

November 10, 2020

## OFFICIAL STATEMENT FROM SPEECH-LANGUAGE & AUDIOLOGY CANADA (SAC)

### Official Statement on the Use of Transparent Masks

***Transparent masks, when used with additional supports and strategies, can facilitate communication by overcoming some of the communication barriers associated with masks and face coverings.***

Medical masks, face shields, N95 respirators and non-medical masks are necessary to mitigate the spread of COVID-19 (Public Health Agency of Canada [PHAC], 2020b, d), however, **masks and face coverings change communication for everyone** and create additional communication barriers for [people with hearing loss and/or communication difficulties](#) (Baltimore & Atcherson, 2020; Atcherson et al., 2017).

In Canada, an estimated 4.6 million adults have hearing loss that affects their ability to hear typical speech and an estimated 8.4 million adults have some degree of high-frequency hearing loss (Feder et al., 2015). Up to 1 in 5 children in elementary school experience temporary hearing loss (e.g. due to ear infections) during the school year (Bluestone, 2004). As well, more than 10% of school-aged children have speech, language and communication challenges (Beitchman et al., 1986; Norbury et al., 2016). In older adults, communication difficulties are often associated with neurological conditions such as stroke and Parkinson's disease (Miller et al., 2006; Flowers et al., 2013).

**Transparent masks can facilitate communication with people with hearing loss and communication difficulties and assist when providing speech-language pathology and audiology services during the COVID-19 pandemic** (Baltimore & Atcherson, 2020; PHAC, 2020a, c). Transparent masks preserve important visual cues (including lip/speech reading) and facial expressions critical for effective communication; however, masks and face coverings may dampen and/or degrade the speech signal (Atcherson et al., 2017; Corey et al., 2020).

**When using any mask or face covering, [communication supports](#) and [strategies](#) are necessary to facilitate effective communication, especially in challenging listening environments such as hospitals, clinics and schools.** Non-medical masks made of loosely woven cotton and medical masks can attenuate speech by 3-4 decibels (dB) (Corey et al., 2020; Goldin et al., 2020). Transparent masks, face shields and N95 respirators can dampen speech by as much as 12 dB (Atcherson et al., 2017; Corey et al., 2020). Medical masks and N95 respirators also degrade speech because they act as a low-pass filter and affect high-frequency sounds important for speech discrimination (Corey et al., 2020; Goldin et al., 2020). A reduction in higher frequencies affects our ability to hear in the presence of background noise and contributes to poor speech recognition and increased listening effort, especially in those with hearing

loss (Hicks & Tharpe, 2002; Stelmachowicz et al., 2001). This can also be particularly problematic for children as they require greater access to high frequencies for speech understanding (Stelmachowicz et al., 2007).

Speech-language pathologists, audiologists and communication health assistants conduct [point-of-care risk assessments](#) to inform safe practices during the COVID-19 pandemic, including the appropriate use of transparent masks. SAC members and associates should refer to infection prevention and control guidance about the level of protection that transparent masks provide against COVID-19. **Health Canada advises that transparent masks currently available in Canada are intended for use in non-infectious environments and should not take the place of a medical mask or N95 respirator (Speech-Language & Audiology Canada [SAC], 2020).**

**SAC continues to advocate for improved access to transparent masks in Canada, including the development of a Canadian-made solution appropriate for use in infectious and non-infectious settings.**

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*This SAC Official Statement has been developed based on the best available evidence in the context of a rapidly evolving health care emergency and is subject to change as additional information becomes available.*

### About SAC

**Speech-Language & Audiology Canada (SAC)** is a member-driven organization that supports and promotes the professions of more than 6,500 members and associates. We are the only national organization passionately supporting and representing speech-language pathologists, audiologists and communication health assistants inclusively. Through this support, we champion the needs of people with communication disorders. Visit [www.sac-oac.ca](http://www.sac-oac.ca) to learn more.

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