

► Learning from work-related accidents

Confined spaces safety webinar

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▶ Definitions

▶ Work-related accident or occupational accident:

- “Covers an occurrence arising out of, or in the course of, work which results in fatal or non-fatal injury”.

▶ Occupational disease:

- “Covers any disease contracted as a result of an exposure to risk factors arising from work activity”.

in, ILO Protocol of 2002 to the Occupational Safety and Health Convention, 1981

▶ Work-related death's paradox

▶ Reasons to work:

- Provision of means of subsistence;
- Improvement of the well-being and quality of life of people and their families;
- Strengthening of self-esteem, individual dignity and personal fulfilment;
- Promotion of social cohesion and stability, peace and economic growth.

▶ Paradoxal consequences of work:

- Work kills more people than wars!
- From a global workforce of around 2.84 billion:
 - between 350 and 360 thousand people die annually (due to about 270 million accidents);
 - about 2 million dies annually from occupational diseases.

► “Costs” of occupational accidents and diseases

UK: EUR€18.1 billion (HSE, 2015)

USA: US\$250 billion - 1.8% of GDP (Miller, 1997)

EU: EUR€26 billion (Richthofen, 2002)

World: US\$1,200 billion- 4% of global GNP
(Hämäläinen, 2009; Takala, 2014, 2005)

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Victims & families:

- Death;
- Injuries and disabilities;
- Decreased quality of life;
- Pain, sorrow and suffering;
- Self-esteem;
- Loss of earnings and earning capacity.

Employers:

➤ **Direct:**

- Damages in plant, machinery, equipment, and raw materials;
- Civil and criminal liability;
- Compensation costs;
- Increased insurance premiums.

➤ **Indirect:**

- Reputation & image damages;
- Replacements' recruitment & training;
- Motivation, absenteeism and presentism of colleagues;
- Production capacity and productivity;
- Quality of goods/services & delivery times;
- Diseconomies of scale and experience;
- Opportunity costs.

States:

➤ **Direct:**

- Health, emergency services, SS benefits
- Compensation costs;
- Costs with rehabilitation and reintegration of victims

➤ **Indirect:**

- Loss of tax & SS revenues
- Reputation & image damages
- Administrative, investigation & inspection costs.

▶ WHY to learn about causes and circumstances of occupational accidents and diseases?

▶ International community:

- ▶ To set up standards that provide guidance to national policies and legislation aimed at improving OSH and preventing work-related accidents and occupational diseases

▶ National-level:

- ▶ To formulate national-level policies, systems, strategies and legislation to improve OSH and to prevent work-related accidents and occupational diseases
- ▶ To carry out programs and actions to disseminate, promote and implement policies, systems, strategies and legislation to improve OSH, prevent occupational accidents and diseases and to ensure their effective implementation

▶ Workplace-level:

- ▶ To implement the most adequate preventive and protective measures to ensure the OSH of workers and the prevention of the occurrence (or repetition) of occupational accidents and diseases

▶ HOW to learn about causes and circumstances of occupational accidents and diseases?

▶ International community:

- ▶ Through the consolidation and comparison of work-related accidents and occupational diseases statistics

▶ States:

- ▶ Through national statistics on occupational accidents and diseases; and
- ▶ Through labour inspectorates' notification and results of official investigations of work-related accidents and occupational diseases

▶ Employers/workers:

- ▶ Through the recording and notification of occupational accidents and diseases;
- ▶ Through their own investigation of occupational accidents and diseases;
- ▶ Through the official investigation of occupational accidents and diseases.

► Main International Labour Standards and Guidelines on Occupational Accidents and Diseases

► ILO C155, on OSH an the Working Environment:

- The aim of any national OSH policy shall be to prevent accidents and injury to health at work (Art. 4);
- In order to implement such OSH policy, States have to ensure, *inter alia* (Art. 11):
 - The **set up and application of procedures for notification of occupational accidents and diseases** by employers (and, when appropriate, insurance institutions and others directly concerned), and the **production of annual statistics** on occupational accidents and diseases;
 - The **holding of inquiries, where cases of occupational accidents, occupational diseases** or any other injuries to health at work appear to reflect serious situations;
 - The **annual publication of information on measures taken on occupational accidents, occupational diseases** and other injuries to health at work.

