

# ***OCCUPATIONAL HEALTH & SAFETY***



# Basic Concepts & Definitions



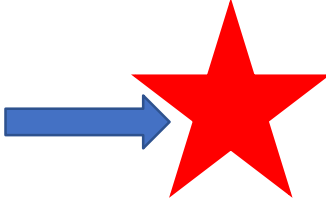

## Occupational Disease:

Any illness associated with a particular occupation or industry. Such diseases result from a variety of biological, chemical, physical, and psychological factors (hazards) that are present in the work environment.



# Basic Concepts & Definitions

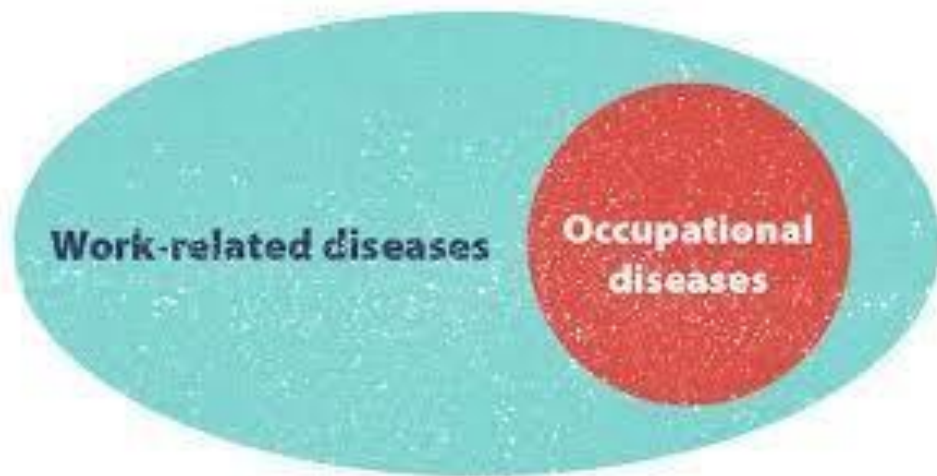
## Occupational Disease Examples:

Contact Dermatitis		Sourced from working with chemicals (Chemical Hazard)
Occupational Cancer		Sourced from working with chemicals (Chemical Hazard)
Musculoskeletal Diseases		Sourced from working position(s) (Ergonomical Hazard)
Silicosis		Sourced from fine particles/dust (Physical Hazard)

# Basic Concepts & Definitions

## Work-Related Disease:

“**Work-related diseases**” have multiple causes, where factors in the **work** environment may play a role, together with other risk factors, in the development of such **diseases**.



*In daily life*



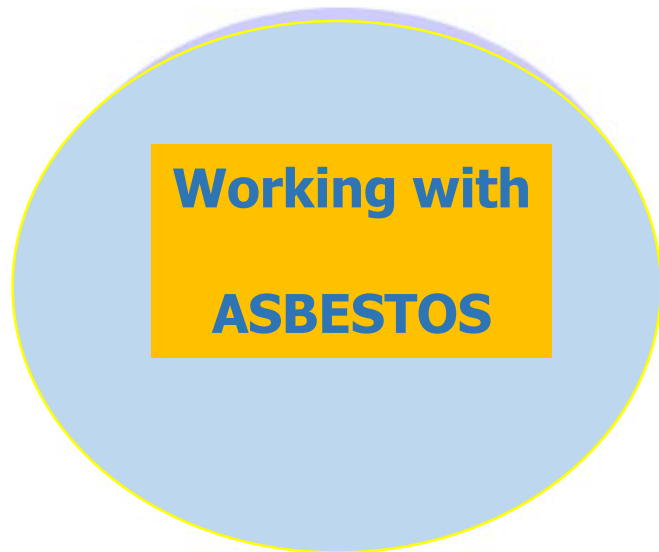
**Trigger** →

*accelerating  
the development  
of the disease*

**Formaldehyde**  
**Carbon disulphide**  
**Arsenic**

***Coronary heart disease***  
***Asthma***

*Work – Related  
Diseases*



***DIRECT EFFECT***

***ASBESTOSIS***  
***Occupational Disease !***

# Basic Concepts & Definitions

## Occupational Medicine:

This is concerned with the effect of all kinds of work on health and the effect of health on a worker's ability and efficiency.



