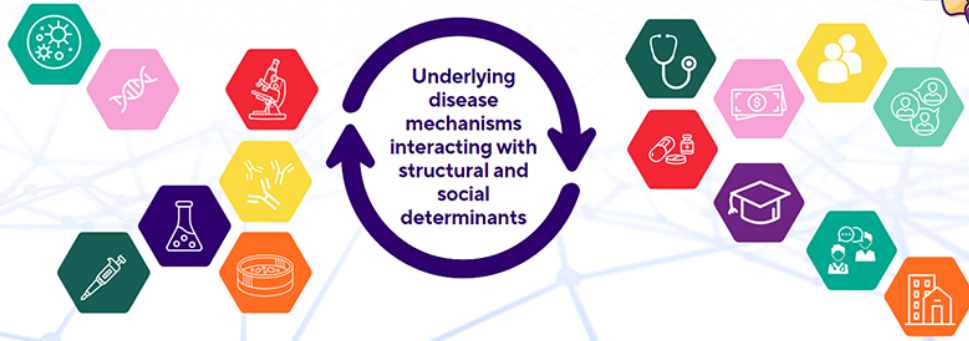




19TH ANNUAL CHILD HEALTH RESEARCH DAYS  
**Outcomes in Child Health**



October 25 + 26, 2023 | RBC Convention Centre, Winnipeg, Manitoba

Abstract Submission Form

## CHR D 2023: Abstract Submission Form

### Submitter Name

Ava Nykiforuk

### Presenter Name

Ava Nykiforuk

### Presenter Status

Undergraduate Students

### Research Category

Clinical

### Role in the project

Design  
Analyze Data  
Write Abstract

### Title

Grade 12 School Performance of Children Born Preterm: A Retrospective Canadian Cohort Study

### Background

Children born preterm are prone to educational challenges during their school years. However, data on their high school performance is scant.

### Objective

Examine the association between preterm birth and grade 12 school performance in a population-based cohort of children.

### Methods

In this retrospective cohort study, we built population-based cohorts of children as well as their term sibling cohorts born between 1986-2002 whose grade 12 school performance data was available in the provincial database. Using logistic regression models, we found Grade 12 graduation rates defined as completing a total of 30 course credits in grade 9-12 and finishing high school within 5 years of joining grade 9. Secondary outcomes include passing mathematics and language arts tests in grade 12, the need for school assistance and grade repetition in grades 8-12.

### Results

Of 260,561 eligible children, 9846 preterm and 162,660 term children were included in the population cohort. Grade 12 graduation rates were similar between preterm and term children (<28 wks-84%, 28-33 wks-83%, 34-36 wks-83% and term-84%). In the population-based regression model, preterm birth was not associated with grade 12 graduation (<28 wks aOR: 1.10; 95% CI: 0.76-1.61; 28-33 wks aOR: 0.94; 95%

CI: 0.82-1.08; 34-36 wks aOR: 1.03; 95% CI: 0.96-1.11). Similarly, the rates of passing math tests were similar (77%, 75%, 75% vs. 76% for term) while the rates of passing language test were lower among <28 wks and 28-33 wks neonates (76%, 86% vs. 88% each for 34-36 weeks and term). In the sibling cohort, 83%, 79%, 82% of preterm children had high school graduation compared to 80% of term children (<34 wks aOR: 1.36; 1.03-1.79; 34-36 wks aOR: 1.18; 95% CI: 1.01-1.37).

### Conclusion

Preterm birth was not associated with high school graduation in this population-based cohort. Preterm children caught up with the term peers by the time of their high school completion.

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