Chemical exposures in the World of Work:

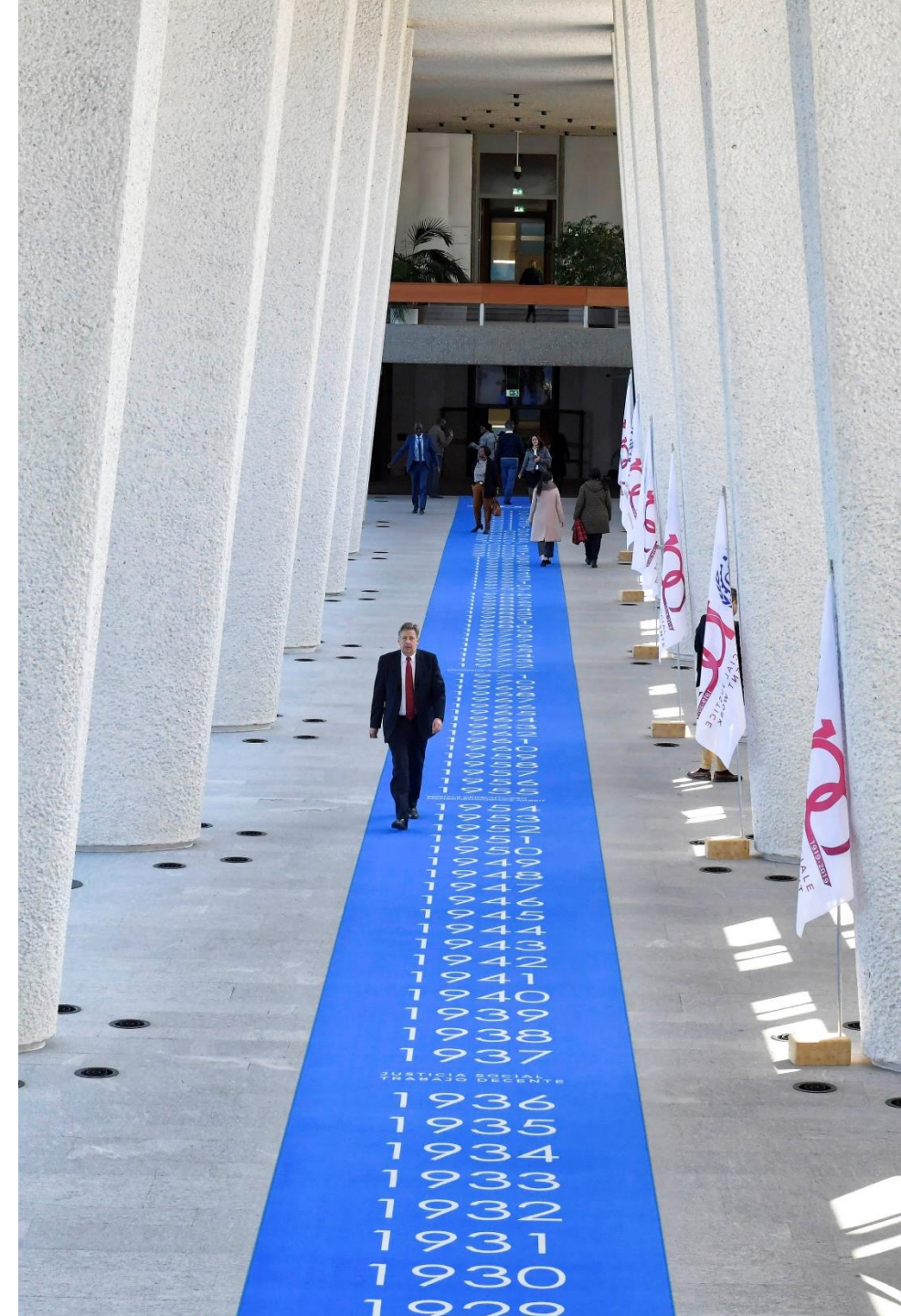# Preventative measures at the policy level

Session objectives

At the end of the session, you will be able to:

1. Realize that preventative measures exist at both policy and workplace levels.

2. Recognize the components of a national OSH system.

3. Identify the key ILO international labour standards related to chemicals.

4. Know that Codes of Practice related to chemicals also exist.

5. Describe the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

6. Understand occupational exposure limits (OELs).

7. Provide examples of ILO engagement in the field of chemical safety.

8. Deepen your knowledge about inter-agency cooperation.

Introduction to the ILO response

Central goal is to standardize and formalize chemical safety.

▶ Conventions and Recommendations.

▶ Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

▶ International chemical safety cards (ICSC).

▶ ILO chemicals control toolkit.

▶ International collaborations e.g. SAICM.

Advancing social justice, promoting decent work
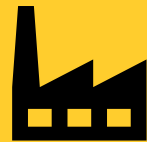
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Preventative measures at the policy and workplace levels

▶ Priority actions should be implemented at both the policy level and the workplace level, with a strong foundation of social dialogue throughout.

▶ Individual actions for specific chemicals should also be noted and research priorities considered.

| National level actions | Workplace level actions | Social dialogue | Research priorities | Individual chemical actions |

An overview of policy level actions

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Overview of policy level actions

▶ A national OSH system.