# *Risk Assessment*

It is the careful examination of what could cause harm to people, equipment, environment or property.

It is required to know **what the OHS hazards and risks are,**

And to prevent «***Death***» and «***personal injury***» ,

and also to prevent the **direct and indirect costs** that follow the accidents.

# Risk Assessment

Risk assessment is a term used to describe the overall process or method where you:

- Identify hazards and risk factors that have the potential to cause harm (hazard identification).
- Analyze and evaluate the risk associated with that hazard (risk analysis, and risk evaluation).
- Determine appropriate ways to eliminate the hazard, or control the risk when the hazard cannot be eliminated (risk control)



Is the risk acceptable or not ?



# Risk assessment

**Step 1: Identify the hazards.**



**Step 2: Decide who might be harmed and how.**



**Step 3: Evaluate the risks and decide on precautions.**



**Step 4: Record your findings and implement them.**

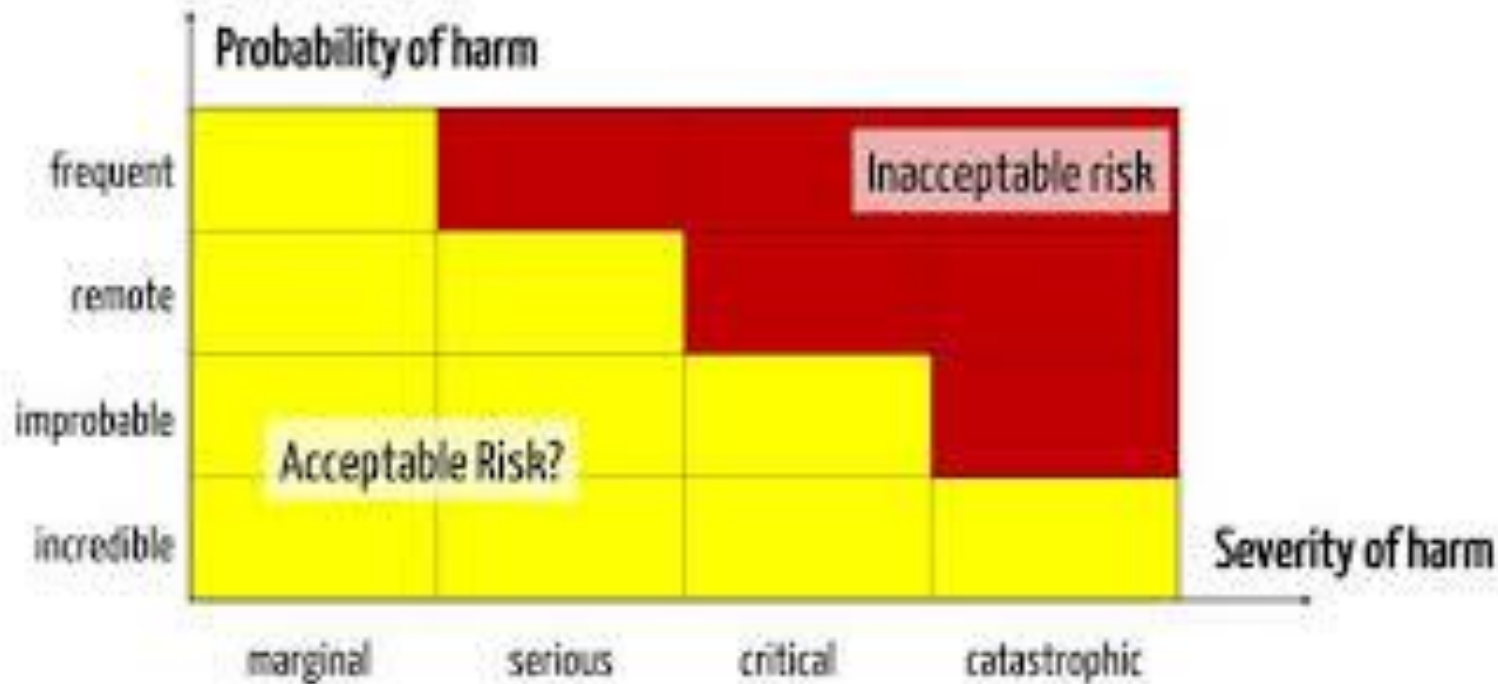


**Step 5: Review your assessment and update if necessary.**

# Acceptable Risk:



**acceptable risk** is a **risk** that has been reduced to a level that can be tolerated by the organization having regard to its legal obligations and its own **OHS** policy



# RISK ASSESSMENT

HAZARD	RISK	Probability	Severity	Present Risk Assessment (probability x severity)	Present measure	Measures to be taken	New Probabiliy	New Severity	New Risk Assessment (probability x severity)
