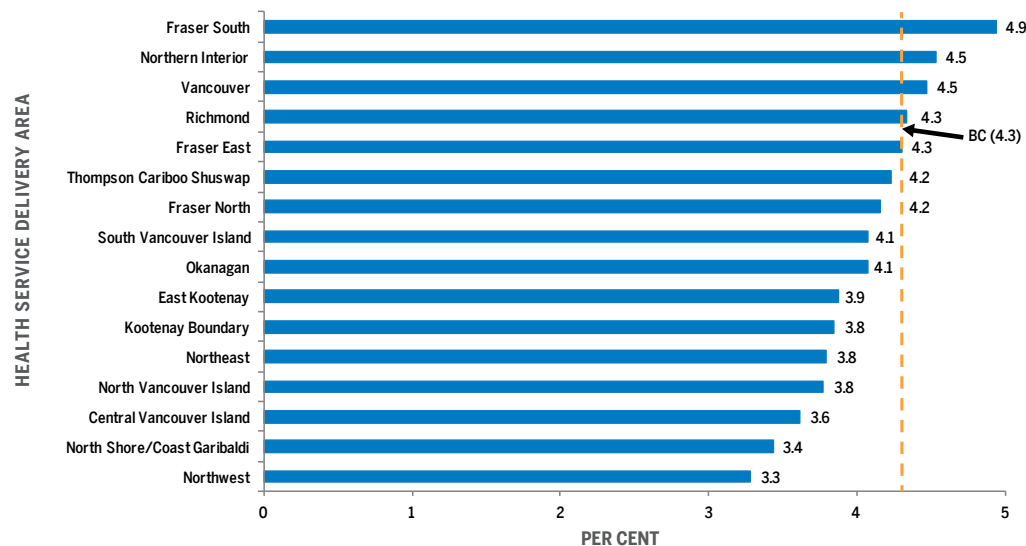
Notes: "Low birth weight" means live births of babies weighing less than 2,500 grams and includes preterm births (babies born before 37 weeks gestation). "Singleton" means one child carried and born. See Appendix B for more information about this data source.
Source: BC Vital Statistics Agency, 1989 to 2013 data. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

FIG 1.2 Percentage of Low Birth Weight Babies among Singleton Births, by Health Authority, BC, 2011-2013



Notes: "Low birth weight" means live births of babies weighing less than 2,500 grams and includes preterm births (babies born before 37 weeks gestation). "Singleton" means one child carried and born. Health authority is based on the residence of the mother. See Appendix B for more information about this data source.
Source: BC Vital Statistics Agency, 2011-2013 data. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

FIG 1.3 Percentage of Low Birth Weight Babies among Singleton Births, by Health Service Delivery Area, BC, 2011-2013



Notes: "Low birth weight" means live births of babies weighing less than 2,500 grams and includes preterm births (babies born before 37 weeks gestation). "Singleton" means one child carried and born. Health service delivery area is based on the residence of the mother. See Appendix B for more information about this data source.

Source: BC Vital Statistics Agency, 2011-2013 data. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

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- ⁵ Statistics Canada. Table 102-0701 Low birth weight babies (500 to less than 2,500 grams), by sex, five-year average, Canada and Inuit regions, every 5 years (table). CANSIM (database). Ottawa, ON: Statistics Canada; [modified 2012 Dec 10; cited 2016 Jun 28]. Available from: <http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=1020701>.
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- ⁸ H. Krueger & Associates. Child and youth health and well-being indicators project: appendix F – physical health and well-being evidence review [prepared for the Office of the Provincial Health Officer and the Canadian Institute for Health Information]. Ottawa, ON: Canadian Institute for Health Information; 2011.
- ⁹ Harder T, Roepke K, Diller N, Stechling Y, Dudenhausen JW, Plagemann A. Birth weight, early weight gain, and subsequent risk of type 1 diabetes: systematic review and meta-analysis. Am J Epidemiol. 2009 Jun 15;169(12):1428-36.
- ¹⁰ Oldroyd J, Renzaho A, Skouteris H. Low and high birth weight as risk factors for obesity among 4 to 5-year-old Australian children: does gender matter? Eur J Pediatr. 2011 Jul;170(7):899-906.
- ¹¹ Hemachandra AH1, Howards PP, Furth SL, Klebanoff MA. Birth weight, postnatal growth, and risk for high blood pressure at 7 years of age: results from the Collaborative Perinatal Project. Pediatrics. 2007 Jun;119(6):e1264-70.