



Ankara University  
**SCHOOL OF MEDICINE**

*The First Medical School In The Republic of Turkey (1945)*

# *Labour Life and Health*

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**Ankara University Medical School, Dept. of Public Health**

**25th February 2019, Ankara - TURKEY**

# GLOBAL SAFETY STATISTICS

WORK-RELATED ACCIDENTS AND DISEASES RESULT IN 2.3 MILLION FATALITIES



AROUND THE WORLD EVERY YEAR

THIS EQUATES TO OVER 6000 DEATHS



EVERY SINGLE DAY

HAZARDOUS SUBSTANCES ALONE ARE ESTIMATED TO CAUSE 651,279 DEATHS



A YEAR

WORLDWIDE, THERE ARE 340 MILLION OCCUPATIONAL ACCIDENTS AND 160 MILLION VICTIMS OF WORK-RELATED ILLNESSES ANNUALLY



ILO UPDATES INDICATE AN INCREASE OF ACCIDENTS AND ILL HEALTH

Source: ILO (International Labour Organisation)

www.rozps.com



**WORKPLACE STRESS**

**A COLLECTIVE CHALLENGE**

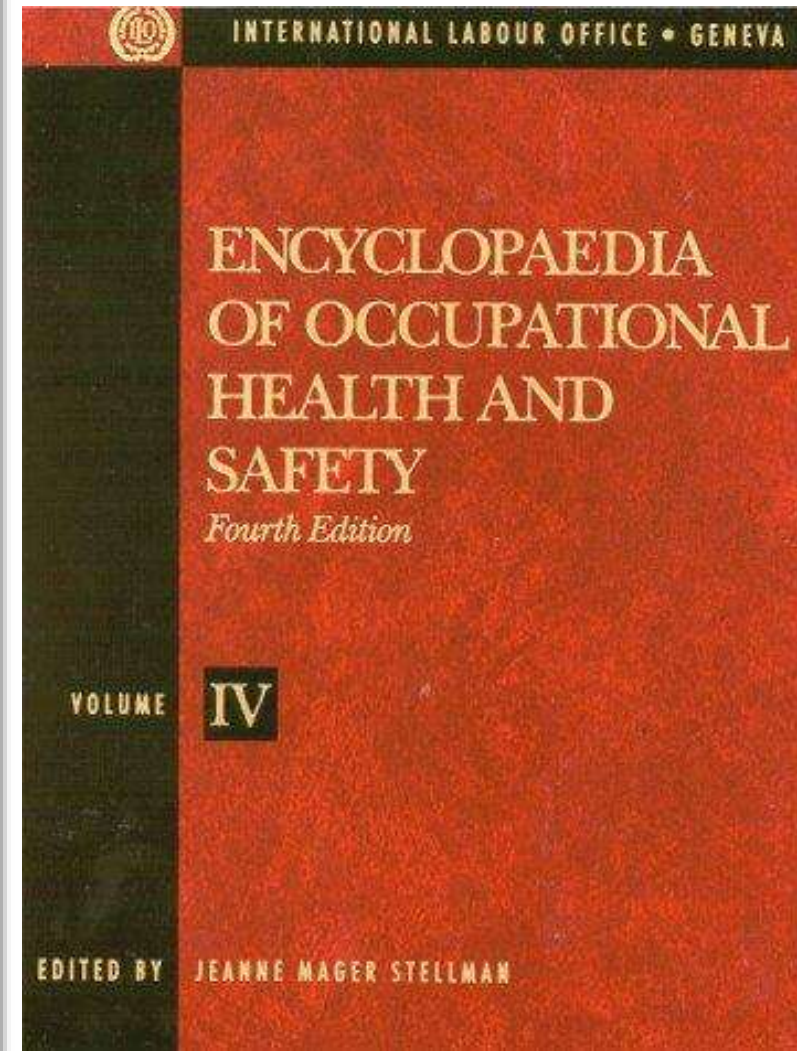
WORLD DAY FOR SAFETY AND HEALTH AT WORK  
28 APRIL 2016

# SafeWork: Strategy

- Integrating new aspects into occupational safety and health such as drugs and alcohol, stress and HIV-AIDS
- Strengthening knowledge, advocacy and capacity building
- Developing a global technical cooperation programme
- Fostering institutional collaboration, networking and partnerships



ILO: The ILO SafeWork Programme



- The Occupational Safety and Health Convention 1981 (No 155)
- The Occupational Health Services Convention 1985 (No 161)
- The Promotional Framework for Occupational Safety and Health Convention 2006 (No 187)

# ABOUT THE ILO



- The tripartite U.N. agency (Geneva), since 1919 the ILO brings together governments, employers and workers representatives of 186 member States, to set labour standards, develop policies and devise programmes promoting decent work for all women and men.

The ILO has designed guidelines as a practical tool for assisting organizations and competent institutions as a means of achieving continual improvement in occupational safety and health (OSH) performance.

The guidelines have been developed according to internationally agreed principles defined by the ILO's tripartite constituents.





ev-**ery** **15** seconds  
a worker dies from a work-related accident or disease.

Every year, **2.3 million** people die from occupational accidents or work-related disease. **That's almost the entire population of Chicago.**



 ilo.org/infographics

# Global Estimates of Occupational Accidents and Work-related Illnesses 2014



TAMPERE UNIVERSITY OF TECHNOLOGY

WSH  
Institute



Made for the ILO Report at XX World Congress, Frankfurt



# The Global Situation: Occupational Injuries and Diseases

- 250 million occupational accidents
- 335,000 fatal occupational accidents
- 160 million occupational occupational diseases
- 4% of gross national product is lost



ILO: The ILO SafeWork Programme



THEY FACE SIGNIFICANT ECONOMIC INSECURITY.

**74%**

Live on less than \$13 per day

**45%**

Work in low-skill or manual occupations

**77%**

Work in part-time, temporary, "vulnerable," or unpaid jobs

THEY ARE GROWING OLDER AND LESS HEALTHY.

**18%**

Of labor force over 55 by 2030

**52%**

Of adults overweight or obese

**9%**

Of adults with diabetes

**76%**

Are "struggling" or "suffering" in their physical wellbeing

THEY ARE STRESSED, UNHAPPY, AND EVEN UNSAFE AT WORK.