Working with Asbestos	Serious lung diseases if fibres released into air and inhaled.	Very high (5)	Very high (5)	Very high (25)	No	1) Elimination 2) Substitution 3) Engineering methods 4) Administrative methods 5) PPE	Low (2)	Very high (5)	Low (10)
Flammable gases	Fire, Smoke inhalation, Burns	High (4)	Very high (5)	Very high (20)	No	Correct Storage, caution signs, tranings, PPE	Low (2)	Very high (5)	Low (10)
Manuel handling	Suffering from back pain	High (4)	High (4)	Very high (16)	No	Use lift truck, porters trollet etc., training	Very Low (1)	High (4)	Very Low (4)
Noise	Hearing damages	Very high (5)	Very high (5)	Very high (25)	No	Caution signs	High (4)	Very high (5)	Very high (20)
Noise	Hearing damages	Very high (5)	Very high (5)	Very high (25)	No	Using Ear plugs when it exceeds 85 dB	Low (2)	Moderate (3)	Very Low (6)

↻

Must be done again

Table. An example for a risk assessment

# Who must do the Risk Assessment?

- 1) Employer
- 2) OHS Expert
- 3) Workplace doctor
- 4) Working agent
- 5) Authorized staff

**They all must sign the Risk Assessment**

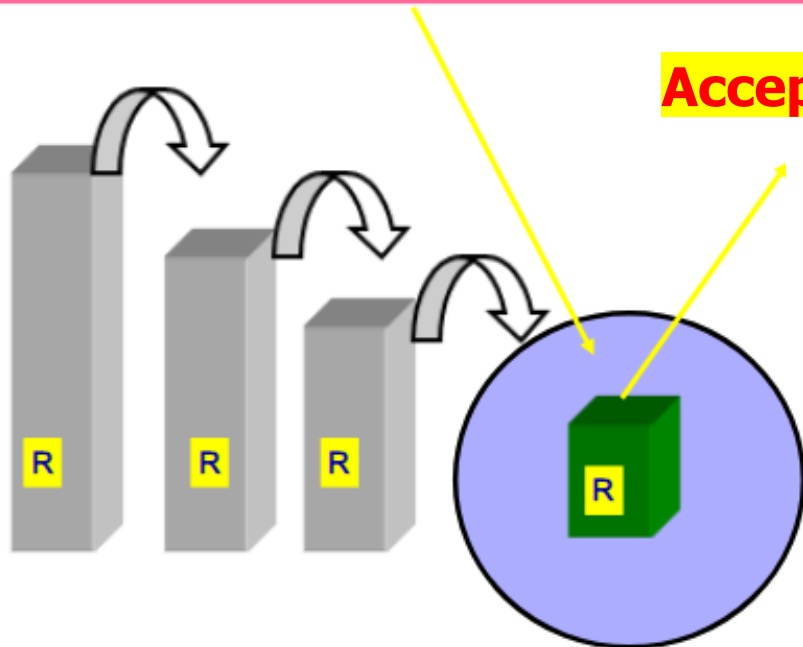


A grid of nine handwritten signatures in various styles, including cursive and block letters, arranged in three rows and three columns.

