Bridging Social Protection and Occupational Health to Advance Sustainable Development Goals

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Abbreviations

ARL	Administradoras de Riesgos Laborales (Colombia)
CEREST	Centro de Referência em Saúde do Trabalhador (Brazil)
CNaPS	Caisse Nationale de Prévoyance Sociale (Madagascar)
DSST	Direction de la Sécurité Sociale des Travailleurs (Madagascar)
EII	Employment injury insurance
EPS	Entidades Promotoras de Salud (Colombia)
IPS	Instituciones Prestadoras de Salud (Colombia)
LMIC	Low- and middle-income countries
MSSP	Ministerio de Salud y Protección Social (Colombia)
MOT	Ministerio del Trabajo (Colombia)
MOLISA	Ministry of Labour, War Invalids and Social Affairs (Viet Nam)
MSA	Mutualité Sociale Agricole (France)
MTEPSLS	Ministère du Travail, de l'Emploi, de la Fonction Publique et des Lois Sociales (Madagascar)
NHS	National health service
OHS	Occupational health services
OSH	Occupational safety and health
SISPRO	Sistema Integrado de Información de la Protección Social (Colombia)
SGRL	Sistema General de Riesgos Laborales (Colombia)
SGSSS	Sistema General de Seguridad Social en Salud (Colombia)
SHP	Social health protection
SMIE	Service Medical Inter-Entreprise (Madagascar)
SMT	Service Médical du Travail (Madagascar)
SSTOI	Service de la Santé au Travail et des Organisations Interentreprises
SUS	Sistema Único de Salud (Brazil)
UHC	Universal health coverage
USP	Universal social protection
VHEMA	Viet Nam Health and Environment Management Agency (Viet Nam)
VSS	Viet Nam Social Security (Viet Nam)
WIOD	Work injury and occupational disease

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Introduction

Human health is determined by physiological factors and by the conditions in which people are born, grow, live, work, play and age and the systems and forces that shape these – in other words, social, environmental, behavioural and political factors (Marmot 2001). At the individual level, the different determinants of health are not experienced in silo and therefore should ideally be tackled and addressed by employing a coordinated and holistic set of policies and institutional frameworks. Social protection and occupational safety and health systems both aim to address some of the social and environmental determinants of health for the working population and beyond, and in particular, occupational health services (OHS) and social protection schemes covering healthcare and employment injury and occupational diseases. They share a common public health objective of promoting good health, preventing (work-related) injuries and diseases, supporting access to health care without hardship, guaranteeing income security throughout sickness and injury and facilitating rehabilitation. In this respect, both policies directly support the achievement of SDG targets 1.3 and 8.8, respectively, and jointly contribute to the achievement of SDG 3 on health and wellbeing for all.

In support of coordinated and holistic approaches, a research project consisting of a scoping review and three country case studies was undertaken as part of the ILO-France Project "Universal Access to Social Protection and Health and Safety at Work" to generate an understanding of existing linkages and coordination mechanisms between national social protection systems and occupational health services, while also highlighting the current gaps in knowledge that need to be filled. This report brings together the findings of the project.

Social protection

Social protection is defined as a set of policies and programmes designed to reduce and prevent poverty, vulnerability and social exclusion throughout the life cycle (ILO 2024b). The term encompasses a broad variety of policy instruments, including social insurance and social assistance, with most social protection systems adopting a combination of instruments to achieve their objectives. As outlined in the Social Protection Floors Recommendation 2012 (No. 202), it encompasses, at a minimum, access to healthcare without hardship, which includes maternity care, and income security throughout the life cycle (ILO 2019b).

Within the 2030 Sustainable Development Agenda, social protection contributes to a range of goals and targets. SDG target 1.3 commits members to the elaboration of nationally appropriate social protection systems for all and sets a clear target to achieve substantial coverage of the poor and vulnerable. In addition to SDG 1 on eradicating poverty, social protection also contributes to SDG 2 on eradicating hunger, SDG 3 on good health and well-being, SDG 5 on gender equality, SDG 8 on decent work and economic growth, SDG 10 on reduced inequalities and SDG 16 on peace, justice and strong institutions (ILO 2021b).

The ILO's normative social security framework consists of 19 up-to-date Conventions and Recommendations which highlight the importance of universal and adequate social protection coverage. Specifically, the Social Security (Minimum Standards) Convention, 1952 (No. 102) recognizes nine life contingencies, including access to medical care that aims to maintain, restore and improve the health of the protected person without hardship and also includes access to maternity care benefits (ILO 2019b). There are several normative instruments which enshrine the rights to health and social protection on a universal basis and outline the minimum levels of protection that should be guaranteed under national systems and the minimum range of services to be covered. These include preventative and curative interventions, such as the Medical Care Recommendation, 1944 (No. 69) and the Medical Care and Sickness Benefits Convention, 1969 (No. 130). These instruments allow for a plurality of approaches towards ensuring access to health care, on the premise that these must meet certain principles, including that of solidarity in financing (ILO 2020a; 2019b; 2020c). In practice, there is great diversity in the manner in which health care is financed and organized, which can be through social health insurance, national health services, or a combination of both – and indeed, most countries operate a combination of these approaches in their efforts towards achieving universal coverage (UHC) (ILO 2020b). Income security during maternity and sickness are also guarantees outlined in Convention No. 102, contributing towards meeting health objectives and they are, along with access to health care without financial hardship, the core components of social health protection (SHP) (ILO 2020c). The extension of SHP contributes to two

complementary SDG targets: SDG target 1.3 on universal social protection systems, including floors, and SDG target 3.8 on universal health coverage (ILO 2020c).

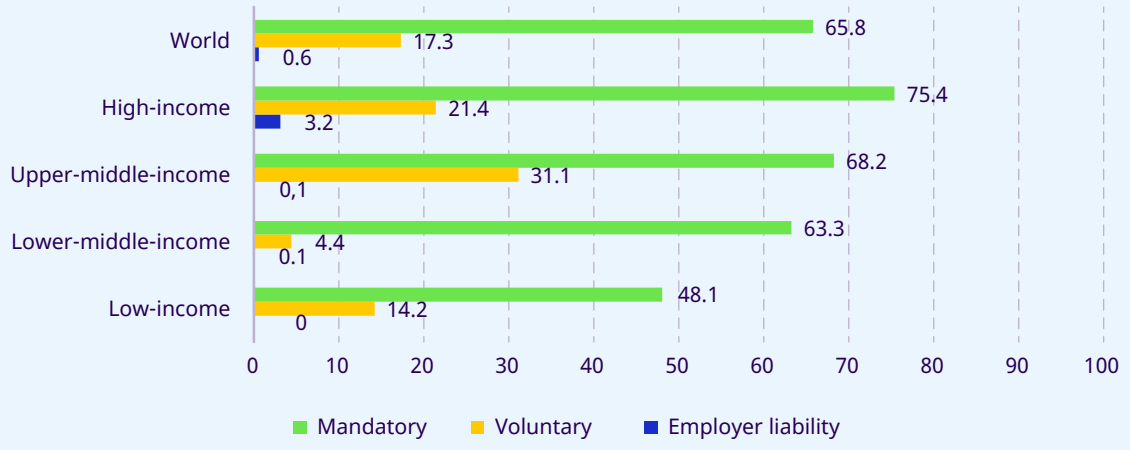
Access to healthcare without financial hardship is also a guarantee to which persons affected by work injury and occupational diseases (WIOD) are entitled under the international social security framework. Indeed, part VI of Convention No. 102 and the Employment Injury Benefits Convention, 1964 (No. 121) outline minimum standards for benefits in case of employment injury and occupational diseases. These consist of:

- cash benefits in case of a temporary incapacity to work
- cash benefits in case of permanent reduced capacity to work or invalidity
- cash benefits for survivors in case of fatal injury or disease
- medical care and allied benefits to maintain, restore or improve the health of the affected person.

Convention No. 121 also outlines the need for the institution administering medical care to cooperate with, or provide, vocational rehabilitation services to support persons with disabilities resulting from employment injury or occupational disease towards accessing suitable employment. The Conventions are not prescriptive about the institutional arrangements for the administration of such benefits, however, and Convention No. 102 envisages the possibility of embedding the guarantees with others.

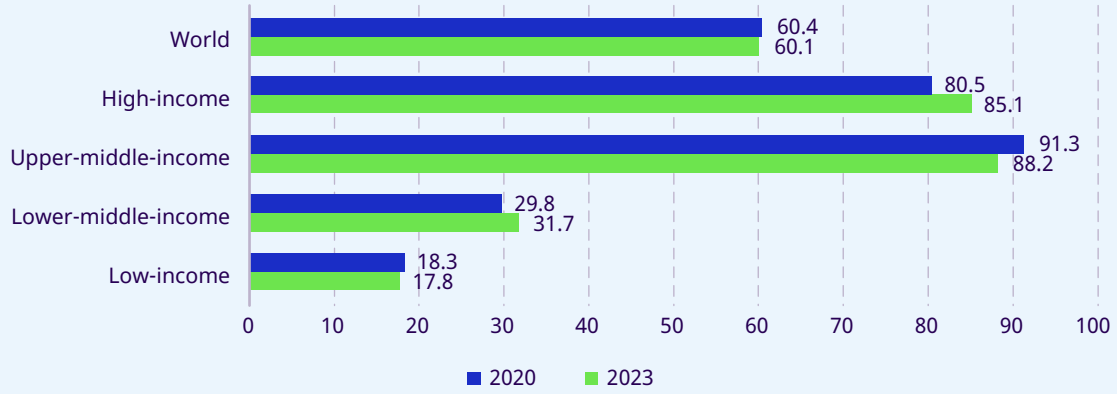
In practice, some 60 per cent of the world population is protected by SHP, although this hides significant disparities across country income groups, as 17.8 per cent and 31.7 per cent of the populations in low-income and lower-middle-income countries are protected, respectively, as illustrated in figures 1 and 2 (ILO 2024b). These also show that stagnation has occurred in the scope of coverage of SHP over the past few years. This largely accounts, then, for why over one billion people incurred catastrophic health spending in 2019, a number that continues to rise year on year (WHO and World Bank 2023).

Figure 1: Share of the population legally entitled to access healthcare services without hardship, by income group and type of mechanism, 2023 (percentage)



Source: ILO 2024b.

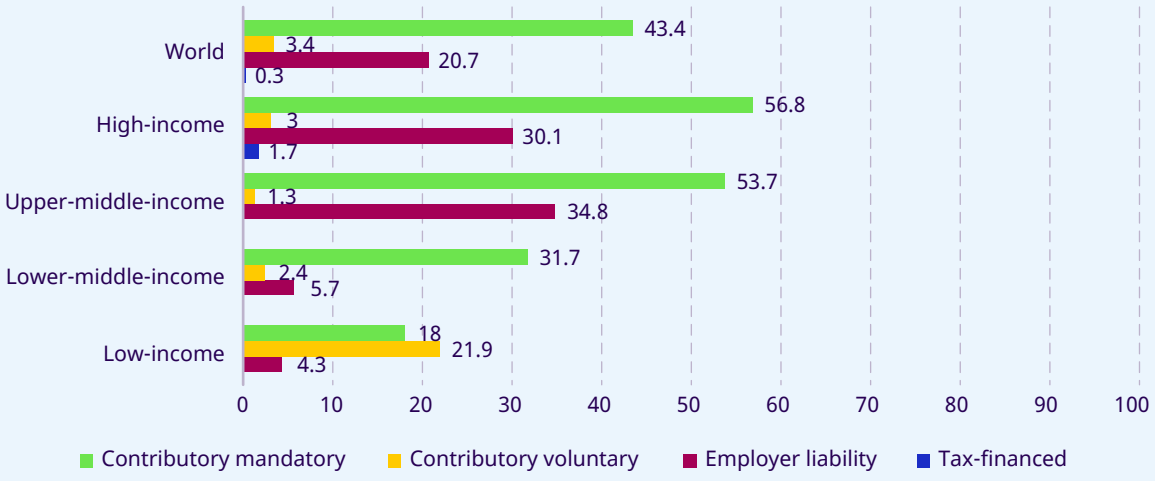
▶ Figure 2: Share of the population protected by social health protection (protected persons), income level estimates, 2020 and 2023 or latest year available (percentage)



Source: ILO 2024b.

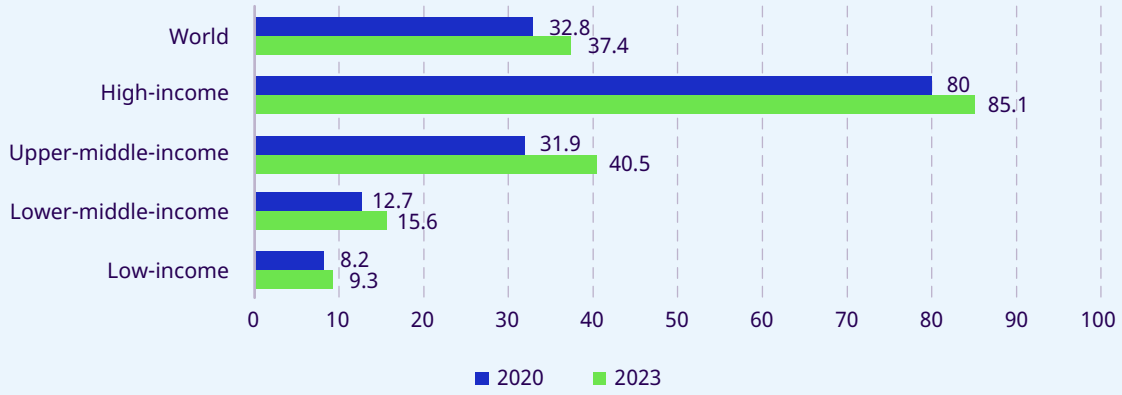
In turn, just over 40 per cent of the labour force is legally covered by contributory mandatory provisions for cash benefits in case of employment injury, with a further fifth covered by contributory voluntary provisions or employer liability provisions (see figures 3 and 4). However, only 37.4 per cent of workers are effectively covered by cash benefits for employment injury, again with significant variations by country income groups (ILO 2024b). Information for coverage of medical benefits is not currently monitored under SDG target 1.3 owing to the lack of comparable data at the national and global levels.

▶ Figure 3: Share of persons in labour force aged 15 and over legally covered by cash benefits in case of employment injury, by income level and type of scheme, 2023 or latest available year (percentage)



Source: ILO 2024b.

Figure 4: Share of persons in labour force aged 15 and over covered by cash benefits in case of employment injury (active contributors), by income level, 2020 and 2023 (percentage)



Source: ILO 2024b.

Occupational health services

The ILO's normative framework on occupational safety and health (OSH) numbers over 40 instruments, including two fundamental Conventions - Occupational Safety and Health Convention, 1981 (No. 155) and the Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187). Convention No. 187 calls for the promotion of continuous improvement of occupational safety and health through the development of a national OSH framework composed of a national OSH policy, a system and a programme. The Convention stipulates that a national OSH system – that is, the infrastructure through which OSH policies and programmes are implemented – itself should be composed of, among other components, a national tripartite advisory body on OSH, training, information and advisory services, occupational health services, and provisions for collaboration with insurance or social security schemes covering occupational injuries and diseases.

Occupational health services are defined by the Occupational Health Services Conventions, 1985 (No. 161) as those services entrusted with essentially preventive functions, which are required to advise employers, workers and their representatives concerning the requisite means for establishing and maintaining safe and healthy working environments so as to promote optimal physical and mental health in relation to work and the adaptation of work to the capabilities of workers in consideration of their physical and mental health. Convention No. 161 and the Occupational Health Services Recommendation, 1985 (No. 171) call on States to progressively develop occupational health services (OHS) for all workers. Additionally, Convention No. 161 specifies the scope of functions of occupational health services as are adequate and appropriate to the occupational risks of the undertaking (outlined in box 1), without prescribing financing arrangements.

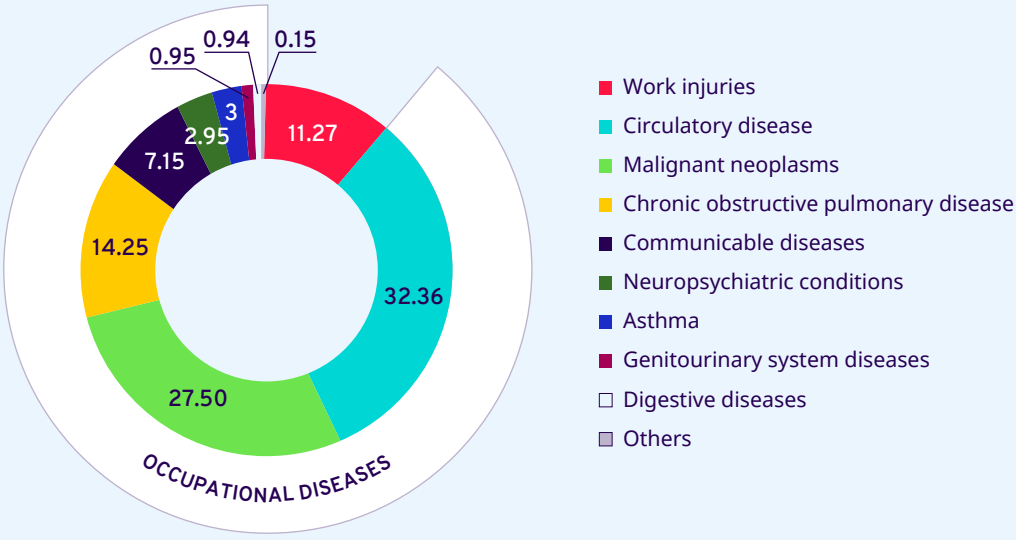
▶ Box 1: Occupational health service functions outlined in Convention No. 161

The range of occupational health service functions, as outlined in Article 5 of Convention No. 161, are:

1. Identification and assessment of the risks from health hazards in the workplace
2. Surveillance of the factors in the working environment and working practices that may affect workers' health, including sanitary installations, canteens and housing as facilities that are provided by the employer
3. Advice on planning and organization of work, including the design of workplaces; the choice, maintenance and condition of machinery and other equipment; and substances used in work
4. Participation in the development of programmes for the improvement of working practices, as well as testing and evaluation of health aspects of new equipment
5. Advice on occupational safety, health and hygiene and on ergonomics and protective equipment for individual and collective usage
6. Surveillance of workers' health in relation to work
7. Promoting the concept of adaptation of work to the worker
8. Contribution to measures of vocational rehabilitation
9. Collaboration in providing information, training and education in the fields of occupational health and hygiene and ergonomics
10. Organizing first aid and emergency treatment
11. Participation in analysis of occupational accidents and occupational diseases

At the global level, estimates suggest that only 10–15 per cent of workers worldwide have access to any form of occupational health services (Buijs et al. 2012). In turn, ILO estimates indicate that in 2019, 395 million workers worldwide sustained a non-fatal work injury and around 2.93 million workers died as a result of work-related factors – of which 2.6 million were attributed to work-related diseases (ILO 2023a). Figure 5 shows the composition of global work-related deaths.

