



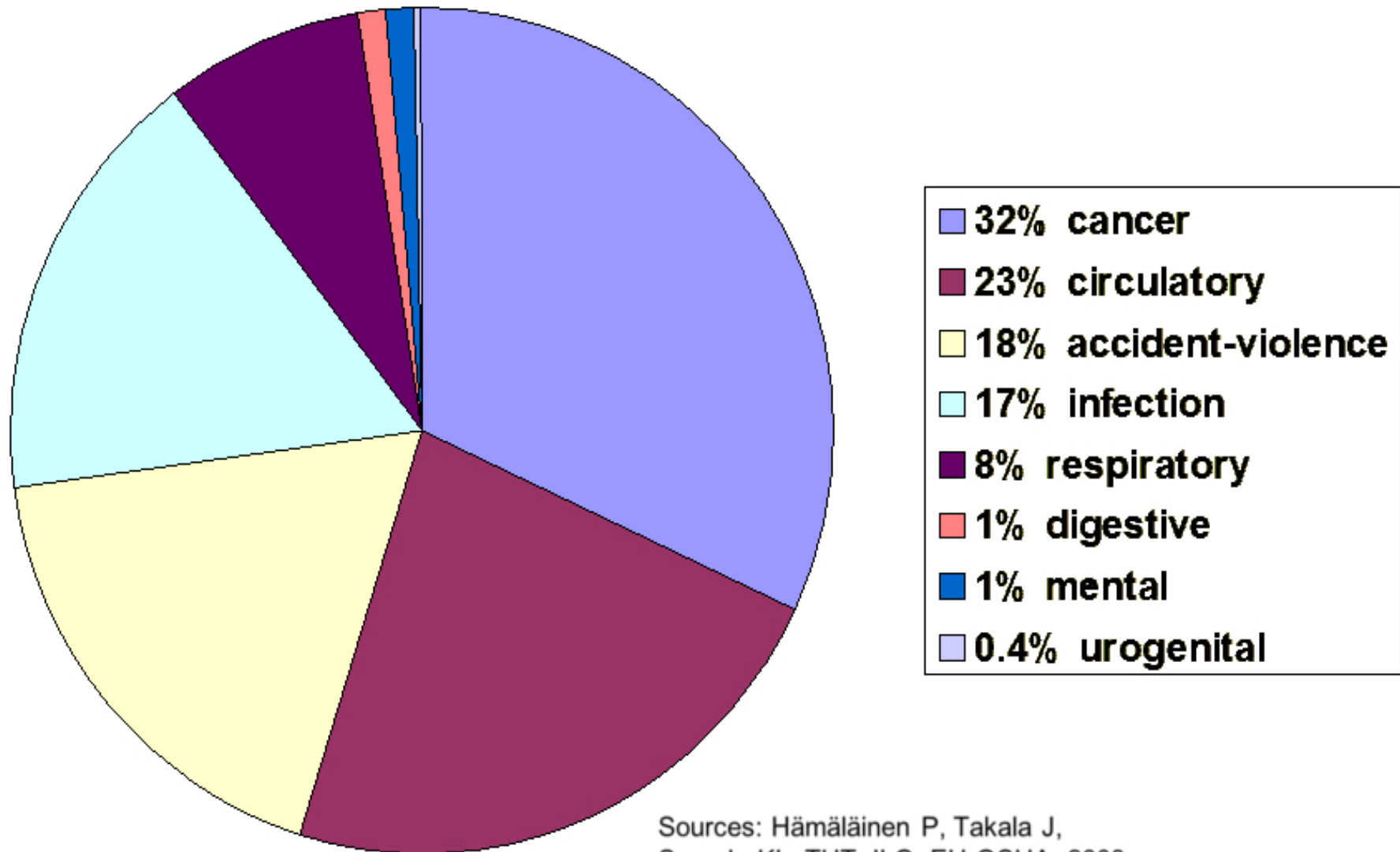
# IndustriALL MENA Region Oil, Gas, and Health and Safety



# General Context

- Globally, 2.3 million workers die as a result of their work every year, according to the ILO.
- IndustriAll considers this number, shocking as it is, to be underestimated by at least a factor of ten. Many millions more are injured or made ill due to occupational disease.