▶ ILO international standards on OSH.

▶ Codes of Practice (COP) related to chemicals.

▶ OSH Management Systems Guidelines, 2001.

▶ Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

▶ ILO chemicals control toolkit.

▶ Occupational exposure limits (OELs).

▶ Inter-agency cooperation.

Advancing social justice, promoting decent work

▶ ilo.org
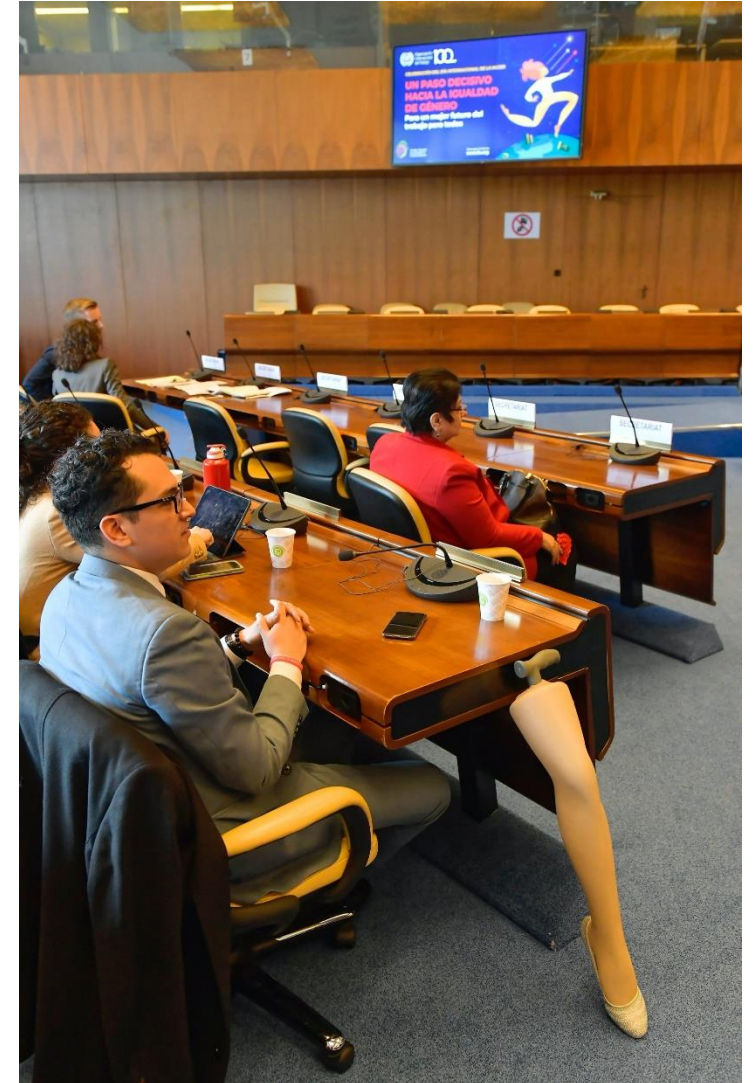
Implement
a national
OSH
system

Implement a national OSH system for the sound management of chemicals

▶ A **strong national OSH system** is critical.

▶ **ILO instruments on OSH and chemical safety** should be ratified and implemented.

▶ Use a **management systems approach**, based on the general ILO principles of these OSH instruments, as well as the ILO Guidelines on occupational safety and health management systems *(ILO–OSH 2001)*.

▶ This national policy framework should aim at the **continuous harmonisation, integration and improvement of preventive and protective OSH measures**, management systems and tools and capacity building, encompassing both the workplace and the environment.

▶ **Effective labour inspection services** provided with proper qualifications and training.

Components of a national OSH system

Should include:	Should also include, where appropriate
▶ **Laws and regulations**, collective agreements where appropriate and any other relevant instruments on OSH pertaining to the sound management of chemicals.	▶ A **national tripartite advisory body**, or bodies, addressing OSH issues related to chemicals.
▶ An **authority or body**, or authorities or bodies, responsible for OSH of chemicals, designated in accordance with national law and practice.	▶ **Information and advisory services** on OSH measures regarding chemicals.
	▶ The provision of **OSH training** regarding the sound management of chemicals.
▶ **Mechanisms for ensuring compliance** with national laws and regulations regarding chemical management, including systems of inspection.	▶ **Occupational health services** for workers exposed to chemicals, in accordance with national law and practice.
	▶ **Research** on OSH for chemicals exposures.
	▶ A mechanism for the **collection and analysis of data** on occupational injuries and diseases related to chemical exposures, taking into account relevant ILO instruments.
▶ Arrangements to promote, at the level of undertaking, **cooperation** between management, workers and their representatives, as an essential element of workplace-related prevention measures for the sound management of chemicals.	▶ Provisions for collaboration with **relevant insurance or social security schemes** covering occupational injuries and diseases from chemical exposures.
	▶ **Support mechanisms** for a progressive improvement of occupational safety and health conditions for enterprises using chemicals, including micro-enterprises, small and medium-sized enterprises and the informal economy.

Promote a national preventative safety and health culture

▶ Building, implementing and continuously strengthening a preventative safety and health culture is essential for **improving safety in the workplace** and **minimizing any adverse impacts** of chemical exposure.

