



A safe and healthy working environment is not only a fundamental principle and right at work but also an essential requirement for fostering sustainable and inclusive economic growth, full and productive employment and decent work for all.

Despite significant progress in occupational safety and health (OSH) over the years, the reality remains that workers continue to suffer from work-related injuries and diseases, with some even losing their lives, due to exposure to a range of occupational hazards and risks. These include risks to physical safety, biological hazards, chemicals and hazardous substances and ergonomic and psychosocial hazards.

In June 2022, the International Labour Organization (ILO) constituents strongly reaffirmed their commitment to the protection of safety and health, when the International Labour Conference decided to include “a safe and healthy working environment” in the ILO’s framework of fundamental principles and rights at work. It also designated the Occupational Safety and Health Convention, 1981 (No. 155) and the Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) as fundamental Conventions.

This historic decision, expressed and supported unanimously by the governments, employers’ and workers’ organizations of the 187 ILO Member States, creates a renewed momentum to increase efforts worldwide to improve safety and health at work, and underlines the central role of the ILO in this field.

► Where are we now?

The global burden of work-related injuries and diseases

According to the latest estimates developed by the ILO and covering the year 2019, over 395 million workers worldwide sustained a non-fatal work injury. In addition, around 2.93 million workers died as a result of work-related factors, an increase of more than 12 per cent compared to 2000. [1] The sizeable increase in the absolute number of work-related fatalities is influenced by several factors, which may relate to an aggravation in terms of unprotected exposures to occupational risks, as well as to socio-demographic changes. For example, the global labour force increased by 26 per cent between 2000 and 2019, from 2.75 billion to 3.46 billion. [2] Diagnostic tools have also improved significantly over the last two decades, contributing to an increase in the number of cases detected. [1] [3]

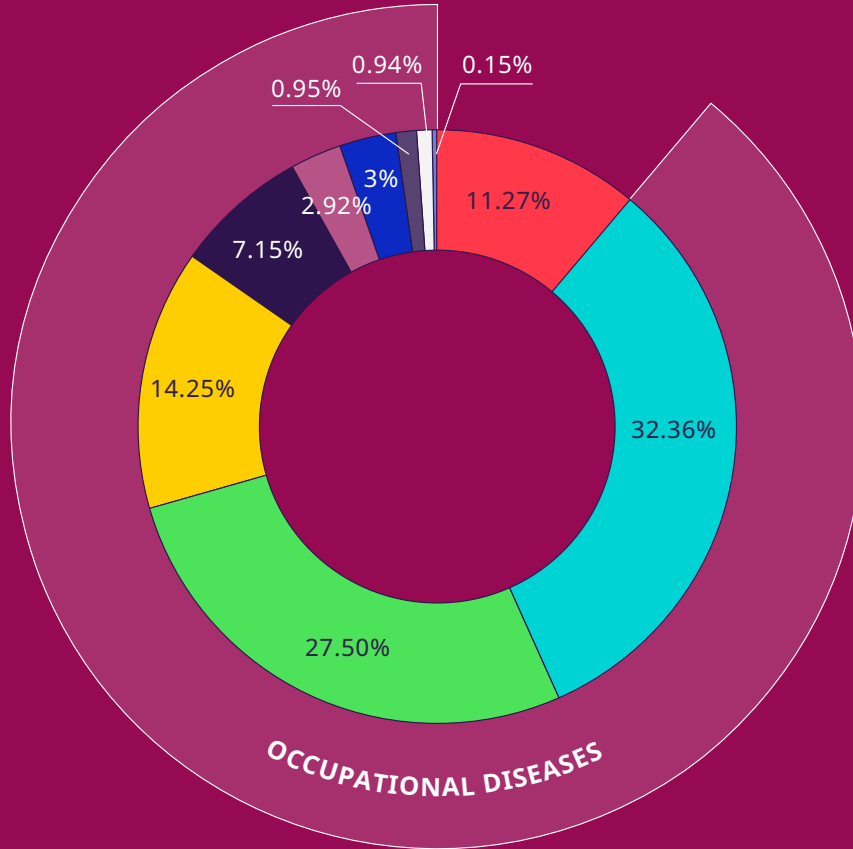
Work-related deaths are unequally distributed, with the male mortality rate (108.3 per 100,000 in the labour force) being significantly higher than the female rate (48.4 per 100,000). In terms of regional distribution, Asia and the Pacific holds the highest share, contributing to almost 63 per cent of global work-related mortality. This reflects the fact that the region possesses the highest working population in the world. [1]

In relative terms, work-related fatalities represented 6.71 per cent of all deaths globally.¹ The attributable fraction of work-related deaths is estimated to be highest in Africa (7.39 per cent), followed by Asia and the Pacific (7.13 per cent) and Oceania (6.52 per cent). [1]