▶ Figure 5: Composition of global work-related deaths (percentage)



Source: ILO 2023a.

Joint ILO-WHO estimates from 2016 indicate that among the 20 occupational risk factors considered, the largest number of attributable deaths was exposure to long working hours, followed by exposure to occupational particulate matter, gases and fumes, work injuries and occupational exposure to asbestos (WHO and ILO 2021).

Occupational health services also contribute to a range of sustainable development goals and targets, as they are central to the achievement of decent work and economic growth (SDG 8), particularly target 8.8 on the promotion of safe and secure working environments, as well as SDG 3 on health and wellbeing, contributing to target 3.9 on the reduction of the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination.

Potential for synergies

In their respective objectives and complementary missions, there exist several opportunities for collaboration and coordination between OHS and social protection, in particular, SHP and employment injury insurance (EII). Firstly, both systems have similar objectives with regard to the maintenance and restoration of health, whether at the workplace, in the case of OHS, and both within and beyond the workplace in the case of social protection systems.

The potential for such synergies is identified in relation to the responsibilities and functions outlined in the normative frameworks for social security and OHS. Convention No. 130 recognizes that the benefits covered by SHP include **preventive** care, wherein opportunities for institutional coordination with respect to the primarily preventive function of OHS might be identified. Moreover, Recommendation No. 171 provides for occupational health services to "engage in other health activities, including **curative** medical care for workers and their families, as authorized by the competent authority" depending on the national context and distance of the workplace to health facilities; while the list of medical benefits to be provided in case of employment injury or occupational disease under Convention No. 121 includes emergency and follow-up treatment at the place of work, where synergies can potentially be identified. Finally, the engagement of both OHS and EII in vocational **rehabilitation** (as per Recommendation No. 171, Convention No. 102 and Convention No. 130) presents opportunities for coordination.

Further, recommendations on the governance and administration of OHS and social protection offer opportunities not just for collaboration but also for the deployment of greater synergies. International social security standards offer clear guidance on this point, outlining the primary responsibility of the state in guaranteeing the right to social protection. The standards are non prescriptive when it comes to the administrative and institutional arrangements for publicly-led schemes. When it comes to occupational health services, Article 7.2 of Convention No. 161 provides the following guidance in relation to organisation modalities:

In accordance with national conditions and practice, occupational health services may be organised by:

(a) the undertakings or groups of undertakings concerned;

(b) public authorities or official services;

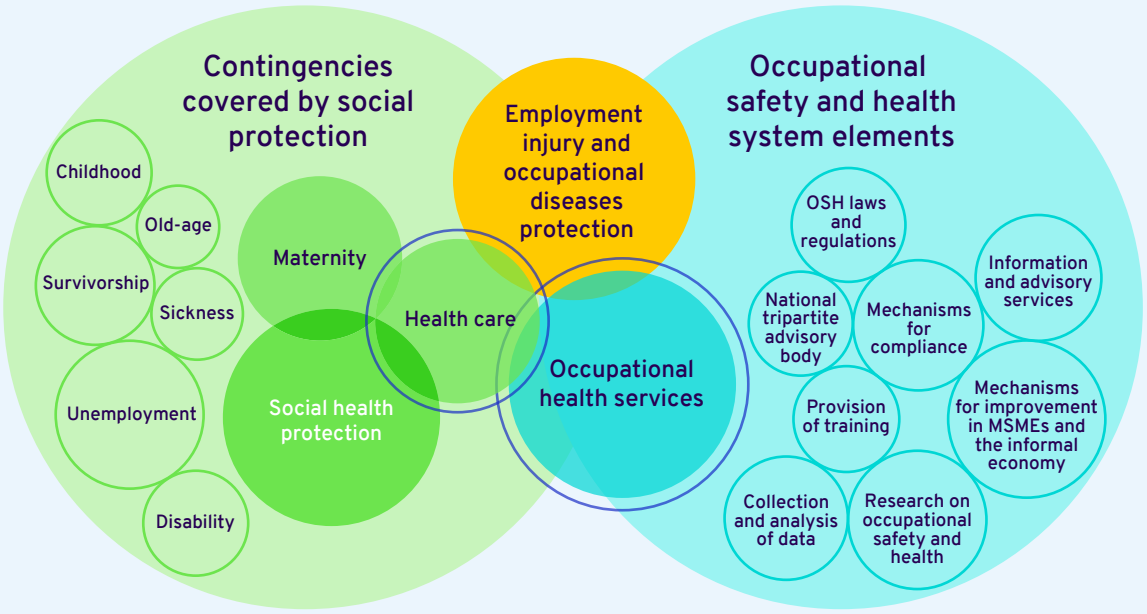
(c) social security institutions;

(d) any other bodies authorised by the competent authority;

(e) a combination of any of the above.

This opens up the potential for synergies to be operationalized, or even the integration of some, if not all of the OHS functions set out in box 1.

▶ **Figure 6: Illustration of the relevant social protection and occupational safety and health (OSH) sub-systems**



It was against this background that the research endeavoured to identify the types of linkages that exist between OHS and social protection systems – and in particular, SHP and EII. Notably, the research aimed to identify what the nature of linkages between OHS and social protection might be and those countries where they are reported. In this report, linkages are defined as direct and regularized relations between two or more institutions, that is, any policy, operative process or programme that formally or informally links social protection systems and occupational health services. An institution was considered to be any government agency, semi-private or private organization that is tasked with overseeing and administering specific functions of OHS or social protection schemes.

The research on which this report is based is composed of: on the one hand a scoping review of the available published research (the detailed methodology of which is in the annex), and on the other hand country case studies based on both a review of secondary data (mostly institutional reports) as well as primary research through key informant interviews with institutions in charge of the regulation and administration of social protection and / or occupational health services (see annex). Indeed, the scoping review revealed a dearth of published studies documenting collaboration between OHS and social protection systems, and the need to gather additional empirical evidence, particularly in low- and middle-income countries (LMICs), which was only possible through the selection of specific country case studies.

The remainder of the report is structured in two parts. In the first part, the findings of the project are synthesized, both in relation to the availability of literature and nature of linkages between OHS and social protection identified in the literature review and the country case studies (the methodology for which is set out in the annex). Overarching themes running through the research are then presented and discussed. In the second part, the findings of the country case studies are summarized.

Part 1: Cross analysis of research findings

This section presents the findings of the research project. Firstly, an overview is given of the state of literature on linkages between OHS and social protection identified through a scoping review (the methodology of which is in the annex). The nature of the connections between OHS and social protection, as identified in the scoping review, the case studies and wider desk research – including a review of ILO published and unpublished reports – are then outlined on the basis of the following seven broad categories: integrated stewardship; integrated mandate of OHS and social protection within a single institution; delivery of specific OHS functions by social protection administrations; OHS extension to general health services for workers and their families; administration of benefits for employment injury or disease by social protection schemes responsible for other contingencies; financial linkages; and referrals and information sharing.

While the initial objective of the research was to identify a typology of collaborative models between OHS and social protection systems, both the paucity of available studies and the diversity of collaboration models encountered did not allow for such an exercise. Therefore the present section is rather structured by key broad themes. Similarly, while the research strategy included the gathering of information on the results of collaborations between OHS and social protection systems on outcomes for a range of stakeholders, little was found in the published litterature on this. Therefore, it is not possible at this stage to draw good practices or lessons learned thereof, which should nevertheless be considered for future research.

State of research globally

Overall, the scoping review highlighted the paucity of published research on the question of collaboration across OHS and social protection and what was found largely focuses on high-income countries. Indeed, out of a total of 10,160 papers identified through a database, grey literature searches and snowballing, only 27 publications met the criteria and objectives of the scoping review. The majority (17) of the publications identified in the scoping review reported on linkages in European contexts, with eight articles reporting on countries in the Americas and two in the Asia Pacific region. No articles were identified reporting on Arab States and African countries, although this may point to a shortfall in documentation (including in languages covered in the review) rather than an absence of linkages in practice.

The identified literature was highly disparate, both in terms of the nature of the articles, their objectives and the methodologies adopted. The level of detail provided in the identified articles was often very limited: in most cases, the linkage was not the focus of the article but only addressed in a contextual manner. Similarly, few of the articles provide a wholistic picture of the context, particularly in relation to the architecture of both OHS and SHP systems and further research was often required to gain a deeper understanding of these. This deficit posed a significant challenge to fully grasping and analysing the connections between sub-systems.

Finally, largely as a result of the above, the outcomes of the linkages were rarely described or analysed. Where they were discussed, this was mostly in the context of articles reporting on the outcomes of pilot projects, usually referring to procedural outcomes or effects on coverage. Yet, such information is crucial to informing policy and practice particularly in relation to coordination between OHS and social protection systems.

The paucity of the literature or level of detail provided prevents the identification of factors that might enable or hinder interaction or collaboration in the first place, any impact of these on workers and the results of adopting intersectoral approaches. The case studies conducted as part of the research project aimed to address these knowledge gaps, thus providing some important insights on these questions. From this point onwards, the findings from the scoping review that were further echoed by the results of the case studies are highlighted by key topics.

Nature of identified linkages between occupational health services and social protection

Four overarching findings emanate from the research:

- Firstly, there is **vast diversity** in the nature of the linkages in each context, owing to the institutional architecture of SHP, EII and the organization of OHS, as well as the sometimes high level of fragmentation of systems and functions, thus resulting in increased complexity. For example, links may exist between one social protection scheme for a given group and one specific function of OHS. In light of this consideration, establishing a typology emerged as a challenge.
- Secondly, in most countries on which literature was identified, or where empirical research was conducted as part of the project, there are **multiple linkages** identified between OHS and social protection systems. This, too, results from the variable architecture of both OHS and social protection systems, which may be highly fragmented and complex. Cases with the most interactions are typically pilot schemes or programmes where greater coordination across multiple levels is the primary objective. In other cases, several linkages are identified but are not necessarily described as being related or conditional upon one another. In France, for example, there are several linkages between a variety of actors for a range of OHS functions. One such example occurs with regard to a discreet pilot programme implemented by the national health insurance scheme (Labbe et al. 2012) and a further one results from the evolution of the service offer of complementary health insurance actors (Lecomte-Ménahès 2022). Several others are more institutionalized, and include financial linkages between the employment injury scheme of the social protection system for non-agricultural workers and the national health insurance scheme (Lancry et al. 2007; Commission des Comptes de la Sécurité Sociale 2021; Ferre 2010).
- Thirdly, the articles were often not explicit about **which OHS function**, as outlined in Convention No. 161, was the subject of the coordination with the social protection system. Some cases referred to one particular function without information about connections or relations with regard to other functions, while in others, OHS was broadly discussed but without specific reference to specific functions.
- Finally, while the scoping review initially postulated that the focus would be on **SHP and OHS** with a view to identify opportunities for joint investments in prevention, only a minority of articles focused exclusively on these, with many highlighting broader linkages between SHP, OHS, EII, as well as other social protection schemes. In all three country case studies, interactions were identified between SHP, EII and OHS, highlighting that it is not easy to isolate the relationship between two of the three, which are closely interrelated institutionally. The wider literature highlight interactions with other social protection branches, including old-age pensions, sickness benefits and disability pensions (see below and also Moseret al. 2010 and Kittel et al. 2014).

The reminder of the chapter is structured around the nature of the connections between OHS and social protection identified in the research.

Integrated stewardship

While it is common for OHS to be overseen jointly by the Ministry of Labour and the Ministry of Health (Rantanen et al. 2017) or for these to coordinate in the oversight of OHS activities – as is the case in Colombia – there is limited evidence indicating that stakeholders mandated with the governance and administration of social protection were specifically engaged in OHS oversight. There are only a few reported instances in which this is the case. In Madagascar, the Directorate of Social Security for Workers (DSST)[1] within the Ministry of Labour, Employment, Public Service and Social Legislation (MTEPSLS)[2] oversees compensation, social benefits, social prevention and occupational medicine. This means that

[1] Direction de la Sécurité Sociale des Travailleurs
[2] Ministère du Travail, de l'Emploi, de la Fonction Publique et des Lois Sociales

governance of both occupational health services and social protection functions falls under the same institution.

In France it was noted that the Social Security Directorate under the Ministry of Labour, Health and Solidarity [3] (broadly responsible for social security) also participates in prevention policy, which is largely under the responsibility of the Directorate-General for Labour in the same Ministry (Ferre 2010).

In Viet Nam, the Social Security Institution (VSS) participates as a member of the drafting committee for regulations guiding the implementation of the Law on Occupational Health Services, particularly insofar as these pertain to provisions related to EII. Indeed, in Viet Nam it is the Law on Occupational Safety and Health that outlines provisions for EII, while provisions for other schemes are outlined in the Law on Social Insurance and the Law on Health Insurance. This could potentially indicate the legislator's intent to consider occupational safety and health and social protection policies together and to legislate in a joint and integrated fashion – an approach that has also been found historically in Paraguay and Colombia (Flores et al. 2017; Álvarez Torres and Casallas 2018).

In many instances the studies mentioned that the interaction between OHS and social protection is mandated by law, thus providing for a legal basis for such engagements. Instances where this was not the case were largely pilot projects implemented on a time-bound basis and no literature was found on the extent to which these were sustained and institutionalized.

Integrated mandate of OHS and social protection within a single institution

In some instances, the research identified integration of mandates for both OHS and social protection within the same institution.

- In France, all nine branches of social protection for agricultural workers and their families are administered by the mutual insurance organization Mutualité Sociale Agricole (MSA), which is also responsible for the management and delivery of OHS for these same groups (Lancry et al. 2007).
- In Brazil, the Sistema Único de Salud (SUS, the country's public health care system) is tasked with the delivery of several OHS functions, including surveillance, prevention activities and delivery of curative services to workers affected by WIOD (Aguiar and Vasconcellos 2015; Balista et al. 2011).
- In Quebec (Canada), the Commission of Standards, Equity, Health and Occupational Safety[4] is responsible both for compensating workers in cases of work injury and occupational diseases (WIOD), as well as for the oversight and management of OHS prevention activities and OHS-specific inspection (Ferre 2010).

These scoping review findings are echoed in the case studies.

- In Madagascar, inter-company medical services (Service Médical Inter-Entreprises, or SMIE) are required by decree to provide and cover OHS as well as healthcare services that go beyond the scope of occupational health, thus integrating mandates for OHS and SHP for the categories of workers covered.
- In Colombia, the General System of Occupational Risks (Sistema General de Riesgos Laborales, or SGRL) is responsible both for providing employment injury benefits and organizing prevention and advisory activities, working through public or private Occupational Risk Administrators (Administradoras de Riegos Laborales or ARL). The integration of these two mandates within one single institution facilitates synergies between their respective objectives, as data from employment injury claims informs the design of tailored prevention activities within some ARLs.

[3] The Directorate also reports to the Ministry for the Economy, Finance and Industrial and Digital Sovereignty.
[4] Commission des Normes, de l'Equité, de la Santé et de la Sécurité du Travail (CNESST).

▶ Box 2: Provision of social protection and OHS by a single organization for the agricultural sector in France

For agricultural workers, social protection coverage and OHS have been administered by the mutual insurance organization Mutualité Sociale Agricole (MSA), since 1930 and it has been tasked with the administration of all nine contingencies of social protection for agricultural workers and the organization and delivery of OHS. The MSA thus engages in activities to prevent employment injuries and occupational diseases and each MSA includes occupational health services or associations. The institution provides services to its members through a single window, offering a multidisciplinary approach with occupational physicians and prevention advisers working in the same body. Moreover, it is reported that the medical adviser of the health insurance branch and attending physicians cooperate when it comes to making decisions on the capacity of members to return to work.

Source: Labbe et al. 2012.

Delivery of specific OHS functions by social protection administrations

There are also cases in which social protection schemes are involved in the delivery of all, some or a single OHS function. There is much diversity here, one that emanates from the complex and at times fragmented institutional architectures of both social protection systems and OHS within countries and the number and nature of actors involved.

