

# Health Survey in Gypsum Mines in India

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## ABSTRACT

**Background:** Mining is a hazardous occupation in which workers are exposed to adverse conditions. In India, gypsum mining is mainly carried out in the state of Rajasthan, which contributes about 99% of the total production. **Objective:** The present study was carried out in 12 different gypsum mines in Rajasthan state to determine the health status of the miners. **Materials and Methods:** One hundred and fifty workers engaged in mining activities were included in the study and their health status was compared with that of 83 office staff of the same mines. The health status of the employees was evaluated using a standardized medical questionnaire and pulmonary function testing. **Statistical Analysis:** The unpaired 't' test was used to determine whether there was any significant difference between the miners and the controls and the chi-square test to compare the prevalences of various respiratory impairments in workers with that in controls; we also examined the differences between smokers and nonsmokers. **Results:** Our findings show that the literacy rate is low (42%) among the miners. Pulmonary restrictive impairment was significantly higher amongst smokers as compared to nonsmokers in both miners and controls. Hypertension (22.6%), diabetes (8.8%), and musculoskeletal morbidity (8%) were the common diseases in miners. **Conclusion:** This study shows that there is high morbidity amongst miners, thus indicating the need for regular health checkups, health education, use of personal protective devices, and engineering measures for control of the workplace environment.

**Keywords:** Gypsum mine, miners, morbidity, pulmonary impairment