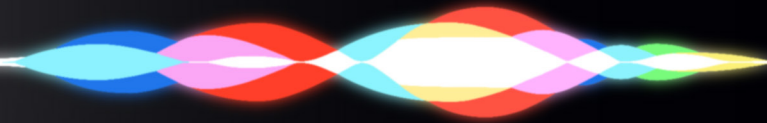
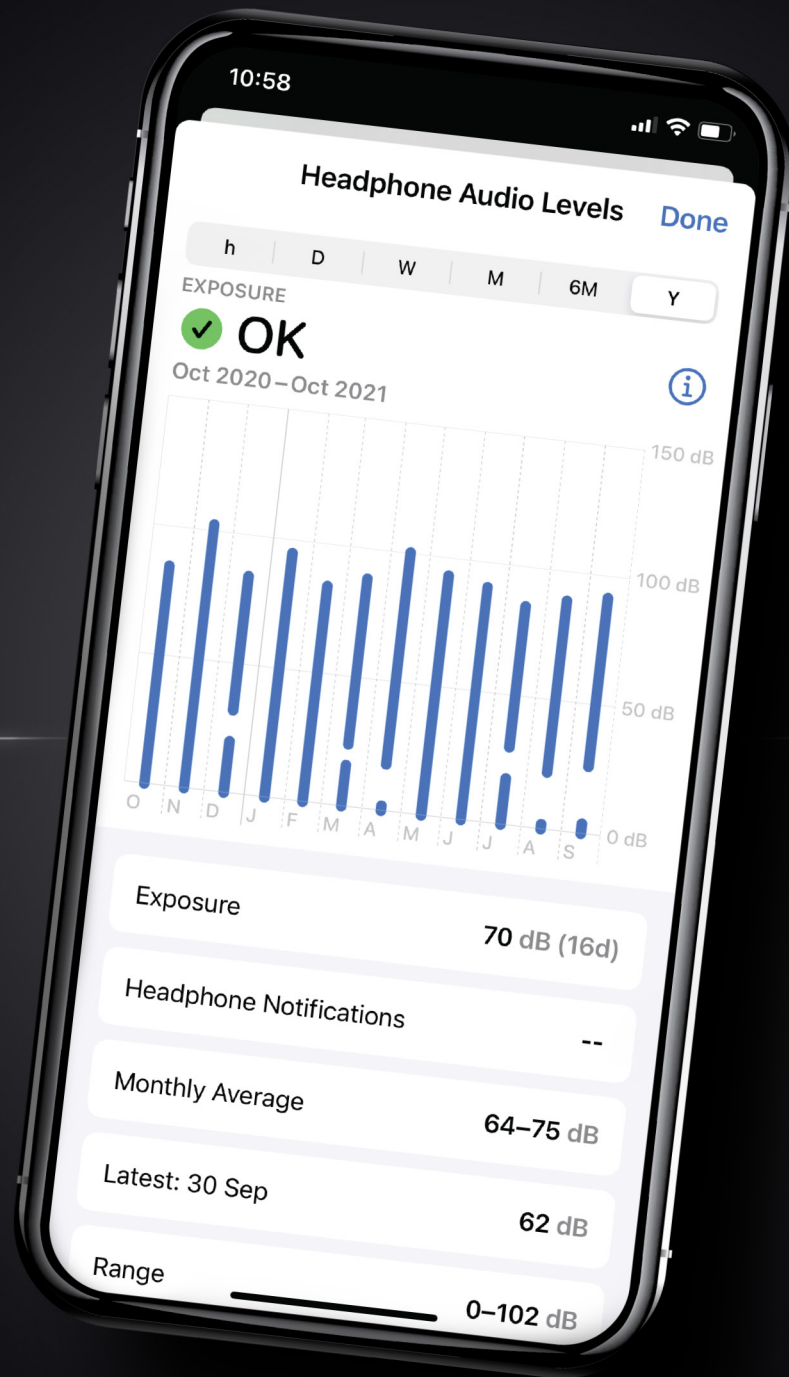