Firstly, in some cases, a substantial number of OHS functions are delivered by social protection schemes, as is the case in Brazil, for example (see below). In other cases, social protection schemes engage in the delivery of only a single or a few OHS functions, while other functions are implemented by various additional actors. This is the case in the Russian Federation, for example, where the social insurance fund engages in only specific OHS functions, namely analysis of occupational injuries and diseases at the enterprise level, in accordance with which advice to companies on potential corrective measures is provided (Alshits and Kulkova 2018).

Secondly, there is also diversity in terms of the OHS functions that are administered by social protection schemes (prevention and promotion, rehabilitation, advisory services, surveillance, etc), although in several cases, there is an important focus on prevention and rehabilitation services. In turn, it was seldom identified that functions requiring workplace visits (for example, adaptation of work to the worker, identification and assessment of risks) are administered by social protection mechanisms.

Thirdly, there is diversity in terms of social protection schemes that engage in the delivery of OHS functions: these include healthcare schemes; pension schemes; employment injury schemes; or, in some cases, unspecified schemes. Below, the findings are presented according to the social protection scheme implementing the OHS function(s).

Delivery of OHS functions by National Health Services

In Brazil, Ireland, Italy, Spain and the United Kingdom, certain OHS functions are delivered by the respective national health services (NHS) with the mandate for SHP in the country (Jain et al. 2021; Persechino et al. 2017; García Gómez et al. 2006; Aguiar and Vasconcellos 2015; Balista et al. 2011). In the United Kingdom and Ireland, this is largely related to curative services, but in others, certain functions that contribute to health surveillance and prevention are also delivered by the NHS. In Brazil, for example, the SUS delivers several OHS functions through the network of Reference Centres for Occupational Health (Cerest),[5] which, among other functions, organize health surveillance and promotion actions

[5] Centro de Referência em Saúde do Trabalhador

(Aguiar and Vasconcellos 2015; Balista et al. 2011). In addition, reporting of WIOD to the Brazilian Social Security Institute[6] is undertaken by the primary care units of the SUS (ibid).

OHS functions integrated in the benefit package of national health insurance schemes

In France, Germany, India and Türkiye, one or multiple health insurance institutions are either responsible for, or engaged in, the delivery of all or some OHS functions (Jain et al. 2021; Nagaraja et al. 2013; Ferre 2010; Labbe et al. 2012; Leiva et al. 2021; Bulut 2022). In some instances, such as in Germany, this is a core responsibility of the national health insurance, while in other cases – such as in India and France – these activities are implemented through discreet pilots or programmes beyond their core mandate. In France, for example, the national health insurance schemes engage in prevention and rehabilitation services through the implementation of pilot programmes (Ferre 2010; Labbe et al. 2012; Leiva et al. 2021).

OHS functions delivered by other social protection schemes

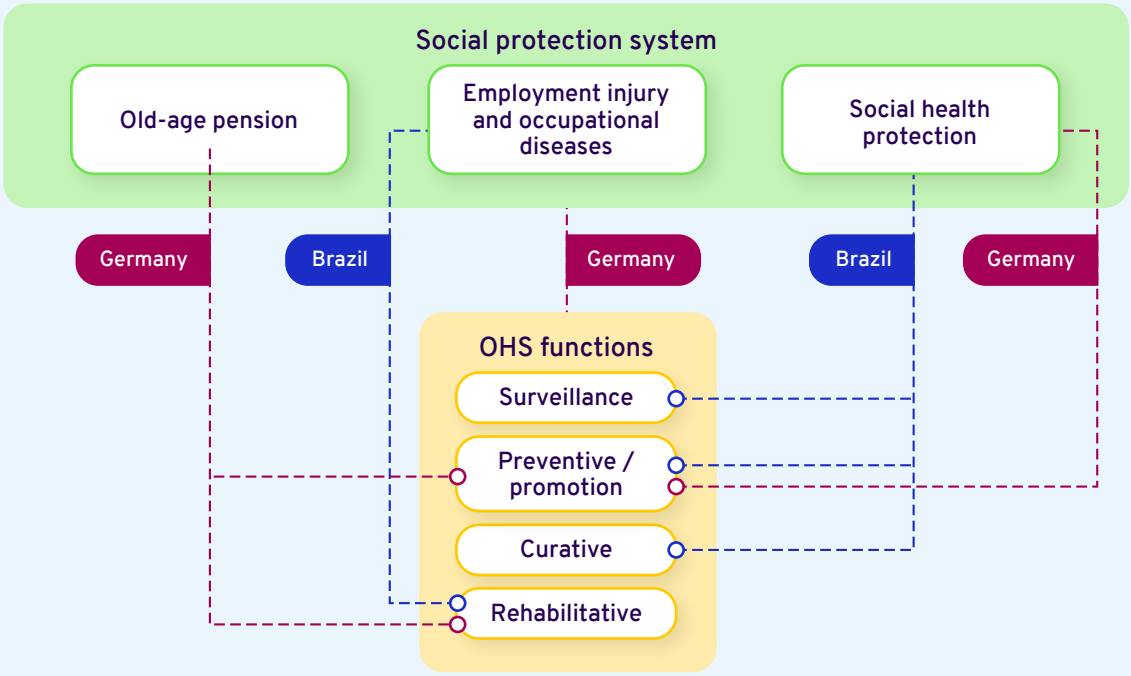
In Brazil, France, Germany, Italy, the Netherlands, the Russian Federation, and Türkiye, different social protection schemes engage in the delivery of some OHS functions besides SHP (Alshits and Kulkova 2018; Jain et al. 2021; Hansen et al. 2019; van Beurden et al. 2012; Barreto de Miranda 2018; Lecomte-Ménahès 2022; Daubas-Letourneux 2008). Such cases often relate to one or a few functions of OHS, at times complementing provision of other functions by SHP or other actors. The types of functions vary significantly, from the analysis of WIOD data in France and the Russian Federation through to the provision (and financing) of rehabilitation services in Brazil, Italy and the Netherlands. However, in the majority of cases analyzed, OHS functions delivered by social protection schemes are predominantly preventive and rehabilitative in nature. This finding is echoed in the case studies, as in Madagascar, the social protection administration Caisse Nationale de Prévoyance Sociale (CNaPS) implements health surveillance and prevention activities. In turn, in Germany and the Netherlands, the social protection system delivers OHS functions for specific categories of the population.

There is also variety as to the scheme responsible for implementing such activities: while this is at times the social security administration (as in Madagascar), in some cases it is specifically EII, or as in Germany even pension schemes, which have been engaging in vocational rehabilitation and prevention to support continued working capacity (Moser et al. 2010; Kittel et al. 2014).

In some instances, the implementation of OHS functions by social protection schemes has a legal basis, while in other cases these appear to be discreet initiatives or pilots. In these types of regimen, it was not possible through this research to determine the extent to which OHS functions are coordinated or fully articulated with the formal OHS architecture. In Madagascar, for example, prevention activities implemented by law by the CNaPS are perceived as a duplication of the responsibilities of the department of OHS by certain employers.

[6] Instituto Nacional de Seguro Social

▶ **Figure 7: Illustration of the multiple linkages identified in the examples of Brazil and Germany**



OHS extension to general health services for workers and their families

In Madagascar, the entities responsible for the administration of OHS functions also provide coverage for general curative and public health services for their members, adopting the broad objectives and mission of SHP mechanisms. The SMIEs (Service Médical Inter-Entreprises) are, by law, required to deliver and provide coverage for healthcare services that go beyond the scope of occupational health not only for affiliated workers but also their family members. These include public health services, as well as diagnostic services, for example. In light of the fragmentation and low legal coverage of SHP in Madagascar, the role played by the SMIEs fills a gap, ensuring access to healthcare services to a share of mainly formal economy workers and their families.

This integration is reported by the concerned actors as facilitating synergies in the delivery of services, with it being reported that there is an exchange of information between occupational and general physicians within SMIEs for the monitoring and follow-up of workers' health situations (ILO 2023b).

Administration of benefits for employment injury or disease by social protection schemes responsible for other contingencies

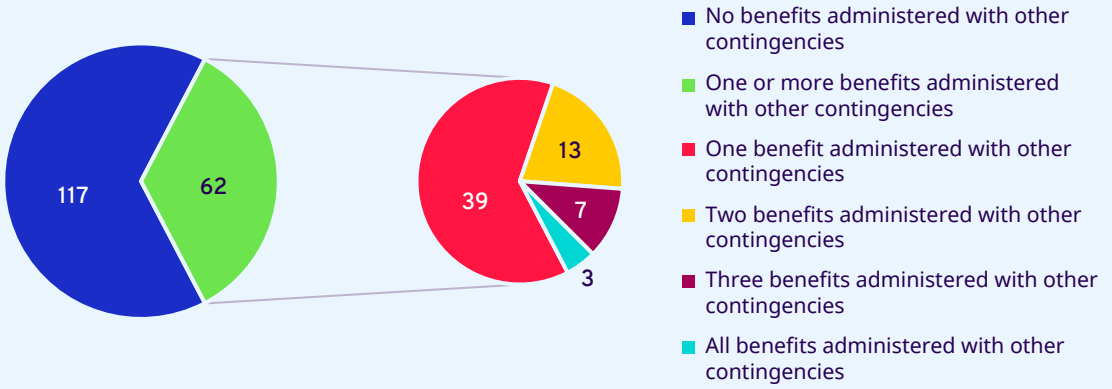
While not the primary focus of the research, the literature and case studies highlighted linkages between social protection schemes and contingencies, particularly as relates to the administration of one or more of the four guarantees of the WIOD contingency identified by Convention No. 102 within social protection schemes covering broader contingencies. This can result from a design choice or not.

Benefits for employment injury or disease administered with other risks in the social protection system by design

International social security standards identify WIOD as a distinct contingency with unique parameters. The resulting medical care and compensation may be organized and arranged in different ways, the diversity of which is highlighted in the literature and case studies.

Employment injury benefits are often administed through a separate branch of social security – it is the case in 117 countries according to the world social protection database. Yet, the different types of benefits needed in case of WIOD are administered with other benefits of a similar nature in some countries. A review of available data on the legal provisions for employment injury and occupational disease guarantees identified that in 62 countries, at least one type of benefit in case of WIOD is in part or in full administered alongside schemes covering other contingencies of the social protection system (see figure 8 and table 1).

▶ **Figure 8: Number of countries in which benefits for workers affected by WIOD are administered with other contingencies of the social protection system**



Source: Based on ISSA, Social Security Around the World Country profiles.

▶ **Table 1: Number of countries in which one or more benefit(s) for workers affected by WIOD are administered with other contingencies**

Type of WIOD benefit	Number of countries in which it is administered with other guarantees
Medical care	23
Temporary disability	15
Permanent disability	9
Survivor benefits	49

Source: Based on ISSA, Social Security Around the World Country profiles.

This was also identified through the case studies. For instance, in Viet Nam medical care for workers affected by a WIOD is accessed under the mandatory health insurance scheme, while survivor benefits are covered under the survivorship scheme.[7] The employment injury scheme (entitled the Occupational

[7] This is provided for in the Law on Health Insurance of 2008 as emended in 2014, and the Law on Occupational Safety and Health of 2015.

Accident and Disease Insurance Fund) administers temporary incapacity benefits and other benefits, while employers are liable to cover benefits for workers uncovered by social protection schemes and to reimburse workers for co-payments related to healthcare services (for which they themselves can be partly reimbursed by the employment injury scheme).

In Colombia, there is an administrative linkage of a similar nature. Here, health care services for WIOD covered by the ARLs are to be accessed through the networks of administrators of the SHP system (the Entidades Promotoras de Salud (EPS), or Health Promoting Entities).[8] The costs of services are recovered by the EPS from the ARLs for workers covered by them if and once the origin of the injury or disease has been verified as occupational. Further research is necessary to determine the efficiency gains or limitation of this model and the implications for the SHP and EII beneficiaries. In addition, the ARLs also reimburse the General System of Social Security in Health (Sistema General de Seguridad Social en Salud, or SGSSS) for disability cash benefits provided to cases where the origin of the disability has been verified as occupational. In Viet Nam, no mechanisms were identified for the reimbursement by the EII scheme to the health insurance scheme for the costs borne. In other contexts, no information was available about the manner in which the different guarantees are financed in the reviewed litterature.

These findings warrant additional research as no comparative assessment was done on the alignment of these arrangements with ILO standards on employment injury insurance. In particular, research could identify whether this joint administration of benefits of a similar nature but for different contingencies allows for the respect of a differential level of benefit and eligibility conditions in line with the provisions set forth by international social security standards. Indeed, this prompts the need for a deeper exploration into how these schemes retain their unique characteristics while being managed alongside other social security benefits to achieve economies of scale, a crucial consideration for countries with limited resources. For instance, the standards provide for different eligibility conditions and minimum benefit levels in the specific case of WIOD.[9] Benefits should not be subject to qualifying conditions, and should be more generous than for sickness, invalidity, and survivorship due to non-work-related accidents. For healthcare benefits, the standards foresee the possibility to administer them in line with the general scheme.[10] Research is required to understand whether such provisions are conducive to the achievement of adequate benefit levels and reporting of WIOD, which is essential to identify preventative measures, as well as on the financing arrangements in such cases.

Provision of benefits in case of WIOD incurred by social protection schemes covering other contingencies not by design

In contrast to the cases above, the literature and case studies also points to cases in which benefits for workers affected by WIOD are incurred by schemes covering other contingencies of the social protection system though not as the result of a design choice. This principally affects SHP and there are two main reasons for this.

- The first relates to the coverage gaps of employment injury cash benefits in many low- and middle-income countries (LMICs) as highlighted in the introduction, although information about coverage for medical benefits in case of WIOD at a global level is not yet available (ILO 2024b).
- In addition, even for workers that are registered and contributing to employment injury schemes, effective access to benefits under these can be challenging for a variety of reasons, as outlined in box 3.

[8] Only professional rehabilitation services and occupational medicine covered by the ARLs are not provided through this mechanism.

[9] In particular, the medical care provided to victims of employment injuries is more comprehensive than that offered under sickness benefits. According to Convention No. 102, injured workers are entitled to all necessary care, including the supply and maintenance of prosthetic devices, eyeglasses, and dental care, without any time limits or costs to the worker. Regarding cash benefits, the rate of injury benefits is higher than that of sickness, invalidity and survivor's benefits. Importantly, the principle is that there should be no qualifying conditions related to the duration of employment, insurance, or payment of contributions for employment injury benefits.

[10] Article 11 of Convention No. 121 outlines that, if administered through a general health scheme, conditions of entitlement can be the same irrespective of the nature of the event.

▶ Box 3: Possible barriers to accessing employment injury benefits

There are a broad range of reasons as to why workers covered by employment injury insurance may not effectively avail themselves of benefits. These include – but are not limited to:

- The narrow definition of occupational diseases – that is, the medical conditions for which workers are eligible for compensation. In Viet Nam, for example, the current list includes only 35 diseases for which workers may be eligible for compensation under the EII, which fail to include work-related musculoskeletal disorders or psychosocial hazards such as workplace stress and anxiety.[11]
- Difficulties in determining causality in work-related illnesses and in proving the relationship between a disease and risk factors in the work environment. Diagnosis of occupational mental health issues is a particular challenge.
- Limited knowledge of the work-relatedness of certain diseases by general physicians, which can result in under-diagnosis.
- The long latency periods of pathological manifestations, most notably with asbestos-related diseases.
- Disincentives for employers to report cases, including, in some contexts, as a result of the contribution calculation methods adopted for EII (known as "experience rating").
- Barriers to reporting amongst affected workers, such as the fear of reprisal or job loss (including as a result of the above), but also because of the onerous and complex administrative procedures for submitting claims.

Source: Cheng et al. 2019; Kyung et al. 2023; Commission des Comptes de la Sécurité Sociale 2021; ILO 2013.

These types of barriers do not typically affect access to benefits for other contingencies covered by social protection systems to the same extent. In practice, therefore, workers affected by WIOD may access entitlements under other schemes with wider scope of coverage to overcome some or all of the above-mentioned challenges. As can be seen, many of the challenges relate specifically to occupational diseases, which highlights the crucial and complex interplay between employment injury and social health protection schemes with implications for the prevention and compensation thereof.

The literature and case studies highlighted some of the implications of this interplay. In Colombia, in practice, workers in the informal economy who are not covered by the SGRL may in the event of a WIOD access medical services under the subsidized regime of the SHP scheme (SGSSS), which currently achieves almost universal coverage in this country. As the latter does not monitor the origin of the injuries or diseases, there may be no recording and notification of the WIOD. This was identified as a challenge by stakeholders, who informed that action is being planned in this respect to ensure essential data collection thereof with a view to devise preventative measures. Another challenge reported by the stakeholders as a result of the situations described in box 3, was that workers covered by the SGRL may nevertheless not access benefits accorded under it, and consequently, services are covered by the health insurance scheme or the pension system in the case of disability cash benefits.

This phenomenon is also highlighted in the literature in Taiwan (China) and France, where the respective national health insurance schemes cover, not by design, medical benefits for workers affected by WIOD (Cheng et al. 2019; Commission des Comptes de la Sécurité Sociale 2021). In the case of Taiwan (China), this is reported to result largely from the administrative barriers to accessing benefits under EII and its low effective coverage, while in France, this is broadly a result of both under-diagnosis and reporting.