▶ Actions taken at the national level to develop a **preventative culture** must also be applied at the workplace level.
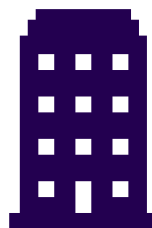
ILO Conventions

Question:

Have you heard of any conventions relating to chemical safety?

Answer:

- There are many!
- The ILO has a number of relevant conventions related to chemical safety and OSH.
- Other conventions also exist, for example the Minamata Convention and the Stockholm Convention.

Ratify and implement ILO International Standards on OSH

States have the duty to ensure that the fundamental principles and rights at work and ratified international labour standards protect and are applied to all workers.

▶ ILO conventions and accompanying recommendations have their own unique range of application in the field of OSH.

▶ They allow countries to develop their own legislative and regulatory framework on chemical safety in the world of work.

▶ In the past 100 years, the ILO has adopted more than 50 legal instruments on the protection of workers, as well as the public and the environment, from chemical hazards.

▶ ilo.org

ILO Chemical Conventions

▶ The ILO focuses on assisting its 187 member States to ratify and implement the main ILO chemicals-related Conventions:

- **The Chemicals Convention, 1990 (No. 170)**
- **The Prevention of Major Industrial Accidents Convention, 1993 (No. 174)**

▶ These two Conventions provide the basis for the sound management of chemicals at the workplace.

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ILO Occupational Safety and Health Conventions

The ILO has over 40 instruments related to OSH. These are also applicable in many cases to the use of chemicals in the world of work.

▶ Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187)

▶ Occupational Safety and health Convention, 1981 (No. 155)

▶ Occupational Health Services Convention, 1985 (No. 161)

**Advancing social justice, promoting decent work**

▶ ilo.org

Additional International labour standards related to chemicals

▶ Asbestos Convention, 1986 (No. 162) and Recommendation, 1986 (No. 172)

▶ Working environment (air pollution, noise and vibration) convention, 1977 (No. 148) and recommendation, 1977 (No. 156)

▶ Radiation Protection Convention, 1960 (No. 115)

▶ Benzene Convention, 1971 (No. 136) and Recommendation, 1971 (No. 144)

▶ Occupational Cancer Convention, 1974 (No. 139) and Recommendation, 1974 (No. 147)

▶ Labour inspection (Agriculture) Convention, 1969 (No.129)

▶ Safety and health in agriculture convention, 2001 (No. 184) and recommendation, 2001 (No. 192)

▶ Safety and health in construction convention, 1988 (No. 167) and recommendation, 1988 (No. 175)

▶ Safety and health in mines convention, 1995 (No. 176) and recommendation, 1995 (No. 183)

▶ List of Occupational Diseases Recommendation, 2002 (No. 194)

Other policy
level actions

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Codes of Practice related to chemicals

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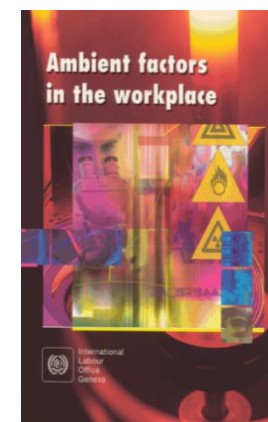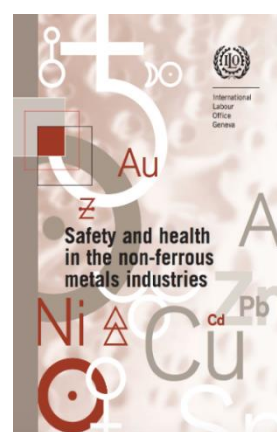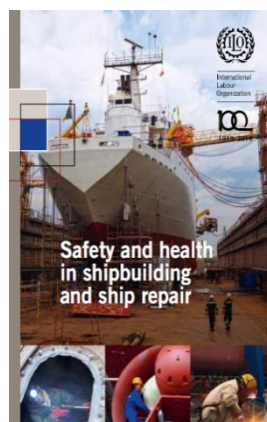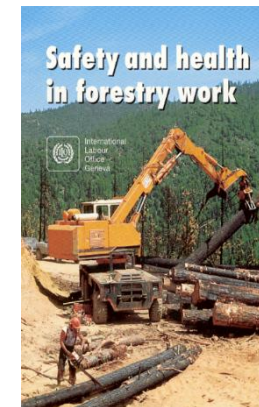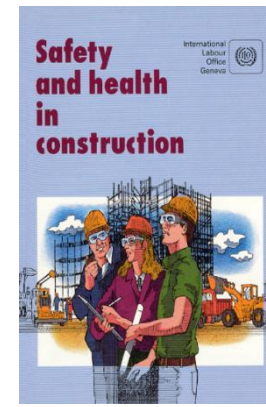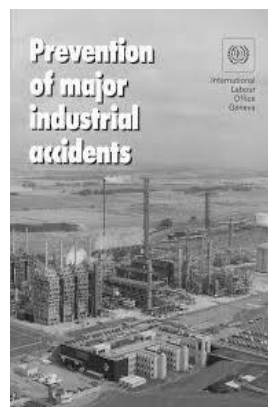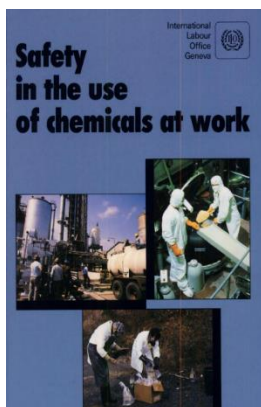
A new ILO code of practice: Safety and health in textiles, clothing, leather and footwear

▶ General information related to chemical safety, including:
- Emergency preparedness e.g. chemical spill procedures and first aid.
- Preventative and protective measures e.g. ventilation systems.