# World Occupational Deaths: 2.3 million per year



Sources: Hämäläinen P, Takala J, Saarela KL; TUT, ILO, EU-OSHA, 2008

# Specific Health and Safety Issues

- Oil, gas, petrochemicals: remains among the most dangerous and toxic occupations
- Statistics are misleading and unreliable
- The industry focuses attention on individual human errors, (behaviour based safety)
- BUT the big dangers lie in e.g. toxic materials releases; catastrophic fires; asphyxiations; explosions; and in occupational diseases

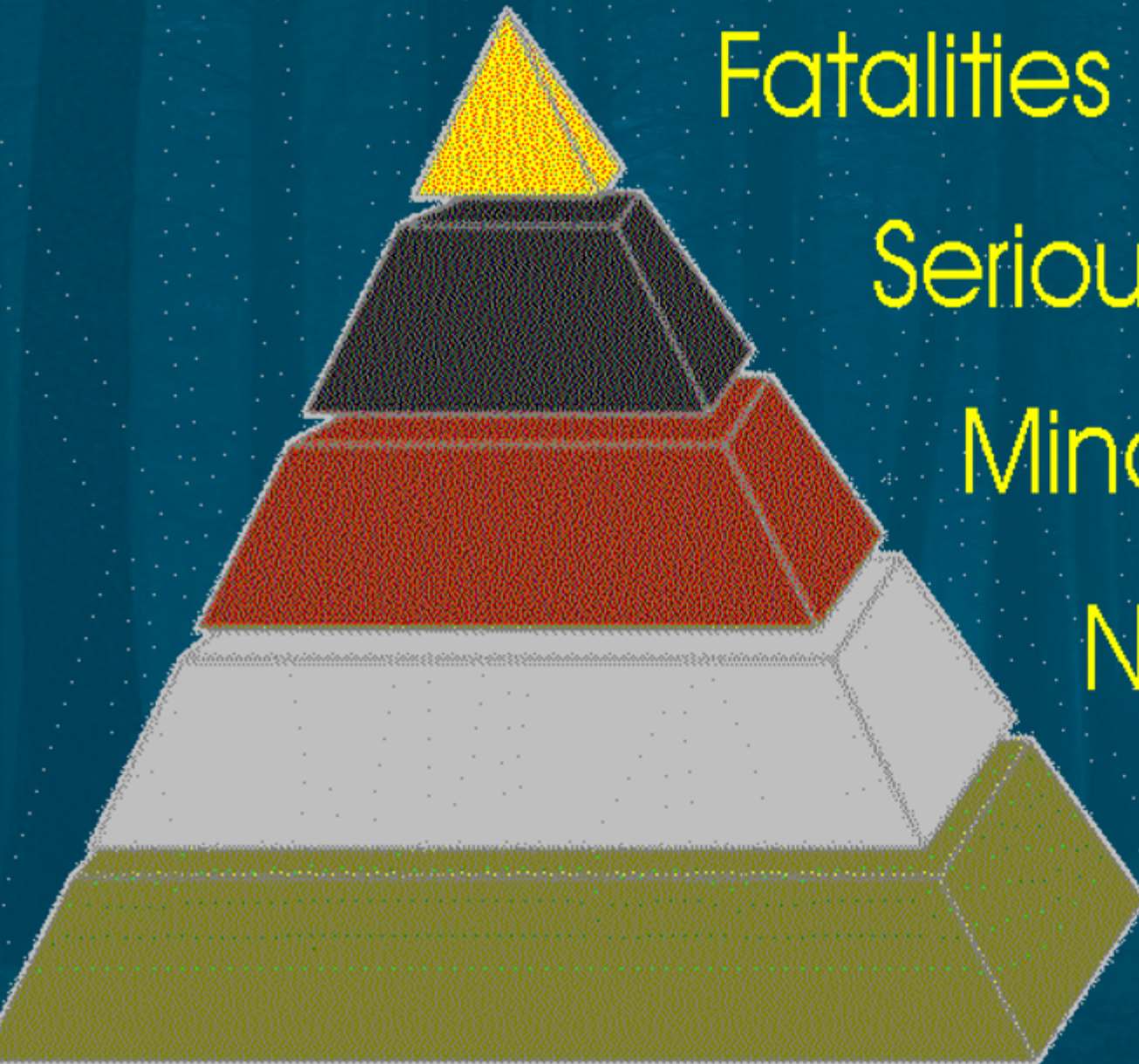


# Typical Injuries

- burns (thermal or chemical)
- asphyxiation, toxic exposures, or radiation
- crushed / struck / buried / fell / cut (e.g. falling objects, machinery, materials, vehicles, ladders, scaffolds, sheet metal)
- electrocution
- heat exhaustion
- musculoskeletal injuries and diseases, including repetitive strain injuries



# "Safety Pyramid"



Fatalities

Serious Injuries

