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OCCUPATIONAL ACCIDENTS IN MUNICIPAL SOLID WASTE MANAGEMENT (MSW) COMPANIES

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Abstract

The objective of this research was to analyse the factors present in occupational accidents occurred at work among Municipal Solid Waste (MSW) workers. Garbage, and rubbish from household waste were considered as MSW. The study was based on a total of 11,935 accidents occurring and reported in the MSW sector during the period 2009-2012 in Andalusia (Spain), as well as a survey of 572 workers in the above mentioned sector conducted in 2009. All the variables included in the accident reports were analysed and the possible existence of statistically significant differences between the percentages of each variable category and the severity of the accident were determined. In addition, the results of the accidents reported were compared with the results of the survey for certain variables. Unskilled (Risk Ratio= 7.6) male workers (Risk Ratio= 1.4), aged 25 or below (Risk Ratio= 3.0), with experience of less than one year (Risk Ratio= 12.1), were the ones most susceptible to suffering an accident. In addition, accidents for male workers over 55, occurred in companies with 10 to 24 employees, during the initial hours of the work shift, and caused by loss of control, had the highest probability of being severe or fatal. If the companies considered these risk factors during the design of preventive measures the accident rate in the MSW sector could be reduced.

Key words: solid waste, management, occupational, safety risk, accident

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