

Background and Objectives: Work-related musculoskeletal disorders (WRMSDs) are a leading cause of occupational morbidity in high-risk industries such as mining and metals. In South Africa, limited research has utilised compensation data to describe the burden and determinants of WRMSDs. This study aimed to describe the burden and characteristics of WRMSD compensation claims and to identify factors associated with claim acceptance among workers in the mining sector between 2019 and 2023.

Methods: An analytical cross-sectional study was conducted using anonymised compensation claim data obtained from A mutual assurance company, which insures workers in the mining and related industries. Descriptive statistics were used to summarise demographic and occupational characteristics. Logistic regression analysis was performed to identify factors associated with claim acceptance. Musculoskeletal disorders were classified using the International Classification of Diseases, Tenth Revision (ICD-10).

Results: A total of 338 WRMSD compensation claims were analysed, of which 230 (68.0%) were accepted. Most claimants were male (78.7%), with the highest proportion aged 40–49 years (37.3%). Soft tissue disorders accounted for the majority of diagnoses (86.1%). Claims from the metals sector were significantly more likely to be accepted compared with those from the mining sector (adjusted odds ratio (AOR) 3.12; 95% confidence interval (CI) 1.78–5.45; $p < 0.001$). Soft tissue disorders were also more likely to be accepted compared with dorsopathies (AOR) 4.14; 95% CI 1.64–10.47; $p = 0.003$.

Conclusion: There is a substantial burden of WRMSDs among workers in mining and related industries. Claim acceptance is influenced by industry sector and diagnosis category, suggesting both occupational exposure and compensation system factors play a role. Strengthening ergonomic interventions and occupational health surveillance is essential to reduce the burden of WRMSDs.