**38%**

Suffer from excessive pressure on the job

**24%**

Are actively disengaged at work

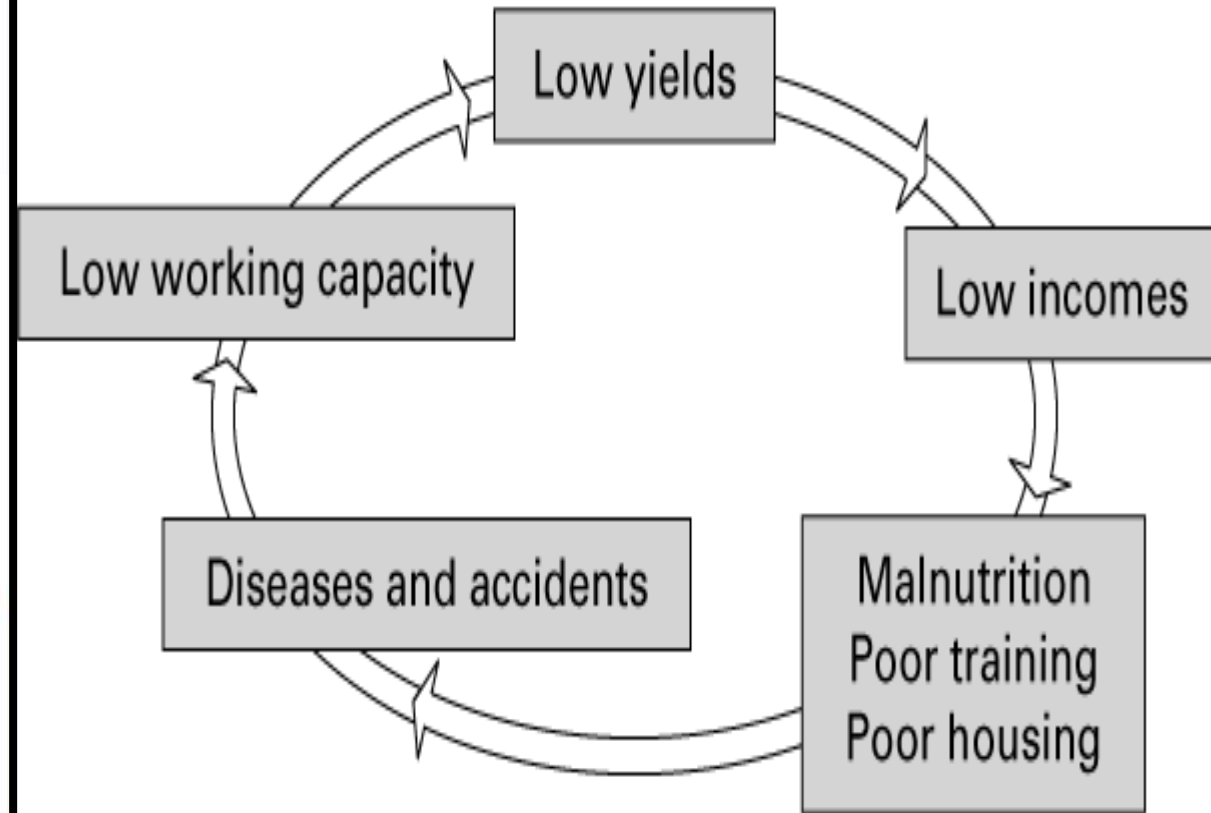
**2.3M**

Annual work-related deaths

**313M**

Annual work-related accidents

Figure 4.1. The economic cycle of disease

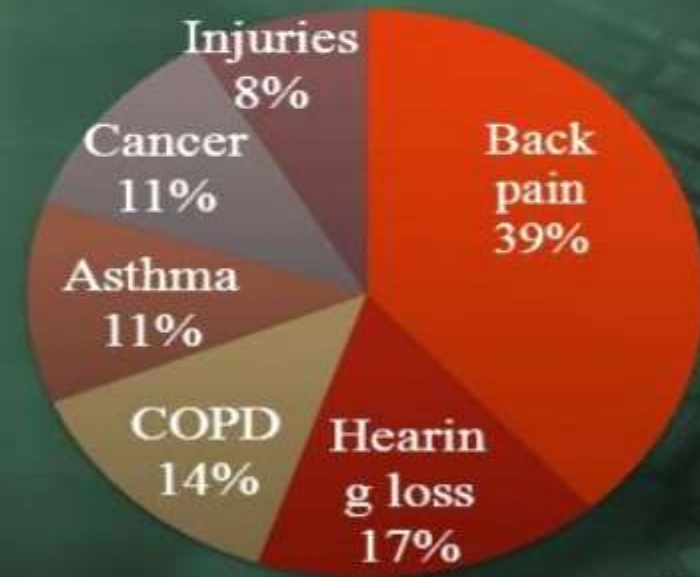


Source: "Teaching ergonomics and occupational safety and health in tropical agriculture and forestry" (National Board of Occupational Safety and Health, Stockholm, 1982).

# Global Burden of Disease from Occupational Diseases and Injuries

- 25% of the global burden of disease and mortality is due to occupational and environmental risk factors<sup>1</sup>
- 2 million deaths per year globally are attributable to occupational diseases and injuries<sup>2</sup>
- 90,000 die annually from asbestos-related diseases<sup>3</sup>

Global burden of disease: occupational risk factors



Source: Rosenstock, Cullen, Fingerhut, 2006

1. Pruss-Ustun & Corvalan 2006; 2. ILO/WHO 2005; 3. WHO 2006

# ***Global burden of occupational health illnesses-1***

- Let's share with you some facts from the ***ILO's report on the global burden of occupational health illnesses***:
- Of the world's 2.7 billion workers about **2 million deaths** are attributable to ***occupational diseases and injuries***
- About 4% of the GDP is lost due to occupational diseases and injuries.
- ***Health, Safety and Environment*** are enablers for economic development.
- All the three aspects of business are measured by their negative impact on people, assets and environment.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2796774/> 24.02.19



***Do not use these silicon ear pieces in order to block your hearing not to hear OSH problems!***

# Global burden of occupational health illnesses-2

- The damage is
  - *acute in the area of safety,*
  - *chronic in the area of occupational health and*
  - *persistent in the case of environment.*
- While the impact of safety is felt immediately, the effects of OH related diseases are felt over generations. A prime example in India is the **Bhopal gas tragedy** 1984, India causing thousands of sudden deaths in 1 night!

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2796774/> 24.02.19



# Unwellness at work is incredibly costly!



**\$1,100b**

Costs of chronic  
disease



**\$250b**

Costs of  
work-related injuries  
& illnesses



**\$300b**

Costs of work-related  
stress



**\$550b**

Costs of  
disengagement  
at work

**\$2.2 trillion annual loss in the United States (12% of GDP)**

## ***Bad Health?***

# ***How Work and Working Conditions Contribute to Health Disparities-1***

Work and working conditions are essential contributors to social **inequality in health** within and across generations, though they have received less attention from **health disparities** researchers than other aspects of socioeconomic position, such as education or income. It must be emphasized that a broad array of ways that work is linked to health for individuals and societies.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3813007/>, 24th Febr. 2019



***Safety and Occupational health is of paramount importance to all emerging economies at this juncture and the presence of such a large number of professionals only lends credence to this fact.***

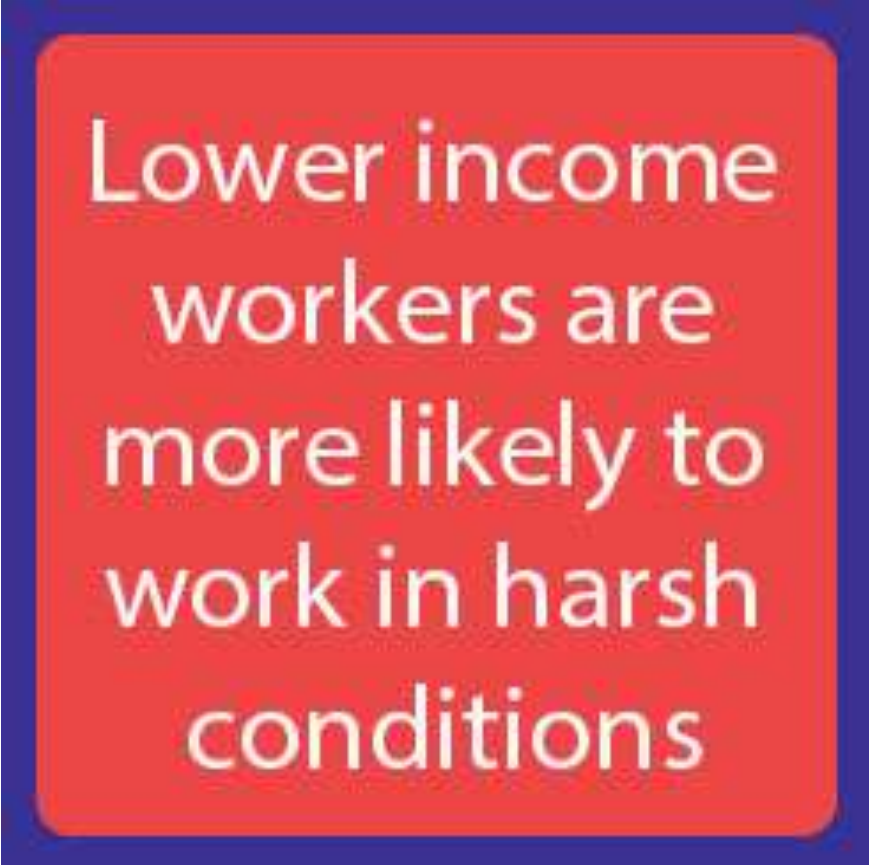
## ***Bad Health?***

# ***How Work and Working Conditions Contribute to Health Disparities-2***

Beyond the material and status rewards that come with paid work in a particular occupation, work also shapes individuals' exposure to a wide spectrum of physical, environmental and psychosocial factors that can ***influence health***.

At the population level, the availability and arrangements of work and occupations across societies determine the opportunities for livelihoods and exposure to risk and contribute to ***health disparities*** within and between societies.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3813007/>, 24th Febr. 2019



Lower income  
workers are  
more likely to  
work in harsh  
conditions

# *The nature of work is changing at whirlwind speed-1*

**Child labor** is an important global issue associated with poverty, inadequate educational opportunities, gender inequality, and a range of health risks. **Child labor** is defined by the relevant international conventions (*UNICEF's Convention on the Rights of the Child*, *International Labor Organization [ILO]* not by the activities performed by the child, but by the consequences of such activities

-*worst forms of child labor* such as *prostitution* and *bondage*.

For example, work affecting a child's health and schooling should, according to these Conventions, be eliminated. Identifying the health effects of *child labor* is essential because it enables policymakers to decide which types of *child labor to target for*

*eradication*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1781398/>, 24th Febr. 2019





# *The nature of work is changing at whirlwind speed-2*

The **ILO** (International Labour Organization) estimates that there are approximately **250 million child laborers** worldwide, with at least 120 million of them working under circumstances that have denied them a childhood and in conditions that ***jeopardize their health*** and even their lives. Most working children are ages 11-14 years old, but as many as 60 million are between the ages of 5-11.

