

Estimation of Morbidity Level of Industrial Labour Conditions at Zestafoni Ferroalloy Plant

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Abstract : Background: Mining process has the significant influence on human health and quality of life. In recent years the events in Georgia were reflected on the industry working process, especially minimal requirements of labor safety, hygiene standards of workplace and the regime of work and rest are not observed. This situation is often caused by the lack of responsibility, awareness, and knowledge both of workers and employers. The control of working conditions and its protection has been worsened in many of industries. Materials and Methods: For evaluation of the current situation the prospective epidemiological study by face to face interview method was conducted at Georgian "Manganese Zestafoni Ferroalloy Plant" in 2011-2013. 65.7% of employees (1428 bulletin) were surveyed and the incidence rates of temporary disability days were studied. Results: The average length of a temporary disability single accident was studied taking into consideration as sex groups as well as the whole cohort. According to the classes of harmfulness the following results were received: Class 2.0-10.3%; 3.1-12.4%; 3.2-35.1%; 3.3-12.1%; 3.4-17.6%; 4.0-12.5%. Among the employees 47.5% and 83.1% were tobacco and alcohol consumers respectively. According to the age groups and years of work on the base of previous experience ≥ 50 ages and ≥ 21 years of work data prevalence respectively. The obtained data revealed increased morbidity rate according to age and years of work. It was found that the bone and articulate system and connective tissue diseases, aggravation of chronic respiratory diseases, ischemic heart diseases, hypertension and cerebral blood discirculation were the leading among the other diseases. High prevalence of morbidity observed in the workplace with not satisfactory labor conditions from the hygienic point of view. Conclusion: According to received data the causes of morbidity are the followings: unsafety labor conditions; incomplete of preventive medical examinations (preliminary and periodic); lack of access to appropriate health care services; derangement of gathering, recording, and analysis of morbidity data. This epidemiological study was conducted at the JSC "Manganese Ferro Alloy Plant" according to State program "Prevention of Occupational Diseases" (Program code is 35 03 02 05).

Keywords : occupational health, mining process, morbidity level, cerebral blood discirculation

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