The large majority of these work-related deaths, 2.6 million, were attributed to work-related diseases, while work accidents resulted in 330,000 deaths. The diseases that caused most work-related deaths were circulatory diseases, malignant neoplasms and respiratory diseases. Together, these three categories contributed to almost three-quarters of total work-related mortality. [1]

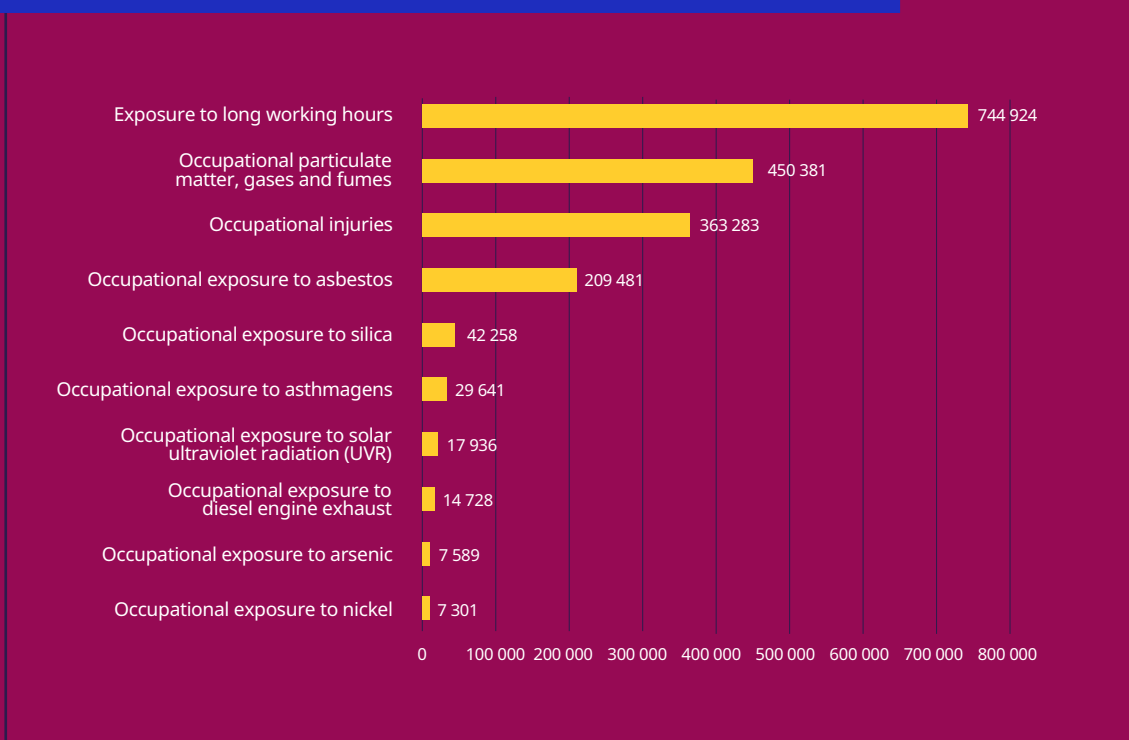
¹ As a comparative example, in 2019 work-related deaths were more than double those due to road traffic injuries (1,286,446 deaths).

► Composition of global work-related deaths



- Work injuries
- Circulatory disease
- Malignant neoplasms
- Chronic obstructive pulmonary disease
- Communicable diseases
- Neuropsychiatric conditions
- Asthma
- Genitourinary system diseases
- Digestive diseases
- Others

