



# Occupational diseases registration and the use of the Register for planning preventive measures and interventions at the workplace



**World Health Organization**

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REGIONALBÜRO FÜR Europa



**Всемирная организация здравоохранения**

Европейское региональное бюро

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Best practice in occupational diseases prevention, diagnostics, registration, rehabilitation and control and Detection and system of registration of occupational diseases with particular emphasis on the Russian Federation

Moscow, Russian Federation

06-07 December, 2016

SYNDROME  
 SUNBURN  
 AFFECTING  
 SKIN  
 POPULATION  
 UTILIZED  
 CAUSED  
 TECHNOLOGY  
 INFORMATION  
 COMPENSATION  
 JURISDICTIONS  
 TUNNEL  
 PERSONS  
 CARCINOMA  
 COMPOUNDS  
 INCLUDE  
 ASBESTOSIS  
 MINERS  
 ORIGIN  
 CONCERN  
 PREVALENT  
 WORK  
 POISONING  
 TRAUMATIC  
 OCCUPATIONAL  
 DISEASE  
 OCCUPATIONAL  
 BODY  
 DISCUSSES  
 IDENTIFIED  
 PARTS  
 INSURER  
 PREDISPOSE  
 INDOOR  
 AUTHORITIES  
 RECOGNISED  
 CHIMNEY  
 TEXTILE  
 OPERATORS  
 DISEASE  
 FRIABLE  
 WORKER  
 INSULATION  
 ROOFERS  
 LEAD  
 SCROTUM  
 MACHINING  
 COMPENSATED  
 OCCUPATIONS  
 ASBESTOS  
 MUSCULOSKELETAL  
 LUNG  
 GASTHMA  
 PRESUMPTION  
 EMPLOYER  
 HAZARDS  
 COTTON  
 COAL  
 BOYS



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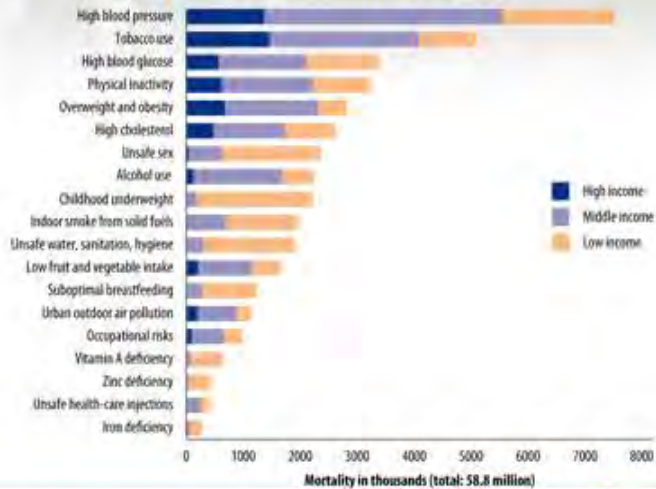
# Occupational diseases –new perspective

- Technological, social, organizational changes- global economic crisis
- Traditional and new emerging hazards and risks (ergonomic factors, psycho social risk, nanotechnology...)
- New threats, new challenges
- New ODs or new problems-Musculoskeletal disorders, mental health disorders, occupational cancer
- Millions of workers –exposed to unsafe, hazardous working conditions without any protective measures

NEED FOR ACTION- **PREVENTION !!!**



## Deaths attributed to 19 leading factors, by country income level, 2004



## Deaths from selected occupational risks in 2004



## DALYs from selected occupational risks in 2004



Some statistics-  
an estimated 2.02 million workers  
at global level each year die from  
a wide range of work-related  
diseases

**All occupational diseases can be prevented !**

## Occupational Diseases

2.3 million deaths  
per year including  
651,000 deaths from  
Hazardous substances  
and **160 million work-  
connected diseases each  
year.**

**more  
deadly  
than  
wars.**



# Definition

- An occupational disease is any disease contracted primarily as a result of an exposure to risk factors arising from work activity.

or

- Occupational diseases are illnesses primarily caused by a physical, chemical or biological factor at the workplace.

[http://www.who.int/occupational\\_health/activities/occupational\\_work\\_diseases](http://www.who.int/occupational_health/activities/occupational_work_diseases)

# Recognition of the Occupational Diseases



## causal relationship

- occupational history
- clinical and pathological data
- job analysis and risk assessment
- exposure verification



clinically diagnosed disease- if causal link is established

the disease is recognized as occupational



# National list of occupational diseases

**The purposes - prevention, recording, notification and, if applicable, compensation (Prescribed List)** established by the competent authority, in consultation with social partners according to national conditions and practice.

