WHO-ITU global standard for safe listening devices and systems

Summary

The World Health Organization (WHO) and the International Telecommunication Union (ITU) are concerned about the rise in hearing loss. Therefore, they have developed a standard for the manufacture and use of personal audio devices such as smartphones and MP3 players. The standard covers these devices and the systems of which they are a part, including the earphones and headphones that facilitate listening.

The aim of the standard is to reduce the risk of hearing loss among users of such products. The standard was developed over two years based on the latest evidence and in consultation with a range of stakeholders, including experts from government, industry and civil society as well as users of personal audio devices.

Implementing the WHO-ITU standard

Many different types of entities can play a role in facilitating adoption of the WHO-ITU standard for safe listening devices. Firstly, governments can do so through policy, regulation or legislation as part of national consumer protection efforts. Secondly, manufacturers can adopt the standard voluntarily at the point of manufacture, producing safe listening devices that already include the features noted in the following page. Thirdly, civil society, in particular professional associations and other organizations which promote hearing care, can advocate towards governments and manufacturers for adoption of the standard and towards the public so that people understand the importance of safe listening practices and demand products that help them to practice safe listening. Regarding the latter, the WHO-ITU toolkit for implementation of the global standard for safe listening devices provides practical guidance in this respect.
Features of safe listening devices

The WHO-ITU standard offers recommendations on the following aspects of personal audio devices:

Dosimetry function: The personal audio device will include software that tracks the level and duration of the user’s exposure to sound as a percentage used of a reference exposure, also known as a user’s “sound allowance”. The user will have the option to choose one of two modes that determine the total sound dose he or she can safely consume:

- Mode 1 for adults: 80 dB for 40 hours per week.
- Mode 2 for children: 75 dB for 40 hours per week.

Personalized information: Based on the user’s listening practices, the personal audio device will generate an individualized listening profile. This profile informs the user of how safely (or not) he or she has been listening to music through the device. The software that allows this will summarize listening activity in terms of a percentage of sound allowance and give cues for action to the user based on this information.

Volume limiting options: The personal audio device will offer users options which aim to limit the volume, including:

- Automatic volume reduction, which reduces the listening volume based on information from the user’s profile. If the user has been listening at a high volume for too long, the volume will automatically be reduced.
- Parental volume control, which allows a parent to set the volume to a certain level. This control is password protected.

General information: The personal audio device will provide general information and guidance to users to make safe listening choices. This includes information on safety listening practices, both through personal audio devices and in the context of other leisure activities, as well as the risks for hearing loss that users face when these practices are not followed.

Download here: https://www.who.int/deafness/world-hearing-day/2019/en/

1. ITU-T H.870 Guidelines for safe listening devices and systems https://www.itu.int/rec/T-REC-H.870