► Top 10 occupational risk factors and total number of attributable deaths

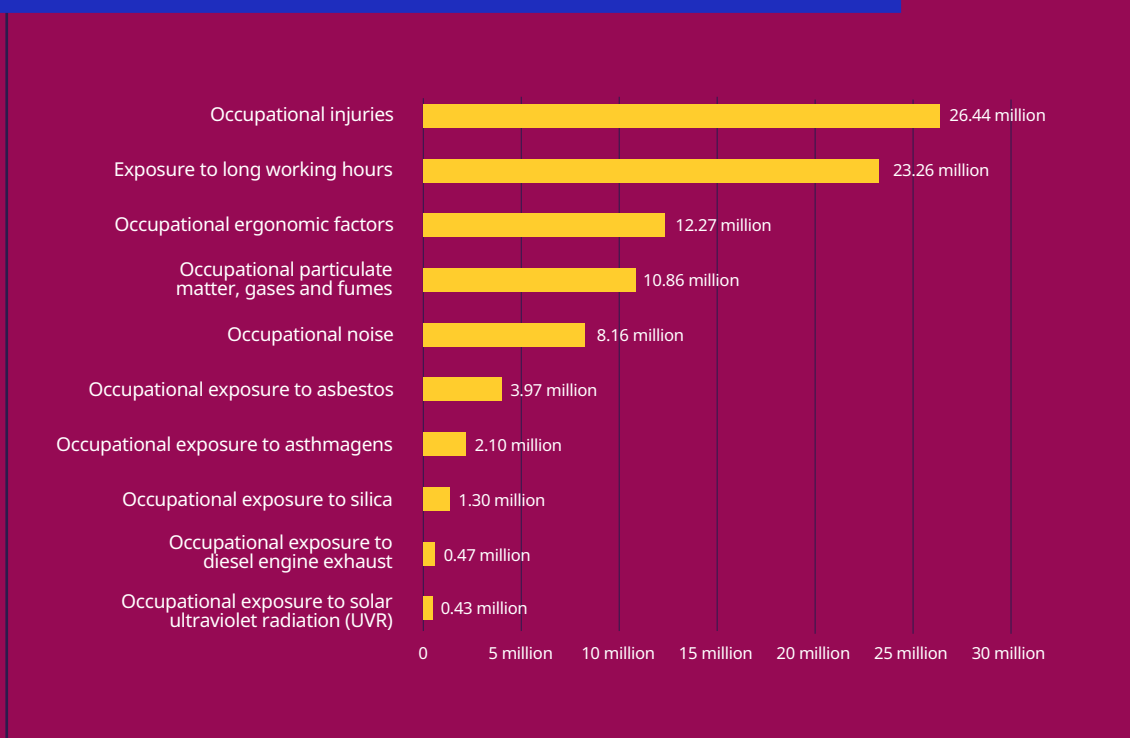


Looking in detail at the most prevalent occupational risk factors, the World Health Organization (WHO) and the ILO developed a joint estimation methodology to produce the *WHO/ILO Joint Estimates of the Work-related Burden of Disease and Injury*. To date, 42 pairs of occupational risk factors and associated health outcomes (namely a specific disease or injury) have been studied. [4] [5] These estimates provide evidence on the relation between occupational exposure to specific risk factors and the subsequent negative health outcomes.

Among the 20 occupational risk factors considered,² the one with the largest number of attributable deaths in 2016 was exposure to long working hours (≥ 55 hours per week), which killed almost 745,000 people, followed by exposure to occupational particulate matter, gases and fumes with over 450,000 associated deaths, and thirdly occupational injuries with over 363,000 deaths. [4] [5]

2 The 20 risk factors are occupational exposure to the following: occupational exposure to asbestos; occupational exposure to arsenic; occupational exposure to benzene; occupational exposure to beryllium; occupational exposure to cadmium; occupational exposure to chromium; occupational exposure to diesel engine exhaust; occupational exposure to formaldehyde; occupational exposure to nickel; occupational exposure to polycyclic aromatic hydrocarbons; occupational exposure to silica; occupational exposure to sulfuric acid; occupational exposure to trichloroethylene; occupational asthmagens; occupational particulate matter, gases, and fumes; occupational noise; occupational injuries; occupational ergonomic factors; exposure to long working hours; and occupational exposure to solar ultraviolet radiation.

► Top 10 occupational risk factors and total number of attributable DALYs



The WHO and ILO also estimated a total of 90.22 million disability-adjusted life years (DALYs)³ attributable to the 42 specific pairs of occupational risk factors and health outcome. Occupational injuries were responsible for the largest number of DALYs lost (26.44 million), followed by exposure to long working hours (23.26 million) and occupational ergonomic factors (12.27 million). [4] [5]

In line with the ILO global estimates discussed above, the burden of specific occupational risk factors considered by the WHO/ILO joint estimates show varying evolution over time. For example, the rate of trachea, bronchus and lung cancers attributable to occupational exposure to chromium doubled between 2000 and 2016. Mesothelioma attributable to asbestos exposure has risen by 40 per cent. The rate of non-melanoma skin cancer increased by over 37 per cent between 2000 and 2020. On the other hand, deaths due to exposure to asthmagens and particulate matter, gases, and fumes decreased by over 20 per cent. [4][5]

The ILO has also partnered with other institutions to estimate the number of workers affected by poor OSH conditions. For example, the ILO and the International Agency for the Prevention of Blindness collaborated to produce a report drawing attention to healthy vision as being integral to safety and productivity at work. According to the report, over 13 million people around the world live with vision impairment linked to their work, with an estimated 3.5 million eye injuries occurring in the workplace every year. This amounts to 1 per cent of all non-fatal occupational injuries and places work as the third largest risk factor for vision impairment. [6]

³ One DALY represents the loss of the equivalent of one year of full health. It is a universal measurement to calculate health burdens.



Challenges and opportunities for OSH in the evolving world of work

Major industrial accidents pose a significant threat to workers and wider communities.

Disasters such as the explosion of a large store of ammonium nitrate in the Beirut port (Lebanon) in 2020 and an explosion in a waste management centre in Leverkusen (Germany) in 2021 caused deaths, injuries, diseases, environmental pollution, business disruption and substantial economic damage for entire communities.