▶ Descriptions of chemical hazards commonly used in these industries, including:
- Routes of exposure.
- Principal health effects.

▶ Risk assessment to identify, measure and evaluate hazardous chemical exposures.

▶ Control strategies following the Hierarchy of Controls.

▶ Transport, storage and disposal of hazardous substances.

▶ Detailed information of specific hazards, including, silica, other dusts and asbestos.

Technical guidelines: OSH Management Systems Guidelines, 2001

Non-binding guidance tool on the establishment of efficient OSH management systems.

▶ Ensure the continual improvement of the working environment and of preventative measures on OSH.

▶ Guidelines can be applied nationally and organizationally:
  - **Nationally:** provide for the establishment of a national framework for OSH management systems, preferably supported by national laws and regulations.
  - **Organizational:** encourage the integration of OSH management system elements as an important component of overall policy and management arrangements.

▶ Guidelines establish a hierarchy of controls which structures all OSH control measures in decreasing order of effectiveness.
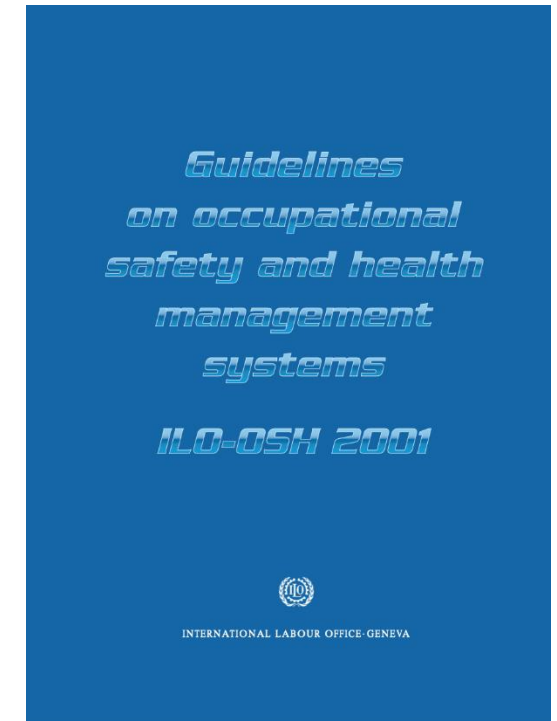
Guidelines on occupational safety and health management systems

ILO-OSH 2001

INTERNATIONAL LABOUR OFFICE·GENEVA

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

Internationally agreed standard set up to create an internationally harmonized approach to classification and labelling of chemicals

▶ Designed to cover all chemicals, including mixtures.

▶ Developed to inform and protect people involved in chemical production, handling, transport, use and disposal.

▶ Not legally binding but implemented in 72 UN member states

- • Standardized hazard testing criteria
- • Universal warning pictograms
- • Harmonized SDS, which provide users of chemicals with hazard information

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GHS PICTOGRAMS

Health Hazard

Carcinogens, respiratory sensitisers, reproductive toxicity, target organ toxicity, germ cell mutagens

Flame

Flammable gases, liquids, & solids; self-reactives; pyrophorics;

Exclamation Mark

Irritant, dermal sensitiser, acute toxicity (harmful)

Gas Cylinder

Compressed gases; liquefied gases; dissolved gases

Corrosion

Skin corrosion; serious eye damage

Exploding Bomb

Explosives, self-reactives, organic peroxides

Flame Over Circle

Oxidisers gases, liquids and solids

Environment

Aquatic toxicity

Skull & Crossbones

Acute toxicity (severe)

ILO chemicals control toolkit

Online scheme for Workplace Chemicals Control Kit designed for SMEs in developing countries.

▶ Generic risk assessment based on GHS and task guidance sheets.

▶ Aim is to provide simple and practical means to prevent/reduce risks of chemicals.

▶ Toolkit Operation:

- Hazard classification
- Scale of use (amount of chemical used)
- Ability for chemicals to become airborne
- Finding the control approach
- Finding the task-specific control guidance sheet(s)

Occupational exposure limits (OELs)

Develop, update and harmonize evidence-based OELs

▶ Regulatory values which **indicate levels of exposure that are considered safe** for a chemical substance in a workplace.

▶ Unfortunately, **OELs do not exist for many chemicals** and those that do exist are often outdated.

▶ There is also a **lack of harmonised data** between different countries and safety bodies.

▶ It is a huge task to keep OEL databases updated and relevant.

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OELs – Suggested actions

▶ Create a **priority system** for OELs, to focus on those that do not exist or need to be updated..

