

Submission to the Australian Government Senate Inquiry Regarding Prevalence of Different Types of Speech, Language and Communication Disorders and Speech Pathology Services in Australia 2014

# Prevalence of speech, language, and communication needs in Australia's children

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**This submission demonstrates that there is a high prevalence of speech and language needs for Australian children.** The information is based on data from 13 studies and 300,000+ Australian children.

## Benchmark international systematic review of prevalence of speech and language need Speech and language delay is a "high prevalence condition" (Law et al., 2000, p. 179) according to the

authors of an international systematic review of literature regarding prevalence of children with primary speech and language delay. In their systematic review, Law and colleagues indicated that there was a

- range of 2.30 to 24.60% for speech delay only
- range of 2.02% to 19% for language delay only
- range of 2.28 to 6.68% (median prevalence of 5.95%) for combined speech and language delay.

# "Even a moderate or mild delay may cause appreciable concern to parents and other carers." (Law et al., 2000, p. 179)

# Comparative prevalence in a longitudinal Australian study of 14,500 children

The prevalence of nine areas of learning need was identified within a large school district in NSW (37 primary schools and 7 secondary schools) via a 4-stage data collection, initiated by classroom teachers and confirmed by assessment from relevant professionals teachers (McLeod & McKinnon, 2007). There were 14,514 students in the first year of data collection (wave 1) and 14,533 students two years later (wave 2). Overall 5,309 (36.57%) students were identified as having some area of learning need in the first year and 4,845 (33.33%) students were identified 2 years later. Specifically, the areas of learning need (in order) were:

- specific learning difficulty (17.93% in wave 1; 19.10% in wave 2)
- communication disorder (13.04%; 12.40%)
- English as a second or other language (9.16%; 5.80%)
- behavioural/emotional difficulty (8.16%; 6.10%)
- early achiever/advanced learner (7.30%; 5.50%)
- physical/medical disability (1.52%; 1.40%)
- intellectual disability (1.38%; 1.20%)
- hearing impairment (0.96%; 0.80%)
- visual impairment (0.16%; 0.30%) (McLeod & McKinnon, 2007).

Many children with communication disorder have no known cause (e.g., they do not have hearing loss, intellectual disability, cleft palate, etc.).

In a follow-up study, presence of a **communication disorder was the most important predictive factor that students required a high level of support at school** (McLeod & McKinnon, 2010).

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## Australian prevalence of speech, language, and communication need

The following table provides a summary of literature from Australia regarding the prevalence of children with speech, language, and communication needs. Overall, the data demonstrate that many children have difficulty requiring speech-language pathology services.

Table 1. Prevalence of Australian children with speech, language, and communication need organized												
accor	ding to	o age (	adapted from	McLeod, M	cAllis	ter, McC	orma	ck & Harrison,	2013, in	press)		
<b>a</b> , <b>b</b>	2					3.6.13			•		1	

Study + Cohort acronym	Ν	Age	Method	Domain	Prevalence
Taylor, Maguire, & Zubrick	5,107	9 mths	Parent report	Language	17.8%
(2011): LSAC-B			×	0 0	
Reilly, Bavin et al. (2009): ELVS	1,911	1-2	Parent report	Language	19.7%
		yrs	_		
Zubrick et al. (2007): RASCALS	1,766	2 yrs	Parent report	Language	13.4%
Reilly, Onslow et al., (2009):	1,619	2-3	Parent + SLP report	Stuttering	8.5%
ELVS		yrs			
McLeod & Harrison (2009):	4,983	4-5	Parent report	Speech and language	24.5%
LSAC (K cohort)		yrs	Teacher report		22.3%
CCCH (2009): AEDI	261,203	4-5	Teacher report	Language and	$8.9\%^{a} +$
		yrs		literacy	14.0% <sup>b</sup>
CCCH (2009): AEDI	261,203	4-5	Teacher report	Communication	9.2% <sup>a</sup> +
		yrs			15.8% <sup>b</sup>
Jessup et al. (2008)	308	5-6	Direct assessment	Speech and language	41.2%
		yrs			
Taylor, Maguire, & Zubrick	4,317	6-7	Direct assessment	Language (receptive)	19.6%
(2011): LSAC-K		yrs			
Taylor, Maguire, & Zubrick	4,317	8-9	Direct assessment	Language (receptive)	15.0%
(2011): LSAC (K cohort)		yrs			
McKinnon, McLeod, & Reilly	10,425	5-12	Teacher + SLP	Speech, voice,	0.12-1.06%
(2007)		yrs	report	stuttering	
Harasty & Reed (1994)	437	5-12	Direct assessment	Communication	28.8-37.6%
		yrs			
Keating et al. (2001)	12,388	0-14	Parent report	Talking, speech,	1.7%
		yrs		stuttering	
McLeod & McKinnon (2007):	14,514	5-18	Teacher + SLP	Communication	13.0%
wave 1		yrs	report		
McLeod & McKinnon (2007):	14,533	5-18	Teacher + SLP	Communication	12.4%
wave 2		yrs	report		

LSAC-B = Longitudinal Study of Australian Children - Birth cohort, LSAC-K = Longitudinal Study of Australian Children - Kindergarten cohort, ELVS = Early Language in Victoria Study, RASCALS = Randomly Ascertained Sample of Children born in Australia's Largest State, CCCH = Centre for Community Child Health and Telethon Institute for Child Health Research, AEDI = Australian Early Development Index, SLP = speech-language pathologist confirmation. Note. Some studies, particularly Taylor et al. (2011) also reported prevalence figures for additional measures. <sup>a</sup> Developmentally vulnerable, <sup>b</sup> Developmentally at risk

### Extended version of this information

McLeod, S., McAllister, L., McCormack, J., & Harrison, L. J. (2013, in press). Applying the World Report on Disability to children's communication. *Disability and Rehabilitation*, doi:10.3109/09638288.2013.833305

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