Your aim must be providing the security:

# SAFETY SECURITY

the ability to stay out of the unacceptable level of risks during work



**Acceptable Risk**

frequency of appearance	often	Risk often occurring and causing low losses	Risk often occurring and causing high losses
	rare	Risk rare occurring and causing low losses	Risk rare occurring and causing high losses
		low	high
		amount of losses	

Color scale:

red	unacceptable risk
yellow	tolerated risk
green	acceptable risk

So,  
Occupational Health and Safety:

*Improves* a company's occupational health and safety standards.

*Ensures* good business,

*Protects* the physical and mental health of the employee,  
a better brand image, and higher employee morale etc.



These studies are; systematic and scientific studies that are carried out in order to protect themselves from conditions that may harm health at workplaces.



The main purposes of OHS are;

\*\* to assure safe and healthful working conditions for employees



\*\*to prevent work accidents and occupational diseases



\*\*to provide security and continuity in production.

\*\*to provide a healthy and safe working environment



As a result, quality and efficiency increase



# *SAFETY CULTURE*

## ***-definition -***

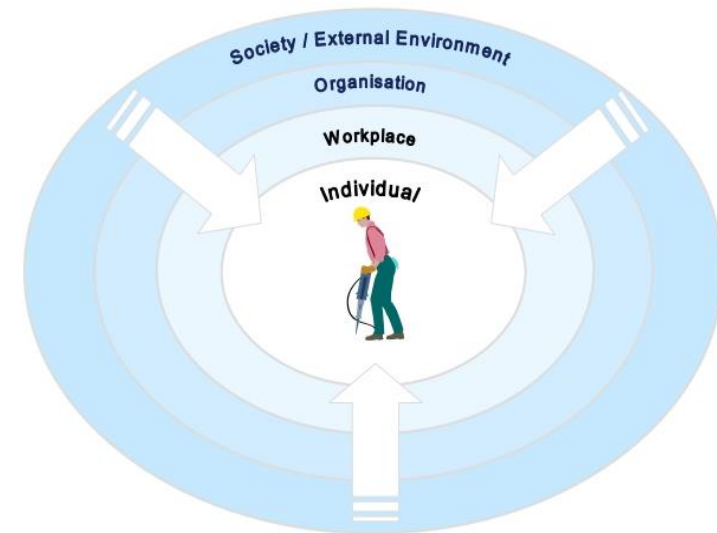
It is the way in which safety is managed in a workplace. It is the combination of beliefs, perceptions and attitudes of employees toward the safety of workers and the overall safety of the work environment.



occupational health and safety culture  
begins from family and then is followed by  
national security culture



While sandpapering the toy,  
You must wear safety glasses  
to prevent splashing some tiny wood particules  
to your face.



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**“Don’t worry. We can clean up after we get back from the safety meeting.”**

# Recommended references:

- [www.worksafe.wa.gov.au](http://www.worksafe.wa.gov.au)
- [www.safetyline.wa.gov.au](http://www.safetyline.wa.gov.au)
- [https://www.google.com.tr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwjgqufxgP\\_WAhXBCpoKHdbiC9kQtwIIMDAB&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3Da-YkLaFvmo8&usg=AOvVaw06eb5XbQtYH1DdorOUAyig](https://www.google.com.tr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwjgqufxgP_WAhXBCpoKHdbiC9kQtwIIMDAB&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3Da-YkLaFvmo8&usg=AOvVaw06eb5XbQtYH1DdorOUAyig)
- <https://www.youtube.com/watch?v=xwsmMue2q18>
- [https://www.google.com.tr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwipjcvVg\\_\\_WAhVJKpoKHbvEBwAQyCkIJzAA&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DHD1e3uc\\_eQE&usg=AOvVaw1oc9wxLNRIclglgu1NtYny](https://www.google.com.tr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwipjcvVg__WAhVJKpoKHbvEBwAQyCkIJzAA&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3DHD1e3uc_eQE&usg=AOvVaw1oc9wxLNRIclglgu1NtYny)

Because of



is required..