▶ Ensure that OELs are **easily understandable and accessible**.

▶ **Consider all potential health hazards**, rather than only acknowledging single health effects.

▶ Develop an approach **covering all chemicals in the workplace**, rather than focusing on individual chemicals only.

▶ Produce and implement **harmonised international guidelines** for OELs.

▶ **Promote OELs** on an international level with policy makers and industry representatives to ensure that OELs are enforced.

▶ **Update key OELs** on a systematic basis to reflect advancements in science and technology.

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Mainstream gender into OSH policy and practice

Chemical safety in the workplace can no longer afford to be gender-blind, and it is essential that inclusive and responsive gender-sensitive OSH policies are developed.

▶ **The ILO Maternity Protection Convention (No. 183) and accompanying Recommendation (No.191)** set out that pregnant women should not be obliged to carry out work that is a risk to her or her child and provides for specific risk assessment concerning pregnant women, including chemical agents which represent a reproductive hazard.

▶ The ILO has also developed **Guidelines for Gender Mainstreaming in Occupational Safety and Health** to assist policy-makers and practitioners in taking a gender-sensitive approach for the development and implementation of OSH policy and practice.

Examples of ILO engagement

ILO engagement on mercury issues

Projects	ILO Resources
▶ Caring Gold Mining Project: Philippines and Ghana ▶ Promoting Decent Work in the Automobile Dismantling Sector in Fiji ▶ Support for national initiatives in Guyana and Suriname ▶ Plans in Mauritania	▶ ILO code of practice on safety and health in opencast mines (2018) ▶ Promoting decent work in global supply chains: Specific chapter on OSH concerns of mercury in ASGM ▶ Inspection manual for ASGM

ILO engagement on lead issues

▶ Lead remains a **valuable, but hazardous** metal in construction, manufacturing and other industries.

▶ The potential health consequences are well-established, but **many workers are not protected**.

▶ In 2019, the ILO joined the **Global Alliance to Eliminate Lead Paint**.

▶ By bringing together governments, employers, and workers, the ILO hopes to ensure **a collaborative approach to shaping policies and programmes** related to lead exposures along the entire supply chain.

GLOBAL ALLIANCE TO ELIMINATE LEAD PAINT

ILO engagement on the e-waste sector

▶ E-waste sector, also known as: Hazardous Substances within the Life Cycle of Electrical and Electronic Products (HSLEEP).

▶ E-waste contains **hazardous substances** like beryllium, mercury, lead, arsenic, polyvinyl chloride (PVC), brominated flame retardants (BFRs) or phthalates.

▶ **Workers are at high risk for exposure**, especially in developing economies.

▶ The ILO has produced a series of **technical publications on e-waste** and has joined the new **UN Coalition to Tackle Electronic Waste**.

▶ In April 2019, the ILO hosted a high-level forum to discuss current and emerging issues related to decent work in the management of the e-waste sector.

GDFEEW/2019

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Decent work in the management of electrical and electronic waste (e-waste)

Sectoral Policies Department

▶ ilo.org
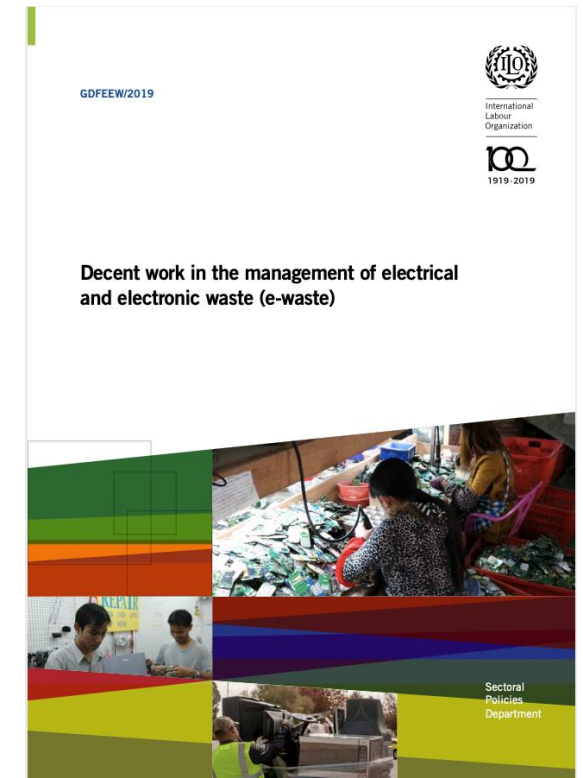
ILO's Green Jobs

▶ ILO is involved in the 'greening' of enterprises, work practices and the whole labour market.

- • Create decent employment opportunities
- • Enhance resource efficiency
- • Build low-carbon sustainable societies.

▶ Supported a shift towards a circular low-carbon economy, specifically in the mechanical and electrical engineering industry, and when it comes to e-waste.

▶ The Green Jobs Programme has progressively assisted over 30 countries.

▶ New ILO report launched at **Davos: A New Circular Vision for Electronics – Time for a Global Reboot** brings attention to the potential to "green" jobs in the MEE sector.

▶ ilo.org

Inter-agency
cooperation

The history of inter-agency cooperation

▶ Major part of ILO's input in chemical safety was through the **International Programme on Chemical Safety (IPCS)**.