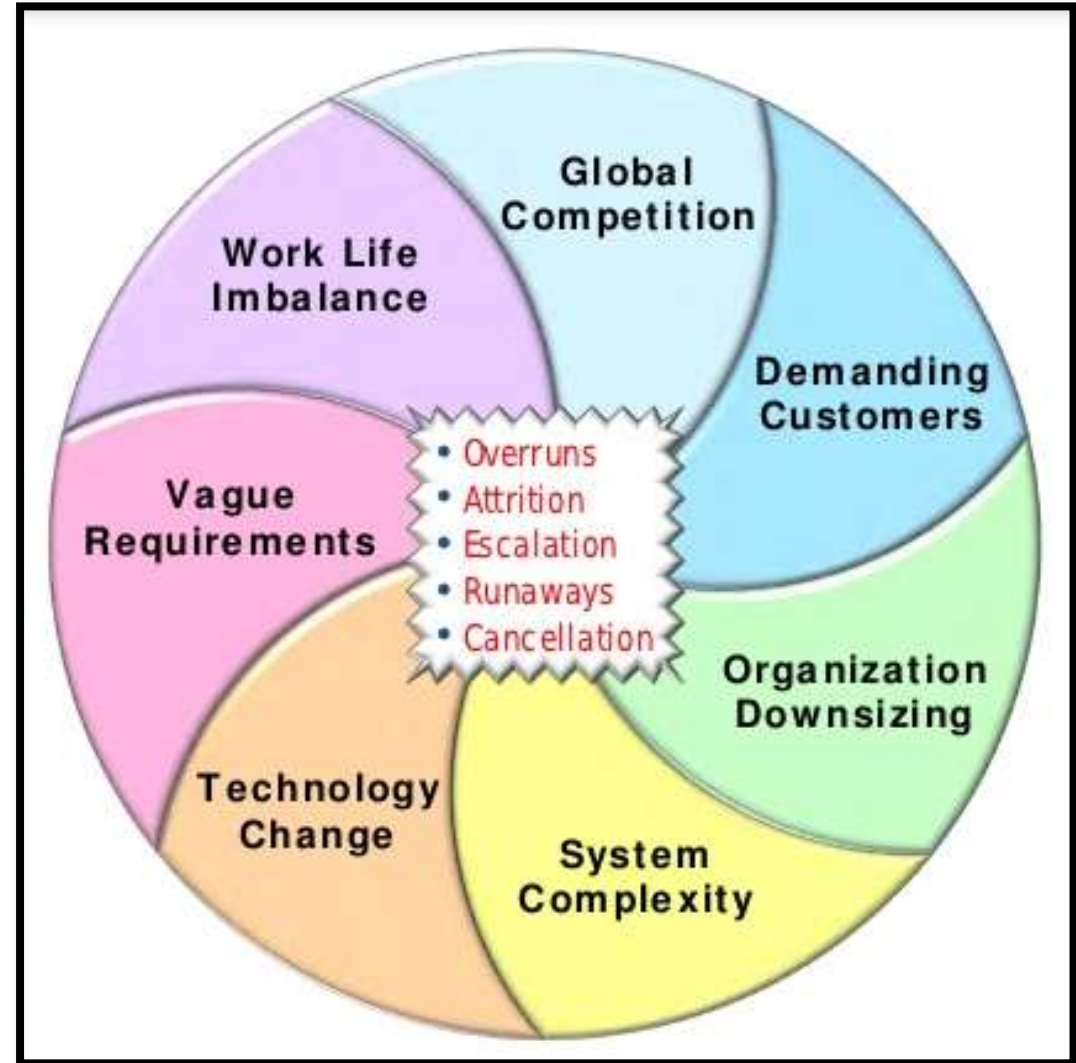
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1781398/>, 24th Febr. 2019



# *The worst forms of child labor-1*

Although the exact numbers are not known, available statistics indicate that approximately **96% of child workers reside in developing countries** in Africa, Asia, and Latin America; there are also pockets of **child labor** in many industrialized countries. In spite of a reported decline in child labor during the period 1995 to 2000, ***child labor remains a major concern.***

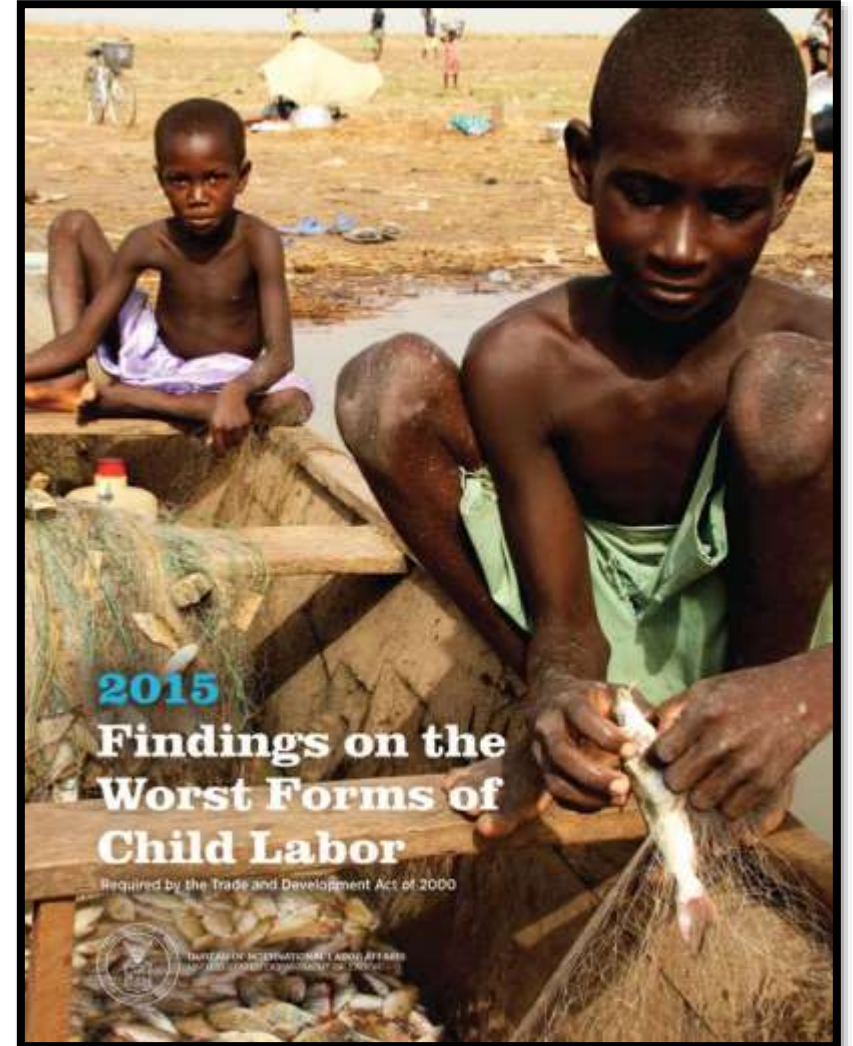
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1781398/> , 24th Febr. 2019



# *The worst forms of child labor-2*

Most child laborers begin working at a very young age, are malnourished, and work long hours in ***hazardous occupations***; frequently they do not attend school. They receive very low wages or are unpaid, and their income or help is usually essential for family survival.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1781398/>, 24th Febr. 2019



# *The worst forms of child labor-3*

They are mainly employed in the ***informal sector***, with agriculture accounting for more children workers than any other sector.

It is estimated that, in developing countries, at least 90% of economically active children in rural areas are employed in agriculture. Recent **ILO** statistics from 20 developing countries categorized the proportion of economically active children aged 5-14 years as employed in agriculture, animal husbandry etc.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1781398/>, 24th Febr. 2019



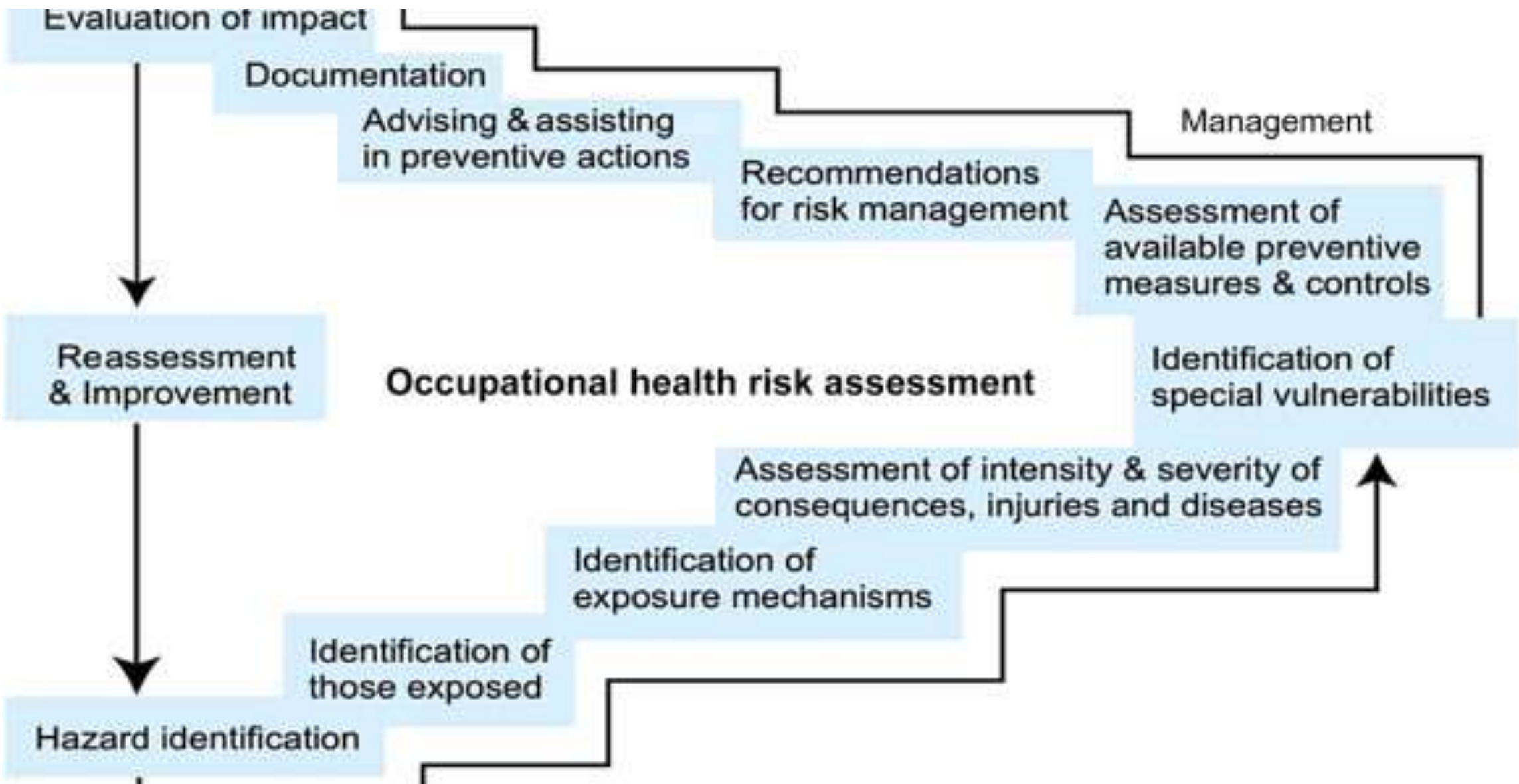
**Working Environment which  
allow employees to work with their full  
Creativity and motivation.**

