

# ILO Input towards the Beyond 2020 Indicator Development Process

- I. ILO proposed indicators for integration into the Beyond 2020 Indicators
- II. Links between ILO legal instruments and Beyond 2020 objectives
- III. Proposal for a new indicator from the WHO/ILO joint estimates of the work-related burden of disease and injury: Mortality rate from diseases attributed to occupational risk factors

## I. ILO proposed indicators for integration into the Beyond 2020 Indicators

### 1. Add the SDG 8, namely 8.8.1 and 8.8.2<sup>1</sup>:

- **Indicator 8.8.1:** Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status
  - **Indicator 8.8.2:** Level of national compliance of labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status
2. The Labour sector indicators can go mostly under Objective A and objective B. The current wording of objective A is problematic and it is difficult to place ILO indicators under the current targets because they overlap but we have attempted to give options. Basically, ILO work feeds into an objective that would read along the lines of: *Increased capacity of member States to ensure safe and healthy working environments*

### 3. **ILO Indicators mapping across proposed SAICM objectives and Targets**

**Under target A1:** Number of member states whose laws and regulations, collective agreements where appropriate, and any other relevant instruments on occupational safety and health include the prevention of chemical risks.

**Under Targets A2 or A4:**

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<sup>1</sup> Currently reporting is only done for occupational injuries, as per 8.8.1, therefore ILO/WHO are proposing a new indicator to measure mortality from occupational diseases, which are in large part due to hazardous substance exposures. Refer to Section III on the Proposed ILO/WHO SDG Joint Indicator, 8.8.3: Mortality rate from diseases attributed to occupational risk factors.

- Number of member States who have adopted national profiles, policies or programmes on occupational safety and health and the working environment including the prevention of chemical risks, accompanied by institutional frameworks and strengthened national OSH systems.
- Number of member States with policy measures to facilitate a just transition towards environmentally sustainable economies and societies through decent work.

**Under Target A2:**

- Number of member states with a designated authority or body, or authorities or bodies, responsible for occupational safety and health, designated in accordance with national law and practice and who manage chemical risks.
- Number of countries with mechanisms for ensuring compliance with national laws and regulations, including the systems of inspection.
- Number of countries with national tripartite advisory body, or bodies, addressing occupational safety and health issues including chemical risks.
- Number of countries who have set up occupational health services in accordance with national law and practice.
- Number of countries who have coordination and collaboration mechanisms at national and enterprise levels, including national programme review mechanisms.
- Number of countries who have technical standards, codes of practice and guidelines on occupational safety and health.
- Number of countries who have occupational safety and health policies and programmes of organizations of employers and workers.
- Number of countries who have financial and budgetary resources with regard to occupational safety and health and particularly chemical safety.

**Under Target A2 or A4 or target B3:**

Number of member States with national recording and notification systems for occupational accidents and diseases that allow the regular reporting against SDG indicator 8.8.1.

OR: Number of countries who have the mechanism for the collection and analysis of data on occupational injuries and diseases and their causes, taking into account relevant ILO instruments;

OR: Number of countries who have occupational injury and disease statistics;

**Under Target A1 or A3:**

- Number of member states who implement the ILO Fundamental rights and principles at work and who have ratified and implement International Labour Standards on OSH and chemicals including the prevention of major industrial accidents.
- Number of member states who have systems for classifying and labelling of chemicals such as the GHS.
- Number of member states who have chemicals safety data sheets.

**Under Target A3:** Number of countries who have regular or ongoing activities related to occupational safety and health, including international collaboration.

**Under Target A5 and or Target B2:** Number of member states who promote a management systems approach to occupational safety and health, such as the approach set out in the Guidelines on occupational safety and health management systems (ILO-OSH 2001).

**Under Target A5:** Number of member states who have the arrangements to promote, at the level of the undertaking, cooperation between management, workers and their representatives as an essential element of workplace-related prevention measures in the area of chemical risks.

