

COGNITIVE DEVELOPMENT

INDICATOR #45 Communication Skills

DEFINITIONS

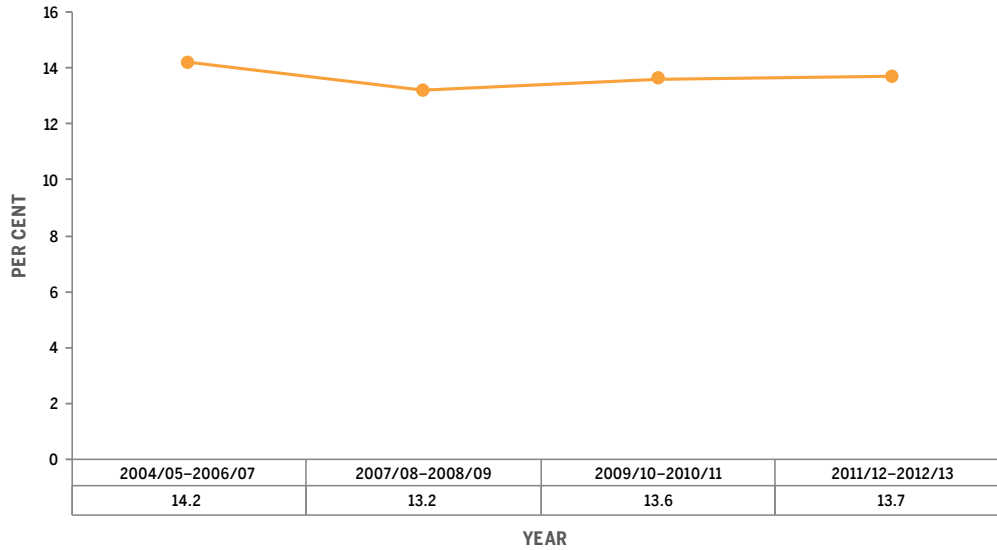
INDICATOR #45A — Percentage of BC kindergarten students (enrolled in public school) identified as “vulnerable” based on the Communication Skills and General Knowledge domain of the Early Development Instrument.

INDICATOR #45B — Percentage of BC kindergarten students (enrolled in public school) identified as “vulnerable” based on the Language and Cognitive Development domain of the Early Development Instrument.

KEY MESSAGES

- ▶ There is strong evidence that elementary school reading is of particular importance in ensuring children can engage in learning and also in predicting school success. General speech ability is a predictor of reading skills in early elementary school, and the level of pre-reading skills attained before kindergarten is an important driver of reading ability in school.¹⁻³
- ▶ Identification of children as “vulnerable” means they need additional support and care to avoid future challenges in school and society,⁴ as determined by their score on the Early Development Instrument (EDI).⁵ Children who are vulnerable within the Language and Cognitive Development domain of the EDI are more likely to score below expectations in reading, writing, and **numeracy** in grade 4. However, this relationship may vary depending on the language spoken by the child and whether English is their first language.⁶
- ▶ As shown in Figure 45A.1, the percentage of vulnerable children has remained relatively stable over the years shown in the EDI domain of Communication Skills and General Knowledge.
- ▶ As shown in Figure 45B.1, there has been a decline in the percentage of children identified as “vulnerable” in the domain of Language and Cognitive Development (from 11.3 per cent in 2004/05–2006/07, to 9.0 per cent in 2011/12–2012/13). This means that more children are entering their formal education prepared from a **literacy** and numeracy perspective. This suggests that the investment in early learning and literacy initiatives has had some positive effects.⁶

