

Abstract

A Study of Development for National Occupational Health and Safety Indicators

In this research, we investigated and benchmarked the specific indicators of national occupational health and safety that have been already in use to develop new indicators. We categorized the OHS related indicators into the four categories of input–activity–output–outcome indicators. The input indicators are composed mainly of labor force and budget, including the number of labor supervisors, environmental medicine specialties, and industrial safety engineers, as well as occupational health related budget, the number of certified workplaces for risk assessment. The activity and output indicators are composed of regulation, supervision, education, inspection, coaching, and awareness. Comprised indicators for this field are of safety and health education for workers, supervisors, and new employees, allotment of safety managers, organization of safety management system, and investment system on health and safety in workplaces. In addition, the number of the cases for administrative and legal actions, fine charge, supervisory and inspectional actions, business performance for health and safety, and law enactments/amendments are considered, but could not be included in the results because of the lack of open source data. The outcome indicators are composed of accident rates such as industrial accident rate, accident death, occupational diseases, working environmental measurement by hazard factors. The rate of return–to–work from industrial accident patients can be considered for an additional indicator.

We expect that this study can establish a useful foundation for

developing comprehensive and systematic indicators which measure national occupational health and safety, thereby upgrading the national occupational health and safety system. Also the indicators suggested in this study can be used to compare different industrial sectors.