#### **Under Target B4 or others**

- Number of countries who have information and advisory services on occupational safety and health including chemical risks.
- Number of countries who provide occupational safety and health training including on chemical risks.
- Number of countries who have research on occupational safety and health including on chemical risks.
- Number of countries who have educational and awareness-raising arrangements, including promotional initiatives.
- Number of countries who have specialized technical, medical and scientific institutions with linkages to various aspects of occupational safety and health, including research institutes and laboratories concerned with occupational safety and health.
- Number of countries who have personnel engaged in the area of occupational safety and health, such as inspectors, safety and health officers, and occupational physicians and hygienists.

**Mean of verification for all of the above indicators:** Official national reports and documentation, compiled in the ILO Strategic Management System.

*Note:*

Other areas in which ILO has indicators that link and overlap with SAICM interests and that were brought up in the indicator workshop include: work in the informal economy, SMEs, migrants, gender, children and child labour, just transition, and chemicals in products.

Such indicators may include for instance:

- Number of countries with provisions for collaboration with relevant insurance or social security schemes covering occupational injuries and diseases.
- Number of countries with the support mechanisms for a progressive improvement of occupational safety and health and chemical safety conditions in micro-enterprises, in small and medium-sized enterprises and in the informal economy.

## II. Links between ILO Legal Instruments and Beyond 2020 Objectives

Strategic Objectives and Targets as Deliberated at OEWG3 2019

<p><b>Strategic objective A: [Measures are identified, implemented and enforced in order to prevent or, where not feasible, minimize harm from chemicals throughout their life cycle [and waste]]</b></p>	
<p><b>Target A.1:</b> Countries adopt, implement and enforce legal frameworks that address risk prevention and the reduction of adverse impacts from chemicals throughout their life cycle and waste.</p>	<ul style="list-style-type: none"> <li>- <b>Implementation and periodic review of a coherent policy on safety in the use of chemicals at work</b> (C170, Art. 4; C174, Art. 4; C155, Art. 4-7; C161, Art. 2; C187, Art. 3; C176, Art. 3 (mining); C184, Art. 4(1), (2) (agriculture))</li> <li>- <b>Power of competent authority to prohibit and restrict dangerous chemicals</b> (C170, Art. 5; C155, Art. 11(b); C148, Art. 12 (air pollution); C139, Art. 1 (carcinogens); C136, Art. 4 (Benzene); C162, Art. 11, 12 (asbestos))</li> <li>- <b>Prevention of chemical risks (risk assessment and risk elimination/minimization, incl. exposure limits, replacement of hazardous substances, prevention of leakage/emission, safe storage)</b> (C170, Art. 10-13; C174 Art. 9(a)-(b), (g); C155, Art. 16(1)-(2); C161, Art. 5-15; C148, Art. 8, 9, 11, 14 (air pollution); C139, Art. 2, 3, 5 (carcinogens); C162, Art. 3, 9, 15 (asbestos); C136, Art. 6 (benzene); C167, Art. 28(1)-(3) (construction); C176, Art. 9(b)-(c) (mining); C184, Art. 13 (agriculture))</li> <li>- <b>Protection of workers against adverse effects of chemicals exposure (protective equipment, emergency plans, first aid)</b> (C170, Art. 13(1)(f) and (2)(b)-(c); C174, Art. 9 (c), (d) and (e), 15, 16 (major hazard installations); C155, Art. 16(3), 18; C161, Art. 5(e) and (j); C148, Art. 10 (air pollution); C162, Art. 6(3), 15(4) (asbestos); C167, Art. 28(2)(c), 31 (construction); C176, Art. 5(4)(a), 9(c) and(d) (mining))</li> <li>- <b>Environmentally sound disposal of waste containing hazardous substances</b> (C170, Art. 14; C174, Art. 3(c) (installations for disposal of hazardous chemicals); Art. C167, Art. 28(4) (chemicals in construction); C184, Art. 12(c), 13(d) (chemicals in agriculture); C162, Art. 17(c) (asbestos waste))</li> <li>- <b>Appropriate inspection to ensure implementation</b> (C174, Art. 18; C155, Art. 9; C187, Art. 4(2)(c); C148, Art. 16 (air pollution); C139, Art. 6(c) (carcinogens); C162, Art. 5 (asbestos); C136, Art. 14(c) (benzene); C167, Art. 35(b) (construction); C176, Art. 5(b) (mining); C184, Art. 5 (agriculture))</li> </ul>
<p><b>Target A.2:</b> Countries have sufficient capacity to address chemicals and waste issues nationally, including appropriate inter-agency coordination and stakeholder participation mechanisms, such as national action plans.</p>	<ul style="list-style-type: none"> <li>- <b>Implementation and periodic review of a coherent policy on safety in the use of chemicals at work</b> (C170, Art. 4; C174, Art. 4; C155, Art. 4-7; C161, Art. 2; C187, Art. 3; C176, Art. 3 (mining); C184, Art. 4(1), (2) (agriculture))</li> <li>- <b>Tripartism and involvement of social partners at national level</b> (C170, Art. 3, 4; C174, Art. 4(1), 5(1), 6(1); C155, Art. 4(1), 8; C161, Art. 2, 4; C187, Art. 2(3), 3(3), 4(1), 5(1); C148, Art. 5(1) (air pollution); C139, Art. 6(a); C162, Art. 3(3), 4</li> </ul>