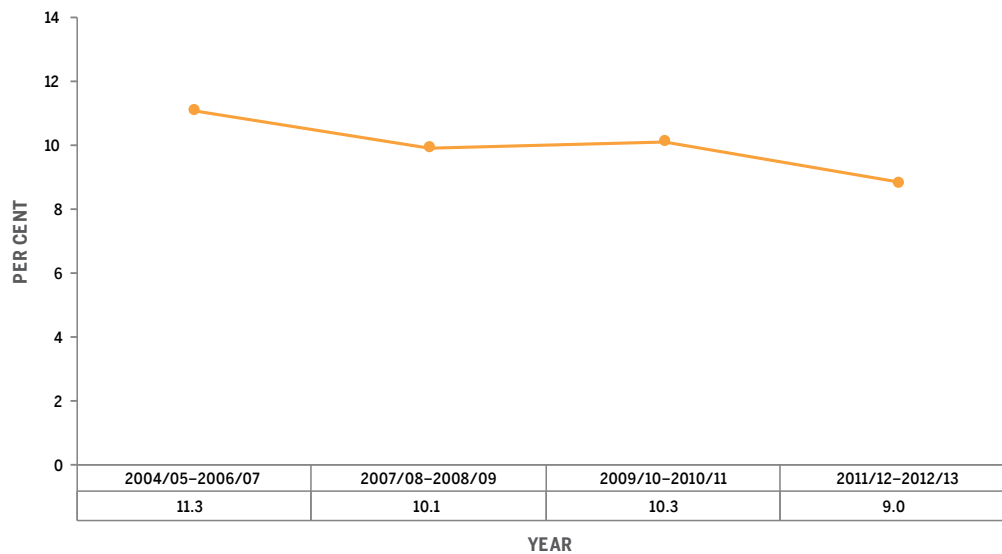
FIG 45A.1 Percentage of Kindergarten Children Vulnerable on the Communication Skills and General Knowledge Domain, BC, 2004/05-2006/07 to 2011/12-2012/13



Notes: "Vulnerable" means receiving a score below the cut-off on this domain of the Early Development Instrument. See Appendix B for more information about this data source.

Source: Human Early Learning Partnership, Early Development Instrument, 2004/05-2012/13. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

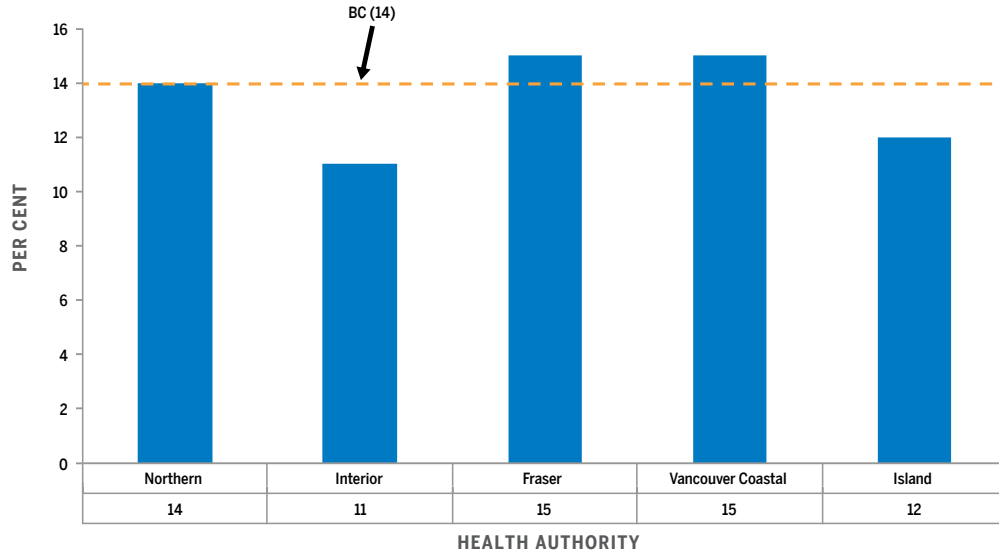
FIG 45B.1 Percentage of Kindergarten Children Vulnerable on the Language and Cognitive Development Domain, BC, 2004/05-2006/07 to 2011/12-2012/13



Notes: "Vulnerable" means receiving a score below the cut-off on this domain of the Early Development Instrument. See Appendix B for more information about this data source.