▶ Main International Labour Standards and Guidelines on Occupational Accidents and Diseases

▶ ILO Protocol of 2002 to ILO C155:

- States shall establish requirements and procedures for the recording and notification of occupational accidents, occupational diseases and, as appropriate, dangerous occurrences, commuting accidents and suspected cases of occupational diseases
- **Recording requirements** include:
 - The responsibility of the employers for: recording them; provide information to workers and their representatives on the recording system; maintaining these records and use them to implement preventive measures; and to refrain from retaliatory or disciplinary measures against a worker for reporting them;
 - Information to be recorded and duration duration for maintaining these records;
 - Measures to ensure the confidentiality of personal and medical data.

▶ Main International Labour Standards and Guidelines on Occupational Accidents and Diseases

▶ ILO Protocol of 2002 to ILO C155:

➤ Notification requirements include:

- The responsibility of the employers to notify the competent authorities of their occurrence and to provide appropriate information to workers and their representatives concerning the notified cases;
- Arrangements for their notification by insurance institutions, occupational health services, medical practitioners and other bodies directly concerned (where appropriate);
- Criteria according to which they are to be notified; and the time limits for notification;
- The content of the notification, which should include data on: the employer and establishment; the injured persons and the nature of the injuries or disease; and the workplace, the circumstances of the accident or the dangerous occurrence and, in the case of an occupational disease, the circumstances of the exposure to health hazards.

► Main International Labour Standards and Guidelines on Occupational Accidents and Diseases

- **ILO C121, on Employment Injury Benefits (1964, as amended in 1980), according to which each Member shall:**
 - Prescribe a definition of accident at work (including the conditions under which a commuting accident is considered to be an accident at work) and of occupational disease (Art. 7);
 - Establish a national legislation on employment injury benefits that protects all employees (including apprentices) in the public, private and cooperative sectors, regarding the following contingencies due to employment injury: a morbid condition; incapacity for work resulting from such a condition and involving suspension of earnings; total loss of earning capacity or partial loss thereof; the loss of support resulting from the death of the breadwinner by prescribed categories of beneficiaries (Arts. 4 and 6);
 - Prescribe a list of occupational diseases (Art. 8):
 - (a) Comprising at least the diseases enumerated in Schedule I to this Convention (which shall be regarded as occupational diseases under prescribed conditions); or
 - (b) Include in its legislation a general definition of occupational diseases broad enough to cover the diseases enumerated there; or
 - (c) A combination of (a) with (b), or with or other provisions establishing the occupational disease's origin

▶ Main International Labour Standards and Guidelines on Occupational Accidents and Diseases

▶ ILO R194, on the List of Occupational Diseases (2002)

- Member States shall establish a national list of occupational diseases for the purposes of prevention, recording, notification and, if applicable, compensation of occupational diseases (Point 2);
- This list should comprise:
 - At the least, the diseases enumerated in Schedule I of the Employment Injury Benefits Convention, 1964 (as amended in 1980);
 - Other diseases contained in the list of occupational diseases annexed to this Recommendation; and
 - A section entitled "Suspected occupational diseases".
- List annexed to R194 should be regularly reviewed and updated through tripartite meetings of experts convened by the Governing Body of the ILO. Any new list so established shall be submitted to the GB for its approval, and upon approval shall replace the preceding list and shall be communicated to the ILO Members.

▶ Main International Labour Standards and Guidelines on Occupational Accidents and Diseases

▶ ILO List of Occupational Diseases (revised 2010):

- This new list replaces the preceding one in the annex of R194 (which was adopted in 2002).
- Includes a range of internationally recognized occupational diseases, from illnesses caused by chemical, physical and biological agents to respiratory and skin diseases, musculoskeletal disorders and occupational cancer.
- Mental and behavioural disorders have for the first time been specifically included in the ILO list;
- This list also has open items in all the sections dealing with the afore-mentioned diseases. The open items allow the recognition of the occupational origin of diseases not specified in the list if a link is established between exposure to risk factors arising from work activities and the disorders contracted by the worker.