	(asbestos); C136, Art. 3(1), 9(2) (benzene); C167, Art. 1(2), 3(construction); C176, Art. 2(2), 3 (mining); C184, Art. 8(4) (agriculture))
<b>Target A.3:</b> Countries are implementing the chemicals and waste-related multilateral environmental agreements, as well as health, labour and other relevant conventions, and voluntary mechanisms such as the Globally Harmonized System of Classification and Labelling of Chemicals.	<ul style="list-style-type: none"> <li>- <b>All ILO Chemicals Conventions are relevant chemicals (and waste) related multilateral agreements</b></li> <li>- <b>C170 covers all aspects of the GHS</b> (classification (Art. 6), labelling (Art. 7), SDS (Art. 8), information and training of workers (Art. 15))</li> </ul>
<b>Target A.4:</b> Stakeholders have incorporated the sound management of chemicals throughout their life cycle and waste into their planning, policies and practices, thereby supporting the development and implementation of chemicals management systems and other sector-appropriate mechanisms.	<ul style="list-style-type: none"> <li>- <b>Implementation and periodic review of a coherent policy on safety in the use of chemicals at work</b> (C170, Art. 4; C174, Art. 4; C155, Art. 4-7; C161, Art. 2; C187, Art. 3; C176, Art. 3 (mining); C184, Art. 4(1), (2) (agriculture))</li> <li>- <b>Power of competent authority to prohibit and restrict dangerous chemicals</b> (C170, Art. 5; C155, Art. 11(b); C148, Art. 12 (air pollution); C139, Art. 1 (carcinogens); C136, Art. 4 (Benzene); C162, Art. 11, 12 (asbestos); C184, Art. 12(a) (agriculture))</li> <li>- <b>Prevention of chemical risks (risk assessment and risk elimination/minimization, incl. exposure limits, replacement of hazardous substances, prevention of leakage/emission, safe storage)</b> (C170, Art. 10-13; C174 Art. 9(a)-(b), (g); C155, Art. 16(1)-(2); C161, Art. 5-15; C148, Art. 8, 9, 11, 14 (air pollution); C139, Art. 2, 3, 5 (carcinogens); C162, Art. 3, 9, 15 (asbestos); C136, Art. 6 (benzene); C167, Art. 28(1)-(3) (construction); C176, Art. 9(b)-(c) (mining); C184, Art. 13 (agriculture))</li> <li>- <b>Protection of workers against adverse effects of chemicals exposure (protective equipment, emergency plans, first aid)</b> (C170, Art. 13(1)(f) and (2)(b)-(c); C174, Art. 9 (c), (d) and (e), 15, 16 (major hazard installations); C155, Art. 16(3), 18; C161, Art. 5(e) and (j); C148, Art. 10 (air pollution); C162, Art. 6(3), 15(4) (asbestos); C167, Art. 28(2)(c), 31 (construction); C176, Art. 5(4)(a), 9(c) and(d) (mining))</li> </ul>
<b>Target A.5:</b> Governments and industry ensure that workers are protected from the risks associated with chemicals and waste and that workers have the means to protect themselves.	<ul style="list-style-type: none"> <li>- <b>Implementation and periodic review of a coherent policy on safety in the use of chemicals at work</b> (C170, Art. 4; C174, Art. 4; C155, Art. 4-7; C161, Art. 2; C187, Art. 3; C176, Art. 3 (mining); C184, Art. 4(1), (2) (agriculture))</li> <li>- <b>Power of competent authority to prohibit and restrict dangerous chemicals</b> (C170, Art. 5; C155, Art. 11(b); C148, Art. 12 (air pollution); C139, Art. 1 (carcinogens); C136, Art. 4 (Benzene); C162, Art. 11, 12 (asbestos); C184, Art. 12(a) (agriculture))</li> <li>- <b>Prevention of chemical risks (risk assessment and risk elimination/minimization, incl. exposure limits, replacement</b></li> </ul>

