

## **MEDICAL BREAKTHROUGHS** **RESEARCH SUMMARY**

TOPIC: COVID MASKS: A SPECIAL CHALLENGE FOR DEAF  
REPORT: MB #4858

**BACKGROUND:** Approximately 466 million people worldwide have disabling hearing loss and of those, 34 million are children. One in every ten people will have disabling hearing loss and it's estimated that by 2050 the number of people disabled by hearing loss will grow to almost 900 million. Hearing loss or deafness can be the result of many different causes such as genetics, complications or trauma during birth, infectious diseases, chronic ear infections, drug use, exposure to excessive noise, and aging. Unfortunately, 60 percent of childhood hearing loss is related to preventable causes. Disabled hearing is a term used to describe hearing loss of greater than 40 decibels for adults and hearing loss greater than 30 decibels in children. The majority of people with disabling hearing loss live in low- and middle-income areas.  
(Source: <https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss>)

**COVID-19 IMPACTS:** One of the best lines of defense against the COVID-19 virus is a face mask that covers both the mouth and nose blocking virus droplets from contaminating the air. However, they also block half of our facial expressions hindering nonverbal communication cues. This particular hurdle has uniquely impacted those with disabled hearing. The life-saving face masks inhibit lip reading and restrict the nuances of the ASL and other sign languages.  
(Source: <https://www.webmd.com/lung/news/20200722/covids-forgotten-victims-the-deaf-community>)

**SOLUTIONS:** In an effort to increase the amount of visibility, some people have begun to utilize and provide clear masks that show the mouth through a sealed, fog-resistant window. These transparent masks offer more visual information, like lip movement, helping those with disabled hearing feel less isolated while also promoting effective, safe, communication. The NAD (National Association of Deaf) outlines that efforts should be made during this pandemic to ensure access to captions, transcripts and written visual information. Remote educators and remote employees with disabled hearing or working with those with disabled hearing can utilize various methods for ensuring effective video call communication as well. This includes a good internet connection to avoid motion blur, a clear background so that hands and fingers are easily visible when signing, and for those with hearing-loss—a large monitor to maximize the visual information available.  
(Source: <https://www.nad.org/coronavirus/asl-resources-for-coronavirus/>, <https://www.nad.org/covid19-telehealth-access-for-providers/> William (Bill) Cooper, American Sign Language Instructor, University of Central Florida, School of Communication Sciences and Disorders)

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**If this story or any other Ivanhoe story has impacted your life or prompted you or someone you know to seek or change treatments, please let us know by contacting Marjorie Bekaert Thomas at [mthomas@ivanhoe.com](mailto:mthomas@ivanhoe.com)**