▶ IPCS was formed in 1980 in collaboration between **ILO, WHO and UNEP**.

▶ Development on **internationally peer-reviewed chemical risk assessments**, as well as harmonised methodologies.

▶ Setting of **air and water quality guidelines**.
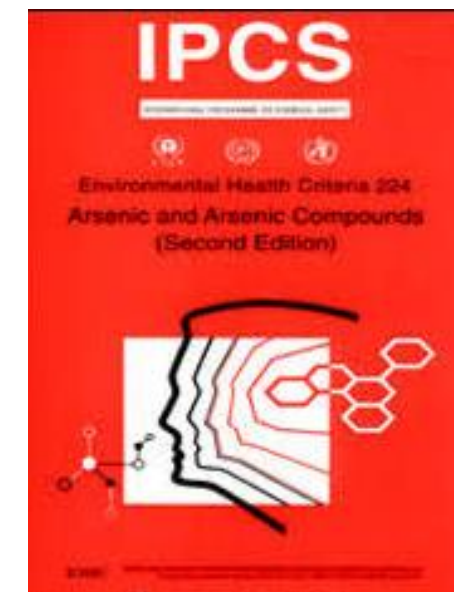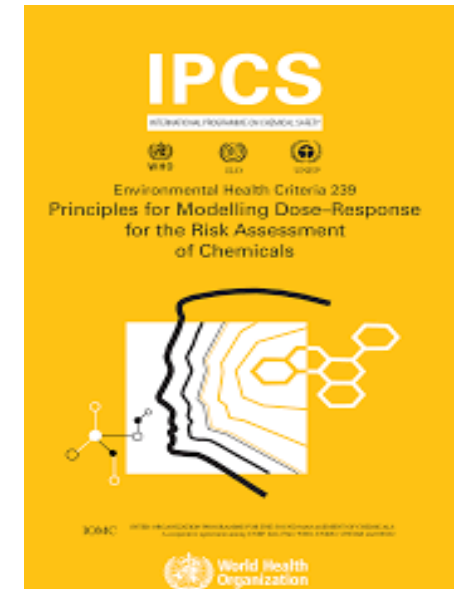
Inter-agency cooperation: IOMC

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

▶ Brings together: ILO, WHO, UNEP, FAO, UNITAR, OECD, UNIDO UNDP and the World Bank (joined in 2012).

▶ Coordinates activities of the 9 Participating Organisations (POs).

▶ Work in 5 main areas:
- Risk assessment of chemicals
- Globally Harmonised System (GHS)
- Risk reduction
- Information exchange
- Capacity building

Strategic Approach to International Chemicals Management (SAICM)

Global Policy Framework for fostering the sound management of chemicals.

▶ Adopted in 2006 and includes focal points in 175 governments and 85 NGOs..

▶ Supports the achievement of the goal agreed at the **2002 Johannesburg World Summit on Sustainable Development** of ensuring that, by the year 2020, chemicals will be produced and used in ways that minimize significant adverse impacts on the environment and human health.

▶ **International Conference on Chemicals Management** (ICCM), which undertakes periodic reviews of SAICM.

▶ 2006 Dubai Declaration on International Chemicals Management.

▶ "**Overarching Policy Strategy**" for SAICM.

▶ In 2015, the 4th ICCM initiated an inter-sessional process to prepare recommendations regarding the Strategic Approach beyond 2020 with the first meeting of the inter-sessional process held in 2017.

Strategic Approach to International Chemicals Management (SAICM)

▶ The main objectives of the Strategic Approach are:

- Risk reduction
- Knowledge and information
- Governance
- Capacity-building and technical cooperation
- Illegal international traffic

▶ Identifies and collaborates on Emerging Policy Issues (EPIs):

Highly Hazardous Pesticides (HHPs)	Nanotechnology
E-waste	Endocrine Disrupting Chemicals (EDCs)
Lead in paint	Environmentally persistent pharmaceutical pollutants
Chemicals in products	Perflourinated chemicals

SAICM intersessional process: Beyond 2020

▶ Fifth session of the International Conference on Chemicals Management (ICCM5) has been postponed due to Covid-19.

▶ Instead four virtual working groups were created to advance the Beyond 2020 chemicals framework:

1. Targets, indicators and milestones
2. Governance and mechanisms to support implementation
3. Issues of concern
4. Financial considerations

Synergies between ILO instruments and the SAICM "Overarching Policy Strategy"

▶ Risk Reduction

▶ Knowledge and information

▶ Governance

▶ Capacity building

Synergies between ILO instruments and SAICM EPIs

▶ **Lead in paint:** one of the first OSH issues discussed by the ILO, prohibited in Convention No. 13.

▶ **Pesticides**: adoption of preventative and protective measures for handling contained within Convention No. 184.

▶ **Chemicals in products:** Convention 170 protects workers as well as the public and environment.

▶ **Electrical and Electronic products:** No specific instrument, but included in Convention No. 170 general provisions.

▶ **Nanomaterials, endocrine-disrupting chemicals, environmentally persistent pharmaceutical pollutants and perfluorinated chemicals:** Covered by Convention No. 170 while not referred to explicitly.