	<p><b>of hazardous substances, prevention of leakage/emission, safe storage)</b> (C170, Art. 10-13; C174 Art. 9(a)-(b), (g); C155, Art. 16(1)-(2); C161, Art. 5-15; C148, Art. 8, 9, 11, 14 (air pollution); C139, Art. 2, 3, 5 (carcinogens); C162, Art. 3, 9, 15 (asbestos); C136, Art. 6 (benzene); C167, Art. 28(1)-(3) (construction); C176, Art. 9(b)-(c) (mining); C184, Art. 13 (agriculture))</p> <p><b>- Protection of workers against adverse effects of chemicals exposure (protective equipment, emergency plans, first aid)</b> (C170, Art. 13(1)(f) and (2)(b)-(c); C174, Art. 9 (c), (d) and (e), 15, 16 (major hazard installations); C155, Art. 16(3), 18; C161, Art. 5(e) and (j); C148, Art. 10 (air pollution); C162, Art. 6(3), 15(4) (asbestos); C167, Art. 28(2)(c), 31 (construction); C176, Art. 5(4)(a), 9(c) and(d) (mining))</p>
<p><b>Strategic objective B: Comprehensive and sufficient knowledge, data and information are generated, available and accessible to all to enable informed decisions and actions</b></p>	
<p><b>Target B.1:</b> Comprehensive data and information for chemicals on the market are available and accessible, including information and data on properties, health and environmental effects, uses, hazard- and risk-assessment results and risk-management measures, monitoring results and regulatory status throughout their life cycle.</p>	<p><b>- Classification and appropriate labelling/marketing of chemicals</b> (C170, Art. 6, 7, 9, 10 and 11; C162, Art. 14 (asbestos); C184, Art. 12(a) (agriculture))</p> <p><b>- Promotion of research on chemical hazards</b> (C155, Art. 12(c); C187, Art. 4(3)(e); C148, Art. 14 (air pollution))</p> <p><b>- Safety data sheets for workers</b> (C170, Art. 8, 10(1))</p> <p><b>- Information and training of workers on chemical hazards</b> (C170, Art. 15; C174, Art. 9(c), 20(d) and (e); C155, Art. 5(c), 14, 19(d); C161, Art. 5(i); C187, Art. 4(3)(c); C148, Art. 7(2) (air pollution); C139, Art. 4 (carcinogens); C162, Art. 22(2) and (3) (asbestos); C167, Art. 33 (construction); C176, Art. 10(a) (mining); C184, Art. 7(b) (agriculture))</p>
<p><b>Target B.2:</b> All stakeholders, in particular industries and regulators, have and are using the most appropriate and standardized tools, guidelines and best practices for assessments and sound management, as well as for the prevention of harm, risk reduction, monitoring and enforcement.</p>	<p><b>- Consideration of latest scientific knowledge when determining prohibited/restricted substances, exposure levels and other chemical safety measures</b> (C155, Art. 12(c); C139, Art. 1(3) (carcinogens), C149, Art. 8(3) (air pollution); C162, Art. 15(2) (asbestos))</p> <p><b>- Periodic review of policies on chemicals</b> (C170, Art. 4; C174, Art. 4, 11, 15; C155, Art. 4-7; C161, Art. 2; C187, Art. 3, 5; C176, Art. 3 (mining); C184, Art. 4(1), (2) (agriculture))</p>
<p><b>Target B.3:</b> Information and standardized methods are available and used to understand the impacts of chemicals and waste for improved burden-of-disease and cost-of-inaction estimates, to inform the advancement of chemical safety measures and to</p>	<p><b>- Promotion of research on chemical hazards</b> (C155, Art. 12(c); C187, Art. 4(3)(e); C148, Art. 14 (air pollution))</p> <p><b>- Consideration of latest scientific knowledge when determining prohibited/restricted substances, exposure levels and other chemical safety measures</b> (C155, Art. 12(c); C139, Art. 1(3) (carcinogens), C149, Art. 8(3) (air pollution); C162, Art. 15(2) (asbestos))</p>

