

# Risk assessment to increase safety and health in the Estonian work environment

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## **Abstract**

The first step to get insight in the hazards in the working environment in Estonia with a labour force 0.65 million was taken by the National Board of Health Protection in the beginning of 1996.

The existing chemical, physical and biological agents in the working environment were investigated with the help of local health inspectors in all counties. Hazards and workers at risk were identified. The results of the analysis showed that 16% of Estonian industrial workers were exposed to different hazards. 20,000 persons were exposed to noise, 11,000 were working in the conditions of vibration, 10,000 were affected by unsatisfactory microclimate, 6,000 complained about long-time work in a compulsory physical position, 5,500 persons suffered from the overexertion of eyes, and physical overload affected 3,500 workers. The measurements of working conditions showed that in an average of 30.3% the results were above the norms. As the development of a chronic occupational disease takes 5-10 years, the causes of present diseases originate from 1996 or before. The diseases caused by noise, vibration, physical overload and compulsory positions come first in the structure of occupational illnesses in 2000.

## **Introduction**

Estonian Law on Occupational Safety and Health (1999) demands the implementation of risk assessment in every work-place. The guidelines for carrying out risk assessment are given in the British Standard 8800.

From an ethic point of view not there are many types of risks that are not justified. To earn a living workers sometimes are forced to work in conditions in which critical values are exceeded. Sometimes this seems to be inevitable as there are no safe alternatives to some of the chemicals used. In the risk management plan the cost of risk reduction measures are calculated. The cheapest solutions are usually realised first, but these measures might not be most risk reducing.

In D. de Waard, K.A. Brookhuis, J. Moraal, and A. Toffetti (2002), *Human Factors in Transportation, Communication, Health, and the Workplace* (pp. 397 - 400). Maastricht, the Netherlands: Shaker.