In those cases the expenditures relating to WIOD are borne by other schemes, pointing to the issue of cost shifting across social protection schemes. Some studies have aimed to estimate those costs, including in Taiwan (China) in relation to the costs borne by the national health insurance scheme for medical benefits and in the United States in relation to the costs borne by disability insurance for cash

[11] Circular No. 15/2016/TT-BYT of May 15, 2016, emended by Circular No. 02/2023/TT-BYT of February 9, 2023.

benefits (Cheng et al. 2019; O'Leary et al. 2012). In turn, in recognition of this phenomenon, a specific mechanism has been established in France for the evaluation and reimbursement by the employment injury scheme for non-agricultural workers to the national health insurance scheme[12] of the costs for the medical services provided to persons affected by unreported WIOD (Commission des Comptes de la Sécurité Sociale 2021).

Financial linkages

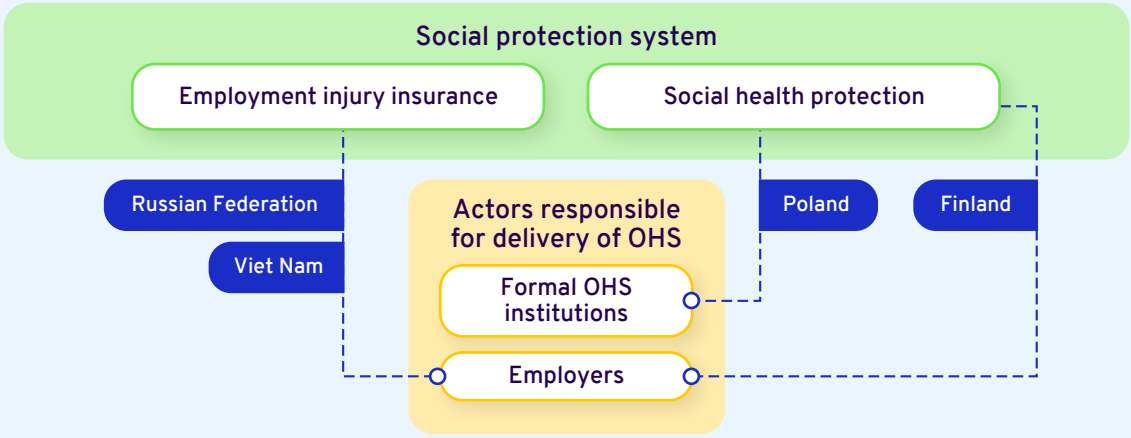
The research also provided evidence of some financial linkages between OHS and social protection systems. In many instances, the literture review didn't provide information on the source of financing mechanism used by social protection schemes or systems when directly delivering OHS, in the mannner highlighted above. But the available evidence provided by this research showed that there are financial transfers from social protection systems to OHS providers, the nature, source and recipient of which varies from one context to another depending on the institutional architecture and which actors are mandated to organize and deliver OHS.

In Finland and the Russian Federation, the social protection system reimburses **employers** for the expenses arising from the organization of OHS for which they are responsible (Tynkkynen et al. 2016; Keskimaki et al. 2019; Alshits and Kulkova 2018). In Finland, it is the SHP scheme that makes these reimbursements while in the Russian Federation, it is the EII.

This finding was echoed in the case of Viet Nam. Here, the EII is mandated to allocate up to 10 per cent of its revenue to finance activities for "risk sharing" and the prevention of occupational accidents and diseases and to reimburse employers the expenses arising from the organization of OHS.[13]

On the other hand, the national health insurance scheme in Poland is mandated to contribute to the financing of the regional **occupational health service centres**, which are responsible for the delivery of multiple OHS functions (Rydlewska-Liszkowska 2002). Similarly, in Viet Nam, resolutions that promulgate national programmes on workers' health and occupational safety call for a "pooling" of resources, including from the health insurance fund and EII, to expand available resources for the programmes, although it is unclear whether this takes place in practice.

Figure 9: Illustration of the financial transfers from social protection schemes to actors responsible for the delivery of OHS



[12] Caisse Nationale d'Assurance Maladie
[13] As provided for in article 56 of the Law on Occupational Safety and Health of 2015 and Decree 88/2020/ND-CP

It is not uncommon for social protection institutions to finance activities aimed at prevention of work-related accidents or diseases. A survey conducted by the ILO with social protection institutions in 24 countries reported on the share of expenditure from EII allocated to prevention in nine of these (ILO 2013), although it concluded that the share of these resources spent on prevention was overall small. From the perspective of the social protection system, investments in prevention and in rehabilitation can be highly cost effective, with evidence from Australia for example indicating that these can have significant impacts in reducing the number of claims for employment injury benefits and therefore the caseload of EII (Martin et al. 2009). Such investments and transfers may also contribute important resources to a sector that is widely under-resourced, though simultaneously they may potentially contribute to expanding access to it. Indeed, OHS are typically financed through a mix of employer and EII funding, which do not usually reach workers in the informal economy (Rantanen et al., 2017). But if the latter are allocated towards activities or institutions that have potential for reaching a wider audience (as in Poland with the allocation of resources to public occupational health service centres), public investments may contribute towards extending access to OHS, including to previously excluded categories of workers.

Referrals and information sharing

Finally, evidence was found on the exchange of information or referral of cases between OHS and social protection schemes. The research identified very few such cases, however. Both were found in the Integral Health Surveillance Programme in Spain, which saw the integration of various functions of OHS with social protection actors (García Gómez et al. 2006). Here, medical inspectors, disability evaluators and other specialists jointly determined the work-relatedness of a specific case, while workers diagnosed with a work-related disease were referred to the social protection system to access temporary disability benefits. In the same vein, in the elaboration of a registry of workers exposed to asbestos, data was collected from a range of institutions, including the public health system and the institute of social security.

In Colombia, given the reimbursements that occur as outlined above, ARLs and SHP administrators communicate with one another when it comes to the delivery of services provided to workers affiliated to the former. In light of the linkages, employers must report work injuries or occupational disease both to EPSs and ARLs in accordance with Decree Law 1295 of 1994.

Other examples are more discreet, including a report on the communication between occupational physicians hired by companies and general physicians working for the NHS in Italy (Persechino et al. 2017).

▸ Cross-cutting themes

The high level of complexity of the linkages between OHS and social protection systems, itself a result of the diversity in the manner in which these are organized and administered, represents a challenge to the inferring of wide-ranging lessons or garnering of insights. That being said, from the analysis of the literature and the case studies described in the previous section there are four themes that have been identified as subjects for further research. These topics are presented and discussed in this chapter.

What was not, or rarely found?

While the above highlights the linkages that were identified in the literature, it is also worth highlighting those that could be reasonably inferred but were either not found or merely rarely. While this may be a result of the limitations of the scoping review methodology, including the predominance of literature from European countries, it may nevertheless represent areas for further research.

- There was limited reference to **referrals** being made from OHS to SHP or other social protection branches or between social protection branches in the event of WIOD. Referrals from OHS to SHP schemes would nevertheless be highly relevant if, for example, during the course of a mandated worker health examination, conditions of a non-occupational nature were to be detected.
- Functions such as workers' health **surveillance**, collaboration and participation in analysis of occuaptional diseases could also fall under the scope of primary healthcare, but such functions were found to be integrated only in Brazil, Colombia and Spain.
- Given the higher level of coverage of SHP mechanisms as compared to that of EII or the reach of OHS services, one could conceive of **initiatives to expand access** to both, such as referrals, joint sensitization campaigns, sharing of administrative data, etc. Nevertheless, there was no evidence on these type of initiatives and more research is necessary to identify them and assess their potential impacts in terms of reducing employment injury (and medical) caseloads, itself financially beneficial to the SHP mechanisms.
- Conversely, given their potential embeddedness within workplaces, OHS may also **share information** amongst workers and employers about social protection entitlements and the procedures to avail of them. While the latter was highlighted in the case of the Service Médical Inter-Entreprise (SMIE) in Madagascar, such approaches were not identified elsewhere.
- Finally, while there was strong evidence of social protection schemes engaging in the delivery or financing of prevention activities, it was often unclear how these were articulated with other established OHS (for example, at the level of the undertaking), or whether social protection – and SHP schemes in particular – engaged in j**oint promotion and prevention activities** with OHS actors. This is closely tied to the next theme.

Linkages or coordination?

The second consideration that emanates from the literature and case studies is that the existence of linkages between OHS and social protection does not necessarily imply effective coordination between the different actors overseeing, organizing or administering OHS and social protection.

In the literature and the research, coordination or synergies was highlighted only in cases where there is full integration of OHS and social protection. In Colombia and Madagascar, the integration of OHS and employment injury protection within the ARLs and OHS and SHP within the SMIEs creates opportunities for collaboration and synergies across both, as highlighted above. In turn, the few articles identified in the scoping review that referred favourably to coordination are those on the Integral Health Surveillance Programme in Spain for workers exposed to asbestos, in which joint work is highlighted (see box 4) (García Gómez et al. 2006; García Gómez 2014) and within the MSA in France, which adopts a multidisciplinary approach to OHS and social protection (Lancry et al. 2007).

▶ Box 4: Integral Health Surveillance Programme in Spain

The Integral Health Surveillance Programme launched in 2002 aimed to promote the uniformity and harmonization of monitoring and surveillance of workers exposed to asbestos across the country to improve the diagnosis and reporting of cases, as well as to support affected workers to access benefits (García Gómez et al. 2006). The Programme consists of seven broad activities, which include the preparation of a registry of workers exposed to asbestos; the establishment and facilitation of procedures to access health examinations post exposure; the establishment of continuous health surveillance post exposure; and the promotion of medical and legal recognition of diseases related to exposure to asbestos (García Gómez et al. 2006). Through these efforts, social protection, health and OHS actors collaborated and coordinated in a range of ways, resulting in multiple linkages:

- The unit established under the Programme brings together medical inspectors, disability evaluators and other specialists to determine the work-relatedness of a specific case. In light of the multidisciplinary nature of professionals involved in the Programme, trainings were provided on occupational health to professionals within national health services, including on the role played by occupational exposure on the causes of diseases.
- The establishment of the registry of exposed workers involves collecting data from a range of institutions, including labour authorities, autonomous health services and the public health system, as well as the institute of social security and mutual insurance companies.
- The national health service is responsible for the health surveillance, including through medical examinations, of workers who had been in employment with exposure to asbestos but who have since retired or changed employment (a responsibility held by employers for their current staff).
- The social insurance system bears the cost of preventive medical examinations for workers with a history of exposure to asbestos who cease at-risk work, whether owing to retirement or a change in employer.
- Workers diagnosed with a work-related disease under the Programme are referred to the social protection system to access temporary disability benefits.

In total, the Integral Health Surveillance Programme resulted in a sixfold increase in the number of workers registered in the surveillance registry within the first three years of implementation, with the Programme reaching 35,630 workers by December 2012 (García Gómez 2014).

On the other hand, several articles on Brazil highlight challenges to coordination between the different institutions within the Sistema Único de Salud (SUS) engaged in the delivery of OHS, including the fragility of coordination between the Cerest and the wider SUS and the fragmentation in the occupational health surveillance mechanisms within primary health care units (Aguiar and Vasconcellos 2015; Balista et al. 2011).

Broadly, though, the multiplicity of actors within, and the institutional separations between, OHS and social protection functions in many parts of the world limit opportunities for joint initiatives and collaboration. This is reported in South Korea (Yum 2006), but it is also the case in Viet Nam and Colombia. In Colombia, there is reportedly limited coordination between ARLs on the one hand and SHP administrators on the other. Instead, the institutional arrangements create incentives for cost shifting, which, it is maintained, undermine incentives for cooperation. Furthermore, the variable coverage rates of OHS and SHP and target audiences of occupational prevention and health promotion activities in Colombia limit opportunities for joint initiatives: indeed, OHS activities are specifically targeted at workers of affiliated firms, with few ARLs actively expanding their reach, thus undermining potential collaborations with SHP institutions to engage informal workers, for example. The wider literature also reports on the issue of cooperation between occupational physicians and other physicians, highlighting that communication between the two sectors are limited or even adversarial (Mori 2018; Persechino et al. 2017).

Indeed, in several cases, even multiple linkages within a given context are themselves relatively independent from one another. This has been previously highlighted in relation to the case of France.

Coverage, quality and comprehensiveness of OHS?

A third broad theme that emerges is that the integration of OHS within social protection, and particularly SHP schemes, may support the achievement of wider coverage of those services including, for example, in Brazil. As highlighted in the introduction, OHS achieve low coverage globally, most notably in contexts where there is high prevalence of informality and where certain categories of workers (for example, the self-employed) may be excluded. The administration of OHS through SHP or the provision of some OHS functions by SHP schemes may result in higher levels of coverage, including among workers in the informal sector, and thus improve access to some of the OHS functions. This is the premise of calls for the integration of OHS within national primary healthcare or health promotion activities, which can extend access to certain functions of OHS, particularly to self-employed workers and those in the informal economy (see for example Govender and Rajaram 2018; Buijs et al. 2012; Dias and de Lima 2022). While this approach could offer an alternative to increase access to basic OHS to such type of workers, aspects such as the type of funtions delivered, and the quality and the multidisciplinarity of the services under this arragement require further information and analysis.

Indeed, several articles note challenges in the quality and comprehensiveness when OHS is integrated within the services delivered by SHP schemes. In the United Kingdom, OHS are delivered by treating physicians or nurses who may lack knowledge in occupational health (Jain et al. 2021). In Brazil, several reports highlight challenges to including OHS in the SUS, which is said to occupy a "peripheral and marginal place", with a focus on curative care over surveillance and improvement of working conditions, and prevention and promotion are prevalent (Leão and Carvalho Castro 2013, p. 772, see also Aguiar and Vasconcellos 2015;). This mirrors findings from wider research on existing attempts to integrate OHS in primary care units, which, in certain cases, highlight the trade-offs between the objectives of such efforts in achieving broader reach of OHS on the one hand and ensuring the quality and comprehensiveness of OHS on the other (Untimanon et al. 2022; Kirkland et al. 2017). Thus, it is essential to ensure the quality and comprehensiveness of OHS, including through the complementary provision of functions that SHP systems may not necessarily be best placed to take on, including occupational hygiene, ergonomics and safety engineering. A correspondingly contrasting issue is observed in Madagascar, where the provision of health services that go beyond the scope of occupational health by SMIEs may affect their ability to ensure the comprehensive delivery of core OHS functions. SMIE personnel are reported to spend the greater part of their time providing general health services, including to family members of affiliated workers, with more limited opportunity and capacity to engage in preventive activities.

Achieving universal and adequate social protection

Finally, a broad topic that cuts across much of the research relates to the challenge of persistent and asymetrical coverage gaps across social protection contingencies and schemes. In particular, several challenges result from the low legal and effective coverage of schemes dedicated to WIOD compensation and some of the difficulties of availing their benefits. The three case studies each illustrate a range of issues that emanate from this theme.

In Colombia, the low coverage of the SGRL (by which over half of the workforce is covered (CSS 2024; ILO, n.d. a) compared to the almost universal coverage of the SGSSS (by which 99.1 per cent of the population is covered (Ministerio de Salud y Protección Social de Colombia 2023b)), combined with the difficulties faced by workers in having the work-relatedness of diseases or injuries recognized, result in medical benefits in the event of WIOD for much of the labour force being covered by the SGSSS. Indeed, this covers such services for all workers who are not affiliated to the SGRL but also for workers covered by the SGRL whose work-related injuries or diseases are not recognized as such. As previously highlighted, this latter phenomenon is not specific to Colombia, as studies on Taiwan (China) and France illustrate the financial burden borne by the national health insurance schemes for services delivered to workers affected by WIOD that go unreported (Cheng et al. 2019; Commission des Comptes de la Sécurité Sociale 2021). Given that SHP mechanisms achieve higher effective coverage than employment injury provisions at a global level, this may be more widely prevalent and illustrates that without universal comprehensive social protection systems, cost shifting may happen between schemes.

In Viet Nam, on the other hand, medical benefits in the event of WIOD are covered by the health insurance fund by design, which ensures almost universal access to these services for workers, given that 93.35 per cent of the population are covered by the fund (VSS 2024). This can also promote effective access to services in a timely manner, and the identification of occupational diseases at an early stage. This also seems to simplify administrative procedures both for the social protection system and for workers and employers. However, as highlighted above, more research would be needed to understand the impact in terms of adequacy of benefits received and sustainability and equity in financing. Further, since the effective coverage rate for cash benefits for WIOD is low, most of the workforce does not enjoy access to comprehensive guarantees in case of WIOD. This is also the case for workers in the informal economy in Madagascar and Colombia. Yet financial protection against the costs of accessing health care services and income security in the event of a temporary or permanent incapacity to work resulting from an WIOD are complementary and closely interlinked: without the one, the effectiveness of the other in preventing poverty or in maintaining, restoring or improving health may be undermined.

Conversely, in Madagascar it is the low coverage of the SHP mechanisms that is said to have driven SMIEs to engage in the coverage and delivery of health services that go beyond occupational health; and indeed, this contributes towards almost doubling the SHP coverage in the country if SMIE coverage is taken into account (see more details on this below) (ILO 2022b).

Each of the three case studies in their own way highlight some of the challenges inherent in the organization within their social protection systems to achieving universal, coherent and comprehensive coverage of benefits for workers affected by WIOD, particularly in LMICs where informal employment is prevalent. As illustrated above, this points to the need for urgently extending comprehensive social protection to all.