measure progress towards reducing those impacts.	- <b>Periodic review of policies on chemicals</b> (C170, Art. 4; C174, Art. 4, 11, 15; C155, Art. 4-7; C161, Art. 2; C187, Art. 3, 5; C176, Art. 3 (mining); C184, Art. 4(1), (2) (agriculture))
<b>Target B.4:</b> Educational, training and public awareness programmes on chemical safety and sustainability have been developed and implemented, including for vulnerable populations, along with worker safety curricula and programmes at all levels.	- <b>Safety data sheets for workers</b> (C170, Art. 8, 10(1)) - <b>Information and training of workers on chemical hazards</b> (C170, Art. 15; C174, Art. 9(c), 20(d) and (e); C155, Art. 5(c), 14, 19(d); C161, Art. 5(i); C187, Art. 4(3)(c); C148, Art. 7(2) (air pollution); C139, Art. 4 (carcinogens); C162, Art. 22(2) and (3) (asbestos); C167, Art. 33 (construction); C176, Art. 10(a) (mining); C184, Art. 7(b) (agriculture))
<b>Target B.5:</b> Countries and stakeholders are implementing training on environmentally sound and safer alternatives, as well as on substitutions and the use of safer alternatives, such as agroecology.	- <b>Substitution of hazardous substances by less harmful ones</b> (C170, Art. 13(1)(a) and (b); C174, Art. 9(b); C161, Art. 5(c); C155, Art. 5(a); C139, Art. 2(1) (carcinogens); C162, Art. 10(a) (asbestos); C136, Art. 2(1) (benzene); C167, 28(2)(a) (construction); there is no explicit mentioning of substitution in C184 on agriculture, however this would be covered under “preventive measures for the use of chemicals” in Art. 13 and “risk minimization” in Art. 14)
<b>Strategic objective C: Issues of concern [that warrant [global] [and] [joint] action] are identified, prioritized and addressed</b>	
<b>Target C.1:</b> Programmes of work including timelines are established, adopted and implemented for identified issues of concern.	- <b>Implementation and periodic review of a coherent policy on safety in the use of chemicals at work</b> (C170, Art. 4; C174, Art. 4; C155, Art. 4-7; C161, Art. 2; C187, Art. 3; C176, Art. 3 (mining); C184, Art. 4(1), (2) (agriculture)) <i>(According to Art. 7 of C155, a national policy must include the periodic review of the safety and health situations in working environments, to identify major problems and to develop priorities of action)</i>
<b>Target C.2:</b> Information on the properties and risk management of chemicals across the supply chain and the chemical contents of products is available to all to enable informed decisions.	- <b>Classification and appropriate labelling/marketing of chemicals</b> (C170, Art. 6, 7, 9, 10 and 11; C162, Art. 14 (asbestos); C184, Art. 12(a) (agriculture)) - <b>Promotion of research on chemical hazards</b> (C155, Art. 12(c); C187, Art. 4(3)(e); C148, Art. 14 (air pollution)) - <b>Safety data sheets for workers</b> (C170, Art. 8, 10(1)) - <b>Information and training of workers on chemical hazards</b> (C170, Art. 15; C174, Art. 9(c), 20(d) and (e); C155, Art. 5(c), 14, 19(d); C161, Art. 5(i); C187, Art. 4(3)(c); C148, Art. 7(2) (air pollution); C139, Art. 4 (carcinogens); C162, Art. 22(2) and (3) (asbestos); C167, Art. 33 (construction); C176, Art. 10(a) (mining); C184, Art. 7(b) (agriculture))
<b>Strategic objective D: Benefits to human health and the environment are maximized and risks are prevented or, where not feasible, minimized through safer alternatives, innovative and sustainable solutions and forward thinking</b>	
<b>Target D.1:</b> Companies adopt corporate policies and practices	- <b>Substitution of hazardous substances by less harmful ones</b> (C170, Art. 13(1)(a) and (b); C174, Art. 9(b); C161, Art. 5(c);

