



Data Sources for Optimizing the Collection and Use of OSH data

National systems for reporting, data collection and analysis of occupational accidents and diseases

To prevent accidents and injury to health arising out of, linked with or occurring in the course of work, governments, in consultation with the most representative organisations of employers and workers, shall formulate, implement and periodically review a coherent national policy on occupational safety, occupational health and the working environment. To give effect to this policy the competent authority or authorities shall ensure the establishment and application of procedures for the notification of occupational accidents and diseases, by employers and, when appropriate, insurance institutions and others directly concerned, and the production of annual statistics on occupational accidents and diseases. [1] Employers have the duty to report occupational accidents and diseases to the competent body themselves or to organize reliable reporting. Statutory or private occupational accident and disease insurance and compensation funds institutions and insurance carriers are responsible for gathering and compiling information on each reported case filed for compensation, rehabilitation, pensions and further benefits.

Other sources of data

To obtain a fuller picture and assess OSH status and progress, countries should supplement statutory notification by employers with data collected from other sources.

If possible, to harmonize statistics compiled from data collected from different sources, the same indicators as those used in the national reporting system of occupational accidents and diseases should be used. The ILO recommends establishing a coordinating committee at national level comprising representatives of government, other producers of statistics on occupational injuries and employers and workers' organizations. [2]

Other parties that can be involved in the reporting of occupational accidents and diseases [3]

- **Workers:** can provide information with respect to their individual situation as well as that of their co-workers.
- **Trade unions:** very often collect data on occupational accidents and diseases in their respective industry.
- **Labour inspectors:** investigate severe accidents and occupational diseases and enterprise visits may uncover previously non-reported cases.
- **Social insurance carriers:** (health insurance, old age fund) receive relevant information on the consequences of occupational diseases and the long-term effects of work-related injuries.
- **Doctors, nurses, hospitals and medical personnel:** can provide first-hand information after treating injuries and occupational diseases.
- **Police officers and emergency services:** are often the first point of contact for help when accidents, physical violence or negligence occur and are involved in workplace investigations for the causes of severe accidents in many countries.

Surveys

As a complement to collecting data on occupational accidents and occupational and work-related diseases through national notification systems, some countries use additional data collections methods such as special surveys, workforce surveys or working environment surveys. [4] Because the cost of conducting large-scale surveys is significant, countries often include OSH related items in major surveys such as the national health survey and labour force survey.

Health surveillance data

Occupational health surveillance systems for monitoring the mortality and morbidity of occupational injuries and diseases are generally established by national authorities within the framework of occupational disease and injury prevention and/or compensation programmes. A comprehensive system of occupational health surveillance includes individual and collective health assessments, occupational injury and disease recording and notification, sentinel event notification, surveys, investigations and inspections. In addition, other routine national and regional health surveillance and administrative data can provide information on worker's health, including on the distribution of mortality, disease and injury across occupations and sectors. These may include demographic census data, mortality data from death certificates, hospital and primary health care records, national health system surveillance data, trauma and disease (including cancer) registries, exposure registries, such as those for carcinogenic agents, laboratory registries, and medical inspections carried out by the labour or health inspectorate.

Labour inspection statistics

According to the ILO [Convention on Labour Inspection, 1947 \(No. 81\)](#), member States are required to ensure that the labour inspectorate is notified of occupational accidents and cases of occupational disease in such a manner as may be prescribed by national laws or regulations. Labour inspection statistics, including data on occupational accidents and occupational diseases, help labour inspectorates to improve their capacity for strategic planning, programming and evaluation of inspection activities. The ILO has published two complementary guides to assist decision-makers, labour inspectors and other labour administration officers in the collection, interpretation and reporting of labour inspection data and facilitate greater cooperation between national labour inspectorates, other government institutions and relevant stakeholders: the [Guide on the Harmonization of Labour Inspection Statistics and Collection and Use of Labour Inspection Statistics – A short guide](#).

Incident reporting schemes

The recording of near-misses or incidents provides a wealth of information in cases where surveillance of actual injuries yields insufficient data. Significant incident reporting schemes developed for the rapid identification of hazards, timely initiation of preventive measures and prompt control of major accidents and industrial disasters can also be used as sources of information. Under the ILO [Guidelines on Occupational Safety and Health Management Systems](#), monitoring and recording of near-misses or incidents is key to OSH performance and measurement.

Sustainability reporting

Some enterprises, public authorities and NGO's worldwide currently publish sustainability reports including the economic, environmental and social impacts caused by their everyday activities. Many of these reports contain disclosures of OSH data, such as the reports that conform to the Global Reporting Initiative's (GRI's) [Sustainability Reporting Guidelines](#).

International information sources and tools

Although OSH data is different from country to country, other countries' data and international information sources can be very valuable, especially for countries lacking reliable national statistics. For instance, application of the "average accident rate by sector of activity" recorded for a given country can provide an order of magnitude of the accidents that may be expected (and thus facilitate an estimate of the degree of under-reporting). The ILO Statistics Department collects and disseminates annual statistics on occupational injuries for over 100 countries. These are collected upon receiving new or revised numbers from member States.

To fill the present coverage and reporting gap and increase awareness on the magnitude of the problem, the ILO publishes global estimates of occupational injuries and work-related diseases based on existing occupational injury data from selected ILO member States and the World Health Organization's (WHO) global burden of diseases data. [5] Updated estimated figures will be released in September 2017 at the [XXI World Congress on Safety and Health at Work](#).

In addition, the WHO has published estimates of the burden of disease attributable to the work environment. [6] Other researchers have recently proposed alternative ways of monitoring progress towards the health-related Sustainable Development Goals including Target 8.8 based on estimating deaths or disease burden attributable to occupational risk factors. [7]

References

- [1] [Occupational Safety and Health Convention, 1981 \(No. 155\)](#)
- [2] [Resolution concerning statistics of occupational injuries \(resulting from occupational accidents\), adopted by the Sixteenth International Conference of Labour Statisticians](#). ILO, Geneva, 1998.
- [3] [Improvement of national reporting, data collection and analysis of occupational accidents and diseases](#). ILO, Geneva, 2012
- [4] [Occupational injuries statistics from household surveys and establishment surveys, ILO manual on methods](#). ILO, Geneva, 2008.
- [5] [Safety and Health at Work: A Vision for Sustainable Prevention](#). ILO, Geneva, 2014.
- [6] Prüss-Üstün et al., [Preventing disease through healthy environments: a global assessment of the burden of disease from environmental risks](#). WHO, 2016.
- [7] GBD 2015 SDG Collaborators, [Measuring the health-related Sustainable Development Goals in 188 countries: a baseline analysis from the Global Burden of Disease Study 2015](#). The Lancet, Volume 388, No. 10053, p1813–1850.

ILOSTAT – ILO Database of Labour Statistics

[ILOSTAT](#) dataset contains annual data mainly collected through the ILO yearly questionnaire, which covers a wide range of topics including decent work indicators. It includes annual ILO and UN estimates and projections for a subset of indicators.

ILOSTAT provide data on OSH, in particular on:

- Fatal and non-fatal occupational injuries by sex, economic activity and occupation, including number of cases as well as rates per 100,000 and 1,000,000 workers and per 100,000 and 1,000,000 hours worked;
- Days lost per occupational injury by sex, economic activity and occupation;
- Days lost due to cases of occupational injuries with temporary incapacity for work by sex, economic activity and occupation; and
- Labour inspection statistics, including registered workplaces that could be selected for labour inspection; number of labour inspectors by sex; number of labour inspection visits to workplaces during the year; inspectors per 10'000 employed persons; and visits per inspector.