Conclusions

Inter-sectoral approaches are central to addressing the social and environmental determinants of health equity and thereby reaching the Sustainable Development Goal 3 of health and wellbeing for all (Marmot, 2001; Commission on Social Determinants of Health, 2008). The research has explored several ways in which intersectoral approaches between social protection and OSH systems take place in different regions. By identifying linkages, the research described how, to some degree, an intersectoral approach could contribute towards overcoming some of the existing silos by creating connections and entry points for actors across OHS, social protection and health to engage. While duplications, gaps, uncertainty on the quality and level of benefits is observed in several contexts, the evidence available in the litterature and gathered through the three cases studies highlights the variety of linkages through which more collaboration could be fostered. Such linkages also have the potential to contribute to improving the use of existing resources in health promotion and prevention of diseases and injuries, with evidence of legal provisions for the allocation of resources from social protection systems, as in the case of Viet Nam.

In light of the paucity of published literature, including on the outcomes of the linkages, the high complexity of linkages and institutional arrangements of OHS and social protection, it is not possible at this stage to draw good practices or lessons learned from the findings. But the following points should be taken into account as countries pursue opportunities for greater collaboration across these areas of work:

- Given that the findings are highly context specific, there is no one size fits all approach to building collaboration across OHS and social protection systems. In developing such approaches, an adequate mapping of the respective functions and the landscape of institutions that have a responsibility for their implementation will be needed.
- Further research is required to be able to identify and extrapolate lessons learned on what works in terms of collaboration between OHS and social protection systems. In particular, it would be important to fill knowledge gaps on:

- the evidence on the linkages that could be reasonably inferred but were not identified in the research;
- the outcomes of existing linkages in many contexts covered in the scoping review, including outcomes for workers as well as process-related outcomes;
- the financing arrangements in place in contexts in which benefits for workers affected by WIOD are administered with other contingencies, and the impacts of these arrangements on access to services, scope of benefits, qualifying conditions, declaration of occupational injuries and diseases, surveillance and prevention thereof, and potential incentives to invest in prevention;
- the linkages with additional institutions playing a crucial role on compliance, recording and investigation of employment injury and diseases for occupational safety and health systems and social protection systems, which was not the focus of the research project but is an important component of coverage extension for social protection systems and occupational health services alike.

That being said, the research does reiterate some core priorities that resonate with past ILO research in support of enhanced protection and well-being for all workers and their families, which include:

- Redoubling efforts to expand access to OHS and social protection to ensure universal and coherent coverage and access to a comprehensive range of benefits and services. Joint initiatives and coordination between OHS, social protection and health stakeholders are only possible and significant if systems thereof are in place and have adequate institutional capacities. In doing so, it is essential to ensure the quality and comprehensiveness of OHS, recognizing the multidisciplinary nature of these services.
- Ensuring that investments in, and engagement in the delivery of, OHS by social protection systems are effectively coordinated with formal OHS infrastructure to ensure complementarity and the deployment of synergies.
- Considering how social protection systems can better recognize the interrelations between social and environmental determinants of health in their design and administration to overcome silos and address barriers to access, but also create opportunities to invest in prevention.

Part 2 of the report outlines the findings of the country case studies conducted as part of the research project. Various criteria were used to select the countries, including the extent to which they had or were developing national policies and integrated strategies for the promotion of access to occupational health services on one hand, and the extension of social health protection to all on the other. The case studies are based on a desk review and key informant interviews and do not reflect the position of the ILO.

Part 2: Country case study findings

Colombia

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Introduction

Colombia is an upper-middle-income country that has achieved strong progress in human capital development in the past decades. Nevertheless, some 55 per cent of employment in Colombia is informal (ILO, n.d.a.), where decent work deficits may prevail. Similarly, income inequality persists in the country, which in 2022 had the highest Gini index in South America (World Bank, n.d.). To promote social justice and economic inclusion, the Government of Colombia adopted the National Development Plan for 2022–2026, organized around five broad transformations wherein universal and adaptive social protection is highlighted as a core objective.

The Statutory Law on Health (Law 1751 of 2015) establishes the fundamental right to health, providing for access to timely, effective and quality health services for the preservation, improvement and promotion of health for all citizens. The Ten-Year Public Health Plan 2022–2031 (PDSP)[14] outlines the broad objectives and strategies for guaranteeing this right, improving access to quality health services and promoting health and well-being amongst the population.

Social protection system

Law 100 of 1993 brought about significant reforms to the social protection system in Colombia, seeing the creation of the Integral Social Security System,[15] composed of several subsystems. Here, the dual mandate of the Ministry of Health and Social Protection (MSPS)[16] over health and social protection offers a coherent legal and policy framework.

The **Social Protection System for Old-Age, Invalidity and Death of Common Origin**[17] was recently reformed through Law 2381 of 2024, composed of three pillars: the contributory pillar, the semi-contributory pillar, and the solidarity pillar. Affiliation to the contributory pillar is mandatory for all employees and self-employed persons and is financed by member contributions, while persons living below the poverty line or in vulnerable situations are covered by the solidarity pillar with financing from the general budget.

[14] Plan Decenal de Salud Pública
[15] Sistema de Seguridad Social Integral
[16] Ministerio de Salud y Protección Social
[17] Sistema de Protección Social Integral para la Vejez, Invalidez y Muerte de Origen Común

The **General System of Occupational Risks** (SGRL)[18] aims to prevent and protect workers from work injuries and occupational diseases. Overall guidance is provided by, among others, the MSPS, the Ministry of Labour (MT)[19] and the National Council on Occupational Risks [20] and the scheme is largely implemented by Occupational Risk Administrators (ARL),[21] which are private or public entities in charge of handling contributions and benefits and implementing prevention and promotion activities amongst affiliated workplaces. Employers are required to affiliate their workers, with free choice over which ARL to affiliate with in covering their workers, while coverage is voluntary for the self-employed, who can similarly choose their ARL. The services covered include medical care and rehabilitation, temporary disability benefits, disability pensions, survivors' pensions and funeral allowance. It is estimated that in 2023 just over half of the labour force was covered by the SGRL (CSS 2024; ILO, n.d.a).

Social assistance schemes, including the Families in Action[22] programme, aim to provide financial support to low-income households to alleviate poverty and enhance social inclusion. These and other state subsidies are targeted through the Sisbén,[23] an information system that categorizes the population according to a range of socio-economic indicators. People in employment are typically excluded from access to social assistance.

The **General System of Social Security in Health** (SGSSS)[24] was also established by Law 100 of 1993 with the objective of achieving universal social health protection. Overseen by the MSPS, the scheme is administered through the Entidades Promotoras de Salud (EPS), or Health Promoting Entities, whose responsibilities are delegated by the state and include the management of the public health insurance, the affiliation of members, the collection of contributions and the reimbursement of health service providers (IPS).[25] Coverage is mandatory for the entire population under three broad regimes: the contributory regime covering wage earners, the self-employed with earnings above a specific threshold and retirees and which is financed by employers and worker contributions; the special regime covering the armed forces, the national police, the Colombian Oil Company, teachers and public universities; and the subsidized regime, which covers everybody else and is financed by government resources. Affiliates of all regimes access the same benefit package,[26] which includes prevention and promotion activities, emergency care, consultations, hospitalisation, specialist services, medicines, dentistry, mental health, rehabilitation and palliative care. The SGSSS also administers income support for temporary incapacity not resulting from work injuries or occupational diseases and maternity and paternity income benefits for persons affiliated under the contributory regime. In 2022, the system achieved a coverage of 99.1 per cent of the population (Ministerio de Salud y Protección Social de Colombia 2023b). Among the population with coverage, 51 per cent are covered under the subsidized regime, 45.7 per cent are covered by the contributory regime and 5.2 per cent are covered under the special regime (Ministerio de Salud y Protección Social de Colombia 2023a). The SGSSS is currently undergoing reform.

Occupational health services

In Colombia, the organization of occupational health services is a multifaceted system aimed at preventing work-related injuries and diseases, ensuring worker safety and promoting health in the workplace. This system is governed by Decree Law 1295 of 1994 and Law 1562 of 2012 and complementary regulations, which establish a comprehensive occupational safety and health framework, as well as provide a strong basis for the occupational risk system (SG-SST).[27] The National Plan for Occupational Safety and Health (PNSST)[28] for 2022–2031, as adopted through Resolution 3077 of 2022 by the MT, outlines the key priorities and strategies of the SGRL for the ten-year period. Various actors have responsibilities under the system.

[18] Sistema General de Riesgos Laborales
[19] Ministerio del Trabajo
[20] Consejo Nacional de Riesgos Laborales
[21] Administradoras de Riesgos Laborales
[22] Familias en Acción
[23] Sistema Nacional de Selección de Beneficiarios
[24] Sistema General de Seguridad Social en Salud
[25] Instituciones Prestadoras de Salud
[26] Plan de Beneficios en Salud. This is currently specified in Resolution 2366 of 29 December 2023 adopted by the Ministry of Health and Social Protection.
[27] Sistema de Gestión de la Seguridad y Salud en el Trabajo
[28] Plan Nacional de Seguridad y Salud en el Trabajo

The **MT** proposes and elaborates policies, standards, strategies, programmes and projects and ensures compliance with labour regulations, including those related to occupational safety and health. It conducts inspections and investigations to ensure that employers fulfil their responsibilities towards workers. Together with the **MSPS**, they also play a critical role in formulating national policies and regulations related to occupational health. The MSPS itself is responsible for conducting research on occupational health trends, evaluating the effectiveness of existing programmes and promoting initiatives that enhance worker safety and health.

There also exist a **network of OSH committees and commissions** at national, sectional, sectoral and local levels, whose role includes the development of action plans and programmes within their jurisdictions based on the PNSST and establishing standards and promoting campaigns, programmes and events for dissemination, publication and training on occupational hazards in their jurisdiction besides other responsibilities (ILO 2022a). The committees and commissions are tripartite with membership of workers, employers, the MSPS, the MoL, ARLs, academics and scientific organizations concerned with OSH.

As mentioned above, **ARLs** are responsible for managing occupational risk insurance in Colombia. ARLs also have a vital role in promoting workplace safety through preventive programmes and initiatives aimed at reducing occupational hazards. They work closely with employers to develop tailored safety plans and conduct regular inspections to ensure compliance with safety and health regulations. Part of member contributions to the ARLs also finance the activities of the **Occupational Risks Fund**,[29] overseen by the tripartite National Council of Occupational Risks, whose responsibilities include research and data generation and the implementation of broader campaigns on prevention and promotion.

Finally, **employers** are required for preventive measures to protect the safety and health of their employees, including by implementing the Safety and Health Management System in accordance with Decree 1072 of 2015 and Resolution 0312 of 2019. This includes conducting workplace risk assessments, establishing emergency response procedures, providing appropriate training and education on safety protocols and ensuring that workplaces comply with health standards, among other kindred responsibilities. Companies with more than ten employees are also required to establish joint occupational health committees, while those employing fewer than ten employees must appoint an OSH officer.[30]

Linkages between occupational health services and social protection

There are several linkages between the occupational health services and the social protection system in Colombia. The first is the integration of certain prevention functions of OHS with EII within the responsibilities of the ARLs, as alluded to above. This dual role results in several linkages between OHS and the social protection system. The second is the delivery of medical care in the event of work injuries and occupational diseases *through* the social health protection scheme, the costs of which are recovered from the EII for covered workers. The third is the exchange of information between schemes, which is closely tied to the first two linkages.

Linkages relating to prevention and promotion activities

In relation to their responsibilities for prevention, article 11 of Law 1562 of 2012 specifies that 5 per cent of total contributions to the ARLs must finance the implementation of basic prevention and promotion activities, which include: education and prevention programmes; campaigns and actions to ensure that affiliated companies comply with rules and regulations on occupational safety and health and develop the requisite workplans under the occupational health programme; the provision of advisory services to affiliated companies on the same; training on the provision within affiliated companies of emergency care and training of joint occupational health committees in the monitoring of occupational health;

[29] Fondo de Riesgos Laborales
[30] Vigía

promotion of healthy work and life styles; and the investigation of work accidents and occupational diseases presented by workers in their affiliated companies. In turn, up to 3 per cent of contributions must be allocated to financing the work of the Occupational Risks Fund, which is in charge[31] of conducting research, campaigns, education and investigation of occupational accidents and diseases and for establishing an Occupational Risks Information System.[32] The Fund can also contribute financing to the elaboration of prevention and promotion activities implemented within the primary health care system. Of the 92 per cent of remaining contributions, the ARLs are also required to dedicate a further 10 per cent to the development of programmes to cover the following: the prevention and control of occupational risks and comprehensive rehabilitation in affiliated companies; support for member companies in permanently monitoring working and health conditions and implementing effective risk control; implementation of activities to achieve comprehensive rehabilitation, readaptation, reinsertion and labour reallocation, including workplace adjustments; and conducting activities to reduce exposure to occupational risks.

There are important linkages that are, or could be, achieved through the dual role played by the ARLs, as well as through the prevention and promotion activities implemented by the Occupational Risks Fund.

Firstly, the dual role played by the ARLs in the compensation and prevention of work injuries and occupational accidents offers an important opportunity for synergies, particularly in the data generated from the former to inform the design and targeting of the latter. This can contribute towards improving the targeting of prevention activities as well as the tailoring of the activities' content, thus promoting not just their overall effectiveness but also their efficiency; indeed, it is reported that certain ARLs do design tailored initiatives for specific companies or sectors among their affiliates based on claim data and statistics on occupational accidents and diseases.

More indirectly, the information collected under the social protection system also helps to inform decisions about the types of prevention and promotion activities to be implemented at the sub-national level. The Integrated Social Protection Information System (SISPRO)[33] of the MSPS is comprised of databases and information systems on supply and demand for health services, quality of services, financing and social promotion. The MSPS also has information on numbers of occupational accidents and diseases and deaths. This information represents a fundamental input for decisions on prevention and promotion campaigns to be implemented, as well as an input for analysis by the network of committees, including the National Council of Occupational Risks, which defines promotion and prevention activities within the framework of the actions of the Occupational Risks Fund.

Secondly, given the roles of both ARLs and EPS in implementing prevention and promotion activities, albeit with a different focus, there may exist opportunities for joint initiatives. However, there is little reported coordination between the prevention and promotion on occupational health on the one hand and wider public health promotion activities on the other.

This may in part be due to the limited coverage of the ARLs' prevention and promotion activities, which are implemented among affiliated companies, while the EPSs' prevention and promotion activities are not specifically targeted at the workplace level. But the Occupational Risks Fund has the authority to implement prevention and promotion activities with the potential to reach workers in the informal economy and therefore to coordinate with health sector institutions in this regard. This entity is financed by contributions from workers and employers, who therefore partly subsidize prevention activities for workers in informal employment.

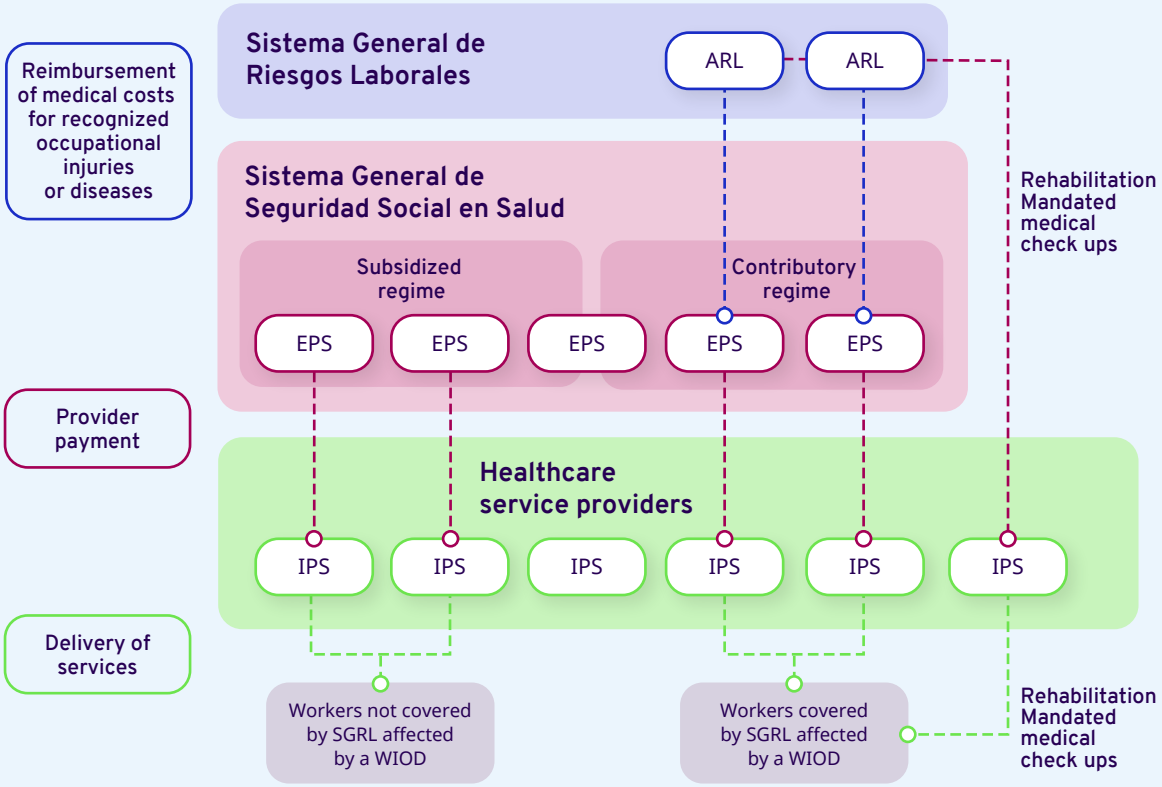
[31] According to article 22 of Law 776 of 2002 as emended by article 43 of Law 1438 of 2011.
[32] Sistema de Información de Riesgos Laborales
[33] Sistema Integrado de Información de la Protección Social

Linkages in the provision of medical care for work injuries or occupational diseases

The ARLs are also responsible for compensating affiliated workers affected by work injuries or occupational diseases. In such cases, affiliated workers are entitled to income support and medical services, which include medical, surgical, dental and hospital care; medicine; appliances; rehabilitation; and transportation.