Minamata Convention on mercury

Adopted in 2013 and ratified by 115 states.

International treaty designed to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds.

▶ Main features:

- **Prohibit new mercury mining** and prohibit existing mining within 15 years.
- Export of mercury is prohibited.
- Prohibit and phase down the **production, import and export of mercury-added products.**
- Prohibit use of mercury in manufacturing processes.
- Progressive reduction of the mercury emitted.
- Take steps to **control and reduce mercury emissions** and releases to the environment.

▶ ilo.org

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

Adopted in 1989 and ratified by 187 states.

▶ The Convention contains obligations relating to the export and import of hazardous waste.

Import and Export of hazardous waste.

▶ Art. 4(1): "prior informed consent."

▶ Art. 4(9): export is only permissible if the exporting state does not have sufficient disposal facilities.

▶ Art 4(4): General prohibition on the export or import of wastes between parties and non-parties.

Treatment and management of hazardous waste.

▶ Art. 4(2): parties must ensure that the generation of hazardous waste and other waste is reduced to a minimum.

▶ ilo.org

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade

Adopted in 1998 and ratified by 161 states.

▶ Art. 10: every party must submit a decision for each substance listed in Annex III, expressing its consent, non-consent or conditional consent to the importation of this substance. All parties exporting chemicals must then adopt and implement legislation banning the export of chemicals to parties who have not explicitly consented to their import.

Notification and information requirements for chemical exports.

▶ Parties exporting chemicals which they have prohibited or severely restricted must provide a notification to the importing State containing information on the chemicals' properties and hazards, safety measures to reduce exposure, the contact details of the national authority handling chemical exports, the name of the importing company and other information listed in Art. 12 and Annex V.

▶ Exported chemicals must also be properly labelled and provided with a customs group code of the WCO and SDS if the chemical is used for occupational purposes (Art. 13).

▶ Furthermore, all parties must facilitate the exchange of scientific, technical, economic and legal information on the chemicals covered by the Convention (Art. 14).

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Stockholm Convention on Persistent Organic Pollutants

Adopted in 2001 and ratified by 183 states.

International treaty that aims at eliminating or restricting the production and use of persistent organic pollutants (POPs).

▶ POPs: organic compounds that are resistant to environmental degradation through chemical, biological na photolytic processes.

Provisions

▶ Art. 3: prohibits the production and use of all POPs listed in Annex A and restrict the use and production of POPs listed in Annex B. The import of substances listed in Annexes A and B as well as the export of substances in Annex B is only possible for the purpose of their environmentally-sound disposal(as well as for several exceptional reasons listed in the Convention). The export of substances in Annex A is prohibited.

▶ Art. 5 mandates that parties must reduce their total release as much as possible and, where feasible, eliminate them.

▶ Art. 9: facilitate the exchange with other parties of information relevant to the reduction and elimination of POPs as well as alternatives to them and other relevant issues.

▶ Arts. 10 and 11: parties must also promote awareness and education campaigns on POPs and shall, within their capabilities, encourage or undertake research on POPs.

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Sustainable Development Goals (SDGs)

The SDGs cover a range of targets on the protection of the health and safety of workers and also of the public and the environment.

▶ **SDG 3, Target 3.9**: "by 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination."

▶ **SDG 8, Target 8.8**: "protect labour rights and promote safe and secure working environments for all workers, including migrant workers, particularly women migrants, and those in precarious employment."

▶ **SDG 12, Target 12.4**: "by 2020,achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment."

Sustainable Development Goals (SDGs)

Right and responsibilities

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Responsibilities of government

▶ Access to coverage for **medical care** and **sickness benefits**, quarantine and isolation for workers sick because of their work.

▶ Schemes for **employment injury benefits** according to national regulations.

▶ Workers who are ill as a result of their work should be entitled to **health care**, and to the extent that they are incapacitated for work, **cash benefits** or **compensation**.

▶ Cash benefits or compensation for **dependent family members**, as well as funeral grants or benefits.

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Responsibilities of employers

▶ Ensure that **workplaces, machinery, equipment and processes** are safe.

▶ Ensure that chemical substances are **without risk to health**.

▶ Provide PPE to prevent risk of accidents or adverse effects on health.

▶ Provide measures to deal with **emergencies and accidents**, including adequate first-aid arrangements.

▶ Ensure that workers and their representatives are **consulted, informed and trained on OSH**.

▶ **Collaborate with health authori**ties to promote health and safety at the workplace.

Responsibilities of employers

▶ Make arrangements for workers to have the **time and resources** to participate actively in the processes of organizing, planning and implementation, evaluation and action for improvement of the health and safety.

▶ Ensure the establishment and efficient functioning of a **safety and health committee** in accordance with national laws and practice.

▶ Ensure that workers **report on incidents** and adopt measures for immediate follow-up, including victim support.

▶ **Notify the competent authority** of cases of occupational injuries and diseases caused by exposure to chemicals, according to national law.

▶ ilo.org

Rights of workers

Workers have the right to a safe and healthy work environment.

▶ The provision of **adequate information and training** on OSH, in forms and languages easily understood by the workers.

