

Abstract:

The study was conducted in the City of Mbabane and assessed Occupational Health and Safety in the informal car maintenance, welding and spray-painting industry. The objective of the study was to assess the risks workers are exposed to in the informal car maintenance, welding and spray-painting industry in Mbabane city in Swaziland. Data was collected by administration of a questionnaire to managers of the establishments and by personal observations of workers while on the job from walk through surveys that were conducted in the city.

Seventy (70) workplaces were identified and sixty five (65) of them participated in the study, representing a response rate of 92.86%. There were twenty (20) workplaces doing car maintenance, twenty five (25) doing welding and twenty (20) doing spray painting. Fifty-three (53)

The data was analysed using the EPI INFO software and results revealed that most workers in this sector were indeed at high risk of exposure to occupational health and safety problems. They worked under unfavourable conditions such as working in the open and subjected to adverse weather conditions, exposed to solvents, welding fumes and gases, strenuous work, improper postures, lifting heavy loads, exposed to spray painting aerosols and fumes and exposed to dust. The workers' occupational health and safety was made worse by the fact that most of them did not have or use personal protective equipment.

90% of the workers were exposed to emissions while carrying out their jobs of spray painting and 10% of them were exposed to paint.

All the workers that were doing spray painting were exposed to paint (95%) and solvents 5%).

Although 75% of the workers, doing spray painting had some kind of personal protection provided however the usage rate was very low.

In all the workplaces that were doing spray painting, there were no other existing control measures for protecting the workers from paint emissions

76% did not have any respiratory protection. However, only 33.3% of them were using the PPE provided and 66.7% were not using them. Therefore most of the workers were at risk of breathing in welding fumes and other welding related gases. This means 92 % of workers were at risk to welding fumes and gases.

68% of the workers did not have protection for the hands, only 32% had. Those workers that had hand protection (32%) had gloves with shorter cuffs and separate sleeves (12%). Others had leather gauntlet gloves with canvas or cuffs (20%). 75% of these workers who had PPE were not using them, only 25% did. Since most of the workers did not use hand protection, this means that their hands were not protected against heat, spatter, and radiation.

Most of the workers (72%) did not wear eye protection when removing slag and that put them at risk of eye injuries.

All welding operations were not done in a booth. This means that the workers and co-workers were at risk of exposure to welding gases and fumes.

48% of the workplaces had their surroundings with materials that could catch fire. 52% had their surroundings free from burnable material. Therefore almost half of the workplaces were at risk of catching fire.

76% of the working places had no fire extinguishers. Only 24% had fire extinguishers, but only two had been serviced accordingly. The workplaces were less prepared for outbreaks of fire.

68% of the workers took no precautions against burns; they had their sleeves rolled up and forearms without gloves or sleeves when carrying out their work. Only 32% of the workers took precautions against burns.

72% of the workers said that they did not know how to treat burns. Only 28% said they knew how to treat them.

72% of the workplaces did not have first aid kits. This means that they were not prepared for accident, only 28% had first aid kits.

71.4% of the work places had first aid kits without the necessary medicines, bandages, and equipment, only 28.6% had. This indicated a lack of preparedness for accidents on their part.

A long-term strategy should be developed aimed at improving the occupational health and safety of the workers. Workers need to be empowered to perform their tasks safely. Workers and owners of informal industries should participate in the formulation of interventions aimed at improving occupational health and safety. The City Council should provide health and safety education and training to the Informal Sector.