A linkage exists between the ARLs and the EPS. According to Law 100 of 1993, with additional details elaborated in Decree Law 1295 of 1994, the provision of health services in the case of occupational injuries and illnesses is meant to be carried out through the EPS networks and the costs of the services are recovered from the ARLs once the origin of the injury or illness has been proven to be occupational. In the case of rehabilitation services, the ARLs can organize or contract service providers directly for the delivery of services to affiliates with their own resources. In practice, the insurance companies have established their own networks of service providers for services for conditions of both occupational or common origin (or have directly created IPS), and affiliated workers affected by a work-related injury or occupational disease can choose where to access services on the basis of geographical proximity. The disability income benefits provided to workers affiliated to the contributory scheme of the SGSSS are assumed by the ARLs if the disability is identified as being the result of a work injury or occupational disease. Income support and services covered up to three years before the occupational origin of the disease or injury is confirmed are recovered from the ARLs (Law 1562 of 2012). EPSs and ARLs therefore communicate on the delivery of services provided to workers affiliated to the latter. Given this linkage, employers must report work injuries or occupational disease both to EPSs and ARLs (Decree Law 1295 of 1994). Thus, all workers are able to access health services regardless of the origin of the event; the costs are borne by the SGSSS if workers are not affiliated with the SGRL and or if the injury or disease is not recognized as occupational in origin.

▶ **Figure 10: Illustration of the arrangements for the delivery and coverage of medical services to workers affected by WIOD according to Law 100 of 1993 and Decree-Law 1295 of 1994**



These institutional arrangements have a range of implications.

Implications

First, the SGSSS service delivery network allows for greater health care **coverage**, both for injuries and health conditions of common origin and those resulting from work, given the almost universal coverage of the SGSSS (ILO Forthcoming a). If this coverage were administered solely by the SGRL, access to care would be more limited as approximately half of the workforce would be covered. Second, the fact that medical care covered by the ARLs is accessed through the EPSs' network of service providers may also represent a mechanism for expanding the geographical coverage of services, building as this approach does on existing infrastructures established under the social health protection system.

On the other hand, only workers affiliated with the ARLs are entitled to access employment injury cash benefits in the event of a work injury or an occupational disease, which leaves over half the labour force uncovered. Financial protection against the costs of accessing healthcare services and income security are highly complementary and mutually reinforcing, with the effectiveness of the one enhanced by access to the other. It is important to ensure that their complementary objectives are achieved, including through the expansion of coverage of the SGRL.

The situation also has **financial implications**, whereby the costs of medical care for work injuries and occupational diseases for over half of the workforce are covered by the SGSSS. This is compounded by the fact that workers in the informal economy are at higher risk of work injury or occupational disease owing to the lower level of compliance with occupational safety and health laws and regulations, the lack of coverage by the prevention and promotion activities implemented by the ARLs and the limited reach of those implemented by the Occupational Risk Fund. Even among workers affiliated with the SGRL, there is evidence to suggest that not all work injuries or occupational diseases are reported as such (ILO 2022a), the costs of which would therefore also be covered by the SGSSS. This is important as several EPSs are facing a deteriorating financial situation, with over 13 having already ceased operating owing to insolvency (Albarracín Restrepo 2023). The exact scale of the financial burden is not currently known, as the non-contributory regime of the SGSSS did not monitor the origin of injuries or diseases of covered services, although this is being redressed with the Ten-Year Public Health Plan 2022–2031 (PDSP), calling for the establishment of epidemiological surveillance of health events related to occupations covered by the subsidized regime, which could at least partially fill important knowledge gaps. The financial implications potentially provide another a strong incentive for the coverage of the SGRL to be expanded but also potentially for alternative procedures to be identified for compensating the SGSSS similar to those that exist in France, for example.

The current arrangements also create incentives for cost shifting, which in turn is noted to undermine incentives for coordinated action. This also has implications for affected workers, who face delays in receiving the income support to which they may be entitled under the SGRL, the replacement rate of which is higher than under the SGSSS.

The provision of medical care in the event of work injuries and occupational diseases through EPSs could also be considered to contribute towards promoting uniformity in the **quality** of the care provided for events of both common and occupational origin. In practice, however, it was reported that there are differences in the speed at which EPSs and ARLs approve the provision of services that require pre-approvals, including surgery or medicines, resulting in differences between the two systems in terms of the waiting times to access certain non-emergency services.

The provision of medical care in the event of occupational and common injuries and diseases through EPS also holds potential to facilitating the provision of integrated care in which occupational and general medicine are delivered in tandem, with an exchange of information on patient medical histories. This potential is, however, undermined by two factors. The first is the creation amongst some ARLs of their own network of service providers, as well as the separate administration of rehabilitation services, which may ultimately also compromise the continuity of care provided unless adequate coordination is in place. The MSPS and the MT are, however, in the process of discussing potential reforms that would contribute to a more integrated approach towards rehabilitation across the two systems. Secondly, records from

prescribed occupational health examinations conducted by employers are not reported under any monitoring system and are hence not integrated into individuals' medical histories.

Finally, the current arrangements have several implications from an **administrative perspective**, particularly for the ARLs. Indeed, the legislative provisions calling for medical services to be provided through the EPSs and then reimbursed by the ARLs can provide important gains in terms of efficiency. Providing care through the existing infrastructures under the SGSSS avoids ARLs having to establish their own network of service providers, removing the need to contract with healthcare facilities, negotiate fees and process and pay claims arising from these, which administratively are burdensome processes. In practice, however, several ARLs do contract directly with IPSs, or establish their own. While this is provided for in the legislation, it does nevertheless undermine the achievement of such efficiency gains.

Exchange of information between occupational health services and social protection for occupational health surveillance

The interviews highlighted the absence of a comprehensive **monitoring** framework not just for occupational risks but also for work injuries and occupational diseases. There is therefore no comprehensive and consolidated data available which might inform the design and implementation of effective prevention and promotion activities that reach all workers at national and local levels.

Indeed, while there are several separate databases in which different data points are shared, they are not exhaustive. First, the Individual Health Service Provision Records[34] of the MSPS holds the data required to monitor the health service provision within the SGSSS. This does not, however, include information on occupational health checks, which could be useful for effective monitoring of changes in health status resulting from exposure to occupational hazards. Likewise, the subsidized regime does not monitor the common or occupational origin of an injury or illness, thus also yielding a partial picture. This also applies to the information in the SISPRO mentioned above. The country's regulations further provide for the establishment of an Occupational Risks Information System[35] with funds from the Occupational Risks Fund, to be fed by information on the benefits provided by the ARLs and health conditions presented by their affiliates.[36] The monitoring picture is therefore fragmented and incomplete, including owing to the absence of data on workers in the informal economy, who represent half of the workforce, and the under-reporting of occupational accidents and diseases (ILO 2022a).

However, important initiatives are underway to overcome the above. These include the creation of unified information systems. Moreover, as mentioned above, the PDS foresees the characterization of different prioritized population groups for use in generating a comprehensive mapping of the social determinants of health among the population. While the data collection process is ongoing (the plan having only been adopted in 2022), this initiative will include workers in the informal economy and will use an extensive range of indicators, including occupations, health profile, health conditions and occupational risks, among others (Ministerio de Salud y Protección Social de Colombia 2022). This survey, which is administered by the Departmental Health Secretariats of the MSPS, requires the active participation of EPSs, IPSs and ARLs and will contribute to efforts to establish a comprehensive mapping of occupational risks, with the potential to inform the design of integrated approaches towards addressing the social determinants of health.

[34] Registros Individuales de Prestación de Servicios (RIPS)
[35] Sistema de Información de los Riesgos Laborales
[36] This information can currently be consulted through different sources such as FASECOLDA and the MSPS.

Conclusion

There are important linkages that exist between OHS, EII and SHP in Colombia. Firstly, prevention and compensation of work injuries and occupational diseases are integrated functions administered by the same institution. Secondly, medical care for work injuries and occupational diseases are meant to be accessed through the network of service providers of the social health protection system. ARLs cover the costs of these contingencies for affiliated workers, while the SGSSS covers costs for workers not affiliated to the ARL and workers in the formal economy whose work-related injury or disease has not officially been recognized. Thirdly, data generated through the social protection system (including ARLs) informs the design and implementation of occupational safety and health prevention and promotion activities. Finally, initiatives are underway to generate comprehensive data on social and environmental determinants of health, including occupational risks and hazards, with the objective of informing the design of integrated, intersectoral action to promote health and well-being, both in and outside of work.

However, these linkages do not necessarily translate into effective and systematic coordination between OHS and social protection. This, it is argued, is the result of the institutional separation between the SGRL, the SGSSS and other social protection schemes, each with independent objectives to achieve. Further still, the limited scope of coverage of the SGRL, both in terms of the population and geography, reduces opportunities for coordination. The lack of comprehensive data on the occupational risks faced by workers in the informal economy is considered a further challenge to the design and implementation of joint activities. Finally, it may also be pertinent to investigate how the delegation of SHP, OHS, and EII administration to mostly private institutions (both in the case of EPS or ARLs) might affect coordination and synergies.

Nevertheless, opportunities exist for synergies and improvements. For example, it was reported that there is limited coordination in prevention and promotion activities, which are largely implemented in isolation by the MSPS and SHP schemes on the one hand and OHS on the other. Collaboration between these holds the potential to expand the reach of occupational prevention and promotion activities, including the potential to pool resources and piggyback on existing initiatives and infrastructures. Incentives should also be established to promote coordination leading to improved reporting of work injuries and occupational diseases and enhancing the processes for their recognition, both of which continue to be achallenge.

Madagascar

Introduction

The Government of Madagascar has made strong commitments towards achieving both universal health coverage (UHC) and universal social protection (USP). These commitments are particularly important given the socio-economic and epidemiological profile of Madagascar. Indeed, poverty rates remain high in Madagascar with great geographical disparities. While 71.5 per cent of the population are living below the poverty line at national level, these rates reach 83.4 per cent in rural areas and 21.8 per cent in urban areas (INSTAT 2020). Despite considerable efforts, the health situation in Madagascar remains sub-optimal, threatening the health system and the well-being of the Malagasy population. For example, rates of malnutrition and neonatal and infant mortality remain persistently high (INSTAT 2022).

In turn, more than 96.1 per cent of employment in Madagascar are in the informal sector, where labour regulations are largely unenforced (ILO, n.d.b.). In turn, a large majority of workers do not benefit from social protection and few of them have access to occupational health services or decent working conditions. Occupational hazards were identified among the top ten risks responsible for the highest number of deaths in Madagascar in 2017 (IHME 2017), in spite of occupational accidents and diseases being largely under-reported and that current statistics are expected to be underestimated (ILO 2019a).

Social protection system

The country adopted its first National Strategy on Universal Health Coverage (SN-CSU) in 2015, followed by the National Social Protection Strategy (SN-PS) for the period 2019–2023. Despite these political commitments, many efforts and resources are needed to achieve these objectives.

Social health protection in Madagascar is characterized by a lack of universal entitlements and fragmentation, composed of a range of different mechanisms that achieve low overall coverage. These include:

- The government covers the medical expenses of civil servants, retired civil servants and non-statutory civil servants and their families, as well as military personnel and their families, which is guaranteed by law or decree.
- For vulnerable groups, Decree no. 2003/1040 provides for the use of funds of the "FANOME" [37] to facilitate access to healthcare. The decree does not, however, provide a definition of the target group and coverage remains low.
- The Caisse Nationale de Prévoyance Sociale (CNaPS) covers maternity care for women in the formal economy or the wives of formal workers.

[37] Acronym for "Fandraisan' Anjara NO Mba Entiko", or "Financing for Non-stop Drug Supply"

- Exemptions and subsidies are also provided by the government and development partners to assist low-income individuals, covering basic health consultations, vaccinations and the management of certain communicable diseases.
- Voluntary health mutuals, with benefit packages that vary among them, are present in 20 of the country's 22 regions. The government aims to strengthen the role of mutuals by promoting community-based health insurance (LHSS 2023).
- In light of the low coverage of social health protection mechanisms, institutions initially responsible for occupational health services, particularly the Inter-Entreprise Medical Services (Service Médical Inter-Entreprise, or SMIE), have come to play an important role in the financial protection and provision of general health care for workers and their families.

This high level of fragmentation results in low coverage, with 4.3 per cent of households protected by social health protection mechanisms that have legal bases if SMIEs are excluded (ILO 2022b).

The CNaPS administers contributory social protection schemes, covering family benefits, pensions, disability and survivors' benefits, occupational injury and disease compensation and maternity benefits for women in formal employment or the spouses of formal workers. Affiliation to the CNaPS is mandatory for employees in the formal private sector, but self-employed, agricultural and temporary workers, who constitute a significant share of Madagascar's labour force, are not covered. While CNaPS coverage theoretically reaches 10 per cent of the workforce, approximately just 840,393 workers were effectively covered in 2021 (ILO 2023b).

Non-contributory cash and in-kind benefits include "human development cash transfers"[38] and cash for work programmes, as well as emergency cash assistance implemented in the southern part of the country. These programmes are largely donor funded and achieve low coverage, particularly when compared with poverty rates in the country (MPPSPF 2019).

Occupational health services

The Ministry of Labour, Employment, Public Service and Social Legislation (MTEPSLS) is the main authority overseeing occupational health services. Within this ministry, the Directorate of Social Security for Workers (Direction de la Sécurité Sociale des Travailleurs, or DSST) manages compensation, social benefits, prevention and occupational medicine.

Within the Ministry of Public Health, the Occupational Health and Intercompany Organizations Department (SSTOI)[39] is responsible for developing occupational health guidelines, focusing on non-communicable diseases and health protection for vulnerable populations.

Occupational health services are regulated primarily by Decree no. 2003-1162, later amended by Decree no. 2011-631 and by the Labour Code (Law no. 2003-044). These outline four models of occupational health services (SMT)[40] in Madagascar[41]:

- SMIE are non-profit associations organized by several private companies, designed to provide health services to employees within a 30-kilometer radius in areas where there are more than 1,500 workers. SMIE funding comes from contributions, amounting to 6 per cent of gross salary (that is, 5 per cent from the employer and 1 per cent from the employee), with a minimum based on the statutory wage. There are currently 28 SMIEs in the country.
- Companies employing more than 500 workers based outside the geographical scope of existing SMIE organize services internally through Autonomous Medical Services for Enterprises (Services Médicaux Autonomes d'Entreprise, or SMAE), of which 50 were registered in 2017.
- State Medical Services provide occupational health service for public establishments.

[38] Les Transferts Monétaires de Développement Humain
[39] Service de la Santé au Travail et des Organisations Interentreprises
[40] Service Médical du Travail
[41] This case study primarily focuses on the work of the SMIE and is based on a review of the coverage and service delivery of five SMIEs, namely: Organisation Sanitaire Tananarivienne Interentreprises (OSTIE); Association Médicale Interentreprises de Tananarive (AMIT); Centre Médical FUNHECE SMIE; FUNABE SMIE; Espace Sanitaire Interentreprises d'Antananarivo (ESIA).

- Public Health Training Centres offer services to smaller companies unable to establish or join SMIEs, through agreements with employers of fewer than 500 workers.

According to the above-mentioned decrees, employers are mandated to organize occupational health services through affiliation with one of the occupational health provider models outlined above. Affiliation of self-employed individuals and independent professionals is voluntary, meaning that only 5.55 per cent of the population in Madagascar is effectively covered by occupational health services (ILO 2022b).

Similarly, the legal and regulatory frameworks also provide for a role of the CNaPS, as well as the Ministry of Public Health, in the delivery of certain OHS functions, with the latter focusing on workers in the informal economy.

Linkages between occupational health services and social protection

Dual role of the SMT (Service Médical du Travail)

The SMT (Service Médical du Travail) fulfils a dual role, both providing occupational health services and delivering and providing financial protection for general health care services that go beyond occupational health. Indeed, Decree 2003-1162 and Decree 2011-631 outline the range of services that must be covered by the SMTs, which include in relation to OHS:

- Routine medical check-ups
- Provision of food for sick workers in isolated areas while awaiting evacuation
- Occupational safety and health education
- First aid training
- Workplace inspections to assess working conditions
- Prevention and awareness programmes on sexually transmitted diseases and human immunodeficiency virus (HIV)

The Decrees also require SMTs to deliver and cover preventive care and health education, medical care for illness and medical evacuation to the nearest medical facility for both workers and their families. In this system, there is broadly[42] no provider-purchaser split, with the SMTs both providing financial protection for healthcare services and delivering them. In practice, a review of services covered and delivered by SMIEs highlighted that these go even beyond what is outlined in the regulation for workers and their family members and include:

- **General medicine:** General consultations, pharmacy access and basic care
- **Specialized medicine:** Cardiology, gynaecology, neurology and other specialities
- **Diagnostic services:** Radiology, ultrasound and laboratory analyses
- **Occupational medicine:** Routine check-ups, workplace visits and awareness programmes on topics such as nutrition and hygiene.

In relation to maternity and work injury or occupational disease, the CNaPS covers a complementary range of benefits. For maternity, the CNaPS provides maternity income benefits and covers part of the healthcare costs. In cases of occupational disease or injury, the CNaPS reimburses SMTs for the care they have provided, covers pharmaceuticals and hospitalization once the occupational nature of the injury or disease is confirmed, supports rehabilitation and reemployment for work-related injuries and provides income security for affected workers.