**Workplace  
Environment**

**Cultivation  
of Human  
Resources**

- **Implementing Health and Safety Risk Assessments**
- **Promoting Health Management**
- **Supporting Mental Wellbeing**
- **Operating of Consultation Desks and Hotlines**

- **Providing Opportunities for Growth**
- **Promoting Diversity and Inclusion**
- **Supporting Women's Active Participation**
- **Achieving Work-Life Balance**











2/25/2019

[www.ahmetsaltik.net](http://www.ahmetsaltik.net)

25







***A  
carpenter's  
hands with  
amputated  
fingers..***



25.02.2019

[www.ahmetsaltik.net](http://www.ahmetsaltik.net)

29

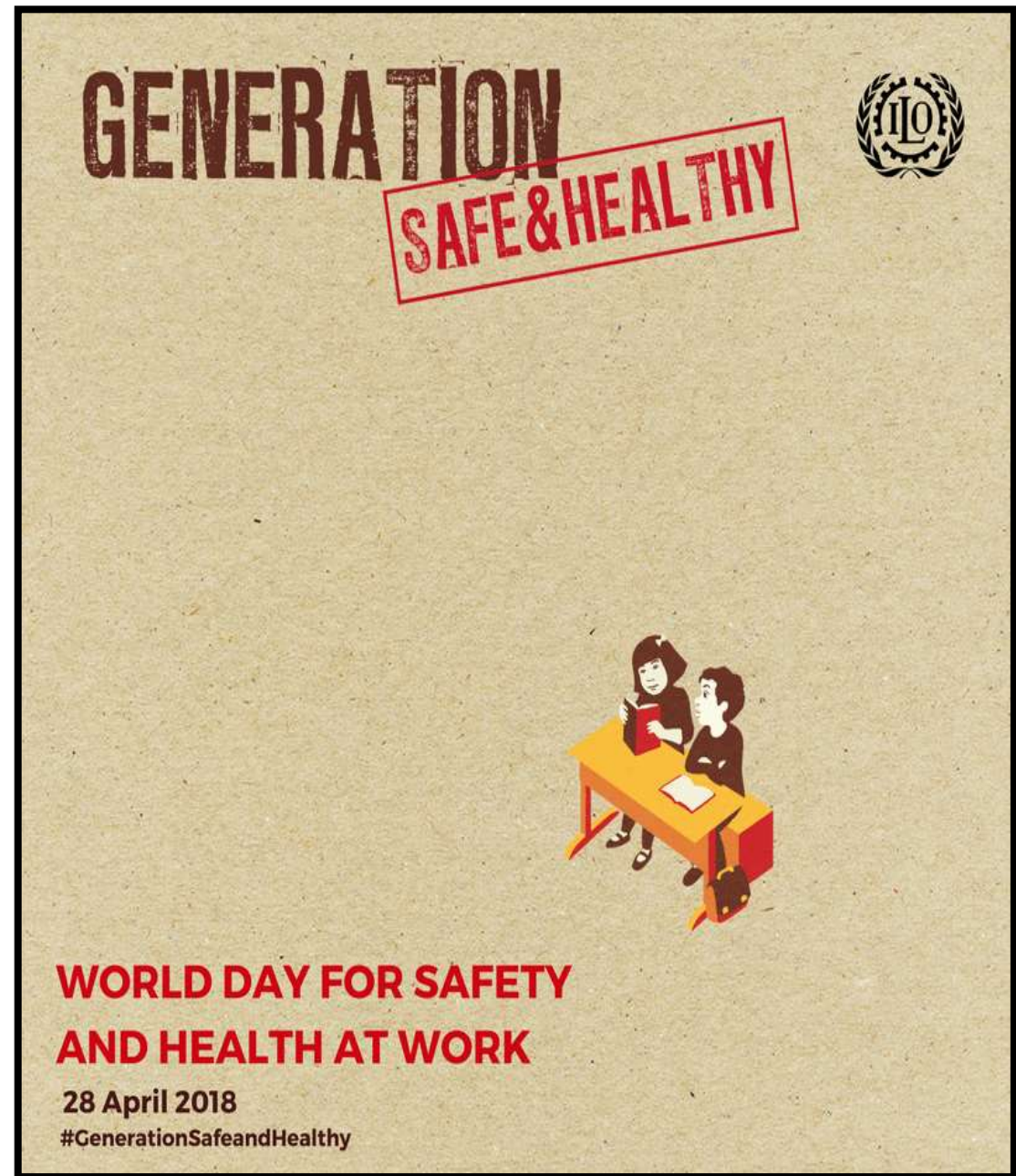






Fig. 1 Bernardino Ramazzini (1633–1714).

Each chapter of the *De Morbis Artificum Diatriba* contains a description of the disease associated with a particular work activity followed by a literature analysis, workplace description, questions for workers, disease description, remedies, and advice. The clinical picture was directly observed by **Ramazzini**, who questioned workers about their complaints.

- **He regularly asked his patients about the kind of work they did and suggested that all physicians do the same.**

**Ramazzini** realized that not all workers' *diseases were attributable to the working environment* (chemical or physical agents). He observed that a variety of common workers' diseases appeared to be caused by prolonged, violent, and irregular motions and prolonged postures. Such cumulative trauma and repetitive motion injuries have recently been called the occupational epidemic of the 1990s. Ramazzini studied the relationship between certain disorders and postural attitudes, repetition of movements, and weight lifting and anticipated some preventive measures.



DE  
MORBIS  
ARTIFICUM  
DIATRIBA

Mutinæ olim edita; nunc accedit Supplementum  
eiusdem argumenti, ac Dissertatio de Sacrarum  
Virginum Valetudine tuenda.

AUCTORE  
BERNARDINO RAMAZZINI

In Patavino Gymnasio Præticæ Medicinæ  
Professore Primario.



VENETIIS,  
MDCCXLIII.

Apud JOSEPHUM CORONA,  
In Via Mercatoria, sub Signo Præmii.  
SUPERIORUM PERMISSU.

## History-Ramazani-18<sup>th</sup> Century

- Father of OCCUPATIONAL Medicine
- Publish first systematic account on occupational Diseases-De Morbis Artificum/Disease and occupation
- Emphasize Obtaining Occupational History
- Introduce the practice of Doctors visit at workplace

# Occupational Disease

- *Occupational diseases*  
are diseases caused by work or work environment
- *Work-related diseases*  
are diseases initiated, hampered or easy to get by work
- The ILO Employment Injury Benefits Recommendation, defines occupational diseases as following terms:  
"Each Member should, under prescribed conditions, regard diseases known to arise out of the exposure to substances and dangerous conditions in processes, trades or occupations as occupational diseases"

## Occupational Health and Safety Act (2012) :

«*Occupational disease is the condition of temporary or permanent illness, physical or mental disability that the insured worker is working on or caused due to the nature of the work, or for a recurring reason or due to the conditions of execution.*»

(Act no 6331, art. 14)

- “ The main focus in occupational health is on three different objectives:
  - The maintenance and promotion of workers' health and working capacity;
  - The improvement of working environment and work to become conducive to safety and health and
  - Development of work organizations and working cultures in a direction which supports health and safety at work and in doing so also promotes a positive social climate and smooth operation and may enhance productivity of the undertakings.
- The concept of working culture is intended in this context to mean a reflection of the essential value systems adopted by the undertaking concerned.
- Such a culture is reflected in practice in the managerial systems, personnel policy, principles for participation, training policies and quality management of the undertaking. “