Source: Human Early Learning Partnership, Early Development Instrument, 2004/05-2012/13. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

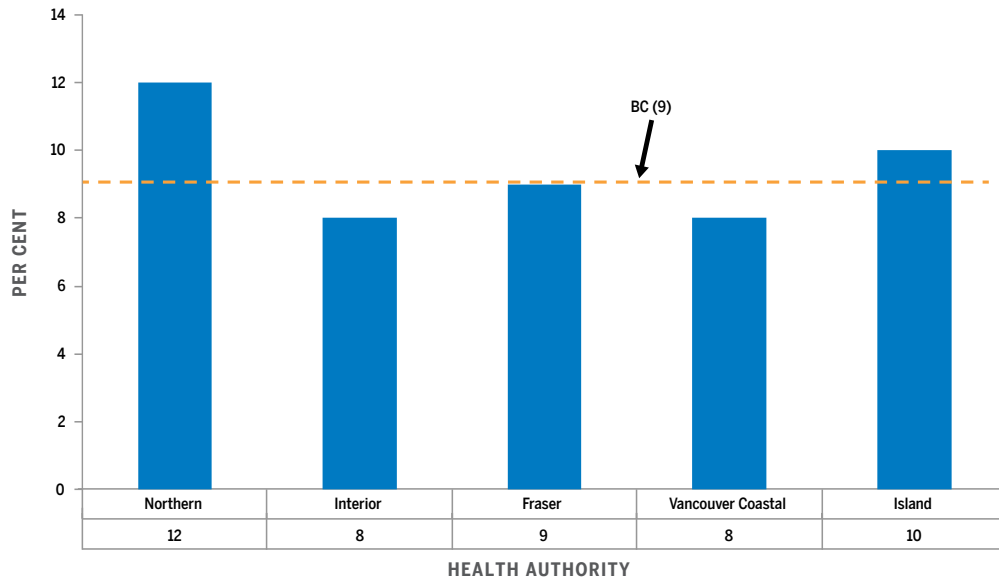
FIG 45A.2 Percentage of Kindergarten Children Vulnerable on the Communication Skills and General Knowledge Domain, by Health Authority, BC, 2011/12-2012/13



Notes: "Vulnerable" means receiving a score below the cut-off on this domain of the Early Development Instrument. Health authority is based on the residence of the child. See Appendix B for more information about this data source.

Source: Human Early Learning Partnership, Early Development Instrument, 2011/12-2012/13. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

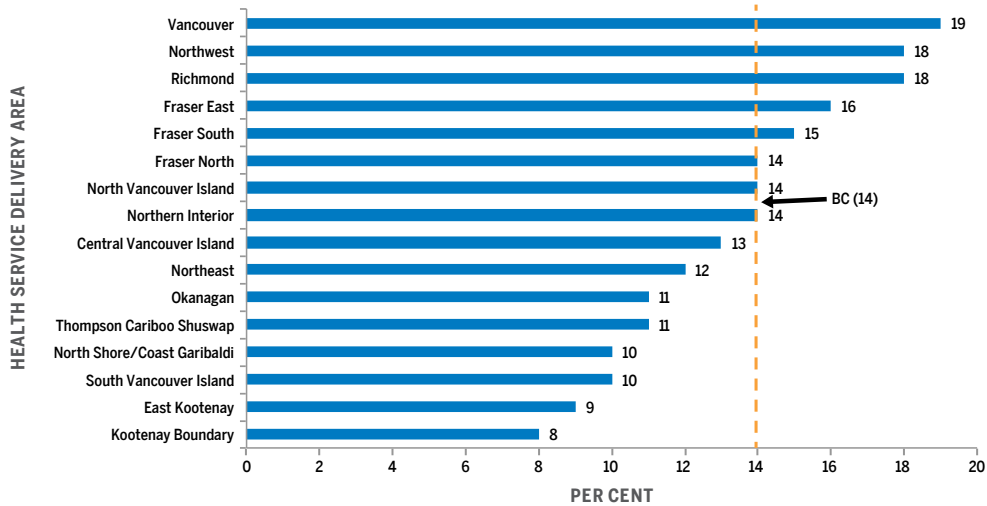
FIG 45B.2 Percentage of Kindergarten Children Vulnerable on the Language and Cognitive Development Domain, by Health Authority, BC, 2011/12-2012/13



Notes: "Vulnerable" means receiving a score below the cut-off on this domain of the Early Development Instrument. Health authority is based on the residence of the child. See Appendix B for more information about this data source.

