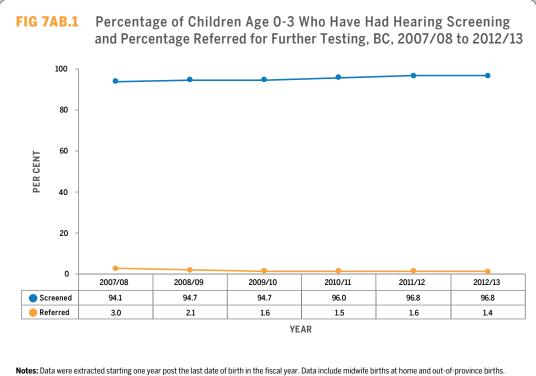
## PHYSICAL HEALTH & WELL-BEING INDICATOR #7 Hearing Screening

## **DEFINITIONS**

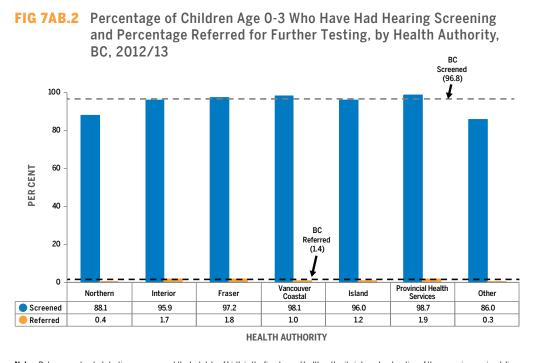
INDICATOR #7A — Percentage of BC newborns who have been screened for hearing problems.
INDICATOR #7B — Percentage of BC newborns who have been referred for further diagnostic testing after hearing screening.

## **KEY MESSAGES**

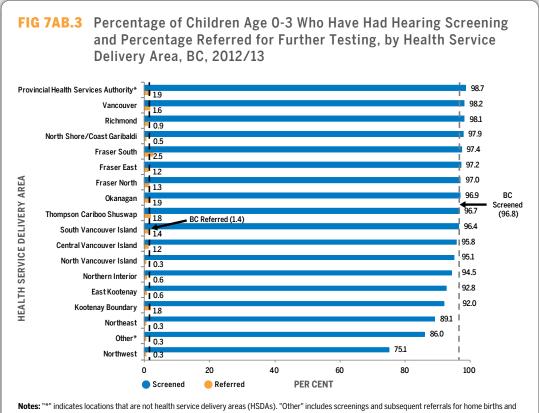
- Early childhood hearing screening helps to identify children who may have health issues leading to hearing impairment or loss, and who require treatment or extra support to develop to their full potential.<sup>1</sup>
- In the US, congenital hearing loss affects an estimated one to six babies per 1,000 births.<sup>2</sup> Most babies who are deaf or hard of hearing are born into families with no history of hearing loss.<sup>3</sup>
- Prior to the introduction of universal newborn hearing screening in BC, the average age of diagnosis for children with hearing impairment was 2.5 years.<sup>4</sup> Diagnosis of hearing loss should occur for healthy babies by three months of age, and hearing devices are usually fitted within one month of the confirmed diagnosis.<sup>4</sup> Universal screening in the first year of life can reduce this time by at least 75 per cent.<sup>5</sup>
- Evidence shows that detection of hearing loss and intervention by six months to nine months of age improves language development.<sup>6</sup> For children with more severe hearing impairment, early detection can allow earlier acquisition of adaptive abilities, including sign language.<sup>7</sup>
- ► The BC Early Hearing Program provides universal newborn hearing screening to all babies born in BC. Early hearing screening in postpartum units began in September 2007 and was fully implemented in all health authorities by January 2010.
- Figure 7AB.1 shows that since the program was implemented, the BC Early Hearing Program has screened more than 94 per cent of newborns in BC.



See Appendix B for more information about this data source. **Source:** Provincial Health Services Authority, BC Early Hearing Surveillance Tool, 2007/08 to 2012/13. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer. 2016.



Notes: Data were extracted starting one year post the last date of birth in the fiscal year. Health authority is based on location of the screening service delivery. "Other" includes screenings and subsequent referrals for home births and out-of-province births. See Appendix B for more information about this data source. Source: Provincial Health Services Authority, BC Early Hearing Surveillance Tool, 2012/13. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.



Notes: The indicates locations that are not health service delivery areas (HSDAs). "Other includes screenings and subsequent reterrals for nome births and out-of-province births. Data were extracted starting one year post the last date of birth in the fiscal year. HSDA is based on location of the screening service delivery. See Appendix B for more information about this data source.

Source: Provincial Health Services Authority, BC Early Hearing Surveillance Tool, 2012/13. Prepared by the Surveillance and Epidemiology Team, BC Office of the Provincial Health Officer, 2016.

## REFERENCES

<sup>1</sup>H. Krueger & Associates. Child and youth health and well-being indicators project: appendix F – physical health and well-being evidence review [prepared for the Office of the Provincial Health Officer and the Canadian Institute for Health Information]. Ottawa, ON: Canadian Institute for Health Information; 2011.

<sup>2</sup>American Speech-Language-Hearing Association. The prevalence and incidence of hearing loss in children. Rockville, MD: American Speech-Language-Hearing Association; [cited 2016 Mar 21]. Available from: http://www.asha.org/public/hearing/ disorders/children.htm.

<sup>3</sup> Provincial Health Services Authority. BC Early Hearing Program [Internet]. Vancouver, BC: Provincial Health Services Authority; [cited 2016 Jun 23]. Available from: http://www.phsa.ca/our-services/programs-services/bc-early-hearing-program.

<sup>4</sup> Provincial Health Services Authority. BC Early Hearing Program information update for physicians, nurses and midwives. Vancouver, BC: Provincial Health Services Authority; 2009 [cited 2016 Jun 23]. Available from: http://www.phsa.ca/Documents/ bcehp\_physiciansinfofall09.pdf.

<sup>5</sup> Human Early Learning Partnership. BC Early Childhood Vision Screening Program: final evaluation report. Vancouver, BC: University of British Columbia; 2012 Aug [cited 2016 Mar 21]. Available from: http://earlylearning.ubc.ca/media/documents/ vision\_evaluation\_report\_update\_01\_09\_13.pdf.

<sup>6</sup>Watkin P, McCann D, Law C, Mullee M, Petrou S, Stevenson J, et al. Language ability in children with permanent hearing impairment: the influence of early management and family participation. Pediatrics. 2007 Sep;120(3):e694-701.

<sup>7</sup> Kushalnagar P, Mathur G, Moreland CJ, Napoli DJ, Osterling W, Padden C, et al. Infants and children with hearing loss need early language access. J Clin Ethics. 2010 Summer;21(2):143-54.