Working in **hazardous sectors** such as agriculture, forestry and fishing, mining, construction, and manufacturing continues to represent the main risk to workers' lives and well-being. Each year, 200,000 fatal injuries occur in these sectors, representing 60 per cent of all fatal occupational injuries. [1] Looking at the fatal occupational injury rate, the mining and quarrying, construction, and utilities sectors are the three most hazardous sectors globally. [1]



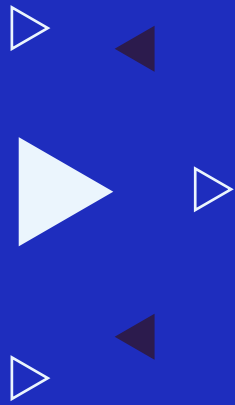
Crises and emergencies, ranging from natural disasters to conflicts, or public health emergencies, continue to cause profound disruption to where, how and whether people are able to work. During the COVID-19 pandemic, all actors in the world of work were exposed to the risk of infection with the novel coronavirus, but also to new and emerging risks correlated with the emergency and newly adopted working practices and procedures.

Demographic changes in the working population, including in relation to age, gender or migration, have important implications for OSH and the prevention of occupational accidents and diseases.

Young people face significant challenges when it comes to securing decent work and experience higher rates of occupational injuries than **older workers**. On the other hand, almost 43 per cent of fatal occupational diseases affect older workers aged 70 years and more, due to the cumulative effects of occupational exposures over working years coupled with the decline in biological functions. [1]

Despite it being widely acknowledged that the physiological and psychological differences between **men** and **women** and gender distribution in jobs and occupations influence exposure to occupational hazards and risks and their impact, the gender perspective is often neglected in OSH practice, with inequalities in women's participation in OSH decision-making processes. [7]





Around 2 billion people are working in the **informal economy** (more than 60 per cent of the world's employed population), [12] lacking a stable or regular income and adequate legal or social protections. Their work often falls outside the scope of OSH legislation and the purview of labour inspectorates, rendering them practically invisible in terms of OSH regulation and oversight.

The share of informal employment among **domestic workers** is twice the share of that among other employees (81.2 versus 39.7 per cent). [13] Domestic work is female-dominated, with one in every 12 female employees working as a domestic worker. [14] They are exposed to a wide range of hazards, ranging from chemical and biological to physical and ergonomic. Psychosocial hazards, such as long working hours, workplace isolation and social exclusion, as well as violence and harassment are also widespread among domestic workers.

Working from home has long been an important feature of the world of work, with about 260 million home-based workers worldwide in 2019. [13] Telework has leaped since 2020 in response to the COVID-19 pandemic and it is the predominant form of home working in high-income countries, while in developing nations, particularly in Asia, homeworkers can be found at the bottom of supply chains associated with industries such as apparel, electronics, and houseware. [17] Often, their working environment and equipment do not meet adequate ergonomic, environmental, and OSH standards, posing significant risks not only for the homeworker but also to other members of the household. Psychosocial risks, such as isolation and blurred boundaries between work and personal time, are quite common among home-based workers.

Nowadays, increasing numbers of workers are involved in **non-standard forms of employment**, often experiencing poor OSH conditions and lacking labour and OSH protections. [8]

Platform workers have been receiving growing attention over the last few years. Platform work may offer significant opportunities for both individuals and businesses, facilitating the transition from informal to formal work and granting workers greater control over their working hours and work-life balance. [9] [10] However, this type of work has been associated with an over-emphasis on "quasi-continuing" availability, and with a lack of OSH protection, with no or little access to paid sick leave, OSH advice and training, suitable working equipment or adequate personal protective equipment (PPE). [11]

Micro-, small and medium-sized enterprises (MSMEs) account for 90 per cent of businesses worldwide, generating 50 per cent of global gross domestic product. [15] Most of them operate in the informal economy. Commonly precarious, they often face both human and resource constraints, limiting their awareness of and compliance with regulations protecting workers in terms of working conditions and OSH. [16]





Climate change and environmental degradation pose a multidimensional challenge to OSH. Extreme weather events, heat stress, ultraviolet radiation, wildland fire, infectious disease, including vector-borne/zoonotic diseases, aeroallergens, air pollution and pesticide use are examples of hazards that may be caused or exacerbated by climate change. [18] Green industries and technologies are rising to respond to this global emergency. However, green technologies may create or amplify OSH hazards and risks at all stages of their life cycle, from the extraction of raw materials and the manufacturing of technological devices, to their transportation, installation, operation, decommissioning and disposal.

