## Infant Mortality Summary 2019 to 2021

Three-Year Review of Infant Deaths in the Island Health Region

**Infant Mortality Review Committee** 

## **Summary**

This summary provides a high-level overview of infant deaths that occurred between 2019 and 2021 in Island Health. More fulsome information on infant deaths during this time period can be found in the 2020-2022 infant mortality report which includes data on the 2019-2021 reporting period.

Island Health's Infant Mortality Review Committee (IMRC) has been reviewing infant deaths since its inception in 2007 when findings revealed higher rates of infant mortality in the Health Authority than the rest of the province. We acknowledge, ongoing colonial practices have resulted in racism, intergenerational trauma and significant harm to Indigenous peoples through mass relocation of land, loss of culture and language and the creation of the residential school systems. These practices have affected the burden of poverty, lack of housing, lack of education and poor access to healthcare services in Indigenous communities<sup>1</sup>. These factors increase the likelihood of infant death and poor social determinants of health are directly associated with disparities between the infant mortality rate between Indigenous and non-Indigenous infants. One of the main goals of the IMRC is to strive to eliminate the disparity of Indigenous infant deaths to non-Indigenous infant deaths. The role of the committee is to analyze data and to try to determine the reasons for these high infant death rates, and develop recommendations and monitor activities to reduce infant mortality in Island Health.

From 2019 to 2021, there were 63 infant deaths in Island Health that met the IMRC review criteria: a rate of 3.5 infant deaths per 1,000 live births. This represents a decrease from the 2018-2020 period where there was 68 deaths and a rate of 3.8 per 1,000 live births. Caution should be exercised when interpreting this data as small increases or decreases may indicate random variation rather than a significant change in rates.

Previously, IMRC summarized the cause of death into four main classifications: extreme prematurity, sudden unexplained death in infancy (SUDI), congenital anomalies and unknown or other. From 2020 onwards, the cause of death classification is now summarized into five classifications: prematurity, sleep related, congenital anomalies, infection and undetermined/unknown/other. This reclassification provides greater clarity on categories of causes of death and allows for easier reporting on trends over time related to those categories.

Similar to the 2018 to 2020 reporting period, prematurity in the 2019 to 2021 period remained the leading cause of death among infants. During 2019 to 2021, 47.6% (30) of infant deaths were attributed to prematurity cause of death. The mechanism of premature delivery of a high-risk infant varied and included premature rupture of membranes (PROM), acute chorioamnionitis, infant affected by prolapsed cord, placental separation and incompetent cervix. Cause of death included complications

<sup>&</sup>lt;sup>1</sup> Public Health Agency of Canada. Key Health Inequalities in Canada: A National Portrait. Ottawa: Public Health Agency of Canada; 2018

related to prematurity such as cardiac failure, perinatal asphyxia, septic shock, acute bronchopneumonia, intracranial hemorrhage, and respiratory failure.

Congenital anomalies cause of death were listed as the cause of death in 24% (15) of infant deaths from 2019-2021. The anomalies included: trisomy 22, trisomy 13, lethal congenital contracture syndrome 7/hypomyelinating neuropathy, and cardiomyopathy.

Sleep-related classification cause of death contributed to 6.3% (4) of infant deaths in 2019 to 2021, with all but one of the infant deaths occurring in the post neonatal period (28-364 days). Two of these infants were born at term. In all cases, potential sleep practice factors – sleep surfaces, sleep environments and sleep positions – were identified as potential contributors, and in many of the cases broader social complexities were also noted.

Infection cause of death was listed as the reported cause of death for 1.5% of infant deaths in 2019 to 2021. Infection cause of death refers to the primary infectious disease that directly leads to the infant's death. This could include various types of bacterial, viral, or fungal infections and infectious processes such as sepsis, pneumonia, meningitis etc. There were no infant deaths attributed to COVID-19 during this reporting period.

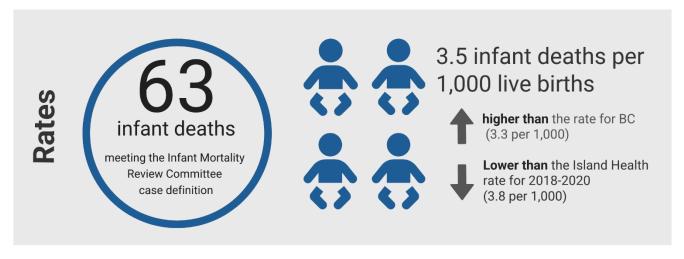
Twenty percent (13) of infant deaths were undetermined/unknown or due to other complications in 2019 to 2021. Examples of complications included cardiac arrest, respiratory failure, necrotic small bowel encephalopathy, ischemic brain injury and several cases with ill-defined and unspecified causes of mortality.

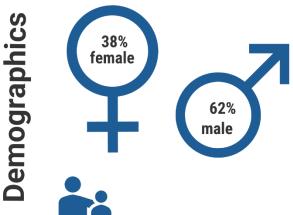
There were no infant deaths attributed to COVID-19 during 2019-2021.

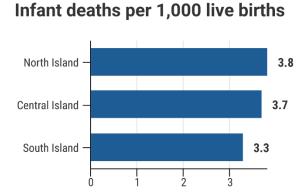


## Island Health Infant Mortality

2019-2021









of infant deaths had a cause of death related to prematurity



10%

of infant deaths had a sleep related risk factor reported



**27%** 

of infant deaths occurred in the post neonatal period



**78%** 

of infants were born prematurely; of which 67% were born extremely preterm