

EDI Over Time Report

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Prince Edward Island

A snapshot of children's developmental health at school entry



Critical Difference

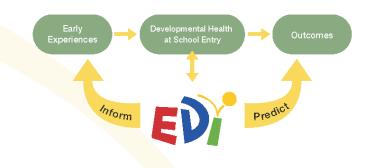
Vulnerability: Prince Edward Island



About the EDI in Prince Edward Island

The EDI began in Prince Edward Island in 2008 with the Understanding the Early Years (UEY), a national initiative aimed at strengthening communities' ability to use research to make decisions to help children thrive. Since then, the EDI has been collected province-wide in 2019 and 2023.

For the purpose of this report, data from EDI collections in Prince Edward Island (2018/2019), Newfoundland and Labrador (2018/2019), and Nova Scotia (2019/2020) were compiled to create the Atlantic comparison group. These data are used to establish the 10th percentile cut-offs used to calculate vulnerability. This allows all future collections to be comparable to understand how children's development is changing across Prince Edward Island.



Thanks to all of our partners for their hard work and commitment to the EDI. A very special thanks to all of the teachers who have committed their time and energy to filling out EDI questionnaires over the years. Without you, none of this would have been possible. All analyses in this report include children that are in Kindergarten, have not been identified by teachers as having special needs, have been in class for more than one month and have a minimum number of items completed on the EDI questionnaire.

Why look at EDI data over time?

The information collected through the EDI helps us to understand the state of children's developmental health by connecting the conditions of early childhood experiences to learning outcomes and future successes.

Examining how children are doing over time is important for mobilizing stakeholders towards change. Focusing on strengthening the areas in which children are vulnerable allows schools, communities, and governments to make decisions on how to best support early development. Investigating how children's developmental health is changing over time can also allow for evaluation and strategic planning around what is currently being done to support children and their families.

We hope the Prince Edward Island EDI Over Time Report will assist you in your invaluable work in the early years sector, aid in informing planning and resource allocation, but most of all, help to build, strengthen, and enhance your connections with community partners.

Prince Edward Island

	2008	2019	2023
Children included in this report	1059	1352	1320
	Number	Number	Number
	(%)	(%)	(%)
Girls	525	674	643
	49.6%	49.9%	48.7%
Boys	534	678	677
	50.4%	50.1%	51.3%
Child considered EAL or	47	281	236
FAL	4.4%	20.8%	17.9%
Children requiring further	73	194	238
assessment	6.9%	14.3%	18.0%
Average age (in years)	5.9	5.7	5.6
Average days absent	2.3	4.9	7.5





percentile for vulnerability because it captures all the children who are struggling, even those whose struggles may not be apparent.

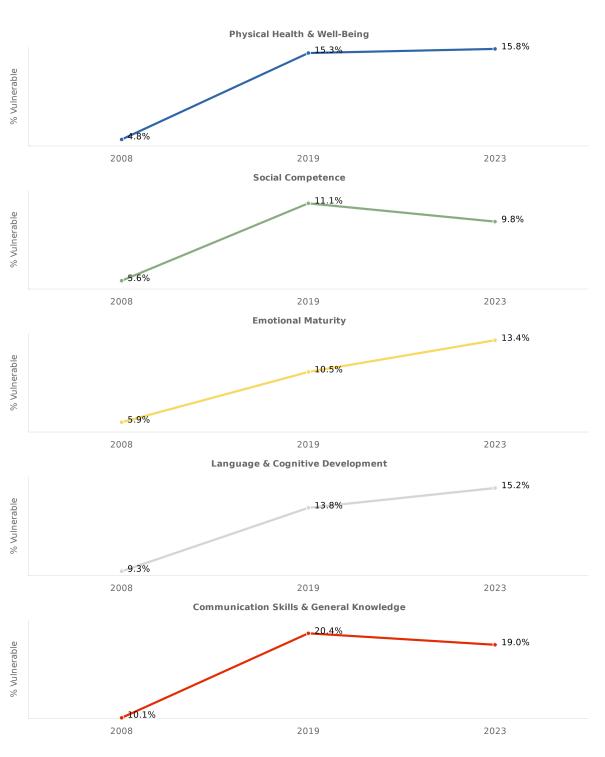
Research linking EDI findings to later educational data demonstrate that, on average, Primary vulnerability predicts ongoing vulnerability in the school system. Numerous studies have shown that early vulnerability predicts a child's lifelong health, learning, and behaviour.