In emerging and developing countries, recycling activities are generally carried out by workers in the informal economy. An estimated 20 million **waste pickers** are working globally. [19] Waste pickers generally have little or no social, economic or legal protections, and often include women and children. They are continually exposed to hazardous substances, materials and pathogens, as well as to new, complex and hazardous waste flows, such as electronic waste. [20]

Technological developments have been able to take over many dirty, dangerous and demeaning jobs previously undertaken by workers. Innovations in automation and robotics can prevent risks such as noise, vibration or contact with moving machinery and reduce exposure to hazardous substances. Innovation in manual handling can support ergonomic movements and positions, while at the same time allowing the inclusion of a broader range of workers in certain jobs and tasks. [21] On the other hand, the use of digitalization and artificial intelligence also creates challenges, with possible detrimental effects on OSH. New risks can emerge from increased human-machine interfaces, for example in relation to collisions with equipment, mechanical failures, electrical hazards, or programming errors of robots. [22] Ergonomic risks may result from the increased use of mobile devices and sedentary work. High cognitive, visual and/or sensory load, as well as the loss of autonomy in how to carry out the work, and reduced interaction with colleagues, can increase stress and feelings of isolation, with consequences for their mental health. [11] [23]



An overview of policy trends on OSH

As of November 2023, Convention No. 155 has been ratified by 79 countries (42 per cent of ILO Member States) and Convention No. 187 has been ratified by 62 countries (33 per cent of ILO Member States). Only 42 countries (22 per cent of ILO Member States) have ratified both fundamental OSH Conventions.

In line with the core principles of the two fundamental Conventions, a sound and resilient national OSH framework, built on social dialogue and participation, is essential for the realization of the fundamental right to a safe and healthy working environment. Such a framework contributes towards the building of a preventative safety and health culture.

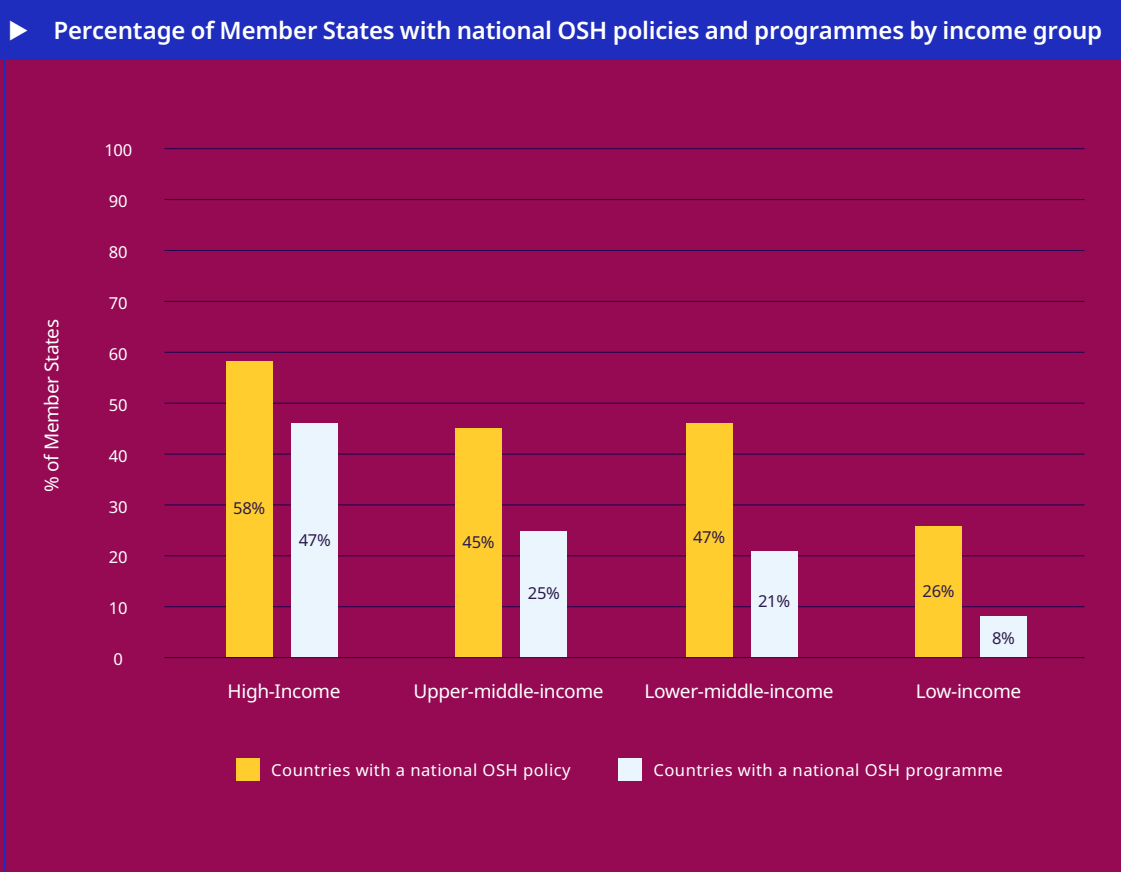
According to the ILO report *Implementing a safe and healthy working environment: Where are we now?*, nearly all ILO Member States have an authority or body responsible for OSH, with 87 per cent of these bodies housed in the ministry of labour of the respective Member State. The majority of the 187 Member States (79 per cent) also have a national tripartite body on OSH.⁴ All countries in Eastern Asia, Western Asia, Eastern Europe, Northern Europe and Western Europe have a national tripartite body while only half of Northern American and Gulf Cooperation Council Arab States were found to have one. [24]