▶ Workers may enquire into, and be consulted by the employer on, all aspects of OSH associated with their work.

▶ They should be able to **appeal to the competent authority** if they consider measures are inadequate to ensure OSH.

▶ They have the right to information and training on the chemicals used and their labels and chemical safety data sheets.

▶ Suitable **PPE** should be provided free of charge, along with training on usage, maintenance and storage.

Further rights of workers

▶ Refrain from using a substance which can reasonably be expected to be hazardous, if the relevant information is not available to assess the hazards or risks to safety and health.

▶ Remove themselves from a work situation which presents an imminent and **serious danger** to life or health.

▶ Be transferred to **alternative work** or receive **adequate compensation** if this is not possible.

▶ Receive **rehabilitation**, **medical treatment** and **compensation** for occupational accidents or diseases.

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Responsibilities of workers

▶ **Co-operate** with the employer in the field of OSH.

▶ **Take reasonable care** for their own safety and that of other persons who may be affected by their acts.

▶ **Comply with instructions** given for their own safety and health and those of others.

▶ Use **safety devices** and PPE correctly and not render them inoperable.

▶ **Report any accident or injury** to health, which arises in the course of or in connection with work.

▶ Workers must also **collaborate with enterprise management** to promote health and safety at the workplace.

▶ **Participate in training** provided by the employer.

Social dialogue

▶ To **promote consensus building** and **democratic involvement** at all levels.

▶ To create an **enabling environment** to ensure safe, healthy, decent and productive work.

▶ Has the potential to **resolve important economic and social issues**, encourage good governance, advance social and industrial stability and boost economic progress.

▶ **Enhance sound governance frameworks** through transparency, public participation, and accountability.

▶ **Active participation** is needed for policy development and governance amongst workers, employers, policy makers, managers and OSH professionals.

▶ Sustainable industrial policies underpinned by meaningful and effective social dialogue are key.

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Social dialogue

- One of the key objectives of a revitalized strategy for **SAICM Beyond 2020** is increased multi-sectoral and multi-stakeholder engagement.

- Enhanced social dialogue will be critical during the intersessional process leading up to **Fifth session of the International Conference for Chemicals Management** (ICCM5), and beyond.

- The ILO has **actively promoted social dialogue** in the chemical sector for many years.

- The **2018 ILO Global Dialogue Forum** adopted **Points of Consensus** to guide governments, employers and workers in shaping a future that works for all in the chemical and pharmaceutical industries.

  - Explored initiatives to promote decent and productive work in the chemical industry.
  - Discussed opportunities and challenges arising from digitalization and other new technologies.
  - Examined initiatives to promote social dialogue for improving the performance of the chemical industry, in particular of small and medium-sized enterprises (SMEs).

International
Labour
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Case study: Vocational training in the German chemical industry

▶ Increasing vocational education and training opportunities for disadvantaged young people can help to resolve skills gaps in the chemical industry.

▶ In 2011, the German chemical industry launched the Start programme.

▶ This initiative supports young people who have failed to secure a vocational training place or do not have the necessary skills for such training.

▶ Since 2000, over 2,200 young people have taken part in the programme.

▶ Around 70% were subsequently able to secure a training place.

▶ This programme will be expanded to include a new measure called Start Plus, which will focus on fostering training activities on the part of SMEs.

Research is
urgently needed

More research is needed

- Increase research and **harmonise global OSH data**, specifically for LMICs and informal sector.

- **Strengthen GBD estimates** for occupational exposures and outcomes.

- Increase research on **NCDs**.

- Examine **interlinkages with chemicals and infectious disease**.

- Enhance the **science-policy interface** for OSH.

- Raise awareness of **gender inequalities** and impacts on reproductive health.

- Collect **model policies**, **best practices** and **lessons learned**.

End of session activity

Group work and quiz

Group work: Discussing rights and responsibilities

▶ Get into pairs. One person is the COO of a textiles factory. The other is a worker on the factory floor. The worker sometimes uses dyes and solvents during the course of their work.

▶ Discuss the rights and responsibilities of both the employer and the worker.

▶ Topics could include the work environment, how to deal with emergencies, training and incident reporting.

▶ ilo.org

Quiz

1. What are the 4 components a national OSH system should always include?

2. Name the 2 ILO Conventions that provide the basis for the sound management of chemicals in the workplace.

3. What is the GHS?

4. What are OELs?

5. List 3 emerging policy issues (EPIs) identified by SAICM.

6. What type of chemical is specified in the Stockholm Convention?

Key ILO resources

▶ Exposure to hazardous chemicals at work and resulting health impacts: A global review (2021).

▶ The GHS in the world of work: Mapping synergies between ILO Instruments and the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

▶ ILO Instruments on Chemical Safety – Analysis and synergies with other international frameworks on the sound management of chemicals (2020).

▶ The Sound Management of Chemicals and Waste in the World of Work (2019).

▶ All You Need to Know: Convention No. 170.

▶ Guidelines on occupational safety and health management systems (2001).

▶ Major hazard control: A practical manual (1993).

▶ Safety in the use of chemicals at work: code of practice (1991).

▶ Safety and health in textiles, clothing, leather and footwear (2021).

▶ ILO indicators of progress in implementing SAICM (2021).