



## Challenges for the collection of reliable OSH data

Under the United Nations 2030 Sustainable Development Agenda and multiple International Labour Organization (ILO) occupational safety and health (OSH) conventions, recommendations and protocols, countries have committed to the collection and utilization of reliable OSH data. [1] To meet this commitment it is necessary for countries to establish effective OSH data collection systems that result in the collection of reliable documentation of occupational accidents and diseases that may be confidently used to detect new and emerging hazards and risks, identify hazardous sectors, occupations, business models and practices, develop policies, systems and programmes at all levels (international, national and enterprise), set priorities and measure progress. There are recognized challenges to establishing effective OSH data collection systems and countries need to be aware of these challenges when establishing and implementing their systems. The following are many of the recognized challenges associated with OSH data collection, which are organized into the following four categories: A) Coverage; B) Accuracy; C) Comparability; and D) Timeliness.

### Coverage

**These challenges involve the exclusion of OSH data from notification and recording requirements.**

Many countries' occupational safety and health and/or employment injury insurance legal frameworks are not comprehensive. The legal frameworks do not cover all economic sectors and all types of employers and

workers. Consequently, the notification and recording of occupational accidents and diseases required under these legal frameworks does not extend to a large number of employers and workers. Sectors that are often excluded from one or both legal frameworks include the agricultural sector, domestic work sector and the public sector. The types of employers and workers often excluded from coverage include small employers, employers and workers operating and working in the informal economy, self-employed workers, migrant and seasonal workers and temporary and part-time workers. These gaps in coverage result in significant under-reporting and undermine the reliability and effective utilization of the data collected. Current and future work trends, including the intensification of migrant flows, ageing of the workforce, and more workers in temporary, casual or part-time work will further exacerbate existing gaps in the coverage of these legal frameworks and impede efforts to improve OSH performance.

Notification and recording requirements often exclude certain occupational fatalities, injuries and diseases for reasons other than that they are not work-related. Occupational diseases are often completely excluded or the list of occupational diseases covered by the notification and recording requirement is limited, even though the ILO has estimated that disease is the cause of over 2 million work-related fatalities each year. [2]

Notification and recording requirements frequently do not require the reporting of dangerous occurrences that have the potential to cause an injury or disease and also suspected cases of occupational disease. Prevention

of occupational accidents and diseases is dependent on the elimination of hazards and the identification of risks before accidents and diseases occur. Collection of data on dangerous occurrences and suspected cases of occupational diseases are key to the creation of a culture of prevention.

Notification and recording requirements are often part of employment injury insurance schemes and employers are often only obligated to notify the competent authority of occupational fatalities, injuries and disease that are insured or compensable under the insurance scheme. Requiring notification and recording of only insured or compensable fatalities, injuries and diseases frequently results in under-reporting and undermines the reliability and effective utilization of the data collected.

## Accuracy

**These challenges involve barriers that result in the under-reporting and as a result adversely affect data accuracy.**

Even when legal frameworks are comprehensive, OSH data collection systems must overcome the following barriers to the collection of accurate data:

- lack of knowledge and understanding by employers, workers and other parties, including medical and healthcare providers, of the possibility/obligation to notify and record occupational accidents, disease, dangerous occurrence and suspected case of occupational diseases;
- time and effort required by the notification and recording process;
- possible negative consequences for injured workers;
- adverse effect on the reputation of the employer;
- adverse financial or other legal consequences for the employer;
- cultural differences in response minor accidents and dangerous occurrences; and
- latency of onset of occupational diseases. [3]

When establishing and implementing notification and recording systems, responsible authorities, social partners and other interested parties need to consult and work in collaboration to eliminate or minimize barriers to compliance with notification and recording requirements. Responsible authorities require the

necessary resources to educate employers, workers and other parties responsible for notification and recording about their responsibilities and to enforce compliance with notification and recording requirements.

Notification and recording of occupational disease and suspected cases of occupational disease is often undermined by the lack of specific knowledge and skills needed for accurate diagnosis and the capacity to carry out periodical medical examinations of workers exposed to hazards. Consequently, even when legal frameworks' coverage is comprehensive, occupational diseases frequently go undetected.

## Comparability

**These challenges involve factors that limit data consistency.**

In many countries, responsibilities for OSH may be divided among multiple authorities, i.e. labour, health, social protection and employment ministries, public and private insurance institutions and other parties including medical and healthcare providers. Authorities may also operate at national, regional and local levels. Authorities may have their own separate notification and reporting mechanisms and repository of OSH data and frequently do not have the authority or ability to share or aggregate data across authorities.

Definitions of key OSH terminology vary from authority to authority and country to country. Even basic terms like "occupational accident" are not consistently defined so the resulting data is often impossible to aggregate or compare within countries and across countries. Further terminology and their definitions are often developed for the purpose of determining compensability under employment injury insurance schemes and not necessarily to further efforts to prevent occupational accidents and diseases. [4]

Information required by notification and recording systems about the occupational fatality, injury or disease, worker(s) who suffered the fatality, injury or disease, and the circumstances surrounding the occupational accident, can also vary significantly from authority to authority and country to country.

As also discussed under "coverage" challenges, the accepted list of occupational diseases differs from one country to another, and many countries only include

diseases that are clearly occupational in origin (e.g. silicosis, mesothelioma, etc.) or can be presumed to be so (e.g. dermatitis, deafness, repetitive-strain injury, etc.). However, certain occupational diseases are difficult to recognize and determine whether the disease is occupational in origin. For example, work-related cancers, which are characterized by long latency periods, are difficult to recognize prior to the clinical manifestation of their symptoms that could appear after a lapse of decades from the exposure to the hazard at work. Long latency periods make it more difficult to recognize and determine whether the disease is occupational in origin.

## Timeliness

**These challenges involve factors that prevent or delay data from being collected and analysed.**

When national OSH data needs to be aggregated from multiple authorities and other public or private entities, delays frequently result unless there is strong communication and on-going collaboration and coordination.

Inconsistencies among the collected data by different authorities and source can further delay the aggregation of collected data and in some instances make reliable reporting and analysis impossible.

## References

- [1] [ILO Implementation Plan 2030 Agenda for Sustainable development](#). ILO, Geneva, 2016.
- [2] [The Prevention of Occupational Diseases: World Day for Safety and Health at Work Report](#). ILO, Geneva, 2013.
- [3] [National system for recording and notification of occupational diseases: Practical guide](#). ILO, Geneva, 2013.
- [4] [Improvement of national reporting, data collection and analysis of occupational accidents and diseases](#). ILO, Geneva, 2012.