

A survey of occupational health problems amongst workers in a lead-acid battery manufacturing factory in Nairobi was conducted in Nairobi's Industrial area between the months of May and July 2004. Workers exposed to a high lead environment have been known to have high blood lead levels which is detrimental to health. 270 workers were examined for occupational exposure to lead and accidents at work using self administered questionnaires. Environmental inspection of the factory was also done using a walk through environmental inspection questionnaire. Due to the type of working shifts and since the participation was voluntary, 66 workers were assayed for lead in whole blood which was analyzed using flame emission Atomic Absorption Spectrophotometer. A control group of 30 workers who dwell about 5 Km from the factory under survey were also included in the study. The main shortcoming was inadequate ventilation, poor waste disposal, excessive dusts, and inadequate provision of protective clothing and lack of training in first aid. The rate of occupational accidents was found to be significantly high ($p = 0.0001$). The mean whole blood-lead level of the exposed group was 52 [g/dl, which was found to be significantly higher ($p = 0.0035$) than that of the control (unexposed) group, which had a mean of 3.6. [tg/ dl. The correlation coefficient of blood-lead levels on experience (No. of years worked) was found not to be significant ($p = 0.080$). The regression of the dependent variable blood-lead on independent variable age was not significant ($p = 0.0678$). Based on the results from this study, there is an urgent need to educate the workers on hazards pertaining to lead exposure. The workers should be encouraged to use protective clothing all the time. The study recommends frequent inspection of the factory by factory inspectors. Voluntary inspection of lacking provisions should be encouraged but better still statutory enforcement to ensure this is done. A comprehensive Occupational Health Preventive Programme is suggested.