Minor Injuries

Near Misses

Unknown

# Typical Diseases

- acute or chronic respiratory impairment
- sensitization reactions and asthma
- eye irritation, visual disorders (e.g. ClO<sub>2</sub> exposure)
- cancer: there are a number of known, probable and possible carcinogens in the oil and gas sector; and there are very likely an even greater number of carcinogens that are presently unknown
- diseases (non-cancer) of various target organs



# Toxic Substances and Occupational Disease: a hidden epidemic

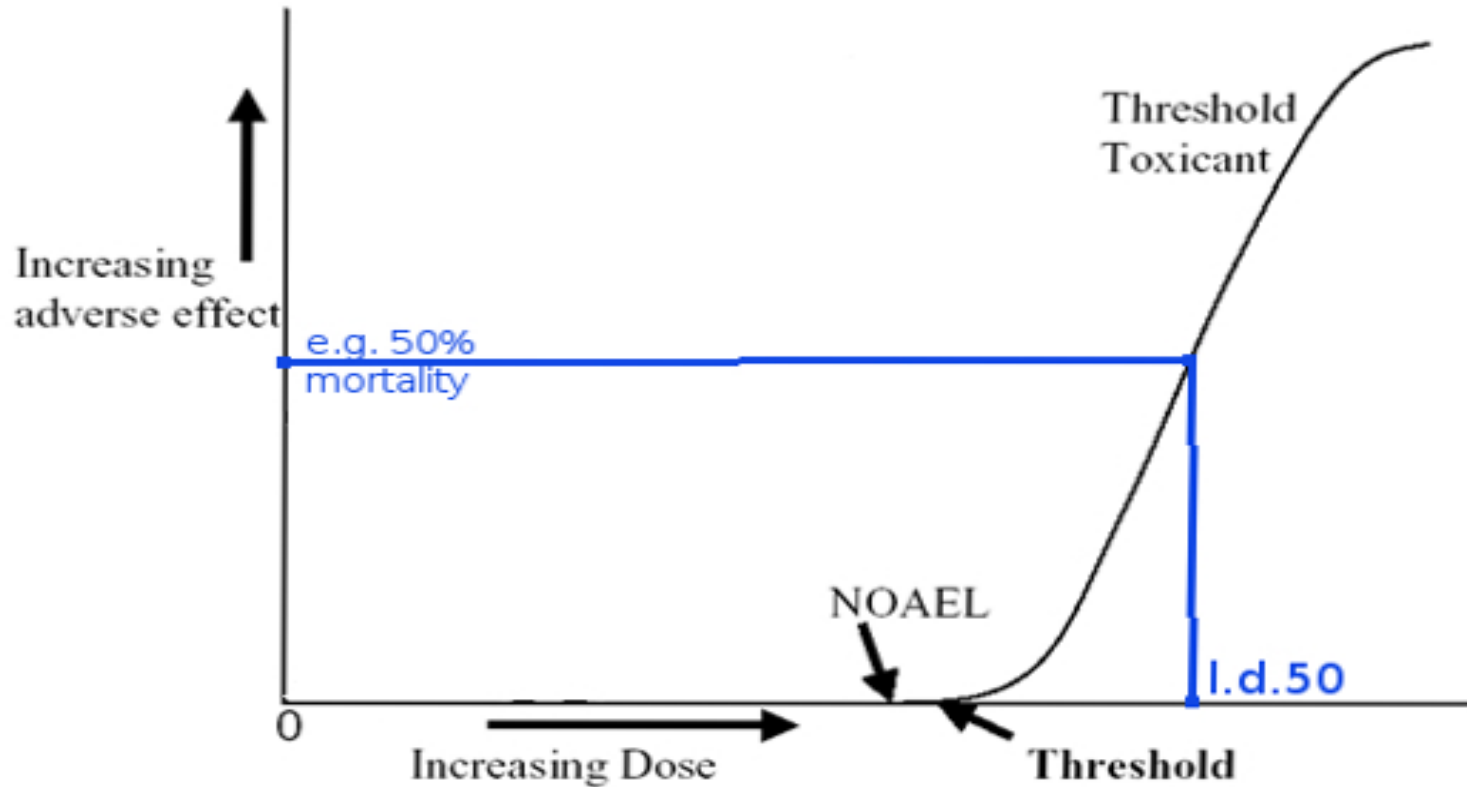
- Cytotoxicology, traditional toxicology, epidemiology, qualitative structure-activity relationships: few industrial chemicals have been studied adequately, or at all; and studies are almost always funded by industry.
- Doctors uneducated on occupational disease; frequently misdiagnosed and mistreated.
- Workers' compensation systems conflict of interest (costs) : prefer to turn a blind eye.





