OCCUPATIONAL HEALTH & SAFETY

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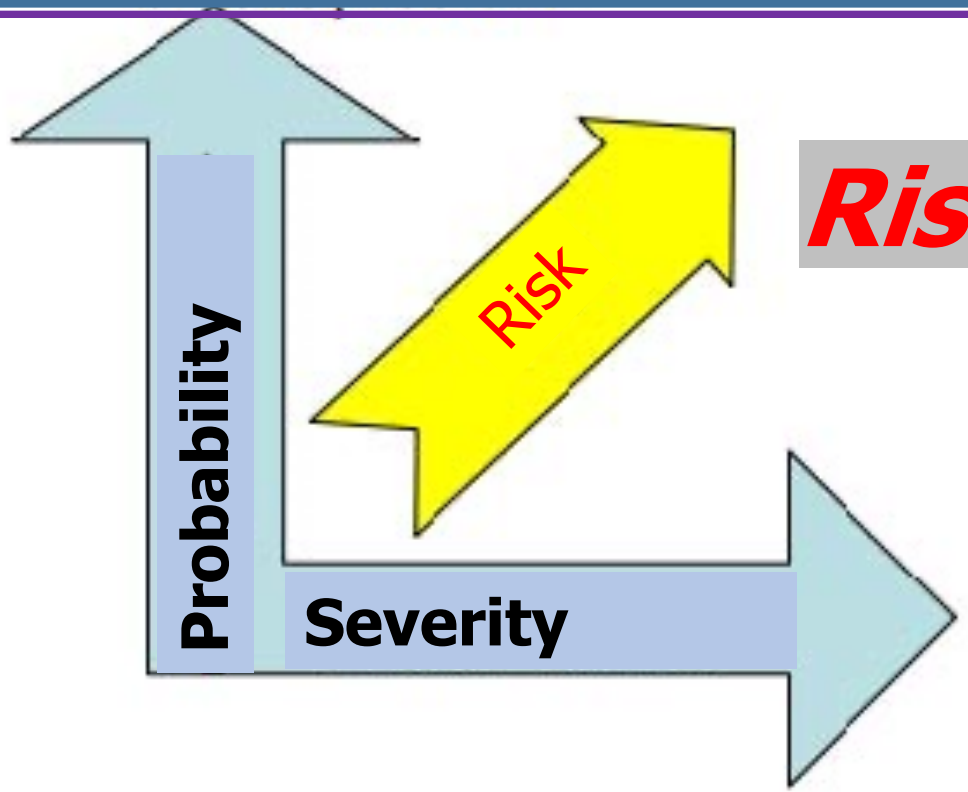
Potential Energy

HAZARD

- **Potential to cause harm or damage which could affect the worker/the workplace. (OHS Law #6331, Article 3 (1))**



Risk = P x S

P: Probability

S: Severity

Kinetic Energy

According to these definitions,

the shark is;

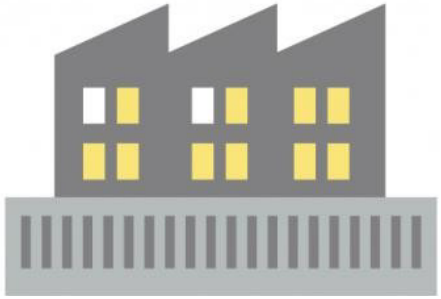
Hazard?

Risk ?

Taking Precaution

It refers to eliminate or reduce the risks related to occupational health and safety at all stages of the work carried out in the workplace.

Status of Turkey (2016) –recorded!