As of March 2023, fewer than half of ILO Member States have an up-to-date national OSH policy, and only 34 per cent have an up-to-date national OSH programme. [24]

Overall, the ILO region with the highest percentage of Member States with a national OSH policy is Europe and Central Asia (57 per cent), followed by Asia and the Pacific (47 per cent), the Americas (46 per cent), the Arab States (45 per cent) and Africa (39 per cent). A consistent geographical pattern emerged when comparing national OSH programmes to the trends observed for national OSH policies. Europe and Central Asia demonstrated the highest percentage of Member States with an up-to-date programme on OSH (47 per cent), followed by Asia and the Pacific (36 per cent), the Americas (31 per cent), Africa (24 per cent) and the Arab States (18 per cent). [24]

Based on country income groups, the percentages of Member States with a national OSH policy for high-income countries (58 per cent), upper-middle-income countries (45 per cent) and lower-middle income countries (47 per cent) are considerably higher than those for low-income countries (26 per cent). Furthermore, nearly half of high-income countries have an up-to-date national OSH programme, compared to 25 per cent of upper-middle-income countries and 21 per cent of lower-middle-income countries, while only 8 per cent of low-income countries have one. [24]

4 National tripartite OSH bodies are usually composed of government representatives (ministry of labour and other relevant ministries and institutions), with an equal number of representatives of employers' and workers' organizations. Sometimes, the tripartite composition is expanded to involve the representatives of additional institutions, for example OSH associations and academic institutions. The functions of these bodies vary considerably from country to country, ranging from a consultative role to a decision-making role in the definition of national policies, priorities and action plans, as well as in the drafting of laws and regulations. [24]



Interestingly, more than 90 per cent of ILO Member States have established a system for the recording and notification of occupational injuries and diseases. [24] Although this reflects a positive trend towards establishing such systems on a global level, it is important to note that this analysis only considered the existence of a reporting system and not its quality.

For instance, only 70 Member States with a recording and notification system have shared data on occupational injuries and diseases with the ILO in the past five years. The highest percentage of these countries were from Europe and Central Asia (about 60 per cent), followed by the Americas (16 per cent), Asia and the Pacific (13 per cent), Africa (8 per cent) and the Arab States (3 per cent). Analysing by country income level, 60 per cent of these countries were high-income countries, 24 per cent were upper-middle-income, 13 per cent were lower-middle-income countries and only 3 per cent were low-income countries. [24]

► Recent developments and the way forward

The elevation of a safe and healthy working environment to a Fundamental Principle and Right at Work

At its 110th Session in June 2022, the International Labour Conference made a significant decision to enhance the prevention of occupational injuries and diseases. It decided to include “a safe and healthy working environment” in the ILO’s framework of Fundamental Principles and Rights at Work and to designate as fundamental Conventions the Occupational Safety and Health Convention, 1981 (No. 155) and the Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187).



The five categories of Fundamental Principles and Rights at Work

Freedom of association and the effective recognition of the right to collective bargaining

Elimination of all forms of forced or compulsory labour

Abolition of child labour

Elimination of discrimination in respect of employment and occupation

A safe and healthy working environment

All ILO Members, even if they have not ratified these two fundamental Conventions on OSH, now have an obligation, arising from the mere fact of their membership, to respect, promote and realize the right to a safe and healthy working environment. This includes the formulation, implementation and periodic review of a national policy and a national programme on OSH in consultation with the most representative organizations of employers and workers, and the promotion of the continuous improvement of safety and health at work through the development of a national OSH system.

The elevation of a safe and healthy working environment to a fundamental principle and right at work changes the reporting obligations both for Member States who have ratified the two fundamental OSH Conventions and for those who have not. Starting in 2024, Member States that have ratified either fundamental Convention will be obliged to report on its implementation in 3-year cycles (instead of 6-year cycles previously). On the other hand, Member States that have ratified neither Convention No. 155 nor Convention No. 187 will now have to provide information regarding improvements related to this new fundamental principle and right at work as part of the report requested annually from all Member States that have not ratified fundamental standards.

The inclusion of a safe and healthy working environment as a fundamental principle and right at work draws attention to the mutually reinforcing nature of all such principles and rights. For instance, lack of adequate OSH conditions are particularly pronounced in populations with deficiencies in other fundamental principles and rights at work. On the other hand, freedom of association is necessary for the effective formulation of national OSH policies and programmes.