Vulnerable Children - Prince Edward Island

Below are graphs of the percentages of children vulnerable in each domain, and of children vulnerable in one or more, or two or more domains in all of Prince Edward Island.



The EDI uses the 10th percentile for vulnerability because it captures all the children who are struggling, even those whose struggles may not be apparent.

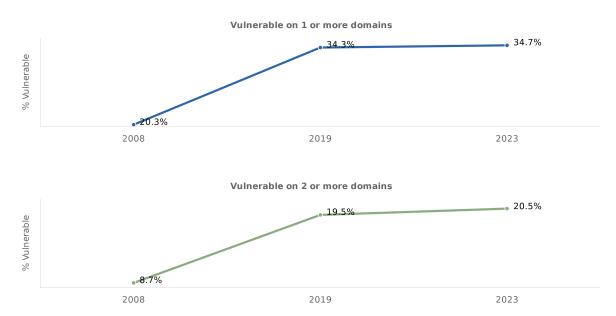
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Vulnerable Children - Prince Edward Island

The graphs below illustrate the percentage of children vulnerable on at least one and at least two domains.



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For more information on critical difference please view HELP's webinar for communities looking to better understand critical difference

youtu.be/pEG8YWmco

How do we know if children's developmental health is changing over time?

When exploring trends in children's development over time, what we want to know is whether children are doing better, worse, or about the same as in the past. Although the vulnerability rate in an area may have changed over time, we want to know whether or not that change is large enough to be meaningful. If we establish that a change in vulnerability rate is meaningful, that means that we are confident that it is real, rather than a result of uncertainty due to sampling or measurement issues.

Our colleagues from the Human Early Learning Partnership (HELP) at the University of British Columbia developed a method to help communities and stakeholders make informed judgements about meaningful change in EDI vulnerability over time. The method is called critical difference.

Critical difference is the amount of change over two time points in an area's EDI vulnerability rate that is large enough to be statistically meaningful.

How to use critical difference: An example

Neighbourhood 'A' has a vulnerability rate on 'one or more domains' of 26% in Time II, based on scores for 63 children. In Time I, the vulnerability rate was 34%, based on scores for 52 children. This means vulnerability has dropped 8 percentage points.

To find out whether this is big enough to be meaningful we must calculate the critical difference percentage for our population size (see next page for your site's calculations). The critical difference for 63 children is 9 percentage points in Time II; the critical difference for 52 children is 10 percentage points in Time I. The average critical difference between both cycles is 9.5 percentage points.

Since the average critical difference is larger than the observed drop in vulnerability of 8 percentage points (34% to 26%), the vulnerability rate has not changed enough to be considered a meaningful difference.





Time II 26% (63 children)

> Critical difference value: 9

Time I 34% (52 children)

Average: 9.5

Critical difference value: 10 Change in EDI vulnerability from Time I to Time II:

Average critical

meaningful)

difference value:

(amount of change

needed to be considered





A comparison of 2019 vs. 2023 data is provided for your site.

Note: Research on critical difference values has not been produced for Vulnerable on 2 or more domains, which is why it is not included in the tables.

*denotes a meaningful difference in vulnerability between cycles. **Prince Edward Island - Vulnerability**

	2019		2023	
	Number of Children	% Vulnerable	Number of Children	% Vulnerable
Physical Health & Well-Being	207	15.3%	208	15.8%
Social Competence	150	11.1%	129	9.8%
Emotional Maturity	142	10.5%	177	13.4%
Language & Cognitive Development	186	13.8%	201	15.2%
Communication Skills & General Knowledge	276	20.4%	251	19.0%
Vulnerable on at least ONE EDI domain	464	34.3%	458	34.7%

Critical Difference

This table provides the change in vulnerability from 2019 to 2023. An increase in vulnerability is represented by an upwards arrow, indicating there were more vulnerable children in 2023 than 2019. A decrease in vulnerability is represented by a downward arrow, indicating there were less vulnerable children in 2023 than 2019. Please note that less vulnerability is the more favourable outcome. The required critical difference value for meaningful change is provided as a reference

	2019 vs 2023			
	Change in Vulnerability	Increase / Decrease	Critical Difference Value	
Physical Health & Well-Being	0.4	Ť	1.9	
Social Competence	1.3*	t	1.3	
Emotional Maturity	2.9*	Ť	1.4	
Language & Cognitive Development	1.5*	Ť	1.2	
Communication Skills & General Knowledge	1.4	Ļ	1.6	
Vulnerable on at least ONE EDI domain	0.4	Ť	1.9	



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