

Prevalence estimates of Cerebral Palsy among 4-year-old children living Manitoba, Births: 2013-2015

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INTRODUCTION

Cerebral palsy (CP) is the most common physical disability in children with an estimated prevalence of 2.1 per 1000 live births. Understanding the provincial prevalence of CP and describing clinical sub-types within Manitoba assists with planning future funding and ensuring adequate resources.

AIMS

This study aimed to determine the prevalence estimate of CP among 4-year-old children in Manitoba, and further describe children's clinical presentation.



METHODS

As the Rehabilitation Centre for Children (RCC) is a referral site for all Manitoba children requiring multidisciplinary evaluation/treatment for CP, this retrospective study used RCC's electronic medical records to identify all 4-year-old children who had a confirmed CP diagnosis, were living in Manitoba and were born between Jan 2013 to Dec 2015.

To ensure provincial data was complete, information was cross referenced with the Pediatric Neurology Clinic's medical records and the Neonatal Follow-up database. Prevalence rate was determined using Government of Manitoba denominators of same age children.

The Gross Motor Function Classification system (GMFCS) determined the child's level of functioning

RESULTS

The prevalence of CP in Manitoba (birth years 2013-2015) for 108 4-year-old-children is 2.05 (95% CI 1.7, 2.5) per 1000 4-year-old children.

Of the 108 4-year-old children with CP, 6 (5.6%) had a post neonatal cause, while 102 (94.4%) had a perinatal cause; and 51/108 (47%) were born preterm.

Motor subtypes for 108 children are:

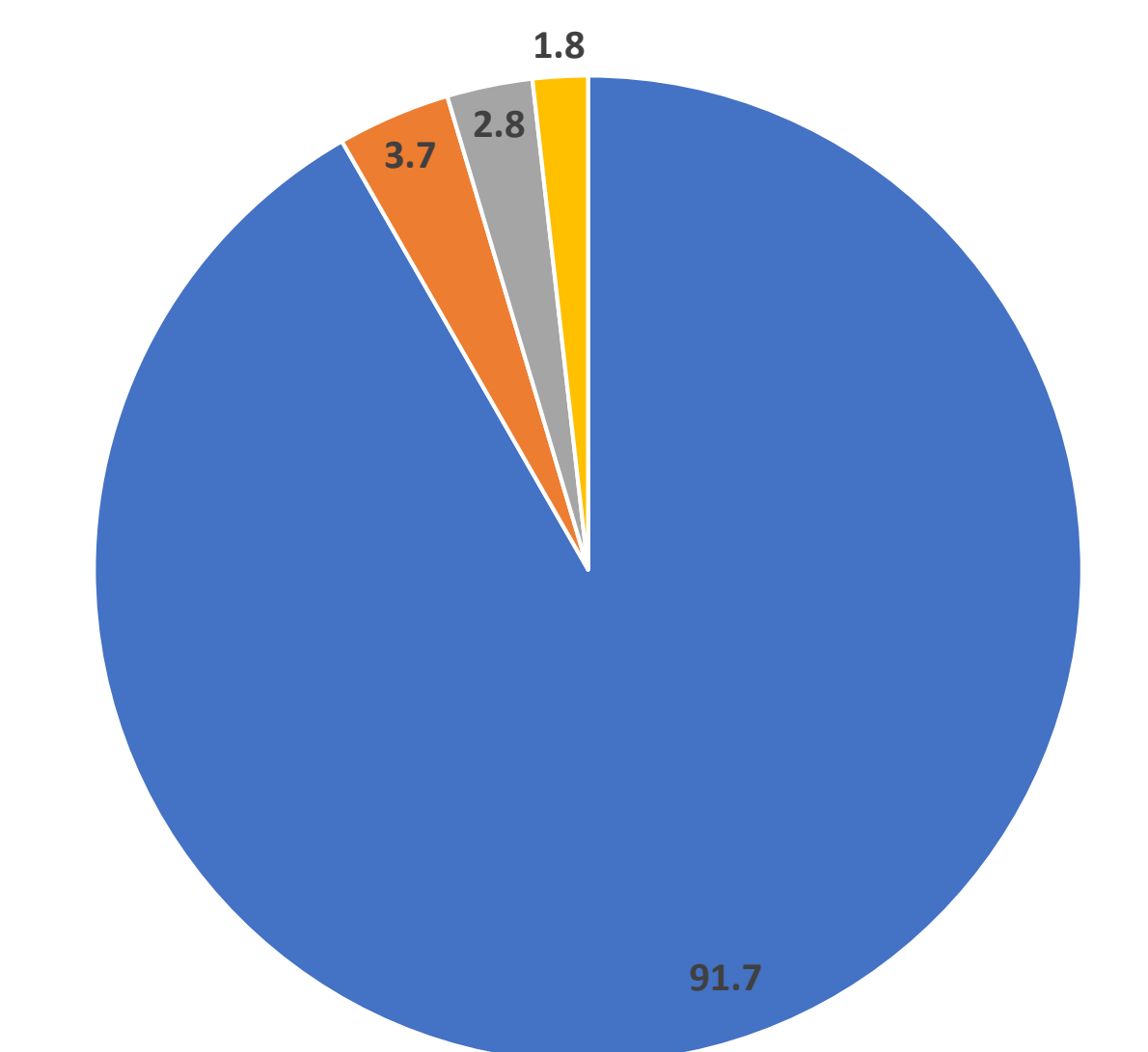
Spastic 99 (91.7%) including hemiplegia 41.4%, diplegia 21.2%, triplegia 8.1%, and quadriplegia 29.3%;

Dyskinetic 4 (3.7%);

Ataxic 3 (2.8%)

Hypotonic 2 (1.8%).

58/108 (54%) were independent ambulators (GMFCS level II/II).



■ Spastic ■ Dyskinetic
■ Ataxic ■ Hypotonia

CONCLUSION

Our provincial rate of CP is consistent with the prevalence reported in developed countries. Understanding the clinical presentation assists in informing treatment and resources for children with CP in our province.