Occupational Exposure to Wood Dust: A Case Study

B. Duarte and M. L. Matos

Abstract Occupational exposure to saw dust is associated with the development of oncological diseases, namely nasopharyngeal cancers (about 44% are from nasal cavity and paranasal sinus cancers), in the wood and furniture industries, about 55.000, according to the (*Associação das Indústrias de Madeira e Mobiliário de Portugal*) AIMMP. It should be noted that since 1995 these dusts have been classified as carcinogenic, by The International Agency for Research on Cancer (IARC). The main objective of this study is to evaluate the exposure to saw dust, quantifying its concentration, comparing with values stipulated by existing legislation and standardization. In order to reach the objectives described above, total dust sampling was performed following the NIOSH0500 methodology, in several jobs, in three different carpentries. From the samplings performed, an average value of saw dust concentration was obtained in each workstation. After analyzing the values obtained in the measurements, performed in the real work context, it was verified there was legal non-compliance in the *Garlopa* workstation and values of the order of magnitude of the NP 1796 exposure limit values ELV, in the Manual Polishing workstation, in some of the Carpentry Workshops. However, if we consider the Scientific Committee on Occupational Exposure Limit (SCOEL) ELV we can state that only the Trimmer complies with the established ELV. Thus, corrective and/or preventive measures should be implemented by employers and preventive measures should be receptive by workers by implementing/complying to ensure the health and well-being of all, will be proposed.

Keywords Occupational exposure · Saw dust · Exposure limit values · Cancer

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