CONGENITAL ANOMALIES IN CANADA’S NORTHERN TERRITORIES

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Objectives: There is little information regarding congenital anomalies in Canada’s circumpolar regions compared to southern Canada. Discovering this information is a critical first step to help direct clinical and public health resources. The birth prevalence of specific significant congenital anomalies also allows for the development of public health prevention strategies.

Methods: Data for the first 30 days of life was gathered by the Canadian Institute of Health Information (CIHI) from discharge abstracts from 2000-2005. That information was compiled into congenital anomaly categories for each province/territory as per the Canadian Congenital Anomalies Surveillance System. Totals and categories were compared per territory to those of the rest of Canada using odds ratios (OR) and 95% confidence intervals (CI). Socioeconomic indicators were gathered from Statistics Canada.

Results: Total anomalies in Canada, Yukon, NWT and Nunavut per 1000 births respectively are: 66, 57, 59, and 90. Only Nunavut had a significantly higher total rate than the rest of Canada (OR 1.4; 95% CI 1.2-1.6). Rates of congenital anomalies in Yukon and Northwest Territories were not significantly higher in any category when compared to the rest of Canada. However, congenital heart defects in Nunavut were increased with an OR of 2.59 (95% CI 2.2-3.3). Socio-economic indicators such as infant mortality, low income and expenditures on food reflected the same trends as seen for congenital anomalies.

Conclusions: Birth defects collected in the first 30 days of life are an underestimate of the true impact since many birth defects are not detected until later. Although congenital heart defects are multifactorial (genetic and environmental), the socioeconomic indicators and congenital anomalies distributions are strikingly similar. The development of maternal child health surveillance systems will provide more specific information on potentially preventable causes of congenital heart defects.

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