## **The criteria for OD's inclusion in the List**

- causal relationship with a specific agent, exposure or work process;
- with higher frequency of incidence among the groups of workers than in the rest of population
- scientific evidence of a clearly defined pattern

**WHO and ILO-common work in the field-** diagnostic and exposure criteria for ODs, to enable HCW to detect and report such diseases.

- Incorporating ODs in ICD11  
(International Statistical Classification of Diseases and Related Health Problems ICD11)



# So many differences

- **ILO List of Occupational Diseases, 2010**
- **Commission Recommendation concerning the European schedule of occupational diseases,**
- **The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR), 2013, UK**
- **Sentinel Event Notification System for Occupational Risks (SENSOR), 1988, US**
- **Finnish Institute of Occupational Health's Register of Occupational Diseases (FROD), 2011**
- **List of Reportable Occupational Diseases in Singapore under Workplace Safety and Health Act, Singapore, 2011**

# Occupational diseases REPORTING

## Statistics of ODs- Influencing factors:

- Definition of occupational diseases
- System for recording and notification
- Health surveillance
- Recognition procedures
- Compensation mechanisms
- Changes in work processes and organization
- Workers' and employers' awareness
- Manifestation of long-latency disease



# National system of recording and notification of Occupational Diseases



- Reported diseases statistics- often incomplete, under-reported, does not cover all categories of workers
- **The collection, recording and notification of data (very important)- Register of ODs**
- **Notification-information on enterprise and employer, person and Dg of ODs**
- Analysis of the causes leads to the establishment of the preventive measures
- Occupational injuries are better recorded than diseases
- No country in the world records all ODs
- To address prevention strategies and compensation mechanisms and with sustainability

# National register of ODs

**Main task-** to provide up-to-date, reliable and available information on ODs in the country

**Goals:**

- Monitor occupational-based morbidity trends
- Identify high-risk workers and jobs in order to initiate preventive measures
- Establish a reliable data base, which will form a basis for strategic planning of this issue
- Provide available, current and reliable information to the decision makers and to the general public
- Compare with other countries
- Serves as a tool for assessing intervention plans
- Serves as a repository for studies on special disease and scientific research



# Why do we loose the data?

## Reported data– related to the Social security systems- compensation scheme

- Coverage of workers by social security (just a formal sector)  
agricultural workers, informal sector, SMEs, migrant workers- out of the system
- Inadequate recording and notification system;
- Intensive migration, changing of workplaces and exposures
- New substances– unknown risks ( occupational origin?)
- Focus only on actual cases of ODs
- Long-latency period of some ODs- difficult for diagnosis
- Difficulties in occupational health surveillance (human resources- capacities)



# Occupational diseases- the data ?

## GOOD DATA BASIS-DEVELOPMENT OF EFFECTIVE PREVENTIVE MEASURES

- More than half of all countries- without adequate statistics for ODs (mainly injuries)

### **REGISTER of Occupational Diseases**

The purpose of the register-to collect, process and analyze the data on occupational diseases and to create the preventive strategy

#### **Sources of data:**

- Reporting by employers to labour ministries (legislation)
- Employment injury compensation schemes (social security system)
- Official information from medical professionals
- Health surveys (self-reported data)

Register

# Occupational diseases-”invisible” and ignored issue

**If we like to prevent ODs we have to recognize them and collect the data**

**We have to change the things!**



- the recognition, treatment and prevention of occupational diseases – should be in focus
- the improvement of recording and notification systems- should be high priority
- the enhancing national safety and health programmes – should be essential to the health of individuals and the societies





# National OSH systems' capacity and prevention of occupational diseases

- Improve the collaboration of OSH and social security institutions in dealing with prevention, early detection, treatment and compensation of ODs;
- Integrate the prevention of ODs into labour inspection programmes, in particular in hazardous sectors (mining, construction and agriculture);
- Strengthen employment compensation schemes in national social security systems
- Improve the capacity of OHS for health surveillance, monitoring of the working environment and implementation of preventive measures;
- Update national lists of ODs taking into account the WHO and ILO recommendations
- Reinforce social dialogue at national, sectoral and workplace levels among governments, employers and workers and their organizations

# Occupational Health Services

## Health surveillance of workers population

The main purposes:

- **detecting early signs and detection of ODs**
- recognizing occupational diseases with long latency
- triggering action for prevention– **THE MOST IMPORTANT!**
- **preventing recurrence of the disease among other workers.**

Linking health surveillance and workplace risk assessment-

Determine worker's exposure to the health hazards



# Work-related Disease and Occupational Diseases

## Differences between Occupational Disease and Work Related Diseases

<b>Work Related Diseases</b>	<b>Occupational Disease</b>
Occurs largely in the community	Occurs mainly among working population
Multifactorial in origin	Cause specific
Exposure at workplace may be a factor	Exposure at workplace is essential
May be notifiable and compensable	Notifiable and compensable

# Suspected occupational diseases

- Establishing of well-defined diagnostic criteria for new diseases and to conclude on their etiology- difficult process
- A system to monitor suspected occupational diseases (sentinel events), provides a major contribution to developing awareness of occupational risks and stimulating preventive strategies
- Recording of suspected occupational diseases is particularly meaningful in light of the changing patterns of work and technologies
- Recognition of suspected occupational diseases strengthens health surveillance provisions and raises awareness of appropriate preventive measures



# OCCUPATIONAL HAZARDS

## Physical

- Heat.
- cold.
- Light.
- Noise.
- Vibration
- UV rays
- Ionizing R

## Chemical

- Local action.
- Inhalation.
- Ingestion.