Khushi Mali

# Voice of Accessibility

Apple continues to lead way with its hearing accessibility in ways never done before

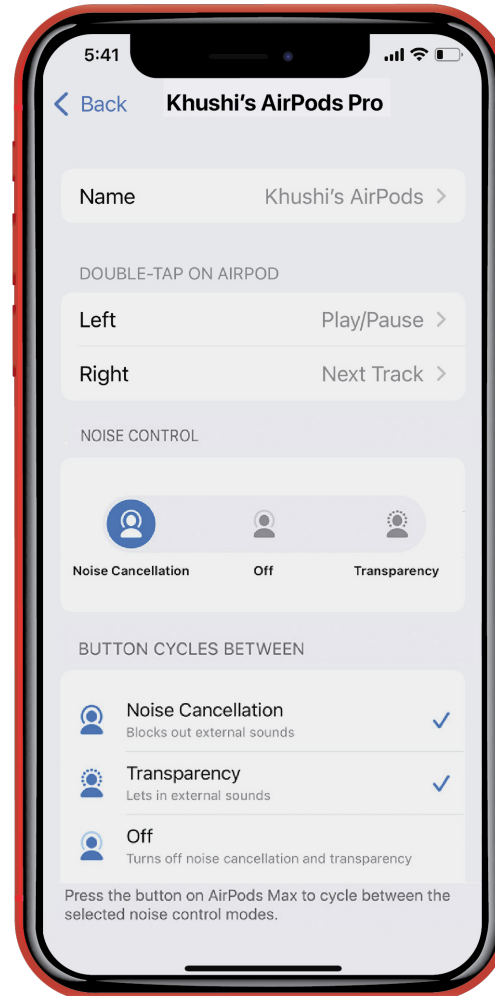


# Voice of Accessibility

Khushi Mali

Did you know over 430 million people of the world's population is hard-of-hearing (HOH) or deaf? Hearing accessibility is a kind of assistive technology Apple provides to assist people with hearing impairments. Over the years, Apple has not only worked with top manufacturers to create hearing aids but also released other accessibility features like headphone accommodations which can now function or give further assistance to hearing aids, making life easier and more inclusive for many users. Additionally, Apple also strives to further focus on the hearing health of users with average hearing with their Noise and Health apps.

One of the major issues that HOH can face are unaided communications in noisy environments. As with the increasing distance, the speaker disappears in the noise floor. With the launch of AirPods, came many revolutionary features like Live Listen which helped tackle this. All you need to do is turn on the feature and move your device towards the people you're talking with allowing your Apple device to act as a microphone which then sends the sound



to your AirPods or compatible hearing aids, allowing you to hear more clearly in noisy settings. Conversation Boost is a similar feature which was recently implemented to AirPods Pro in 2021 to further enhance this experience making it easier for people with mild to moderate hearing. Some additional features recently integrated are, Active Noise Cancellation that cancels the external sounds before you hear them, Transparency mode which lets outside sound in, allowing you to hear what's going on around you and, lastly, Mono Audio to support those who may have hearing loss on one ear.