▶ Main International Labour Standards and Guidelines on Occupational Accidents and Diseases

▶ ILO C081 and C129, on Labour Inspection:

- ▶ Mandatory notification of labour inspectors about occupational accidents and diseases (C081: Art. 14; C129: Art. 19(1));
- ▶ Labor inspectors shall be associated with any inquiry on the spot into the causes of the most serious occupational accidents or occupational diseases (C129: Art. 19(2));
- ▶ The annual report of the labour inspectorate should include statistics on occupational accidents and diseases, including their causes (C081: Art. 21; C129: Art. 27)

▶ Main International Labour Standards and Guidelines on Occupational Accidents and Diseases

▶ ILO Code of Practice on recording and notification of occupational accidents and diseases

➤ Provides guidance:

- To the competent authorities in developing systems for recording and notification of occupational accidents and diseases;
- On the effective use of collected, recorded and notified data for preventive action;
- On joint action by employers and workers and for activities carried out by GOV, SS and other organizations to the overall prevention of occupational accidents and diseases

▶ Main EU Standards and Guidelines on Occupational Accidents and Diseases

▶ EU OSH Framework Directive 89/391/EEC (Art. 9(1))

- The employer shall keep a list of occupational accidents resulting in a worker being unfit for work for more than three working days;
- The employer shall draw up, for the responsible authorities and in accordance with national laws and/ or practices, reports on occupational accidents suffered by his workers.

▶ Main EU Standards and Guidelines on Occupational Accidents and Diseases

- ▶ Regulation (EC) No. 1338/2008 of the European Parliament and of the Council of 16 December 2008 on Community statistics on public health and health and safety at work (Framework Regulation):
 - Sets out obligations to supply statistics on accidents at work to Commission (Eurostat) (Art. 2 and Annex IV);
 - The harmonized and common micro-data set to be provided on accidents at work cover the following subjects:
 - Characteristics of the injured person
 - Characteristics of the injury, including severity (days lost)
 - Characteristics of the enterprise including economic activity
 - Characteristics of the workplace
 - Characteristics of the accident, including the sequence of event characterizing the causes and circumstances of the accident.
 - Statistics are to be provided annually, and submitted not later than 18 months after the end of the reference year

▶ Main EU Standards and Guidelines on Occupational Accidents and Diseases

▶ Regulation (EU) No. 349/2011, adopted on 11 April 2011 (ESAW Regulation):

- To harmonize data on accidents at work for all accidents resulting in more than three days' absence from work (Fatal and non-fatal);
- Implements the Framework Regulation as regards statistics on accidents at work;
- Sets up the variables, definitions and classifications of the subjects listed above and the breakdown of characteristics;
- Specifies that Member States have to send Eurostat an annual verification and update of the metadata together with the data.

▶ Main EU Standards and Guidelines on Occupational Accidents and Diseases

▶ Eurostat methodology for European Statistics on Accidents at Work (ESAW) Variables:

- Regarding the **characteristics of the injured person, the enterprise and the workplace** - information to identify where the accident occurred, who was injured and when;
- Concerning the **characteristics of the accident** - information to show how the accident occurred, in what circumstances and how the injuries came about;
- On the **characteristics of the injury** - information on the nature and seriousness of the injuries and the consequences of the accident.

► Main EU Standards and Guidelines on Occupational Accidents and Diseases

► ESAW - Variables on the characteristics of the accident, the victim and the employers:

- Economic activity of the employer (4-digit level NACE Rev. 2)
- Victim's occupation (2-digit level of ISCO-08 classification)
- Victim's employment status (employee with a permanent/temporary job, full-time/part-time; self-employed, trainee/apprentice, etc.)
- Victim's Age, Sex and Nationality;
- Geographical location of the accident (5-digit code of NUTS classification)
- Date and time of the accident
- Size of the enterprise (0 employees, 1-9, 10-49, 50-249, 250-499, 500+, Unknown)
- Type of injury (3-digit of ESAW classification, e.g.: 011-Superficial injuries; 021-Closed fractures; 031-Dislocations and subluxations; 052-Internal injuries; 062-Chemical burns (corrosions); 071-Acute poisonings; 081-Asphyxiation)
- Part of body injured (2-digit of ESAW class. e.g.: 12-Facial area; 42-Chest area including organs; 64-Foot; etc.)
- Days lost/severity (3-digit class., e.g.: A01-4 - 6 days; A04-At least 21 days but less than 1 month; 997-Permanent incapacity (to work) or 183 or more days lost; 998-Fatal accident)