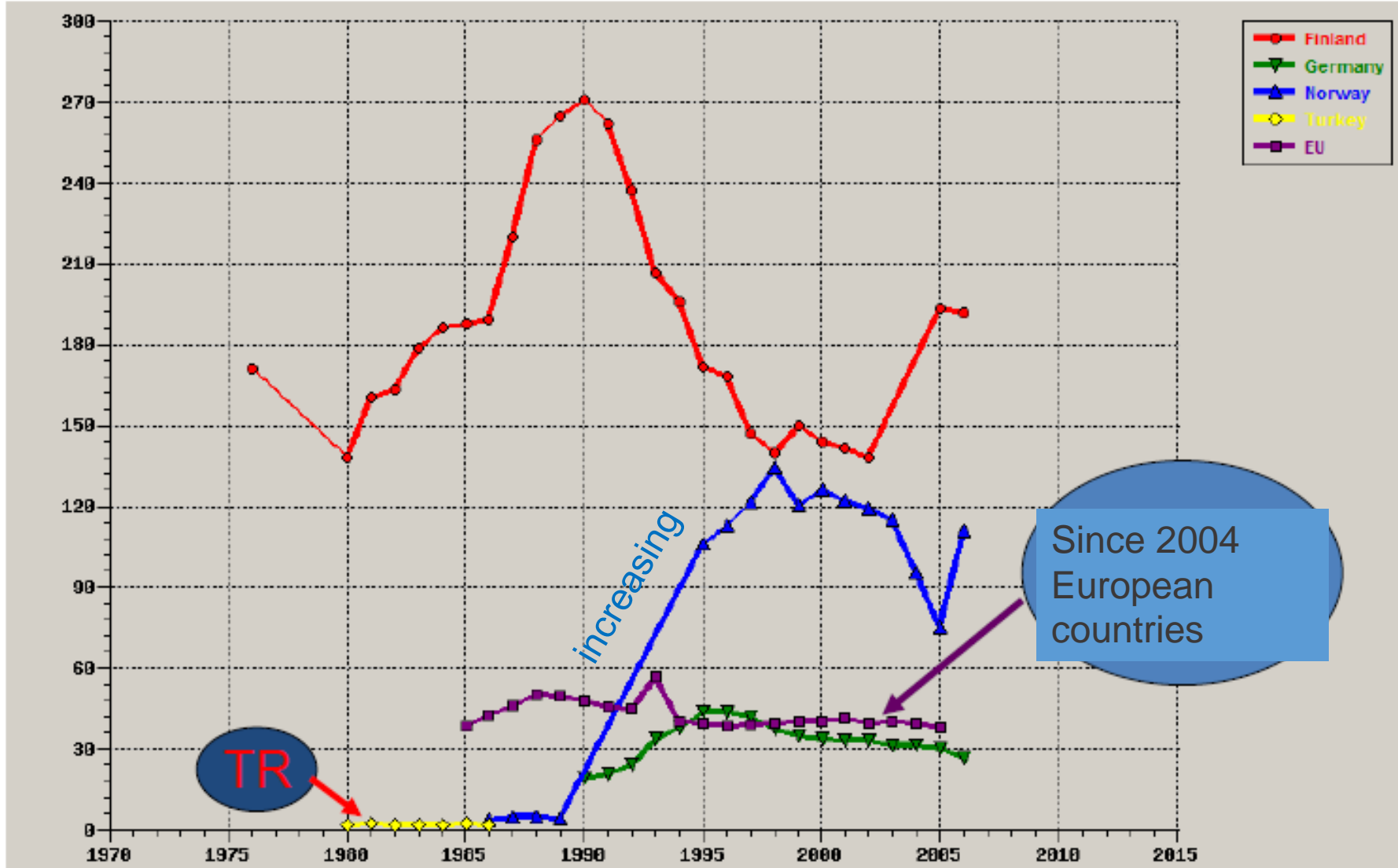
If OHS laws are applied properly;

Occupational diseases can be avoided completely = 100 %.

**98% of Work accidents can be avoided**



Lets have a look at Occupational Disease Statics in world



Since 2004 European countries

TR

increasing



Development in  
OHS