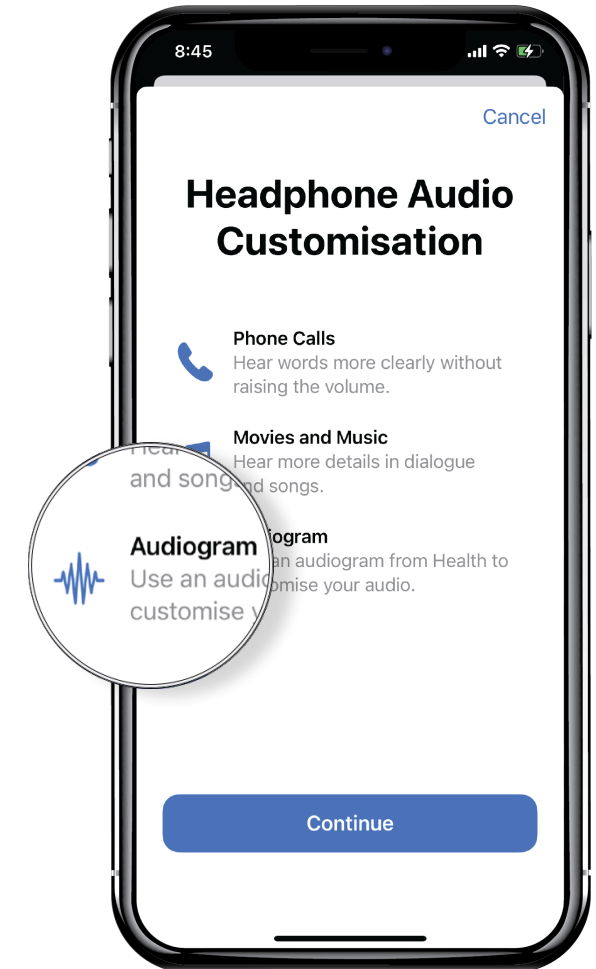
AirPods are known to provide users more control and accessibility over how they hear, however, Apple has also designed over 50 made for iPhone hearing devices which are specifically designed to work with its devices. This allows you to make phone calls or stream any other audio signals such as music or audiobooks at a favourable Signal-to-noise ratio (SNR) and perfect sound quality. You can also instantly apply your audiologist's environmental presets when you go outdoors or enter noisy

settings, without having to rely on additional remotes.

It is estimated that by 2050, more than 700 million people globally will experience profound hearing loss. To try and avert this, Apple shares its key insights from its Hearing Study conducted across thousands of participants from the US to encourage others to better understand and manage your hearing health. These insights show that 25% of participants experience a daily average environmental sound exposure higher than what WHO recommends and 50% used to or have previously worked in a loud workplace. To counter this, Apple has introduced their Noise and Health apps to help you keep track of your hearing thresholds to prevent or reduce chances of hearing loss in the future. Additionally, Apple allows you to take a series of listening tests or upload existing audiograms enabling users to customise and tailor headphone audio output to reflect unique audiogram data.

Furthermore, Apple also provides integrated accessibility features within its apps to help assist with better communication. Facetime, Apple's video call-based app, is a great way for HOH people to communicate using sign language due to its ability to detect sign language in Group FaceTime calls and will automatically make you prominent. Closed Captions are not only supported in apps like the Apple TV app but can also caption HomePod announcements on your iPhone, iPad, and iPod touch. They also feature sensory alerts which lets you choose from a visual or vibrating alert option for any incoming notifications and sound recognition that listens for certain sounds and uses on-device intelligence to notify you when a specific sound is detected.

Overall, Apple has paved the way with its accessibility features and only ever seem to be evolving in the right direction with its wide, adaptive, and versatile features for any possible scenarios and customization to suit your personal needs, all a tap away.



#### References:

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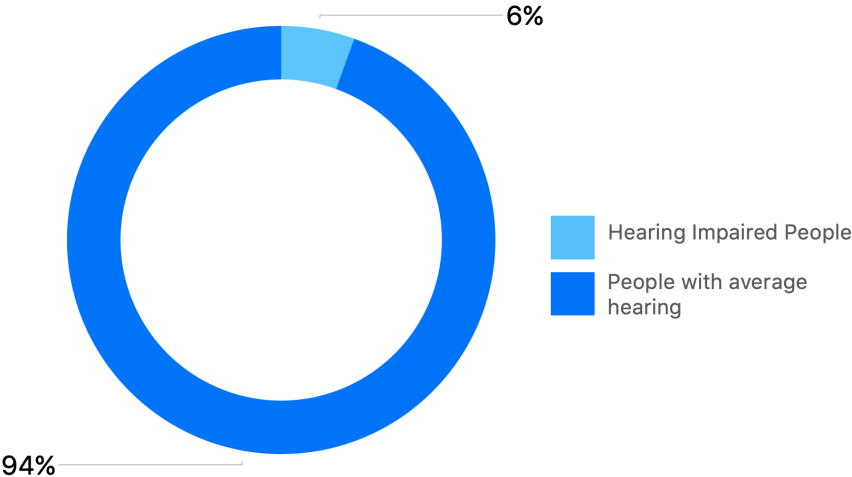
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# How to Turn on Headphone Accommodations:

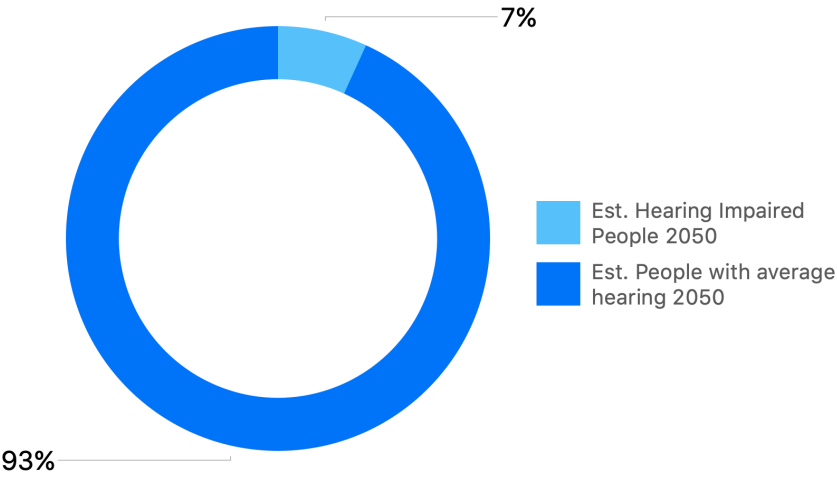
Go to Settings > Accessibility > Audio/Visual > Headphone Accommodations. Turn on Headphone Accommodations.



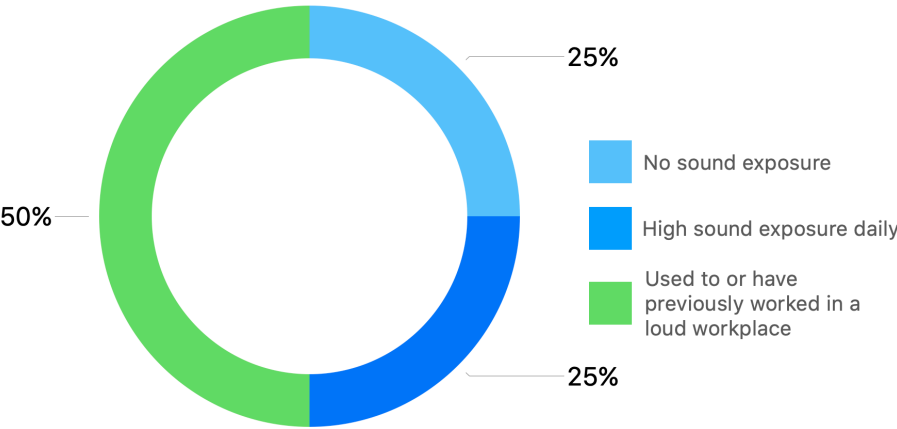
2021 Hard-of-hearing (HOH) or deaf vs. people with average hearing population statistics:



Current 2021 Hard-of-hearing (HOH) or deaf vs. estimated 2050 HOH or deaf population Statistics:



Apple Hearing Study insights:



Rise between the current 2021 Hard-of-hearing (HOH) or deaf vs. estimated 2050 HOH or deaf population Statistics:

