



THE NEW ITALIAN PHYSICAL AGENTS DATABASE FOR RISK ASSESSMENT

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INTRODUCTION

The project of the new Italian physical agents database is presented.

It will be hosted by a web server at the Italian Workers' Compensation Authority (INAIL) in Rome, Italy. It will support the employers who have to comply with Legislative Decree 81/08 in risk assessment of physical agents such as noise (Noise Directive 2003/10/EC), mechanical vibration (Vibration Directive 2002/44/EC), electromagnetic fields (EMF Directive 2004/40/EC) and artificial optical radiations (AOR Directive 2006/25/EC).

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METHODS

By the end of march 2012 the new database will host measurements and EC-declared values related to the physical agents noise, vibrations, electromagnetic fields and optical radiations, together with other useful tools and information such as software, guidelines, best practices, prevention and protection measures, FAQ, a review of normative and scientific references, helpful for risk assessment and control of physical agents at workplace.

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FOREWORD

Despite a decline in the proportion of the workforce employed in traditional sectors such as manufacturing, construction, agriculture and mining, some physical risks such as noise and mechanical vibration are still largely prevalent.

Physical agents are responsible of more than 70% of the total professional diseases claimed for compensation in Italy.

Small and micro enterprises (SMEs) with up to 10 employees, which usually do not have internal H&S units, amount to 90% of the total enterprises in Italy.

There is a lack of competent services and technicians able to measure and assess the risk of exposure to physical agents at workplace.

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The new database hosts the update of a previous database related to mechanical vibration, published in 2005, yet available at the address www.ispesl.it/vibrationdatabase, regarding measurements and EC-declared values of mechanical vibration transmitted from over 1400 hand-held power tools and from about 1000 vehicles.

Already in 2005 the employers have been admitted to use this database for risk assessment of mechanical vibration at work to comply with the obligations set by the Italian legislation.

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For the equipment emitting physical agents, also specific standardized measurements protocols have been developed (harmonized with relevant ISO, CEN, CENELEC and CIE standards) and are available on site, in order to allow both the manufactures and occupational hygiene professionals to become data providers, contributing the data base with quality controlled data.

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HAV - Risk levels set by D.Lgs. 81/2008

$A(8) < 2.5 \text{ m/s}^2$

Risk assessment, no particular measures are requested

$2.5 \text{ m/s}^2 \leq A(8) \leq 5 \text{ m/s}^2$

Risk assessment, information and education, medical surveillance, program of technical measures to reduce the risk

$A(8) > 5 \text{ m/s}^2$

Forbidden, immediate measures to reduce the exposure below this value, like using tools with lower levels of vibration or reducing the exposure time

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WBV - Risk levels set by D.Lgs. 81/2008

$A(8) < 0,5 \text{ m/s}^2$

Risk assessment, no particular measures are requested

$0,5 \text{ m/s}^2 \leq A(8) \leq 1,0 \text{ m/s}^2$

Risk assessment, information and education, medical surveillance, program of technical measures to reduce the risk

$A(8) > 1,0 \text{ m/s}^2$

Forbidden, immediate measures to reduce the exposure below this value, like using tools with lower levels of vibration or reducing the exposure time

CONCLUSIONS AND FUTURE WORK

- The database will be continuously updated and implemented with new data and information
- The database is already accessed by more than 10,000 visitors per month (20% from foreign countries)
- Complete english translation
- Add more data (declared and measured), especially for EMF and AOR
- Support standardized procedures for assessing risks from physical agents in SMEs
- Add other physical agents such as microclimate, infrasounds and ultrasounds

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Thank you for your attention!