## **Children and Hearing Loss**

Around 34 million children worldwide have disabling hearing loss.<sup>1</sup> In Canada, from 2012 to 2015, 8% of children between the ages of 6 and 19 had hearing loss.<sup>2</sup> In 2020, due to the COVID-19 pandemic, Infant Hearing Program agencies had suspended the newborn hearing screenings that would have been completed before discharge from hospitals.<sup>3</sup> As a result, babies born during the start of the COVID-19 pandemic could have been missed.<sup>4,5</sup> Early detection and management of hearing loss is essential for positive developmental outcomes in children.

## **Facts & Stats**

- Children with hearing loss identified by 6 months of age have significantly better receptive and expressive language abilities than children who are identified after 6 months of age.<sup>6</sup>
- Providing hard of hearing children with the audibility they need positively influences language growth rates.<sup>7</sup>
- School age children with hearing loss experience more subjective overall and cognitive fatigue than those with normal hearing.<sup>8,9,10</sup>
- Roughly 35% of children with unilateral hearing loss need to repeat at least one academic year.<sup>11</sup>
- Unless appropriate management occurs, children with a mild to moderate hearing loss may perform on average one to four grade levels below their peers with normal hearing.<sup>12</sup>
- Children with hearing loss are more likely to exhibit greater social dysfunction (behavior, energy, self-esteem) than those with normal hearing. 12,13,14,15
- The use of remote microphone technologies increases the likelihood of caregivers talking to hard of hearing children, when at a distance, which could lead to approximately 42% more words per day and access to potentially 12% more child directed speech.<sup>16,17</sup>

## What You Can Do To Help

Children who cannot hear or may have trouble hearing certain sounds are at greater risks for delays in grammar and articulation development. There is a large body of evidence supporting the advantages of early detection of hearing loss and intervention with hearing aids and remote microphone technologies to facilitate language growth.<sup>6,18,19</sup>

Children are constantly in noisy environments such as a classroom. With increasing noise, speech recognition becomes even more difficult. The use of adaptive digital remote microphone technology, in conjunction with hearing aids, can significantly improve speech recognition performance in noisy situations.<sup>20,21,22,23</sup> An audiologist can evaluate and recommend an audiological intervention plan. Please refer all your pediatric patients who you suspect may have a hearing loss.

Family involvement has also been correlated with positive language outcomes while families with limited involvement have been associated with significant language delays in children at 5 years old. 18 Please encourage parents/family members to be active and diligent participants in their child's hearing healthcare by ensuring their children increase daily hearing aid use, even outside of the classroom, and increase their child-directed speech. For children born at the start of the COVID-19 pandemic in 2020, it is important to recapture those who may have missed their newborn hearing screening.

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