

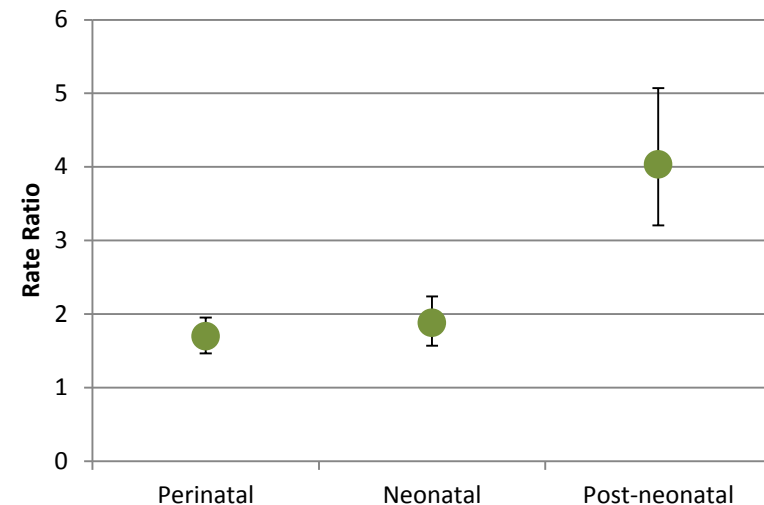
## Different types of Infant Mortality in First Nations in Alberta

### Rate ratios comparing First Nations and non-First Nations infant mortality rates by type, Alberta, 2011 to 2017

Infant mortality is an important indicator of population health. In a previous edition of *First Nations – Health Trends Alberta* we presented overall infant mortality rates (deaths under one year of age per 1,000 births). While infant mortality is associated with a number of factors such as socio-environmental conditions, the age of death provides insights into the relative influence of contributing factors.

Perinatal mortality is the number of stillbirths and deaths in the first week of life per 1,000 total births. Neonatal mortality is defined as the number of deaths in the first 27 days following birth per 1,000 live births. Both types of infant mortality are heavily influenced by factors such as maternal health.<sup>1</sup> Alternatively, post-neonatal mortality occurs a little later in an infant's life. It is the number of deaths in infants aged 28 to 364 days per 1,000 live births and may be relatively more influenced by environmental factors that lead to outcomes such as Sudden Infant Death Syndrome (SIDS) or fatal injury.

Here,<sup>3</sup> we investigate disparities across different types of infant mortality by estimating rate ratios that compare the rates of death in First Nations to the rates in non-First Nations infants. The value of this rate ratio describes the number of times higher rates are in First Nations compared to non-First Nations.



### Post-neonatal mortality rate for First Nations infants is 4 times higher than for non-First Nations

In 2011-2017, the annual average number of perinatal deaths in Alberta was 298 (30 in First Nations). The rate of perinatal mortality for First Nations over this time period was 1.7 times higher compared to the rate for non-First Nations (rates 8.9 and 5.3 per 1,000, respectively). A similar disparity was noted for neonatal mortality with the rate for First Nations in 2011-2017 at 5.9 per 1,000 compared to 3.1 per 1,000 for non-First Nations, corresponding to a rate ratio of 1.9 (average annual number of neonatal deaths: 19 in First Nations, 158 in non-First Nations). While perinatal and neonatal mortality rate ratios were similar, the disparity between First Nations and non-First Nations post-neonatal rates of death was 4.0 times higher in First Nations compared to non-First Nations (4.0 and 1.0 per 1,000, respectively). This was based on a relatively fewer number of deaths with an average annual total of 32 (13 in First Nations).

<sup>1</sup> World Health Organization. Neonatal and perinatal mortality: country, regional and global estimates. 2006. Available: [http://apps.who.int/iris/bitstream/handle/10665/43444/9241563206\\_eng.pdf?sequence=1](http://apps.who.int/iris/bitstream/handle/10665/43444/9241563206_eng.pdf?sequence=1)

<sup>3</sup> This is the 28<sup>th</sup> in a series of First Nations-specific Health Trends compiled in collaboration by Alberta Health and the Alberta First Nations Information Governance Centre (AFNIGC). To suggest future topics, please contact the AFNIGC ([communications@afnigc.ca](mailto:communications@afnigc.ca); 403-539-5775).