# Definitions – ILO 1993

## ▶ **Occupational diseases**

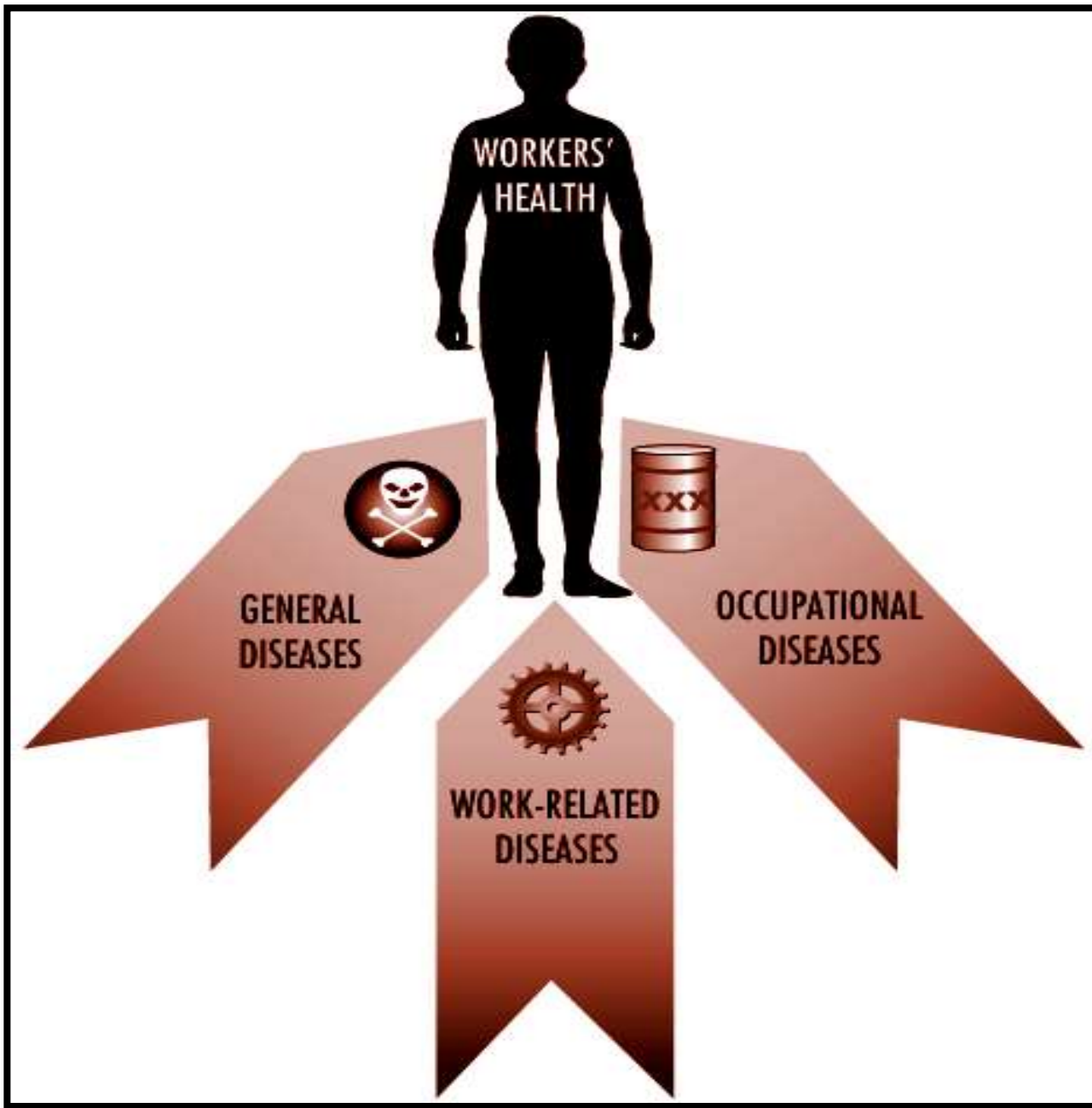
- Having a specific or a strong relation to occupation generally with only one causal agent and recognized as such

## ▶ **Work-related diseases**

- With multiple causal agents, where factors in the work environment may play a role, together with other risk factors, in the development of such diseases, which have a complex etiology

## ▶ **Diseases affecting working populations**

- Without causal relationship with work but which may be aggravated by occupational hazards to health



# World Day for Safety

- **The ILO** celebrates the **World Day for Safety and Health at Work** on the **28 April** to promote the prevention of occupational accidents and diseases globally.
- It is an awareness-raising campaign intended to focus international attention on emerging trends in the field of occupational safety and health and on the magnitude of work-related injuries, diseases and fatalities worldwide.



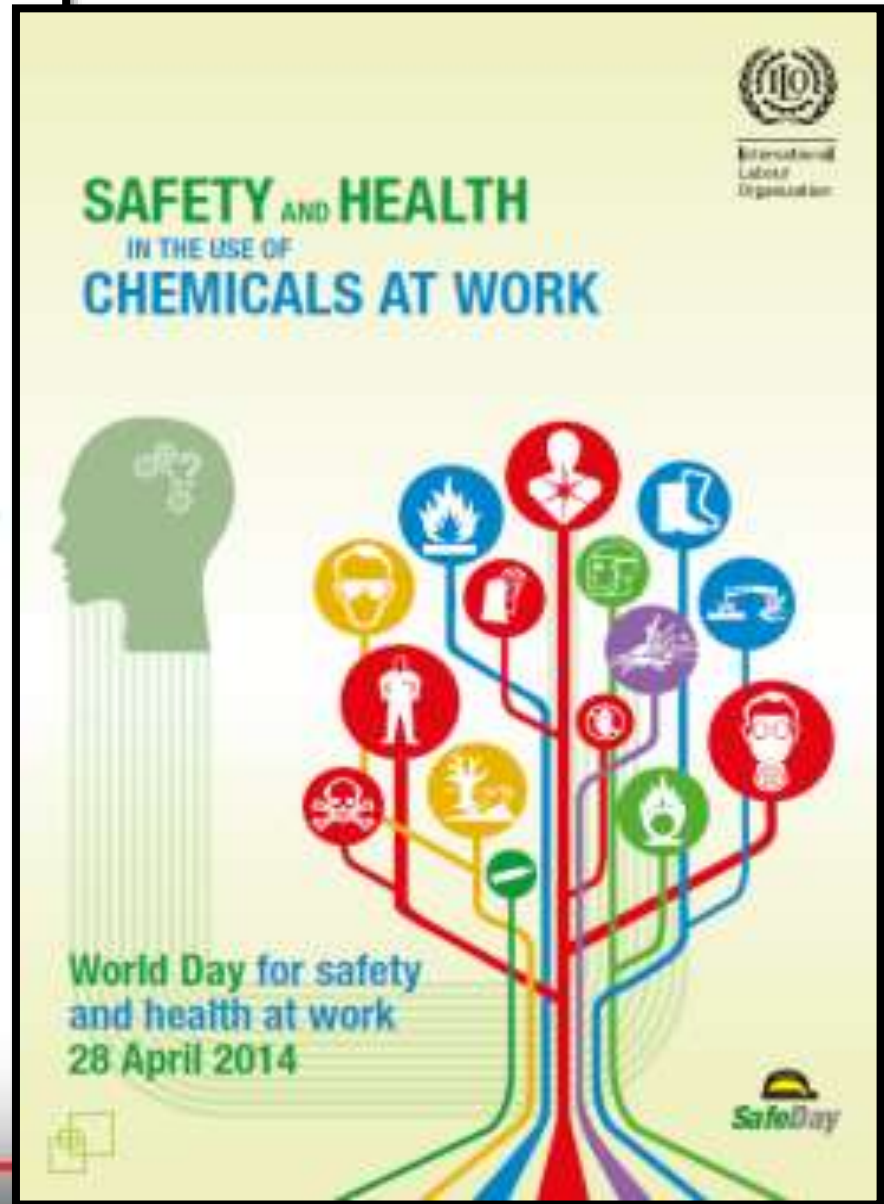




100  
1919-2019

SOCIAL JUSTICE  
DECENT WORK

ILO.ORG/100  
#ILO100







## **ILO Occupational Safety and Health Convention, 1981 (N° 155)**

*“Each Member shall...in consultation with the most representative organisations of employers and workers, formulate, implement and periodically review a coherent national policy on occupational safety, occupational health and the working environment”.*

TAKING LEAP  
▶▶ FORWARD



# ISO 45001:

OCCUPATION  
HEALTH AND SAFETY



**SAFETY FIRST!**

ISO/DIS 45001.2  
Understanding the new international  
standard for occupational health & safety



# Regional and Global Mandate

## IV Summit of the Americas



### DECLARATION

33. *We will promote integrated frameworks of public environmental, employment, health, and social security policies to protect the health and safety of all workers and foster a culture of prevention and control of occupational hazards in the Hemisphere*

### ACTION

16. *To promote occupational health and safety conditions and facilitate healthy work environments for all workers, and, to that end, ensure effective labor inspection systems. For this purpose, it is essential to foster strategic alliances between the labor, health, environment and education sectors.*





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International  
Labour  
Organization





***PPE : Personal Protective Equipments*** are highly effective and cheap..

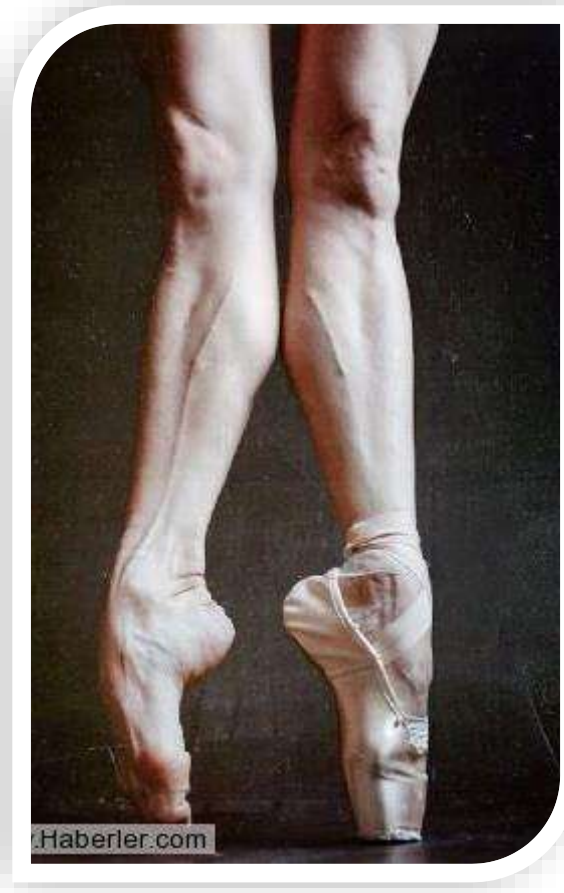
*These devices are both protective against **occupational diseases** and **work injuries**..*