<p>that promote resource efficiency and that incorporate the development, production and use of sustainable and safer alternatives, including new technologies and non-chemical alternatives.</p>	<p>C155, Art. 5(a); C139, Art. 2(1) (carcinogens); C162, Art. 10(a) (asbestos); C136, Art. 2(1) (benzene); C167, 28(2)(a) (construction)  <b>- Consideration of latest scientific knowledge when determining prohibited/restricted substances, exposure levels and other chemical safety measures</b> (C155, Art. 12(c); C139, Art. 1(3) (carcinogens), C149, Art. 8(3) (air pollution); C162, Art. 15(2) (asbestos))</p>
<p><b>Target D.2:</b> Governments implement policies that promote innovation to facilitate the recycling and re-use of products, the adoption of sustainable and safe alternatives, including new technologies and non-chemical alternatives (e.g., the prioritized licensing of reduced-risk alternatives, assessment frameworks, labelling schemes and purchasing policies).</p>	<p><b>- Substitution of hazardous substances by less harmful ones</b> (C170, Art. 13(1)(a) and (b); C174, Art. 9(b); C161, Art. 5(c); C155, Art. 5(a); C139, Art. 2(1) (carcinogens); C162, Art. 10(a) (asbestos); C136, Art. 2(1) (benzene); C167, 28(2)(a) (construction)  <b>- Suitable system for the recycling of chemical waste</b> (C184, Art. 12(c) (agriculture))</p>
<p><b>Target D.3:</b> Companies, including from the investment sector, incorporate strategies and policies to support the sound management of chemicals and waste in their investment approaches and business models and apply internationally-recognized reporting standards where relevant.</p>	<p><b>- Notification requirements for employers</b> (C174, Art. 8 (notification of major hazard installations), Art. 13 and 14 (notification of major accidents); C155, Art. 11(c) (notification of occupational accidents and diseases); C148, Art. 12 (notification of use of air pollutants); C162, Art. 13, 21(5) (notification of use of asbestos and of asbestos related diseases); C167, Art. 34 (notification of accidents and diseases in construction); C176, Art. 5(2)(c) (notification of serious accidents in mines))</p>
<p><b>Target D.4:</b> Companies apply sustainable production principles and life-cycle management in the design of chemicals, materials and products, taking reduced-risk, design-for-recycling and non-chemical solutions and processes into account.</p>	<p><b>- Substitution of hazardous substances by less harmful ones</b> (C170, Art. 13(1)(a) and (b); C174, Art. 9(b); C161, Art. 5(c); C155, Art. 5(a); C139, Art. 2(1) (carcinogens); C162, Art. 10(a) (asbestos); C136, Art. 2(1) (benzene); C167, 28(2)(a) (construction)  <b>- Suitable system for the recycling of chemical waste</b> (C184, Art. 12(c) (agriculture))</p>
<p><b>Target D.5:</b> Industry associations promote change towards sustainability and the safe management of waste and of chemicals and consumer products throughout their life cycles, including in sharing</p>	<p>There are no provisions in ILO instruments, dealing with obligations of employers organisations with regards to promoting the safe use of chemicals, including in SMEs.</p>