A new global strategy on OSH

In November 2023, the ILO Governing Body adopted a new global strategy on OSH. This new strategy aims to guide the work of the ILO in supporting its constituents to promote, respect and progressively realize the fundamental right to a safe and healthy working environment worldwide. It aspires to contribute to a global decrease in the number of occupational fatalities, injuries and diseases, as well as to improve the quality of working lives, increase enterprises' productivity and sustainability and alleviate the socio-economic burden that arises in the absence of a comprehensive OSH framework.

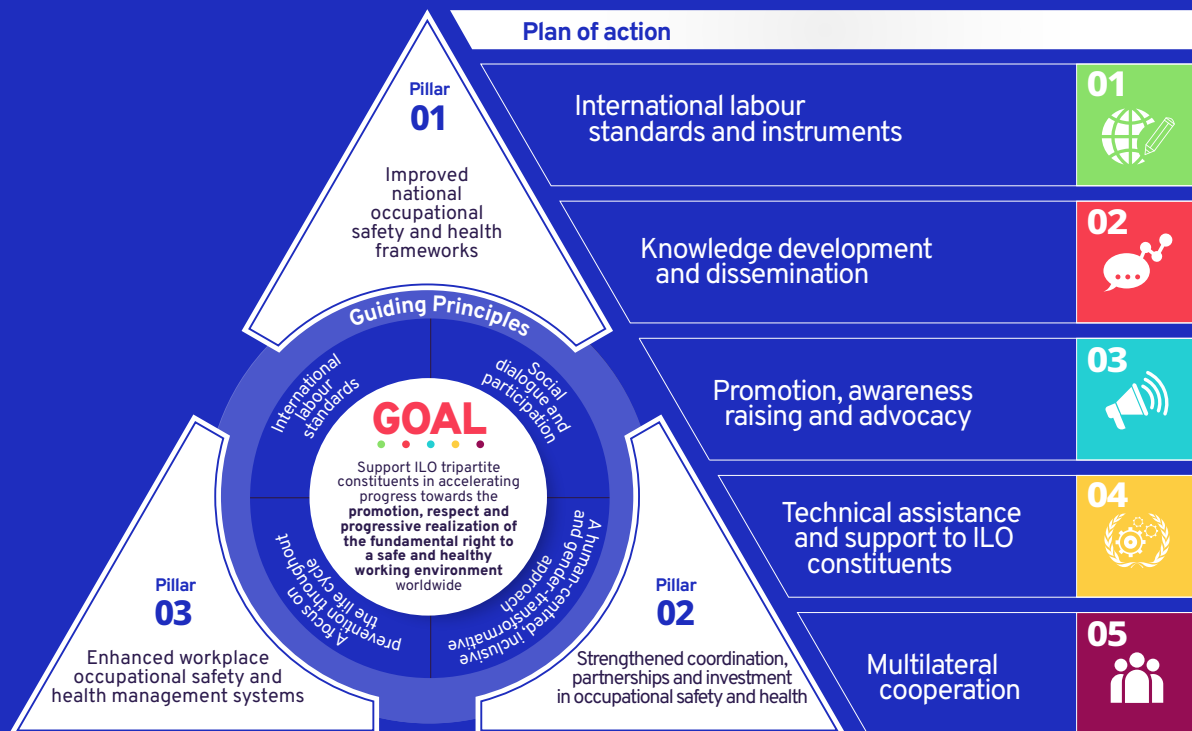
The strategy calls upon ILO constituents to accelerate action towards continuous improvement in building a preventative safety and health culture. It confirms the commitment of the ILO and its constituents to advancing social justice by protecting the health and lives of workers and promoting decent work for all. The strategy also highlights the synergies between OSH and the other fundamental rights, particularly the rights to non-discrimination and freedom of association.

The strategy is grounded on transversal guiding principles. It brings the ILO's mandate, in particular international labour standards and social dialogue, to the forefront of all ILO action on OSH. The strategy also adopts a human-centred, inclusive and gender-transformative approach and applies the principle of prevention throughout the life cycle.

The strategy seeks to encourage and assist ILO Members to take action on three complementary and interdependent pillars. The first one concerns improving national OSH frameworks, by strengthening all elements of a national OSH system, including through ensuring effective governance, promoting reliable data and evidence-based research and developing competency in OSH services. The second focuses on strengthened coordination, partnerships, and investment in OSH, by mainstreaming OSH in broader policies at national and global levels, promoting whole-of-government approaches to OSH, securing key partnerships at national and multilateral level, and guaranteeing adequate and sustainable investments in OSH. The third pillar looks at enhancing workplace OSH management systems, by promoting the principles and values set in the Guidelines on occupational safety and health management systems (ILO-OSH 2001), through the development of tailored gender-responsive guidance adapted to specific hazards, risks, sectors and occupations.

A plan of action for the period 2024-30 will guide the implementation of the strategy. It covers five different areas, namely: international labour standards and instruments on OSH; knowledge development and dissemination; promotion, awareness-raising and advocacy; technical assistance and support to ILO constituents; and multilateral cooperation.