Source: Human Early Learning Partnership, Early Development Instrument, 2011/12-2012/13. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

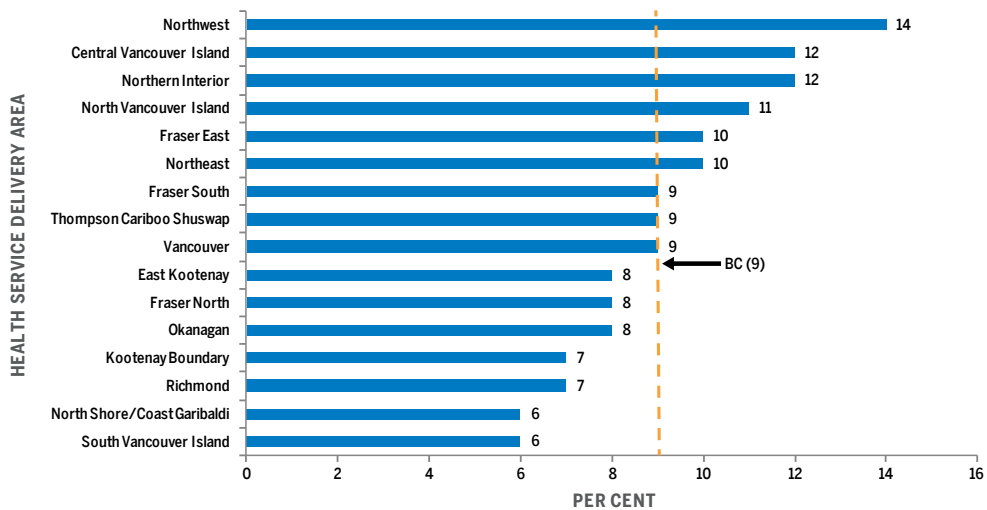
FIG 45A.3 Percentage of Kindergarten Children Vulnerable on the Communication Skills and General Knowledge Domain, by Health Service Delivery Area, BC, 2011/12-2012/13



Notes: "Vulnerable" means receiving a score below the cut-off on this domain of the Early Development Instrument. Health service delivery area is based on the residence of the child. See Appendix B for more information about this data source.

Source: Human Early Learning Partnership, Early Development Instrument, 2011/12-2012/13. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

FIG 45B.3 Percentage of Kindergarten Children Vulnerable on the Language and Cognitive Development Domain, by Health Service Delivery Area, BC, 2011/12-2012/13



Notes: "Vulnerable" means receiving a score below the cut-off on this domain of the Early Development Instrument. Health service delivery area is based on the residence of the child. See Appendix B for more information about this data source.

Source: Human Early Learning Partnership, Early Development Instrument, 2011/12-2012/13. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

REFERENCES

- ¹ Hayiou-Thomas ME, Harlaar N, Dale PS, Plomin R. Preschool speech, language skills, and reading at 7, 9, and 10 years: etiology of the relationship. *J Speech Lang Hear Res.* 2010 Apr;53(2):311-32.
- ² Kendeou P, van den Broek P, White MJ, Lynch JS. Predicting reading comprehension in early elementary school: the independent contributions of oral language and decoding skills. *J Educ Psychol.* 2009;101:765-78.
- ³ Furnes B, Samuelsson S. Preschool cognitive and language skills predicting kindergarten and grade 1 reading and spelling: a cross-linguistic comparison. *J Res Read.* 2009;32:275-92.
- ⁴ Human Early Learning Partnership. Early development instrument [Internet]. Vancouver, BC: University of British Columbia; [cited 2016 May 11]. Available from: <http://earlylearning.ubc.ca/edi/>.
- ⁵ Human Early Learning Partnership. Fact sheet 2013: vulnerability on the EDI. Vancouver, BC: University of British Columbia; [cited 2016 May 11]. Available from: <http://earlylearning.ubc.ca/documents/68/>.
- ⁶ Rowcliffe P. Personal communication. UBC Human Early Learning Partnership; 2015 Sep 25.