*Employers have to supply suitable PPP for the employee by the enforcement of law and workers have to use them during shift.*

**EVERY 15 SECONDS**  
**150 WORKERS HAVE AN ACCIDENT**  
**THAT'S 317 MILLION ACCIDENTS A YEAR**

# CHALLENGES TO BE BALERINA/BALLET DANCER ..

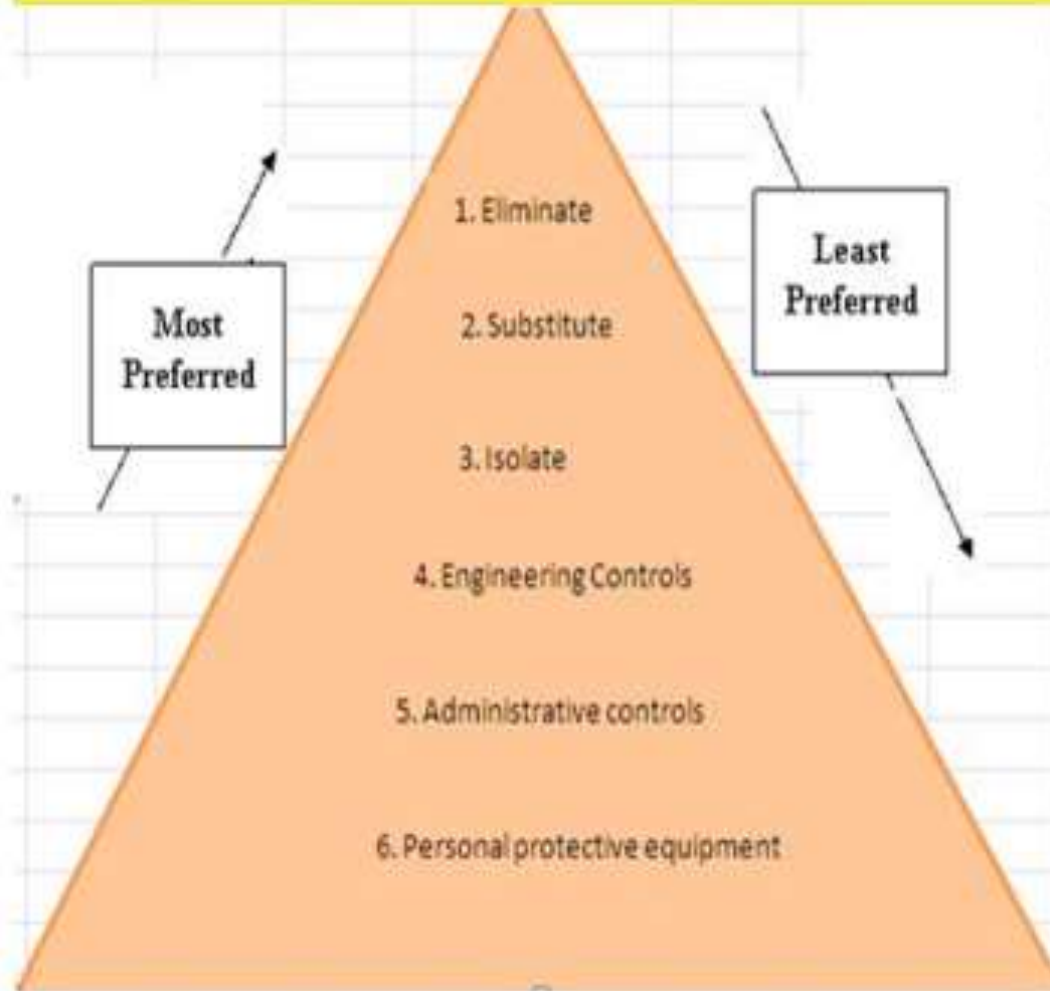
## Typical example of physical risk factors



*Russian ballerina and photographer Darian Volkova from a photo exhibition called "The Soul on the Foot".*

<http://fotogaleri.haberler.com/balerin-olmanin-zorlugunu-anlatan-en-iyi-anlatan/>, 21.3.16

## Hierarchy of Control Measures



**OSH DAY**



## 1.2.1 The Moral reasons-ILO Statistics

1. The ILO estimates that more than 230 Million people die every year from work related accidents or diseases.
2. There are about 270 million accidents and about 160 millions victims of workplace accidents and illnesses each year.
3. According to the ILP 3.9% of the worldwide deaths are due to occupational injuries or diseases.
4. 15% of the world population have incurred minor or major injuries from work in any one year.
5. 30% of the unemployed labor had reported that they have been exposed to minor or major occupational accident or illness when they used to work in the past.
6. 30% of the global work-related accidents are due to commuting accidents.



# What is the ILO?

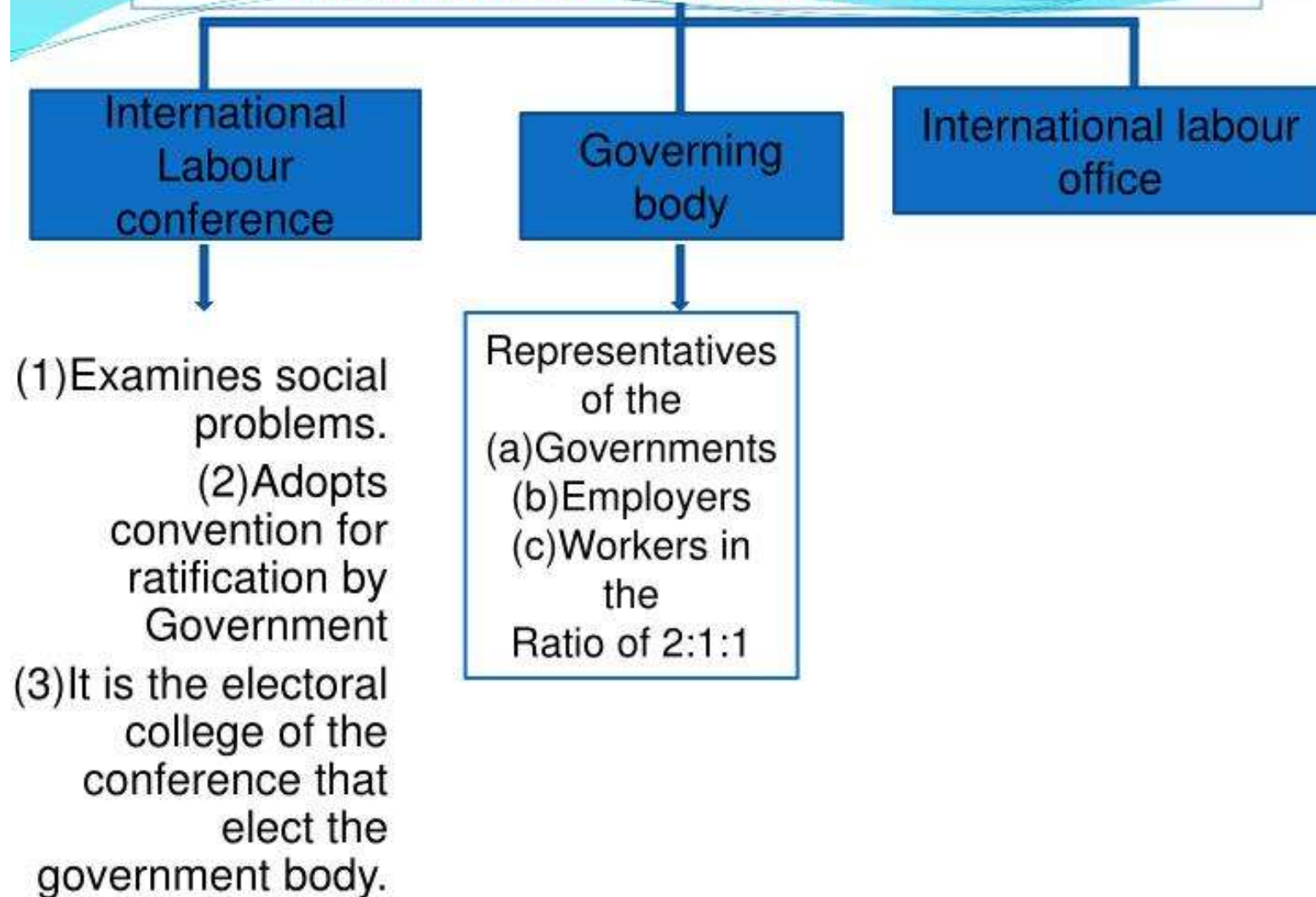
- An Intergovernmental body
- It is a specialised agency “associated” to the UN
  - Up to 1945: all UN members were also ILO Members automatically
  - After 1945: UN members must to accept ILO constitution
  - Not UN member must to be accepted by qualified majority of the ILO Conference

