



**THE QUEBEC SURVEY
OF CHILD DEVELOPMENT
IN KINDERGARTEN**

Estrie region

Findings for the Estrie Region

In the Estrie region served by the health and social services system (CIUSSS de l'Estrie – CHUS), **300 kindergarten teachers** completed the QSCDK questionnaire for **4628 children** in **144 schools**, between February and April 2017, yielding a **93%** response rate. The following table breaks down the proportions of vulnerable children by domain of child development (showing vulnerability in at least one domain).

Proportion of Vulnerable Children by Developmental Domain

Domain	ESTRIE			QUEBEC			ESTRIE (2017)	
	2012	2017	Change	2012	2017	Change	Boys	Girls
Physical health and well-being	9.8	11.4	Increase	9.5	10.6	Increase	14.2	8.4
Emotional maturity	10.1	13.3(+)	Increase	9.7	11.5	Increase	19.7(+)	6.3
Social skills	9.7	12.6(+)	Increase	9	10.2	Increase	17.3(+)	7.4(+)
Cognitive and language development	10.7	13.2(+)	Increase	10	11.1	Increase	16.3(+)	9.8
Communication skills and general knowledge	10	11.4	Increase	10.8	11.1	stable	15(+)	7.5
At least 1 domain	26.8	29.4(+)	Increase	25.6	27.7	Increase	37.4(+)	20.6

(+): Figure significantly higher than in the rest of Quebec (threshold of 0.05).

Increase: Significant difference between the two cycles (threshold of 0.05 for Estrie and 0.01 for Quebec)

In 2017, the population of kindergarten-aged children in Estrie was approximately **4960**, with **29.4%** of them—approximately 1500 children—demonstrating vulnerability in at least one domain of child development. This is higher than the provincial average. The children were particularly vulnerable in the following domains:

- **Emotional maturity (13.3%)**
- **Social skills (12.6%)**
- **Cognitive and language development (13.2%)**

The proportion of vulnerable children in all domains increased from 2012 to 2017. Moreover, there were more vulnerable boys than girls across the board. Out of the 1500 vulnerable children in Estrie, nearly 1000 were boys and only 500 were girls.



The Most Vulnerable Subgroups

In both the Estrie region and the province, the proportion of children vulnerable in at least one domain is greater in certain subgroups: boys, children under the age of 6 years, children who do not have French as their mother tongue, children born outside of Canada, children who live in underprivileged areas, and children who did not regularly attend day care before starting school.

Percentage of Children Vulnerable in at least One Domain (2017)

CHARACTERISTICS	ESTRIE			QUEBEC
	Total number of children	Number of vulnerable children	% of vulnerable children	% of vulnerable children
Population breakdown	4960	1460	29.4(+)	27.7
By sex				
Boys	2590	970	37.4(+)	35.0
Girls	2370	490	20.6	20.2
By age				
Under 6 years of age	2520	840	33.2	31.7
6 years or older	2430	620	25.4	23.5
By spoken languages				
At least French	4440	1200	27.1	25.6
English but not French	290	145	50.3(+)	36.8
Neither French nor English	230	110	46.1(+)	34.6
By place of birth				
Canada	4790	1370	28.6	27.3
Outside of Canada	180	90	52.4(+)	33.6
According to physical and social deprivation				
Privileged	1350	300	22.5	22.9
Average	2570	740	28.8	27.1
Underprivileged	1040	420	40.5(+)	34.6
Regular day-care attendance before starting school				
Yes	4200	1090	26	24.9
No	700	290	41.4	38.5



Some situations in the Estrie region are especially troubling. The differences are often greater in Estrie, as represented in the table above, than in the province as a whole. To illustrate, the rate of vulnerability is almost two times higher among English-speaking children in the Estrie region than those who have French as their mother tongue, while the provincial ratio is at 1:4. In addition, vulnerability increased from 2012 to 2017 amongst boys (from 33.7% to 37.4%) and amongst children living in underprivileged areas (33.8% to 40.5%).

(+): Figure significantly higher than in the rest of Quebec (threshold of 0.05).



Summary of the Survey

Early childhood is a pivotal period of development. Childhood experiences—both positive and negative—affect the development of motor, cognitive, social, and language skills. Studies have shown that vulnerability in kindergarten has been associated with difficulties in social adjustment and school success.¹ Indeed, nearly half of the vulnerable children in kindergarten will have lower-than-average school performance by the fourth grade.

The *Quebec Survey of Child Development in Kindergarten* (QSCDK),² carried out by the *Institut de la statistique du Québec* in 2012 and 2017 in all public and private French and English speaking schools in the province (excluding students who were handicapped or with adaptation/learning difficulties) provides a means of measuring the development of groups of children. As part of this study, teachers filled out a questionnaire consisting of 104 questions that had been validated and used in other provinces and countries for each of their students.³ It should be pointed out that this questionnaire was based on observable behaviours related to developmental norms and was not designed to evaluate the curriculum, nor teacher/school performance.

5 Domains Assessed

The questionnaire made it possible to assess the proportion of vulnerable children in the following five domains:

Domain	Topics of Interest
Physical health and well-being	General physical development, motor skills, diet and dress, cleanliness, punctuality, alertness
Social competence	Social skills, self-confidence, sense of responsibility, respect of peers, adults, rules, and routines, work habits and autonomy, curiosity
Emotional maturity	Prosocial behaviour and mutual help, fear and anxiety, aggressive behaviour, hyperactivity and inattention, expression of emotions
Cognitive and language development	Interest and skills in reading, writing, and mathematics; adequate language use
Communication skills and general knowledge	Ability to communicate so as to make themselves understood, capacity to understand others, clear articulation, general knowledge



It is important to keep in mind that children considered vulnerable in kindergarten may not demonstrate difficulties throughout their entire primary school pathway.

Children are considered vulnerable when their score in an area of development is equal to or lower than the threshold established in Quebec in 2012 (10th percentile of the distribution of results in the first cycle of the survey).

These children are:

- facing a challenge because their mastery of certain aptitudes or skills is lacking,
- less equipped to take full advantage of what school can offer, and
- more likely to experience difficulties in school.

Information and mobilization activities will also be provided throughout 2019.

References

- 1 SIMARD, Micha, Amélie LAVOIE and Nathalie AUDET (2018). *Enquête québécoise sur le développement des enfants à la maternelle 2017*. Québec, Institut de la statistique du Québec, 125 p.
- 2 Gouvernement du Québec. *Enquête québécoise sur le développement des enfants à la maternelle* <http://www.eqdem.stat.gouv.qc.ca/online>. [Consulted on January 15, 2019].
- 3 Instrument de mesure du développement de la petite enfance, © 2000, McMaster University, Hamilton, Ontario, Canada. http://www.eqdem.stat.gouv.qc.ca/enquete_2017/documentation/guide-imdpe-eqdem2017.pdf [online]. [Consulted on January 15, 2019].

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