[42] As outlined below, when the resources of a SMIE do not allow the provision of all services covered, they may establish agreements or 'conventions' with other health facilities to deliver such services, the costs of which are covered by the SMIE.

Implications

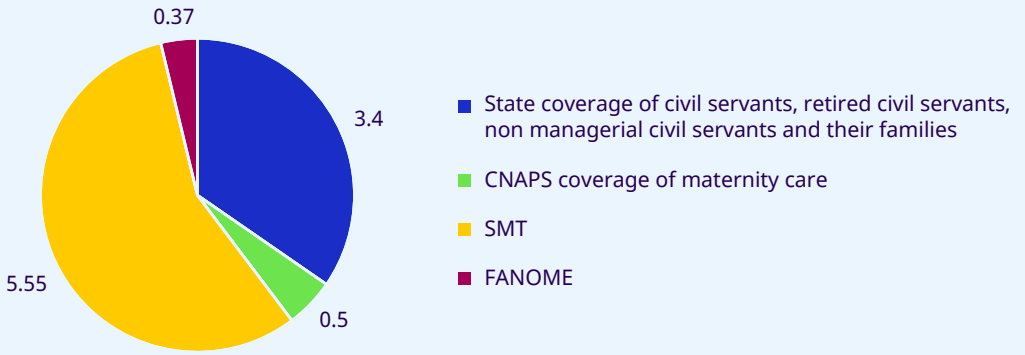
The model adopted in Madagascar and the dual role played by SMIEs in OHS and SHP have several implications.

Coverage

Firstly, the model adopted by Madagascar and the dual role exercised by SMIEs have implications for the coverage of both OHS and SHP. From the perspective of OHS, the model adopted in Madagascar for the delivery of OHS through the SMIEs supports access to OHS for workers, pooling as it does risks through the SMIE. This considerably reduces the burden on each affiliated company, as compared to models based on employer liabilities, thereby promoting compliance with regulations and in turn facilitating access to such services for workers, particularly for workers in small and medium enterprises.

From a SHP perspective, the delivery and coverage of services that go beyond occupational health contribute to the expansion of coverage of existing mechanisms. Indeed, effective SHP coverage currently reaches about 4.3 per cent of the population: however, this rises to 9.8 per cent if SMIEs' coverage is taken into account, effectively doubling the share of persons protected by a mechanism, as illustrated in figure 11 (ILO 2022b). Indeed, it is the limited coverage of SHP mechanisms itself that is said to have been one of the driving factors behind the expansion of SMTs' services into general medicine, with employers placing pressure to access a broader range of services to compensate for limited coverage of other SHP mechanisms.

Figure 11: Effective protection by social health protection mechanisms or occupational health services by population group, as a % of the total population in 2018



Source: ILO 2022b.

On the other hand, from the SHP perspective, the level of risk pooling within the SMIE is relatively fragmented, with wide variations in the coverage of each SMIE as illustrated in table 2 below. This level of pooling is closer to that seen in mechanisms such as mutuals, where pooling is fragmented and which can affect the financial sustainability of SMIEs.

Table 2: Number of enterprises and workers affiliated to SMIEs (Service Medical Inter-Entreprise) and persons covered by them, 2023

	Number of affiliated enterprises	Number of covered workers	Estimate[43] of the population covered
OSTIE	4 228	161 591	678 682
AMIT	648	30 667	129 000
FUNHECE SMIE	349	13 201	17 868

Source: Data collected directly from the SMIE under the project.

Yet, there are several gaps in coverage that remain, as well as challenges to the expansion of SMIE coverage.

- Firstly, geographic limitations restrict the reach of SMIEs. Owing to the rules on their establishment, SMIEs are mostly found in urban areas, with eight of Madagascar's 22 regions lacking an active SMIE and almost a quarter of the population residing outside the radius of SMIE coverage (INSTAT 2020). Agricultural workers, who face high occupational risks, are therefore often effectively excluded. Although some SMIEs have expressed interest in expanding their coverage beyond the 30-kilometer radius defined in regulations, they are in fact constrained by current regulations (ILO 2019a). Accordingly, while regulations allow voluntary affiliation of self-employed workers, SMIEs are not obligated to offer coverage to this category of workers and indeed, of the five SMIEs studied, only one allowed these affiliations, with others fearing financial strain arising from them. For self-employed workers, the high contribution rates (based as they are on the minimum salary) may pose a financial barrier. Though state subsidies could help low-income workers and households' access to SMIEs, no such support currently exists in Madagascar.
- Secondly, there are also questions as to how the coverage of SMIEs aligns or articulates with that of other SHP mechanisms. Indeed, it was reported that competition is starting to arise between SMIEs and community-based health insurance (CBHI) mechanisms in locations in which both mechanisms operate, which the Ministry of Public Health is promoting in order to advance UHC. As they often offer lower contribution rates, CBHI systems attract self-employed workers who might otherwise join SMIEs, potentially reducing access to OHS for this group.

A third consideration revolves around the comprehensiveness of the **benefit package** delivered and covered by the SMIE, as well as the articulation between the services covered by the SMIE and those covered by the CNaPS. In relation to the first point, it is important to highlight that while some services delivered by the SMIE are mandated by decree (for example, Decree 2003-1162 and Decree 2011-631), any care provided beyond what is specified in these Decrees is not legally guaranteed. This absence of guaranteed benefits is at odds with international standards. In turn, SMIEs currently provide first-level medical care without hospital or rehabilitation services. For maternity, SMIEs cover pre- and postnatal care but not obstetric care or hospitalization. In the case of maternity and health care services for workers affected by WIOD, there is a certain level of complementarity with the benefits covered by the CNaPS for workers affiliated to it. However, the distribution of benefits and services between the two entities is very complex, with gaps in coverage for certain services and benefits, which might negatively affect continuity of care. The intricacy and complexity of the divisions may also create confusion for affiliates and their families over which services are covered and by whom. Yet even for those affiliated with CNaPS, effective access to covered maternity health care services is extremely low, with only an estimated 2.9 per cent of births among CNaPS affiliates effectively covered (ILO 2022b), which may be a result of lack of awareness or confusion owing to the divisions in coverage. This highlights the need to better rationalize and align benefit packages and coordinate between CNaPS and SMIE benefits to ensure complementary and coherent access to care and income security.

[43] Based on an average household size of 4.2 persons (INSTAT 2020)

Range of OHS functions

The dual role played by SMIEs also in part affects the range of OHS functions that should be under their purview. The provision of curative care and public health services to workers and their families represents the majority of SMIE activities, with one estimate suggesting that between 60 and 90 per cent of the expenditure and working time of SMIEs is dedicated to the provision of non-work-related health services (ILO 2019a). While this effectively responds to the needs of their members (particularly given the low level of coverage of other SHP mechanisms) it is observed that it leaves little scope for SMIEs to engage in their preventive role. For example, an ILO assessment of SMIEs found that some were unable to adequately advise employers on health, safety and hygiene, which was partly due to limited workplace visits and insufficient assessment capacities. SMIEs also fulfil only a partial role in health, hygiene and ergonomics training, focusing largely on first aid, the delivery of curative services for workers and their families and public health training rather than on occupational health (ILO 2019a).

Quality of services

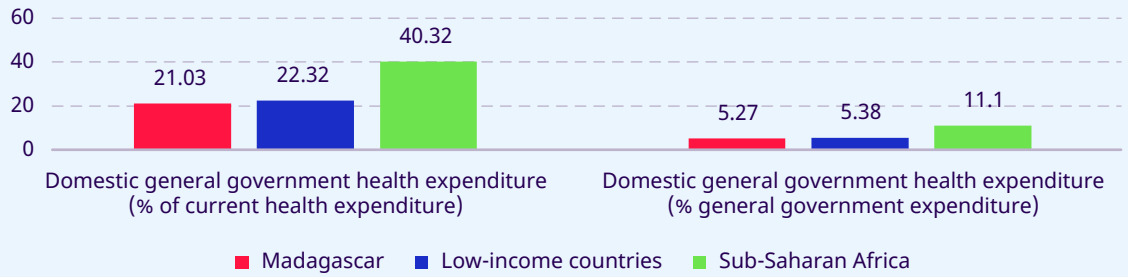
The model and dual role also have some implications for the quality of services provided and covered. One positive aspect to the dual role played by SMIEs in occupational and general health is that this can bridge the commonly observed divide between these two areas. For example, SMIEs reported that this integration facilitated the exchange of information between general and occupational physicians, which is often a challenge (Persechino et al. 2017), thereby enabling a more comprehensive monitoring of workers' health status.

On the other hand, there is wide variation between SMIEs in relation to available infrastructures and resources. While Decree 2003-1162 provides for the Minister of Labour to support the financing of SMIEs, there is no state funding provided for this in practice. As a result, while some SMIEs emanated from pre-existing medical centres with advanced facilities (for example, X-rays and ambulances), in other cases initial setup costs are dependent on resources available amongst member companies, which can result in disparities in terms of the resources and infrastructures available among SMIEs. Thus, when the resources of an SMIE are not sufficient to provide all the services covered, they may establish agreements, or 'conventions', with other public or private health facilities to provide curative care to affiliated workers and their families, the costs of which are borne by the SMIE.

Financing

Another element to highlight is that the dual role played by SMIEs brings **resources** to bear in the SHP system. This is particularly important given that the resources available and allocated to health in Madagascar are limited and below both regional averages and averages amongst countries in the same income group, as is illustrated in figure 12 below.

Figure 12: Domestic general government health expenditure in Madagascar, low-income countries and sub-Saharan Africa



Source: WHO, n.d.

Mandate of the Caisse Nationale de Prévoyance Sociale (CNaPs) for occupational health services

A second linkage identified in the research relates to the responsibilities of the CNaPS in the delivery of certain OHS functions for specific categories of the population. The legal framework in Madagascar assigns CNaPS a preventive role in terms of monitoring occupational accidents and diseases, enforcing employer compliance with health and safety standards and promoting preventive practices. CNaPS's role in accident prevention and occupational health includes awareness-raising, training and advisory activities, typically requested by employers for audits. In practice, the ILO study notes that many stakeholders are unaware of CNaPS's prevention programmes, with a lack of clarity and occasional duplication in roles between the CNaPS, DSST and SMTs, especially concerning the provision of technical advice to companies, prevention and inspections (ILO 2019a).

Conclusion

The engagement of SMIEs in the coverage and delivery of general healthcare services addresses important gaps in the coverage of SHP mechanisms, representing a response to the needs of their members; and indeed, coverage by an SMIE is an aspiration for many uncovered workers, with an ILO study of workers in small and medium enterprises in the urban informal economy highlighting that 70 per cent of respondents expressed a desire to be covered by the CNaPS and/or a SMIE (ILO n.d.b). Achieving UHC will require reflection on the manner in which the SHP mechanisms articulate with one another to guarantee coherent and universal coverage. While the role played by SMIEs is recognized in the National Strategy for Universal Health Coverage of 2015, specific guidelines on their integration with other mechanisms are lacking. This could be facilitated through better coordination in relation to the geographical location or target populations covered and/or through the harmonisation or complementarity of benefit packages.

Furthermore, the responsibilities of the CNaPS in relation to the prevention of occupational risks can complement coverage of SMIEs. Similarly, there are also opportunities to strengthen coordination among health, social protection and occupational health actors. For example, greater coordination could be envisaged between the SMIEs, employers and the CNaPS in relation to the reporting of work injuries and occupational illnesses so as to facilitate access to benefits. As mentioned above, the under-reporting of accidents at work or occupational illnesses is thought to be high, mainly owing to a lack of willingness on the part of employers and workers, but also the restrictiveness of the list of occupational illnesses (ILO 2019a). The Ministry of Public Health could also, through its engagements in the promotion of worker health, raise awareness about social protection and support the expansion of its coverage with a view to promoting access to a comprehensive range of benefits.

Viet Nam

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Introduction

Viet Nam is Southeast Asia's fastest growing economy and Asia's second most dynamic with a forecasted GDP growth of 6.3 per cent in 2023 (Asian Development Bank 2022). A policy of industrialization and modernization has shifted the distribution of employment away from agriculture, forestry and fishery towards manufacturing and services: thus, between 2000 and 2020, employment in the sector of agriculture fell from 62.2 per cent to 34.5 per cent while employment in the industry and construction sectors grew from 13 per cent to 30.5 per cent and from 24.8 per cent to 36 per cent for the service sector (Ministry of Planning and Investment of Viet Nam, 2019 and 2020).

Both health and social protection are rights enshrined in the Constitution of Viet Nam, with a range of strategies and plans in place that aim to ensure and enhance access, quality and adequacy of services and schemes. Similarly, several plans and programmes have been adopted in recent years to promote workers' health and improve occupational safety and health. However, the high prevalence of employment in the informal economy (which represented 67.5 per cent of employment amongst employed persons aged 15 and over in 2019 (ILO 2021)) results in relatively low coverage of contributory social protection schemes guaranteeing income security and limits access to occupational health services. Thus, according to the Occupational Health and Safety report of 2022 published by the Viet Nam Health and Environment Management Agency (VIHEMA), medical facilities recorded in 2022 some 994,397 cases of work-related injuries, 9,378 of which resulted in fatalities (VIHEMA 2022). However, this data is considered to be a significant underestimate of the prevalence of work injuries and occupational diseases, which largely go under-reported..

Social protection

Viet Nam's social protection system is comprised of both contributory and non-contributory schemes covering all nine life contingencies recognized by ILO Convention No. 102. These schemes include:

- **The health insurance fund**, which is administered by the Viet Nam Social Security (VSS). Coverage is compulsory for all and offers a unique package of benefits. The population is categorized into six broad groups, with different contribution rates, subsidy levels and co-payment levels depending on group and category and relying on a mix of contributions and public funding. The health insurance fund has achieved high coverage, reaching 93.35 per cent of the population (VSS 2024), although out-of-pocket health spending continues to increase, with persistent inequities and coverage gaps among near-poor groups and workers in the informal economy (Bales et al. 2021).

- **Social insurance**, covering old-age, survivorship, unemployment, sickness, maternity and employment injury: this is also administered by the VSS. Some 38 per cent of the labour force were covered in 2022 (VSS 2023).
- **Social assistance** cash benefits, catering for specific groups of the population (including orphans, single parents and persons living with HIV) which are narrowly defined, cover a limited scope of benefits and achieve low coverage, although several policies are in place, supporting a more comprehensive and inclusive system that will offer wider coverage (James and McClanahan 2019).

Occupational health services

The Law on Occupational Safety and Health of 2015 defines the preventative actions to be made available to workers and outlines the legally enshrined duties of the state, workers, employers and other relevant stakeholders with regard to the safeguarding of workers' health. However, the Law does not clearly define the organizational model for the provision of OHS (for example, in-house services, external services, state-led services etc), nor does it identify the main entity responsible for organizing and providing OHS. Thus, the responsibility for the provision of OHS is shared among various actors (Matsuda 1996; Diep 2020), namely:

- **The Ministry of Labour**, responsible for conducting safety inspections via labour inspectorates, which have been established at all levels.
- **The Ministry of Health**, responsible for the provision of basic OHS to workers via a network of occupational health centres and health stations. The Viet Nam Health and Environment Management Agency (VIHEMA) is subordinate to the Ministry of Health and supports the implementation of occupational health regulations.
- **Industry-related ministries**, which play a key role in the organization and management of OHS, as well as monitoring of the working environment, health check-ups, occupational disease examination, OSH training for employers and employees and first aid training and also the surveillance and reporting of occupational accidents and diseases.
- **Employers**, responsible for the provision of training on OSH regulations, provision of occupational equipment and health care and medical examination and also the investigation, reporting and surveillance of occupational accidents and diseases.
- **The Viet Nam Fatherland and Front [44] and its member organizations (state)**, collaborate with relevant agencies to organize education and training in OSH and also in the development of OHS.
- **Trade unions**, responsible for collaborating with employers to develop and supervise the implementation of OSH plans, investigate occupational accidents as requested, as well as inspect and supervise OSH activities including the adequate provision of workers' compensation and vocational training for affected employees. They are also actively engaged in organizing educational campaigns on OSH and advocacy activities.

OHS centres are financed by the state budget through the Ministry of Health, although the budget allocation for OHS is still considered limited in all provinces. It is estimated that only workers in formal employment, who accounted for 32.3 per cent of the workforce in 2023 (General Statistics Office of Vietnam 2023), have effective access to these services.

There are several linkages within the social protection system but also between the social protection system on the one hand and occupational health services on the other. These linkages are embedded in the legislative and regulatory framework and are presented below.

[44] According to Law on Vietnam Fatherland Front 2015, the VFF is the political base of people's power, representing and protecting lawful rights and the interests of the people.

Linkages between occupational health services and social protection

Linkages within the social protection system

The design and operation of the EII (known locally as the Occupational Accident and Disease Insurance Fund), the pension scheme and the health insurance fund are interlinked to provide financial protection for workers affected by diseases or accidents, whether occupational or otherwise. In practice, responsibilities for contribution payment, payments of benefits to workers and health facilities' settlement claims are interwoven among the three schemes.