# Objectives of the ILO

*ILO has been “attempting to promote world- wide respect for the freedom and dignity of the working men and to create conditions in which that freedom and dignity can be more fully and effectively enjoyed.”*

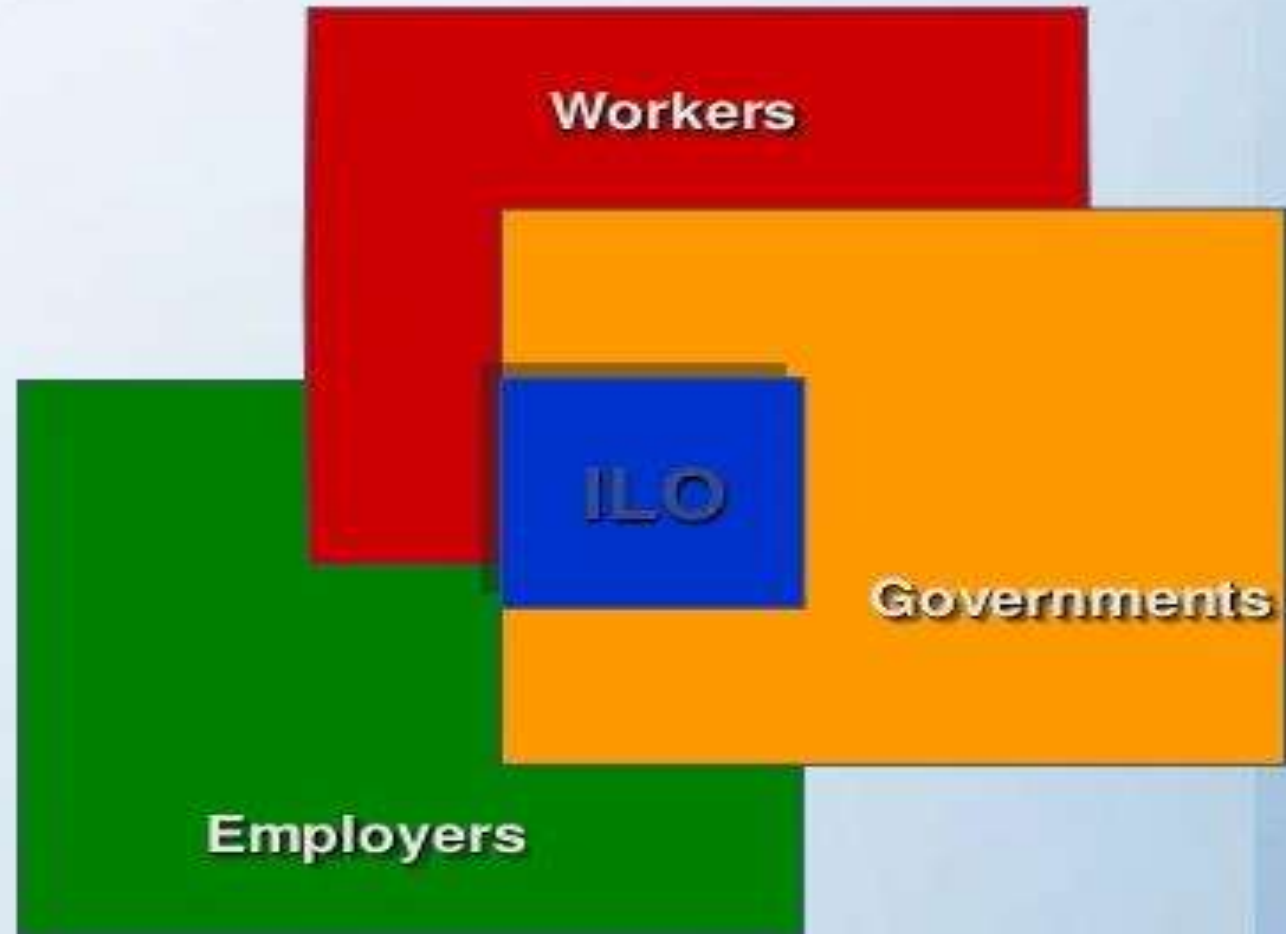
1. Full employment and the raising of standards of living,
2. Employment of workers in the occupation in which they can have satisfaction and measure of their skill and make their contribution to the common well being.
3. Provide a facilities for training and the transfer of labour, including migration for employment and settlement.
4. Policies in regard to wages and earnings bonus and other conditions of work.

# Structure of the ILO



# Tripartite structure of the ILO

The ILO has a tripartite structure unique in the United Nations system, in which employers' and workers' representatives – the “social partners” – have an equal voice with those of governments in shaping its policies and programmes.



# OPTION 1.

I TAKE THE JOB, AND  
TAKE A CHANCE THAT I  
MIGHT SURVIVE EACH DAY!



# OPTION 2.

I DON'T TAKE THE JOB,  
AND ME AND MY FAMILY ARE  
REDUCED TO TAKING HANDOUTS!



# OPTION 3.

I TAKE THE JOB,  
JOIN THE UNION, AND  
FIGHT FOR WHAT'S RIGHT!





**SUSTAINABLE  
DEVELOPMENT GOALS**

**2030**

**DECENT WORK AND THE 2030 AGENDA**

# WHAT IS "DECENT WORK"?

JUST  
WHAT I  
WAS GOING  
TO ASK.



ME  
TOO.

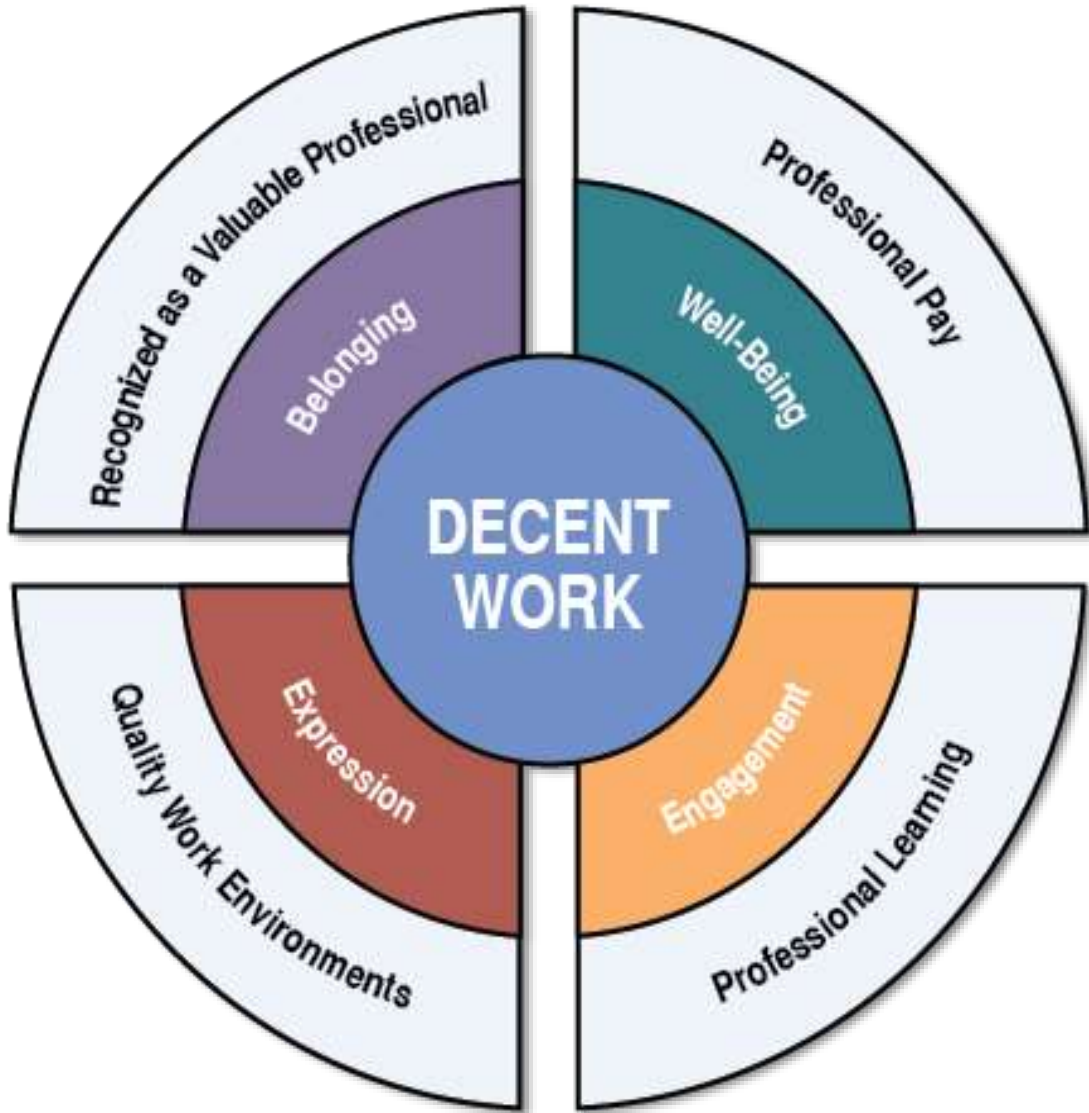
DECENT WORK IS WORK THAT...

- ➔ is meaningful and productive
- ➔ pays a living wage
- ➔ provides benefits and social protections
- ➔ is protected by strong labour laws that guarantee workers' rights, including freedom of association (the right to join and be represented by a union)



Decent work benefits both individuals AND communities. It helps maintain family stability, creates peace in communities, promotes healthy democratic participation, and leads to more equitable and productive economic growth.