ILO global strategy on OSH



Going forward

Looking at the coming years, and as part of the new global strategy and plan of action, the ILO will carry out a global campaign for ratification and implementation of the two fundamental OSH Conventions (Conventions No. 155 and No. 187). It will also strengthen its normative framework on OSH, by discussing new standard-setting on biological hazards, chemical hazards, ergonomics and guarding of machinery, as well as new codes of practices and technical guidelines on OSH. A tripartite meeting of experts will be held to discuss OSH in extreme weather events and changing weather patterns, and tripartite consultations will be organized to discuss other pressing issues.

Another key area of action will be focused on the development of OSH knowledge, data and research, and the promotion of their use by ILO constituents. This will include the launch of a global network of collaborating OSH institutions and experts and a global knowledge platform, including a forecasting group of experts. A triennial global outlook report on OSH, with information on global and regional trends, estimates on work-related injuries and diseases, forecasted challenges and priorities requiring the attention of actors in the world of work, and scientific analysis of selected themes will be released on the occasion of the World Congress on Safety and Health at Work. Research and policy tools will be developed on both traditional and new and emerging risks in the world of work, as well as on the mainstreaming of OSH in relevant public policies and programmes and on sustainable financing mechanisms for OSH.

The ILO will continue to raise awareness and advocate for the prevention of occupational accidents and diseases worldwide. To this end, it will carry out the annual campaign for the World Day for Safety and Health at Work and organize high-level events and tripartite debates to promote political commitment to OSH.

At the country level, the ILO will provide technical and policy assistance to support its constituents in different areas, including ratification and implementation of OSH conventions, formulation of OSH policies and programmes and mainstreaming of OSH in other public policies. The ILO will also support constituents in the establishment and continual improvement of national OSH systems (especially regulatory frameworks, labour inspection, occupational health services and recording and notification systems). The ILO will support countries to develop strategies and interventions to improve OSH conditions and protections for workers in MSMEs, the informal economy and public administration. It will also cooperate to the enhancement of tripartite representation, participation and consultation in OSH governance, through capacity building and training for government officials and employers' and workers' organizations.

With its unique tripartite structure, the ILO will continue to play a central role in the multilateral system, coordinating and participating in platforms, task forces and other mechanisms.



Overview of ongoing international collaborations, initiatives, and commitments

Inter-Organization
Programme for the
Sound Management
of Chemicals (IOMC)

Collaboration
with the Food
and Agriculture
Organization

Inter-Agency
Committee on
Radiation Safety

Collaboration with the
International Atomic Energy
Agency, including in the
Radiation Safety Standards
Committee and the Emergency
Preparedness and Response
Standards Committee

Collaboration with global
OSH associations, such as
the International Ergonomics
Association, the International
Commission on Occupational
Health, the International
Commission on Radiological
Protection, the International
Radiation Protection Association,
the International Commission
on Non-Ionizing Radiation
Protection, the International
Social Security Association,
the International Occupational
Hygiene Association, the
Institution of Occupational Health
and Safety, and the International
Association of Labour Inspection

Strategic
Approach to
International
Chemicals
Management
(SAICM)

Collaborations with
the WHO on major
industrial accidents,
non-ionizing radiation,
chemicals, biological
hazards, communicable
and non-communicable
diseases, mental health

Basel, Rotterdam,
Stockholm
and Minamata
Conventions

Inter-Agency Committee
on Radiological and
Nuclear Emergencies

Collaboration with
financial institutions,
such as the World
Bank (including on the
Environmental and
Social Framework),
the European Bank
for Reconstruction
and Development,
and the African
Development Bank

United Nations
Inter-Agency
Task Force on the
Prevention and
Control of Non-
communicable
Diseases

Collaboration with global and
regional bodies and platforms,
such as the G20 OSH Network,
the European Commission,
the European Agency for
Safety and Health at Work,
the Association of Southeast
Asian Nations, the Pan
American Health Organization
and the Southern African
Development Community

Collaboration with the Organisation for
Economic Co-operation and Development
(OECD), including in the Committee on
Radiological Protection and Public Health

SAFETY + HEALTH FOR ALL

The ILO Flagship Programme **Safety + Health for All** is a key vehicle for delivering the OSH agenda of the ILO. It will remain a crucial mechanism for implementing the new global OSH strategy and for action in providing direct assistance to constituents.

An integral part of Safety + Health for All is the **Vision Zero Fund** which was a G7 initiative and later endorsed by the G20 in 2017. Working with supply chains in the agriculture, garment and construction sectors, the Fund strives to reach zero work-related fatalities, severe injuries and diseases through fostering public and private action in selected businesses operating in low- and middle-income countries and introducing prevention activities to improve OSH.

Since its inception in 2015, **Safety + Health for All** has directly or indirectly benefited over 182 million workers.



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<https://doi.org/10.54394/HQBQ8592>