

WHO update

Shelly Chadha | WHO



World Health
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WHO update

- Key milestone: Publishing of one of two papers on the topic of safe listening in video gaming and esports.
- Strong media coverage as a result

BMJ
Public
Health

Original research

Risk of sound-induced hearing loss from exposure to video gaming or esports: a systematic scoping review

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ABSTRACT

Background There is little information on whether video gaming might be a modifiable risk factor for hearing loss and/or tinnitus, despite the plausibility of these relationships given that video games are often played at high-intensity sound levels and for long periods of time.

Objective To synthesise current evidence related to relationships between gaming and the potential risk of hearing loss and/or tinnitus.

Design Systematic scoping review

Data sources We searched three databases (PubMed, Scopus, Ovid MEDLINE) in January 2023 for peer-reviewed articles, and searched grey literature sources, from inception to 2023.

Eligibility criteria Observational, mixed-methods, trials, or case studies published in (or that could be translated into) English, Spanish or Chinese were eligible for inclusion. Studies were included if they evaluated relationships of gaming with hearing loss and/or tinnitus.

Data extraction and synthesis Two reviewers extracted and verified study data, which are synthesised in tables and in the text.

Results Fourteen peer-reviewed studies were included, 11 of which were cohort studies and 3 of which were non-cohort observational studies. Across studies, the prevalence of gaming ranged from 20% to 78%. In general, the average measured sound levels of video games nearly exceeded, or exceeded, permissible sound exposure limits, and on average, individuals played video games for approximately 3 hours per week. Among the five peer-reviewed studies that evaluated associations or correlations of gaming with hearing loss or tinnitus, four reported significant associations or correlations with gaming and hearing loss or tinnitus.

Conclusions The limited available evidence suggests that gaming may be a common source of unsafe listening, which could place many individuals worldwide at risk of permanent hearing loss and/or tinnitus. Additional research on these relationships is needed along with steps to promote safe listening among gamers.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Video gaming may be an important modifiable risk factor for permanent hearing loss and/or tinnitus because it is common worldwide, and because individuals often play video games at high-intensity sound levels and for several hours at a time. This is important because it is possible to prevent hearing loss and/or tinnitus through known public health practices and by developing and implementing global policies focused on promotion of safe listening practices.

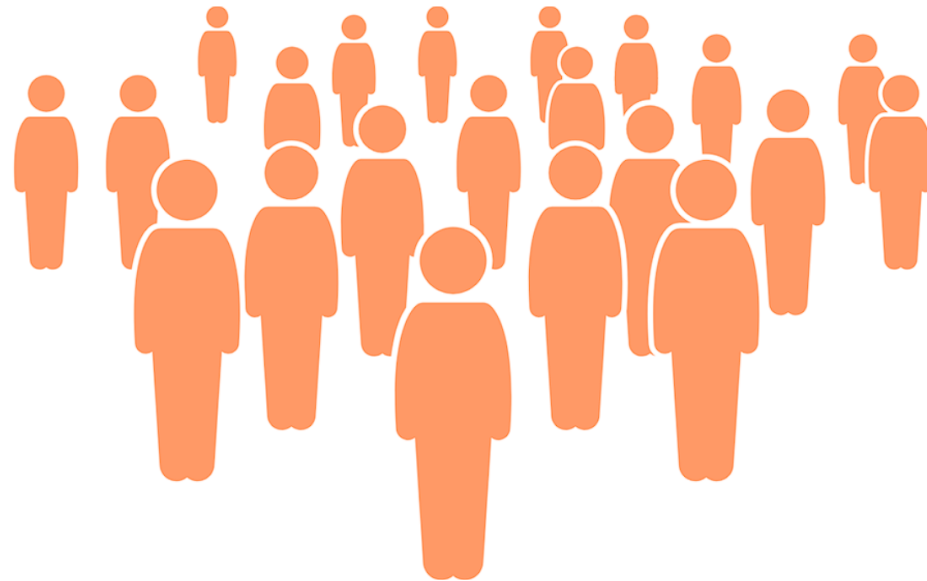
WHAT THIS STUDY ADDS

⇒ Taken together, the evidence collated in this scoping review suggests that gaming is likely a source of unsafe listening and thus may put many gamers worldwide at risk of permanent sound-induced hearing loss and/or tinnitus.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ Study findings suggest that there is a need to prioritise interventions, such as initiatives focused on education and awareness of the potential risks of gaming on the auditory system, which can help to promote safe listening among gamers worldwide.

factor of hearing loss.¹⁻³ The burden of unsafe listening is high and can occur via exposure to several sources of high-intensity sounds, such as personal listening devices and entertainment venues.²⁻⁴ Another potential source of unsafe listening that has received less attention is video gaming, including electronic sports (known as esports).³ Gaming may be a source of unsafe listening because individuals often play video games at high-

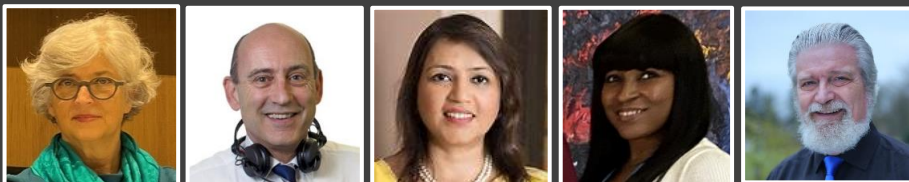


- 198 members
- 5 working groups:
 - Make Listening Safe
 - Changemakers
 - World Hearing Day
 - Member engagement
 - External relations

World Hearing Forum Make Listening Safe Workstream

Objective 1:

Increase awareness on the importance of safe listening and change behavior for the target group (young people)



Young ambassadors and school programs

Promoting safe listening at events to young people

Digital promotion of safe listening

MLS for video gaming and esports



Stephen Wheatley
Make Listening Safe UK



Gaming & Esports Fact Finding Survey

The Gaming and Esports Group of the World Hearing Forum are starting a project to look at the potential risks to hearing amongst gamers and esports players.

To ensure that we understand the hardware and software that gamers and esports players use and how it is configured we are asking those that play to complete the following brief questionnaire.

We would be very grateful for your response which will contribute to a greater understanding of this complex subject.

Thank you.

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October 2023: Stakeholder meeting

- Delegation of video game sector stakeholders hosted at WHO headquarters, coordinated by members of Global Video Game Coalition GVGC and Video Games Europe
- The meeting mainly covered introductory information sharing and discussed ways WHO and private sector could work together to find the best solutions for safe listening in video gaming and esports activities

October 2023: GameSoundCon

- WHO were provided an opportunity for a brief plenary presentation introducing the 'Make Listening Safe' initiative and work being completed by this workshop