NUMBER OF WORKPLACE

App.1,900,000

NUMBER OF WORKERS

App.18,000,000

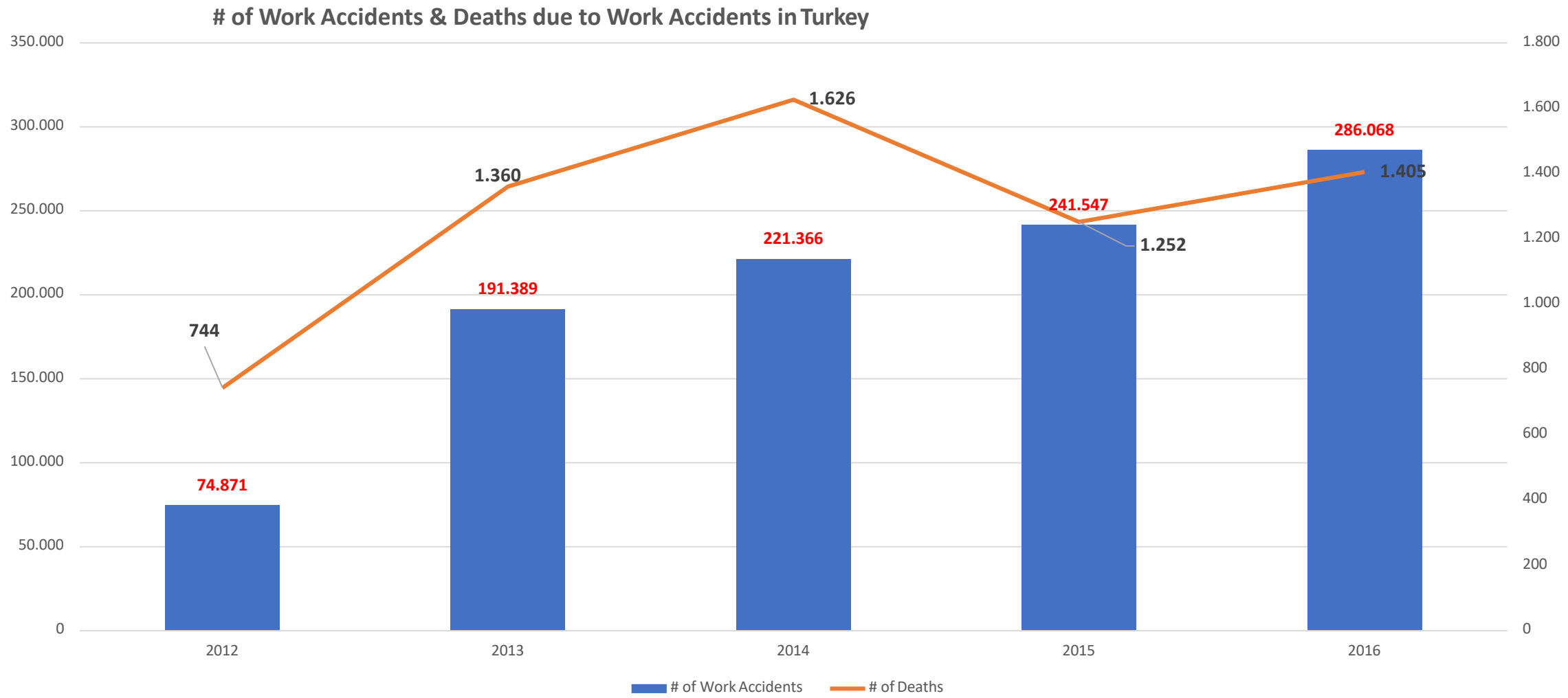
NUMBER OF WORK ACCIDENTS

286,068

NUMBER OF WORKERS DIED IN ACCIDENTS

1,405

STATISTICAL DATA*



*: SGK Statistical Annual

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 hazards that are present in the work environment.

98% of work accidents can be prevented !
2% of work accidents are unpredictable,
so it can not be prevented

100 % of occupational diseases can be prevented
by true OHS System!

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**.