## Biological

- Bacteria.
- Virus.
- Fungi.
- Parasites.
- Protozoon's

## Mechanical

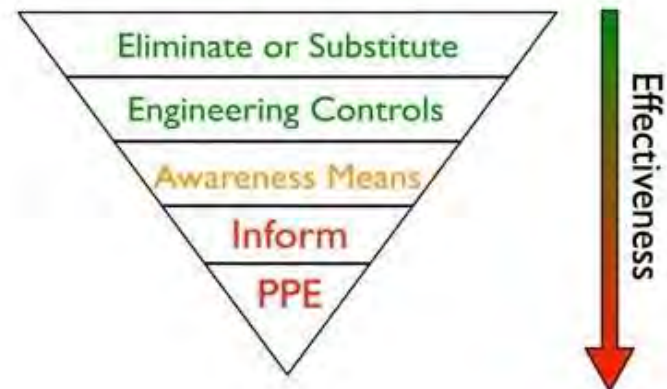
- Accidents

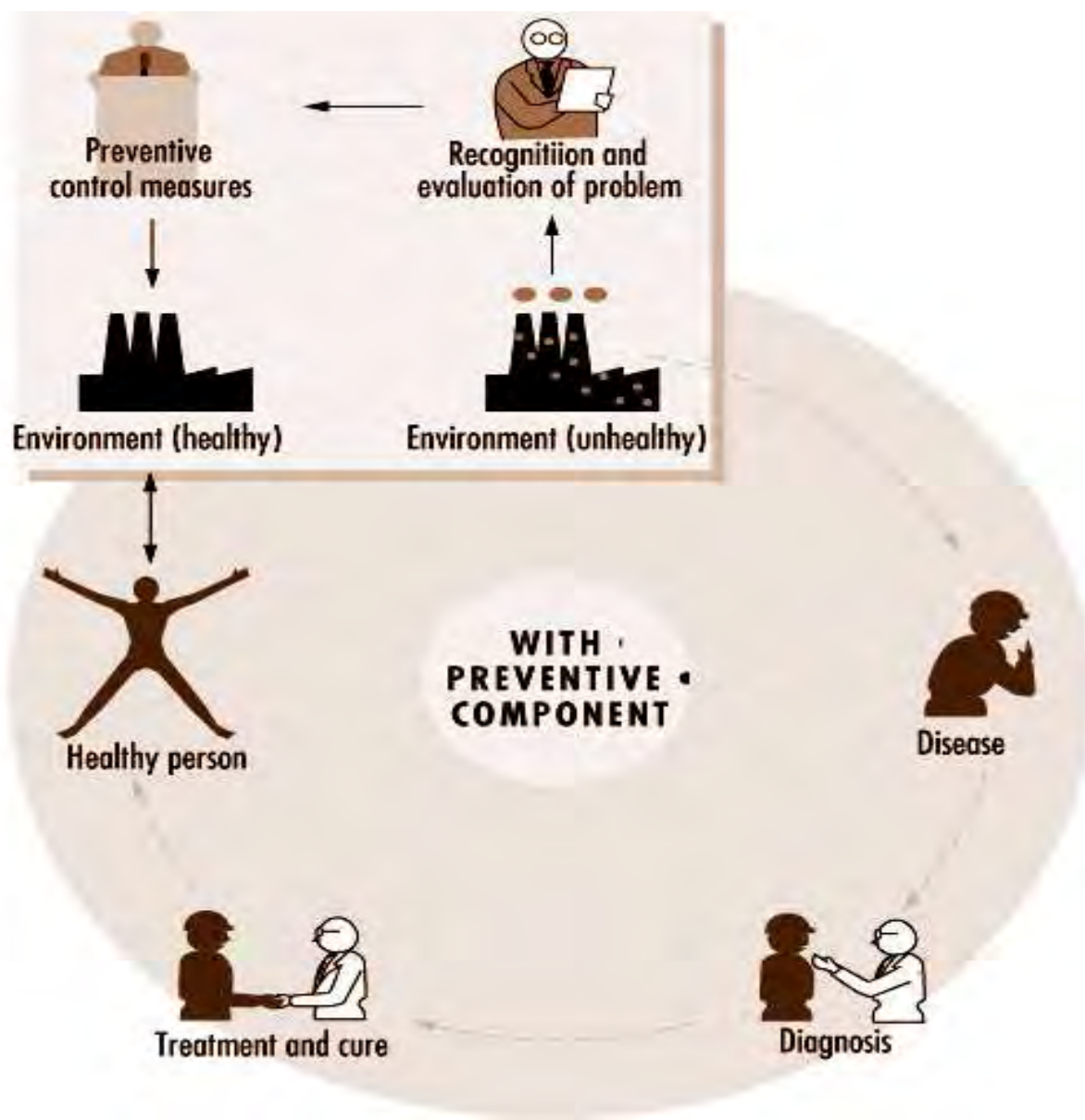
## Psychosocial

- Psycho social conditions.



## Hierarchy of Controls





# PREVENTION OF OCCUPATIONAL DISEASE **-WORKPLACES-**

Primary Prevention	Secondary Prevention
Control of new hazards	Screening
Control of known hazards	
Environmental monitoring	
Biological monitoring	
Identification of vulnerable workers (pre employment medical examination)	Periodic medical examination
Substitution	
Engineering controls to minimise exposure	
Personal Protective Devices	

# PREVENTION OF OCCUPATIONAL DISEASE

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- **MEDICAL MEASURES**

- ❖ Pre-placement examination
- ❖ Periodical examination
- ❖ Medical and health care services
- ❖ Notification
- ❖ Supervision of working environment
- ❖ Maintenance and analysis of records
- ❖ Health education and counseling

A requirement for physicians to inform responsible authorities about suspected ODs – collection of data



# Employers' and workers' role

- The active participation of employers' and workers' organizations is essential for the development of national policies and programmes for the prevention of ODs.
- Employers have a duty to prevent occupational diseases by taking preventive and protective measures through the assessment and control of risks at work.
- Managers, supervisors, OSH professionals, workers, safety and health representatives and trade unions, all have important roles to play through effective participation and social dialogue.
- Workers and their organizations have a right to be involved at all levels in formulating, supervising and implementing prevention policies and programmes.
- Employers' and workers' organizations also play an active role in training.



# Effective prevention of occupational diseases

## Development of preventive strategies

### National level

- Common effort of government and employers' and workers' organizations
- Adequate legislative support
- Continuous improvement of national OSH and compensation systems
- Provision of occupational health services
- Enforcement of efficiency of the labour inspection
- Improvement of the collection and analysis of data on ODs
- Raising awareness and development of advocacy programmes for better understanding of ODs
- Establishment of a preventative safety and health culture, OSH information and training



# Prevention is key in the protection of the workers health and contributes to ensuring economic and social development

- Urgent action by all stakeholders : decision-makers, government authorities, social security institutions, social partners and OSH professionals at the workplaces and in the community

## Prevention through Design *National Initiative*





***“The burden of occupational diseases concerns everyone, everywhere, from factories to farms, from offices to oilrigs, in workplaces and communities. No one is immune. There is consensus that prevention is more effective and less costly than treatment and rehabilitation. As highlighted above, stakeholders in the world of work should not wait any longer and take concrete steps. Now is the time to launch a major new global effort and intensify the national and international response to the occupational disease epidemic so that the health and lives of workers can be protected.”***

[www.ilo.org/safework/info/publications/WCMS\\_208226](http://www.ilo.org/safework/info/publications/WCMS_208226)