► Main EU Standards and Guidelines on Occupational Accidents and Diseases

► ESAW - Variables on the causes and circumstances of the accident:

- **Workstation**, e.g.: 1-Usual workstation or within the usual local unit of work; 2- Occasional or mobile workstation or in a journey on behalf of the employer;
- **Working environment**, e.g.: 011-Production area, factory, workshop; 012-Maintenance area, repair workshop; 021-Construction site - building being constructed; 031-Breeding area; 034-Forestry zone; 041-Office, meeting room, library etc; 051-Health establishment, private hospital, hospital, nursing home; 062-Means of transport - by land or rail – private or public (all kinds: train, bus, car etc.); 071-Private home; 081-Indoor sports area – sports hall, gymnasium, indoor swimming pool; 091 Elevated – on a fixed level (roof, terrace, etc.); 102-Underground – mine; 111-Sea or ocean – aboard all types of vessels, platforms, ships, boats, barges; 121-In a high pressure environment – underwater (e.g. diving); etc;
- **Working process**, e.g.: 11-Production, manufacturing, processing – all types; 12-Storing - all types; 21-Excavation; 31-Agricultural type work - working the land; 42-Intellectual work - teaching, training, data processing, office work, organising, managing; 52-Maintenance, repair, tuning, adjustment; 62 Sport, artistic activity; etc;
- **Specific Physical Activity**, e.g.: 11-Starting the machine, stopping the machine; 22-Working with hand-held tools – motorised; 31-Driving a means of transport or handling equipment - mobile and motorised; 45-Opening, closing (box, package, parcel); 51-Carrying vertically - lifting, raising, lowering an object; 62-Getting in or out; 66-Swimming, diving; etc;

► Main EU Standards and Guidelines on Occupational Accidents and Diseases

► ESAW - Variables on the causes and circumstances of the accident:

- **Deviation**, e.g.: Electrical problem - leading to direct contact; 13-Explosion; 21-Solid state - overflowing, overturning; 22-Liquid state - leaking, oozing, flowing, splashing, spraying; 33-Slip, fall, collapse of Material Agent - from above (falling on the victim); 42-Loss of control (total or partial) - of means of transport or handling equipment, (motorised or not); 51-Fall of person - to a lower level; 63-Being caught or carried away, by something or by momentum; etc;
- **Contact and mode of injury**, e.g.: 12-Direct contact with electricity, receipt of electrical charge in the body; 21-Drowned in liquid; 22-Buried under solid; 32-Horizontal motion, crash on or against; 42-Struck - by falling object; 51-Contact with sharp Material Agent (knife, blade etc.); 62-Trapped, crushed – under; 71 Physical stress - on the musculoskeletal system; etc;
- **Material Agent** (of the Specific Physical Activity, Deviation and/or Contact/Mode of injury) e.g.: 01.01-Building components, structural components - doors, walls, partitions etc. and intentional obstacles (windows, etc.); 03.01-Excavations, trenches, wells, pits, escarpments, garage pits; 04.03-Sewers, drains; 06.11-Hand tools, not powered - for painting; 07.01-Mechanical hand tools - for sawing; 10.04 Machines for processing materials – hot processes (ovens, driers, kilns); 11.03 Fixed cranes, mobile cranes, vehicle-mounted cranes, overhead travelling cranes, hoisting devices with suspended load; 12.02 Vehicles – light: goods or passengers; 15.03-Substances – flammables (solid, liquid or gaseous); 15.07 Substances – biological; etc.

Q&A



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Contacts

Дякую за увагу!

Thank you for your attention!



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