Trigger →

In daily life

Smoking
Hypercholesterolemia
Hypertension
Obesity

accelerating the development of the disease

Formaldehyde
Carbon disulphide
Arsenic

Coronary heart disease
Asthma

Work – Related Diseases

Working with ASBESTOS

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 ***«personal injury***» , **and** «***Death»***

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

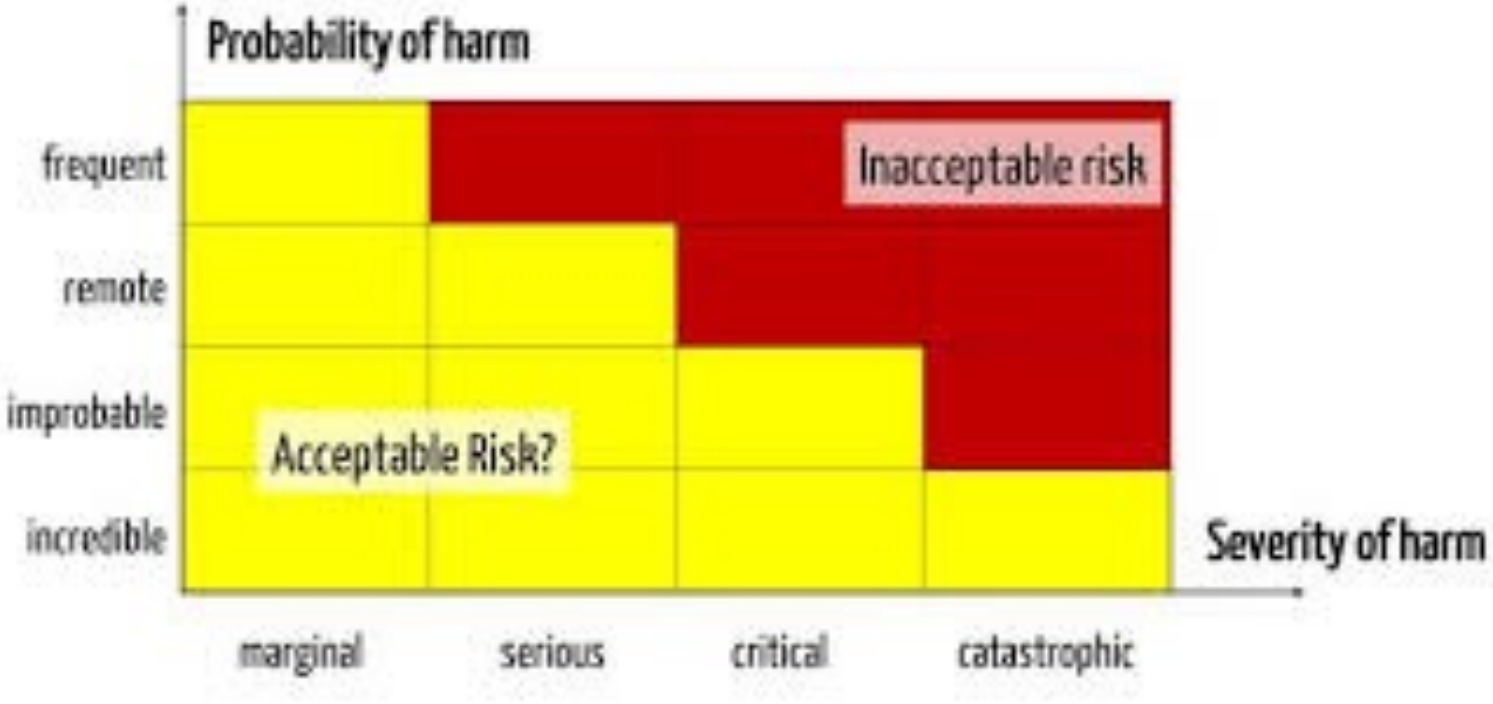
when the hazard cannot be eliminated (risk control)

Is the risk acceptable or not ?

Risk assessment

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 **OSH** policy



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

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Must be done again

Table. An example for a risk assessment

Recommended references:

- 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
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