Indeed, benefits for the survivors of workers who die as a result of a WIOD are covered under the pension scheme according to the Law on Occupational Safety and Health, while medical examinations and treatment in cases of WIOD are implicitly included in the list of eligible services covered by the health insurance fund. Coverage of medical costs in the event of a WIOD had not been included in the past two laws on social insurance but were instead the liability of the employer. These services were also excluded from coverage under the Law on Health Insurance of 2008, but amendments introduced in 2014 removed such services from the list of exclusions. As such, medical examinations, treatment and functional rehabilitation in the event of a WIOD are now implicitly included in the list of eligible services covered by the health insurance fund, for which they are not reimbursed by the EII. On the other hand, if an employer does not pay contributions for employees subject to compulsory social insurance or if a worker is not covered by the health insurance fund, then according to the Law on Occupational Safety and Health, the employer still remains liable to cover the benefits to which covered workers would be entitled under each scheme.

▶ **Table 3: Entitlements for workers affected by WIOD and their survivors by social protection scheme and employer liability in Viet Nam**

	Number of affiliated enterprises	Number of covered workers
Occupational Accident and Disease Fund	29.6 per cent of the labour force	• Costs relating to medical assessment • Lump-sum, monthly and service allowances • Assistive and orthopaedic devices • Expenses for convalescence and part of expenses for health rehabilitation • Reskilling • Health insurance contribution • Reimbursement to employers of part of co-payments incurred (see below)
Health Insurance Scheme	93.35 per cent of the total population	Medical care in the event of occupational disease or accident is not excluded from the benefit package
Survivorship Allowance Regime	31.5 per cent of the labour force are active contributors	• Monthly survivorship allowance • Funeral allowance
Employer liability	32.5 per cent of the labour force (e.g. formal)	• **For workers not covered by above-mentioned schemes:** all above-mentioned entitlements • **For workers covered by above-mentioned schemes:** reimbursement of co-payments and expenses that are not covered by health insurance (themselves partly reimbursed by the Occupational Accident and Disease Fund – see above)

Source: Data available under the ILO social security inquiry, (VSS 2024; General Statistics Office of Vietnam 2023), Law on Occupational Safety and Health of 2015, Law on Health Insurance 2008 (amended in 2014), Law on Social Insurance of 2024.

Implications

There are several implications to such arrangements. Firstly, the implicit inclusion of medical care for persons WIOD in the benefit package of the health insurance fund ensures that financial protection in accessing such services achieves wide coverage. Indeed, while the health insurance achieves a coverage of 93.3 per cent of the total population, EII covers only 29.6 per cent of the labour force, where the self-employed are legally excluded and workers in informal employment face challenges to access.

From an administrative perspective, the "non-exclusion" of medical care in the event of a WIOD from the health insurance benefit package may remove a layer of bureaucratic complexity within the administration of both the health system and EII. This arrangement facilitates the payment of claims submitted by health care providers, based as it is on the experience and expertise of the health insurance fund in provider management and payment. Given that both EII and the health insurance fund are administered by the same institution (VSS), it also makes administrative sense to deliver and cover medical benefits in the event of a WIOD through the health insurance scheme, thus avoiding potential duplication of certain functions, for example: contracting with healthcare facilities, negotiating fees and processing and paying claims.

On the other hand, the amendment to the Law on Health Insurance was not accompanied by other necessary adjustments to take account of the financial implications, particularly as no mechanisms for the reimbursement of the health insurance fund through EII was identified. Indeed, it is not clear whether the adoption of this amendment was informed by an actuarial assessment or estimation of the cost of this inclusion and hence, the additional expenses to be borne by the health insurance fund. In turn, it is unclear whether the share of expenses incurred by the health insurance fund as a result of the delivery of services in such events is monitored, which hinders any analysis of these financial implications.

Further, a large share of the workforce, principally in the informal economy, have with access only to financial protection against the costs of healthcare but without income security as administered by EII. It is important to ensure that the complementary objectives and outcomes of financial protection and income security are achieved through the expansion in coverage of EII.

Finally, reimbursement mechanisms for co-payments are complex and could usefully be rationalized. In Viet Nam, co-payment levels vary from 0 to 20 per cent of eligible treatment charges, depending on the membership group and category to which an individual belongs. The Law on Occupational Safety and Health attempts to limit the financial burden borne by workers and employers by first requiring employers to compensate workers for co-payments incurred in the event of an occupational disease; and second, by providing for the reimbursement of co-payments by EII to employers. However, these cost-sharing arrangements have their own limitations, with reliance on employer liability in the first instance potentially undermining access for workers, as well as limitations to the scope of application of these reimbursements, as these provisions apply only to occupational diseases and not to work injuries and do not cover rehabilitation costs. Owing to the complexity introduced by such provisions in relation to which party bears which expenses, consideration could be given to the introduction of provisions into the Law on Health Insurance waiving co-payments for services accessed in the case of WIOD, such as is the practice in Kazakhstan, for example (ILO 2024a).

Linkages between OHS and employment injury insurance

Another linkage identified in the research and which has been alluded to above is that between the legal frameworks for OSH and EII. Indeed, provisions on the qualifying conditions stipulating the nature and level of entitlements under the EII and use of funds are outlined in the Law on Occupational Safety and Health, article 92 of which repeals all provisions within the Law on Social Insurance pertaining to the EII.

Another linkage is the use of EII resources to finance "risk sharing", prevention and rehabilitation activities. Article 56 of the Law on Occupational Health and Safety provides for up to 10 per cent of its revenue to be allocated to the "payment of expenses for prevention and sharing of risks of occupational accidents and diseases". Related activities include health check-ups and medical treatment of occupational diseases (see Occupational Accident and Disease Fund in table 3 above); working function rehabilitation: investigation of occupational accidents and diseases at the request of the VSS; and occupational safety and health training for affiliates and specific categories of workers, including training activities organized

by employers. Thus, affiliated employers are reimbursed by the Occupational Accident and Disease Fund for up to 70 per cent of the costs of training on occupational safety and health they organize for their workers.

Hence, in 2020, some VND 200 billion were imputed to the fund to support prevention and risk sharing, representing 0.07 per cent of total insured earnings in 2020, or equivalent to roughly a third of the expenditure of the fund on periodic benefits in 2019 (that is, VND 551 billion) (ILO, 2021). From the perspective of OHS, the allocation of resources from EII can represent an important addition to the available resources to organize OHS. This is particularly important, as these are generally underfunded, as is the case in Viet Nam. However, owing to the fact that the resources are allocated to reimburse employers for the activities they undertake, these consequently do not contribute towards the funding of public occupational health service institutions. This stands in the way of opportunities for such resources to finance activities or functions that could otherwise reach workers uncovered by EII.

Coordination between OHS, SHP and EII

There are also legal provisions, programmes and resolutions that call for coordination between OHS, the health insurance fund and EII.

Firstly, the VSS participates as a member of the drafting committee for regulations guiding the implementation of the Law on Occupational Safety and Health, particularly with respect to provisions concerning the Occupational Accident and Disease Insurance. This follows on from the fact that the provisions concerning the scheme are set out in this Law and not in the Law on Social Insurance.

Secondly, article 91 of the Law on Occupational Safety and Health specifies the mechanisms for coordination in the area of occupational safety and health, setting out the primary responsibility for the implementation of activities coordinated with other ministries, ministerial level agencies, local government and other relevant agencies. The activities to be coordinated include the formulation of occupational safety and health policies; laws, standards and technical regulations; programmes; information on occupational safety and health; communication, education and training; statistical work and reporting; and other related activities besides the aforementioned. In practice, various resolutions and decrees have been adopted to establish programmes to coordinate actions on worker's health and occupational safety and health.

Thirdly, two separate programmes, implemented by the Ministry of Health and the Ministry of Labour, War Invalids and Social Affairs (MOLISA), also call for the improvement of coordination among all stakeholders, as well as the pooling of resources in support of workers' health. Thus, the Programme on Care and Improvement of Workers' Health and Prevention of Occupational Diseases 2020–2030 of the Ministry of Health aims to provide a coordinated framework for the protection, care and improvement of workers' health; the promotion of healthy lifestyles and nutrition; the prevention of occupational accidents and diseases; and the safeguarding of workers' lives. The National Programme for Occupational Safety and Health 2021–2025, under auspices of the MOLISA, also calls for strengthened coordination among a wide range of actors to achieve improvements in working conditions of workers, the prevention of occupational accidents and diseases and the safeguarding of workers' lives. With respect to both programmes, the resolutions and decrees call for the pooling of resources, specifically by the health insurance fund and EII, to expand available funding for the programmes – although it is unclear whether this is applied in practice.

However, despite legal and regulatory documentation calling for collaboration, some lack of clarity persists as to the actual level of collaboration in the implementation of activities, with limited available information in this area. The involvement of stakeholders in annual meetings and joint initiatives on occupational safety and health dissemination might facilitate the garnering of lessons and eliciting of recommendations for improved collaboration, whether at the central, provincial, district or communal level.

Conclusion

The case study has also identified additional opportunities for coordination besides those identified and discussed above and all within the ambit of the legislative and regulatory frameworks. The first is in relation to the monitoring and reporting of WIOD. Currently, both the Ministry of Health and MOLISA hold responsibilities in relation to the monitoring and reporting of different aspects of occupational health and safety and WIOD. The regulatory framework states that MOLISA and VSS have oversight on annual reporting to the Government on the implementation of EII and its accounting work and the gathering of associated statistics. MOLISA further collates data on occupational accidents, which is informed by data to be provided by the Ministry of Health on workers affected by work injuries undergoing medical examinations and treatment. The Law on Occupational Safety and Health further sets out how the Ministry of Health is also in charge of preparing statistics and developing a database on occupational diseases, as well as monitoring, aggregating and disseminating information on OHS. Conversely, VIHEMA monitors working environments to confirm whether there is evidence of occupational hazards, which is the essential criterion for classifying any disease diagnosis as being occupationally related. Thus, while reporting on occupational health may be fragmented, it is nevertheless a shared process. Notwithstanding the importance of this fact, there is apparently limited reported coordination between the Ministry of Health and the VSS with regard to the collection and collation of data relating to persons with WIOD and their receipt of benefits from EII. Accordingly, the health insurance fund, despite covering the costs of services accessed in such events, is not mandated in any regulation to contribute to these monitoring and reporting efforts. Therefore, there is scope for better coordination of surveillance and reporting with the social protection system.

Furthermore, the institutional arrangements create opportunities for improving access to OHS for workers in the informal economy and expanding the coverage of different social protection schemes. OHS are integrated in the network of public health facilities through the Centres for Disease Control (Diep 2020). Such services are delivered both to formal and informal workers as the Ministry of Health is responsible for implementing basic OHS packages for small and medium-sized enterprises and for workers without labour contracts. This arrangement contributes to expanding access to OHS, particularly to vulnerable workers and those in the informal economy. This arrangement may also represent an opportunity to share information about social protection rights and entitlements or to make referrals of affected workers by the health facilities to the health insurance fund or to EII, the income protection from which is complementary to the preventive and curative services delivered by the public health facilities. Similarly, the health insurance fund and employment injury insurance are both administered by the VSS, suggesting opportunity for greater coordination and potential referrals.

Despite the limited evidence of concrete activities implemented in a coordinated fashion, there is an important legal basis for stronger engagement between OHS and social protection. Several of the linkages themselves also offer incentives and opportunities for such coordination. The financing of prevention activities by EII could represent a strong basis for coordination with formal OHS providers. That medical costs in the event of WIODs are covered by the health insurance fund represents an incentive for greater collaboration on health promotion and occupational risk prevention activities. More broadly, there are opportunities for coordination with respect to coverage and reach.

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Annex: Methodology

Under the research project, a scoping review and three country case studies based on empirical research in Colombia, Madagascar and Viet Nam were conducted. Their respective methodologies are outlined below.

Scoping review methodology

The scoping review was conducted and drafted by Tatiana Agbadje (Université Laval (Québec, Canada)), Gloria Ayivi-Vinz (Université Laval (Québec, Canada)), Frédéric Bergeron (Université Laval (Québec, Canada)), Nathalie Both (ILO), Aurore Iradukunda (formerly ILO), Dejan Loncar (Université de Genève, Switzerland), Marietou Niang (Université du Québec à Rimouski, Lévis, Québec, Canada), Ana Catalina Ramirez (ILO) and Lou Tessier (ILO). Tatiana Agbadje, Gloria Ayivi-Vinz, Frédéric Bergeron, Aurore Iradukunda, Dejan Loncar, Marietou Niang, Ana Catalina Ramirez and Lou Tessier contributed to the design of the scoping review and the definition of the research questions. Aurore Iradukunda, Dejan Loncar and Marietou Niang developed and submitted the research protocol for registration. The search strategy was performed by Frédéric Bergeron in collaboration with Aurore Iradukunda, Marietou Niang and Lou Tessier. Tatiana Agbadje and Gloria Ayivi-Vinz separately identified and selected relevant documents from the Covidence platform and Marietou Niang acted as an inter-judge in case of non-consensus. Ana Catalina Ramirez and Lou Tessier were responsible for validating the relevance of each article. The report was drafted by Nathalie Both, Aurore Iradukunda, Ana Catalina Ramirez and Lou Tessier, the final version of which was reviewed and approved by all authors. Grace Monica Gothuey (ILO), Mathilde Mailfert (ILO), Tzvetomira Radoslavova (ILO) and Yuka Ujita (ILO) reviewed and provided inputs to a preliminary draft.

The scoping review followed the **methodology** developed by Arksey and O'Malley (2005).The research questions aimed to identify, describe and analyse existing institutional linkages between OHS systems and social protection systems globally. Two main questions were identified: 1) In which countries do institutional linkages between OHS and social protection systems exist? And 2) What does the existing literature tell us about the nature of these relationships and the possibility of building a typology of these linkages?

A search strategy was launched on 26 October 2022 in a range of databases.[45] The snowballing method was also used to identify papers that might have been missed by the search strategy. Inclusion criteria included academic and grey literature articles and were as follows: i) they must report at least one link between OHS systems and social protection systems in one or several countries; ii) must have been published between 2000 and 2022 and iii) must be in one of the following languages: English, French, Portuguese, Russian, Spanish or Turkish. The search strategy excluded reviews and letters. While the research aimed primarily to focus on the linkages between OHS and SHP, the search terms used included broader terms relating to social protection. The selection process followed the methodology's two-step approach consisting of title and abstract screening followed by full-text screening, which was carried out through a double-blind review process. Cross-evaluation of selected studies was conducted by the ILO research team and the results from the studies were presented using qualitative content analysis.

There are, however, several **limitations** to the scoping review methodology adopted. Firstly, fragmentation in the nature of the literature identified and the difficulties in identifying the linkages between systems represented a challenge in the process of identifying and selecting articles. To overcome this challenge, close collaboration among researchers, librarians and ILO experts helped in the selection of appropriate and relevant articles, the extraction of these articles and the development of a common understanding of these articles' objectives.

[45] Medline (Ovid), Embase (Embase.com), CINAHL (EBSCO), Academic Search Premier (EBSCO), CINAHL, Web of Science, ABI/Inform (ProQuest) and SciELO (Web of Knowledge) and Google Scholar

While the linguistic diversity of the review team was an added value in terms of finding a diversity of articles in different countries, this may have resulted in the omission of potentially relevant literature not drafted in the languages used in the scoping review. Indeed, the identified literature focused heavily on European contexts, with very limited literature from low- and middle-income countries (LMICs). While this may point to an absence of literature on linkages in the languages covered rather than an absence of linkages as such, it is nevertheless important for future research to expand the geographical scope of evidence on the topic. To overcome this challenge, three case studies were conducted as part of the project.

Country case studies methodology

Three case studies were conducted on Colombia, Madagascar and Viet Nam. Various criteria were used to select the countries, including the extent to which countries had or were developing national policies and integrated strategies for the promotion of access to occupational health services on one hand, and the extension of social health protection to all on the other. The research for the case studies was qualitative in nature, based on **desk reviews** carried out to generate a general understanding of current policies, regulations, organizational arrangements and the implementation of OHS and social protection with any potential linkages between them. These desk reviews included both published and unpublished studies from various ILO projects.

The desk reviews were complemented by **key informant interviews** with policy makers and administrators of OHS services, social protection schemes and health systems to gather their expert insights on the research questions and collect unpublished data. Interviews were held in June 2024 in Colombia, in October and November 2023 in Viet Nam and in November 2023 in Madagascar. The below table presents the actors who were interviewed as part of the project. In Colombia, certain interviewees were unavailable for interview owing to the effects of the ongoing policy reform in the health sector.

Country	Number of covered workers
Colombia	• Servicio de Salud de Bogotá • Junta de Calificación de Invalidez, Ministerio del Trabajo • Dirección de Riesgos Laborales, Ministerio del Trabajo • Departamento del Trabajo del Departamento de Cesar • Entidad Promotora de Salud (EPS) Salud Total • Administrador de Riesgos Laborales Positiva • Academia (Universidad de La Guajira) • Asociación Nacional de Empresarios de Colombia (ANDI) • Instituto Prestador de Salud (IPS) Atlantico
Madagascar	• Organisation Sanitaire Tananarivienne Interentreprises (OSTIE) • Association Médicale Interentreprises de Tananarive (AMIT) • FUNHECE SMIE • FUNABE • Espace Sanitaire Interentreprises d'Antananarivo (ESIA)
Viet Nam	• Viet Nam Health Environment Management Agency, Ministry of Health • Safe Work Department, Ministry of Labour, War Invalids and Social Affairs • Social Protection Department, Ministry of Labour, War Invalids and Social Affairs • Viet Nam National Institute of Environmental and Occupational Health (VNNIEOH) • Social Insurance Policy Branch, Viet Nam Social Security (VSS) • Health Insurance Implementation Department, Viet Nam Social Security (VSS)

International Labour Organization

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International Labour Organization
Governance Department - Occupational Safety and Health and Working Environment Branch
Universal Social Protection Department
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