Record Nr. UNINA9910451005303321 Traditional rating of noise versus physiological costs of sound **Titolo** exposures to the hearing [[electronic resource] /] / edited by Helmut Strasser Amsterdam; ; Washington, DC, : IOS Press, 2005 Pubbl/distr/stampa **ISBN** 1-280-81046-7 9786610810468 1-4294-6760-6 1-60750-137-6 600-00-0594-6 1-4337-0154-5 Descrizione fisica 1 online resource (240 p.) Collana Biomedical and health research; ; v. 66 Altri autori (Persone) StrasserHelmut Disciplina 363.74 Soggetti Noise - Physiological effect Sound - Physiological effect Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references. Nota di bibliografia Title page: Preface: Contents: Problems of Measurement, Evaluation, Nota di contenuto and Rating of Environmental Exposures in Occupational Health and Safety Associated with the Dose Maxim and Energy Equivalence Principle: Impulse Noise Exposures. Present in Civil and Military Sectors: Noise Immissions from Working with Bolt Setting Tools in the

Safety Associated with the Dose Maxim and Energy Equivalence
Principle; Impulse Noise Exposures, Present in Civil and Military Sectors;
Noise Immissions from Working with Bolt Setting Tools in the
Construction Sector; Methods for Quantifying Hearing Threshold Shifts
of Sound Exposures and for Depicting the Parameters TTS2, t(0 dB),
and IRTTS Indicating the Physiological Costs to the Hearing
Hearing Threshold Shifts and Restitution Course After Impulse and
Continuous Noise at the Frequency of the Maximum Threshold Shift
and the Adjacent Lower and Upper FrequenciesHearing Threshold Shifts
and Their Restitution as Physiological Responses to Legally Tolerable
Continuous and Impulse Noise Exposures with a Rating Level of 85 dB
(A); Physiological Costs of Energy Equivalent Exposures to Continuous
and Additional Energetically Negligible Noise; Influence of the Number

of Impulses and the Impulse Duration on Hearing Threshold Shifts Investigations into the Efficiency of the Stapedius Reflex with Impulse Noise SeriesPhysiological Costs of the Hearing After Exposures to White Noise, Industrial Noise, Heavy Metal, and Classical Music of 94 dB(A) for 1 Hour; Temporary Hearing Threshold Shifts and Restitution Associated with Exposures to Industrial Noise and Classical Music of 94 dB(A) for 1 Hour and 91 dB(A) for 2 Hours: Comparative Investigations into the Physiological Responses to Heavy Metal, Techno, and Classical Music Effects of Noise Exposures During Physical Rest, Additional Physical Exercise and Combined Exposures to Alcohol and Cigarette Smoke on Hearing Threshold Shifts and Their RestitutionQuantification of the Insertion Loss of Personal Hearing Protection Devices by Means of a Subjective Method and an Artificial Head Measuring System; Substantial Protection Loss Associated with a Minimally Reduced Wearing Time of Hearing Protectors - Fiction or Reality?; Influence of Reduced Wearing Time on the Attenuation of Earplugs - Prognosis by the 3-dB Exchange Rate Versus Audiometric Measurements Dubious Risk Prevention via Traditional Rating of Whole-Body Vibrations, UV Radiation, and Carbon MonoxideAuthor Index

## Sommario/riassunto

In occupational safety and health acts, ordinances, regulations, directives, standards and guidelines, A-weighted sound exposures, varying in level and duration, are traditionally converted to an 8-hour-average sound level by applying the 3-dB exchange rate. Under the prerequisite that the energy equivalent rating level does not exceed 85 dB(A)/8 h, even impulse noise exposures of up to 140 dB are declared harmless. Indeed, the mutual settlement of level and duration based on the concept of energy equivalence is correct as far as sound energy or physical dose is concerned. However, between thi