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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 46342-2025

General test methods for hearing protectors

听力防护装备通用测试方法

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. Please note that

some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the Ministry of Emergency Management of the People's Republic of China. This document was drafted by: Institute of Urban Safety and Environmental Science, Beijing Academy of Science and Technology; China Academy of Safety Science and Technology China National Institute of Standardization, Institute of Acoustics, Chinese Academy of Sciences, Institute of Military Supplies Engineering Technology, Academy of Military Sciences, 3M China Limited Liability Company, Zhejiang Nettech Technology Co., Ltd., Jiangxi Lianchuang Electroacoustic Co., Ltd., Beijing Tairuit Testing Technology Service Co., Ltd. Honeywell Safety & Security Equipment (Shanghai) Co., Ltd., and Nanjing Meiyin Acoustics Technology Co., Ltd. The main drafters of this document are. Liu Hongjuan, Chen Zhuowei, Zu Yuanyuan, Wang Xin, Zhang Mingming, Li Xiaodong, Ou Zebing, Ran Linghua, Liu Zhiying, and Kang Yue. Jiang Xuri, Li Qiang, Tang Huan, Ji Yanming, Zhao Jing, and Hua Yiming. General testing methods for hearing protection equipment

1 Scope

GB/T 46342-2025 is the Chinese national standard covering testing earmuffs and plugs - the real-ear attenuation measured on human subjects, the physical attenuation on an acoustic fixture, the headband force and the fit, the materials against the skin, and the durability and temperature range. At 33,000 words. First edition, under the Ministry of Emergency Management. In force from 1 November 2026. Issued on 5 October 2025, it takes effect on 1 November 2026.

This document describes the testing methods for over-ear and in-ear hearing protection devices. This document applies to the physical performance testing, basic acoustic performance testing, and additional acoustic performance testing of over-ear and in-ear hearing protection devices. test.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 2812-2024 General Test Methods for Head Protection

GB/T 6278-2012 Overview of Sound System Equipment - Analog Program Signal

GB/T 7584.3 Acoustic hearing protectors - Part

3.Measurement of insertion of over-ear hearing protectors using a dedicated acoustic

testing apparatus loss

GB/T 12903 Terminology for Personal Protective Equipment

GB 31422.1 Hearing protection equipment - Part

3 Terms and Definitions

The terms and definitions defined in GB/T 12903, GB 31422.1, and GB 31422.2, as well as the following terms and definitions, apply to this document.