information and building the capacity of small and medium-sized enterprises to reduce risks.	
Strategic objective E targets: [The importance of the sound management of chemicals and waste as an essential element to achieving sustainable development is recognized by all]; adequate financial and non-financial resources are [identified and] mobilized; actions are accelerated; and necessary [transparent and accountable] partnerships are established to foster cooperation among stakeholders].]	
Target E.1: The highest levels of stakeholder organizations, including government, industry, civil society and international organizations in all relevant sectors, formally recognize the importance of and commit to action on the sound management of chemicals and waste, and recognize its relevance to sustainable development.	<p><b>- Implementation and periodic review of a coherent policy on safety in the use of chemicals at work</b> (C170, Art. 4; C174, Art. 4; C155, Art. 4-7; C161, Art. 2; C187, Art. 3; C176, Art. 3 (mining); C184, Art. 4(1), (2) (agriculture))</p> <p><b>- Tripartism and involvement of social partners at the national level</b> (C170, Art. 3, 4; C174, Art. 4(1), 5(1), 6(1); C155, Art. 4(1), 8; C161, Art. 2, 4; C187, Art. 2(3), 3(3), 4(1), 5(1); C148, Art. 5(1) (air pollution); C139, Art. 6(a); C162, Art. 3(3), 4 (asbestos); C136, Art. 3(1), 9(2) (benzene); C167, Art. 1(2), 3 (construction); C176, Art. 2(2), 3 (mining); C184, Art. 8(4) (agriculture))</p>
Target E.2: Policies and processes for the management of chemicals and waste are integrated into national and regional development strategies.	ILO instruments do not treat the connection between OSH policies and economic development policies.
Target E.3: Inter- and intra-sectoral partnerships, networks and collaborative mechanisms are established to mobilize resources, to share information, experiences and lessons learned, and to promote coordinated action at the regional and international levels.	<p><b>- Implementation and periodic review of a coherent policy on safety in the use of chemicals at work</b> (C170, Art. 4; C174, Art. 4; C155, Art. 4-7; C161, Art. 2; C187, Art. 3; C176, Art. 3 (mining); C184, Art. 4(1), (2) (agriculture))</p> <p><i>(The national policy requirements in all general chemical instruments, i.e. C170, C174, C155, C161 and C187, require ratifying states to implement a general national policy on chemical safety at work, which encompasses all risks in all sectors and all occupations, in the whole national territory)</i></p>

### III. Proposal for a new indicator from the WHO/ILO joint estimates of the work-related burden of disease and injury: Mortality rate from diseases attributed to occupational risk factors

**This proposal<sup>2</sup> was prepared and submitted by the WHO and ILO Secretariats for the WHO/ILO joint estimates of the work-related burden of disease and injury, collaboratively with the WHO and ILO statistics departments, to the Inter-agency and Expert Group on SDG Indicators (ISEG-SDG).**

**Full name of the Indicator:** Indicator 8.8.3: Mortality rate from diseases attributed to occupational risk factors, by disease, risk factor, sex, and age group

**Custodian Agencies:** World Health Organization (WHO), International Labour Organization (ILO)

**Goal and target addressed:** Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all, Target 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

**What type of proposal (replacement, refinement, adjustment and addition), for replacement, refinement and adjustment, please list the original indicator and its number:** Addition

#### 1. Background and rationale for the indicator proposal

To achieve Target 8.8, the health and labour sectors must ensure occupational safety and health for the 3.5 billion workers globally. Occupational safety and health regulations, policies and services seek to eliminate deaths caused by exposure to occupational risk factors to human health (an estimated 3.4% of all deaths globally). The international standard indicator for this outcome used by both WHO and ILO for 20 years is the number of deaths per population ('mortality rate') attributed to occupational risk factors.

A healthy workforce is crucial for achieving the SDGs, but the current SDG Global Indicator Framework focuses only on occupational injuries (through Indicator 8.8.1). By failing to capture deaths from occupational (or work-related) diseases the indicator framework overlooks most deaths attributed to occupational risk factors (73.7%)<sup>3</sup>. In other words, the crucial aspect of occupational diseases is covered by Target 8.8 but not currently monitored by any SDG indicator.

The proposed indicator (8.8.3) on the mortality rate from occupational diseases will fill this substantial gap. It is well aligned with Target 8.8, applies an internationally established methodology, and uses data already available from producers of official statistics, primarily national statistical offices (NSOs).

#### 2. Information on how and when the methodology has become an international standard and who is the governing body that approves it

For 20 years, WHO and ILO have regularly produced and published data and metadata on the proposed indicator.<sup>4</sup> Since 2016, on the request of Member States, the organizations are harmonizing

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<sup>2</sup> WHO, ILO. Proposal to IAEG-SDG for an additional SDG indicator on mortality from diseases attributable to occupational risk factors. Geneva: WHO, ILO.