# 8 DECENT WORK AND ECONOMIC GROWTH



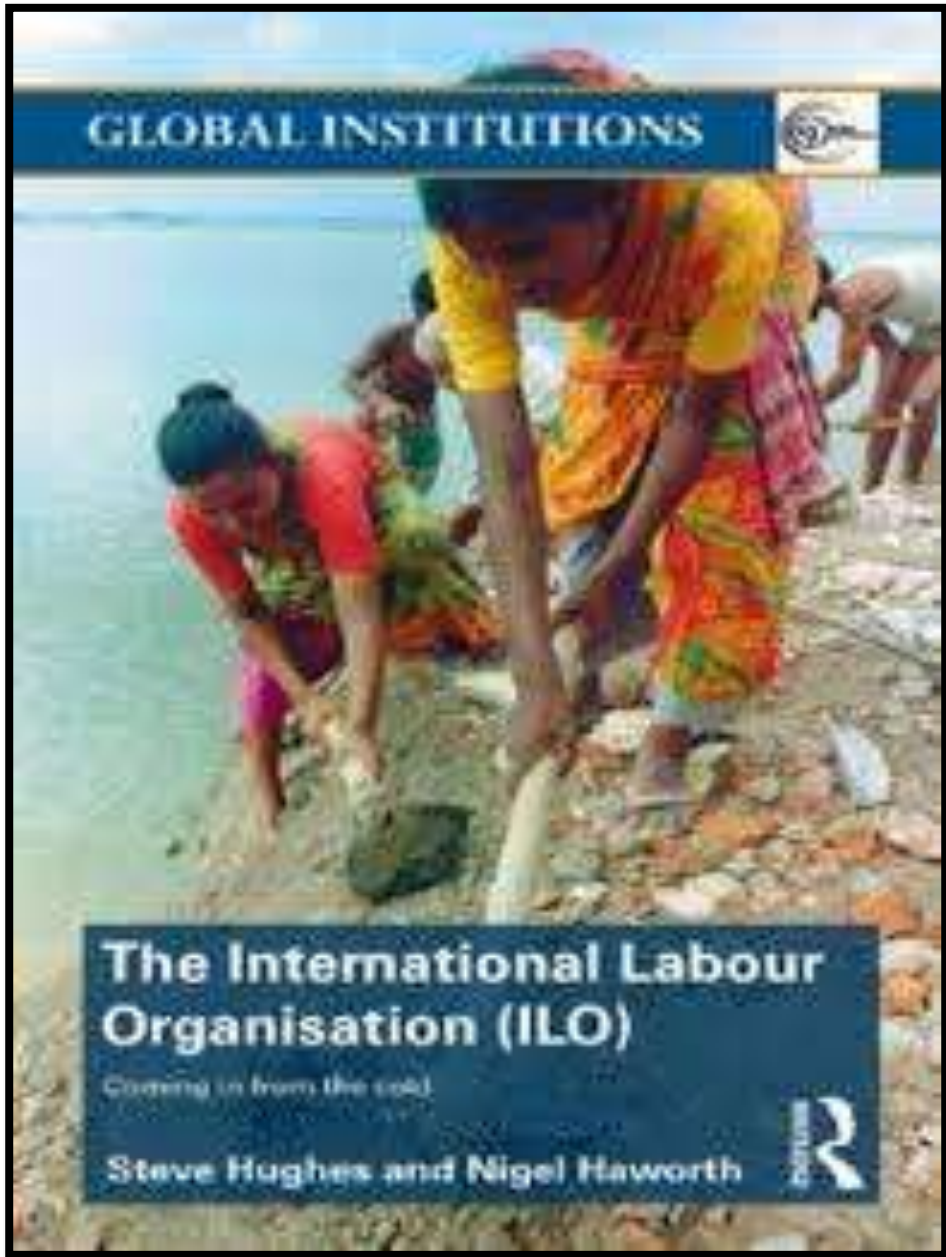
# OUR STORY YOUR STORY

ILO.ORG/100



International  
Labour  
Organization



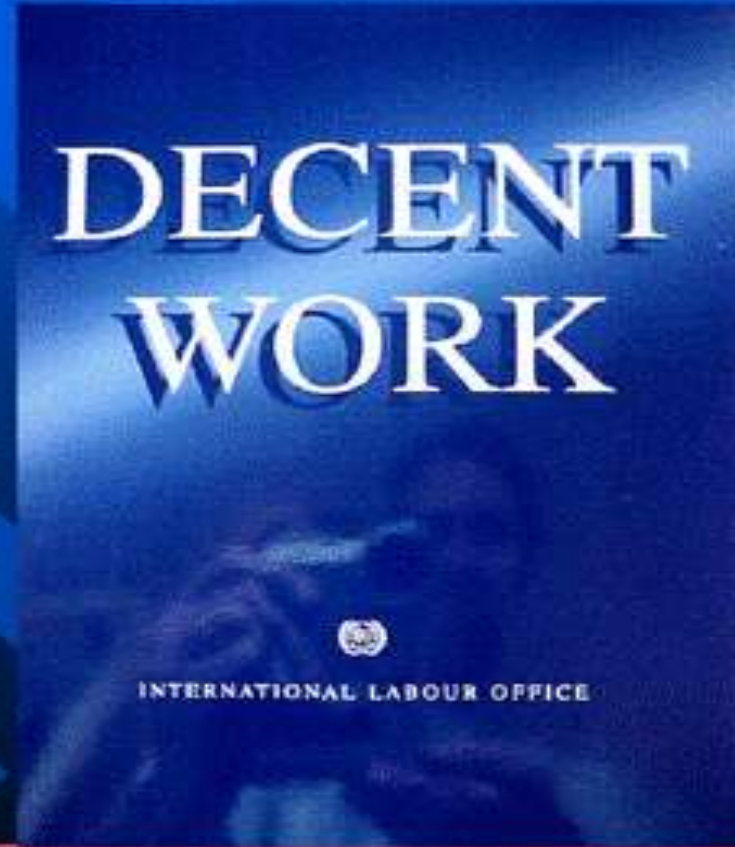


# ILO response

## ■ ILO Standards ,

- Conv. 155, 161 and 81 and 88 other relevant Conventions
- New: C184 on Agriculture
- Recording and Notification of occupational accidents and diseases, 2002
- Integrated approach

## ■ Safe Work





*OSH field is just multi-factorial...*











**XXII World Congress on**

# **Safety and Health**

**at Work 2020**



**4-7 October 2020. Toronto, Canada**



# The Charter of Fundamental Rights of the European Union

## Various social rights:

- freedom of association, which implies the right to form and to join trade unions for the protection of interests (Article 12)
- freedom to seek employment, to work, to exercise the right of establishment and to provide services in any Member State (Article 15)
- social partners' right to negotiate and conclude collective agreements and, in the event of conflicts of interest, to take collective action to defend their interests, including strike action (Article 28)
- right to working conditions that respect workers' health, safety and dignity (Article 31)
- right to limitation on maximum working hours, to daily and weekly rest periods and to an annual period of paid leave (Article 31)
- right of the young to working conditions appropriate to their age and protection from economic exploitation and harmful work (Article 32)

# Effectively exercising a right to protection of health: common or individual challenges


- Oviedo Convention
  - Article 3 – Equitable access to health care
  - «Parties, taking into account health needs and available resources, shall take appropriate measures with a view to providing, within their jurisdiction, equitable access to health care of appropriate quality.»
- European Social Charter
  - Article 11 – The right to protection of health




# Constitution of Republic of Turkey

## *Working conditions and right to rest and leisure*



- **ARTICLE 50-** No one shall be required to perform work unsuited to his/her age, sex, and capacity.
- Minors, women, and physically and mentally disabled persons, shall enjoy special protection with regard to working conditions.
- All workers have the right to rest and leisure.
- Rights and conditions relating to paid weekends and holidays, together with paid annual leave, shall be regulated by law.



International Labour Organization




**Health and life at work :  
A basic human right**

Supported by the International Social Security Association

**WORLD DAY FOR SAFETY AND HEALTH AT WORK**  
28 APRIL 2009 - [www.ilo.org/safeday](http://www.ilo.org/safeday)



## Work-related diseases

Occur largely in the community

'Multifactorial' in origin

## Occupational diseases

Occur mainly among working population

Cause is specific

**NIOSH** *National Institute for Occupational Safety and Health*



**OSHA**<sup>®</sup>





"The best way to use Napo is to **think Napo**"

<https://www.napofilm.net/tr>

The **Napo series of films** are produced in computer graphics. They feature characters in the world of work, faced with safety issues.

The main character, **Napo**, and his partners express themselves in **wordless language**. Their stories have an educational value. They provoke questions and stimulate debate on specific aspects of safety at work. Sometimes they provide practical solutions or lead to them.

**The universal language** of Napo *makes the films suitable for everyone*. Each scene is independent of the others and can be used as one film, or individually.

Because Napo is a cartoon character he can explore areas that would not be possible in drama or documentary films. He is indestructible and everlasting, unlike the workers we are trying to protect.





Please never forget asking

**«What is your occupation??»**



***Labor is the  
supreme  
value.  
Respect to  
labor is the  
chief  
condition of  
being human.***

***This presentation is recommended to  
work with **other OSH related** slides.***