<sup>3</sup> G.B.D. Risk Factor Collaborators. *Lancet* 2018; 392(10159): 1923-94.

<sup>4</sup> Early publications of the proposed indicator: ILO. ILO estimates over 1 million work-related fatalities each year. Geneva: ILO; 1999; & Ezzati M, Lopez AD, Rodgers A, Murray CJL. Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors. Geneva: WHO; 2004; Recent publications: Prüss-Üstün A, et al. Preventing Disease Through Healthy Environments: A Global Assessment of the Burden of Disease from Environmental Risks. Geneva: WHO; 2016; and Hämäläinen P, Takala J, Kiat TB.

methodology and production of the proposed indicator, collaborating with government agencies from ten countries, intergovernmental organizations (e.g. Eurostat) and 170 scientists from 30 countries representing all regions. In 2019, WHO and ILO committed per *Collaboration Agreement* to regularly produce the proposed indicator jointly over the long term.<sup>5</sup>

The proposed indicator applies an established methodology called ‘Comparative Risk Assessment’<sup>2</sup>. The IAEG-SDGs have already approved this computational method for Indicators 3.9.1, 3.9.2 and 3.9.3 (all Tier I). Each attributable mortality is calculated for 29 individual pairs of occupational risk factors and diseases (e.g. occupational exposure to benzene and leukaemia). For each pair, information on how exposure to the occupational risk factor is distributed in the population is combined with information on the increased (or relative) risk of the disease caused by this risk factor. This combination allows the calculation of the ‘population attributable fraction’, the proportion of all deaths that can be attributed to the risk factor. Applying this fraction to the total mortality burden of the disease gives the total number of deaths from the disease attributed to the risk factor. Dividing this total mortality count by the total (or relevant reference) population provides the final indicator: the mortality rate from diseases attributed to occupational risk factors. This methodology is already used in several SDG Indicators, and this contributes to methodological consistency across indicators in the SDG Global Indicator Framework.

### 3. Data sources and data availability

The proposed indicator makes use of existing official data produced almost exclusively by NSOs and already compiled by WHO and ILO (Table 1). The sources of virtually all data on occupational risk factors are national household surveys (mainly labour force surveys) and of data on mortality are administrative health records. Data availability is well over 30% for both countries and the global and regional populations. Estimates are produced at global, regional and country level and disaggregated by disease, risk factor, sex and age group. The proposed indicator places no additional reporting burden on countries and is already being produced by WHO and ILO. A review and validation process for data and estimates will be set up so that individual countries can check these before their release.

**Table 1: Number of surveys, number and percentage of countries covered and sources by database**

Database	Number of surveys	Number (percentage) of countries	Source
Industrial sector	1,091	120 (61.9%)	NSOs
Occupation	594	96 (48.5%)	NSOs
Working hours	2,298	152 (77.3%)	NSOs
Number of deaths	Country reporting	194 (100.0%)	NSOs, Ministries of Health

### 4. Confirmation/explanation of joint submission with other partner/co-custodian agencies (if applicable)

Both WHO and ILO have expertise in and jointly promote occupational safety and health. WHO and ILO regularly produce the proposed indicator jointly under a binding *Collaboration Agreement*<sup>3</sup>.

### 5. Conclusion

The proposed indicator is fully aligned with Target 8.8 and captures a crucial aspect of this target currently missed by the SDG Global Indicator Framework, namely the 73.7% of all work-related deaths caused by diseases. Its methodology has been tested and used by WHO and ILO for 20 years, and the

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Global Estimates of Occupational Injuries and Work-Related Illnesses; Singapore: Workplace Safety and Health Institute; 2017.

<sup>5</sup> WHO, ILO. *Collaboration Agreement between WHO and ILO on the WHO/ILO Joint Estimates of the Work-Related Burden of Disease and Injury*. Geneva: WHO and ILO; 2019.

IAEG-SDGs have already approved it in several SDG indicators. Real data are sourced from national household surveys and administrative records collected by producers of official statistics, primarily NSOs. Several countries, intergovernmental organizations and experts collaborated in the proposed indicator's development and production. Intergovernmental organizations have already endorsed the indicator, including the European Agency for Safety & Health at Work (EU-OSHA) that represents the 28 Member States of the European Union.