# Threshold effects

## Dose-Response Curve



**What is a safe exposure limit ?**

# Carcinogens

Examples: asbestos, benzene, polycyclic aromatic hydrocarbons, formaldehyde, hexavalent chromium, nickel compounds, diesel exhaust, hydrazine, styrene, mineral oils, chlorinated phenols and other chlorinated hydrocarbons, dioxins, ionizing radiation, solvents, lubricants, fuels

- this is FAR from an exhaustive list
- no NOAEL for genotoxic carcinogens



**At the Source**

**At the Worker**

**Along the Path**



**Industrial Hygiene Approach**

**Acute** effects: sudden, often from one exposure. **Chronic** effects: long term, from continuous or repeated exposure. Good information on chronic effects exists rarely

# Ergonomics

- ergonomics is associated with the prevention of musculo-skeletal injuries – especially repetitive strain injuries (AKA occupational overuse syndrome)
- in reality, ergonomics is the science of determining all of the real characteristics and limitations of human beings; and how to design work that takes advantage of our characteristics, and does not exceed our limitations
- “fitting the task to the human (worker)”



# Psychology

- increasing attention is being paid to psychosocial risks of work
- these include harassment, bullying, shiftwork, stress, chronic fatigue, disruption of circadian rhythms, “social death”, post-traumatic stress, and a variety of other “toxic workplace” factors
- these are not trivial effects – can cause reduced length and quality of life, epidemics of suicide or violence, inability to recruit or retain staff

# Precarious Work also an OHS Risk

The energy industries, like many others, seem to have an insatiable appetite for contracting-out work that was formerly performed by direct employees. These workers consistently have greater rates of injury, illness, and fatality.

Strategies to control this include:

- limiting the total number of contractors
- effective contract employee management



# Basic Problems

- Problems differ in the developed, and the developing worlds:
- Developing world: it is still largely a problem of basic work conditions
- Developed world: more complex. A big problem is the **acceptance of safety systems and internal vs. external responsibility**
- Confrontational systems prevail – suppression of accident reporting



# ‘Conceal and Appeal’ vs. ‘Accept and Correct’

Today's safety programmes have become a platform for employers to escape responsibility, blame victims, and indulge in self-congratulation while sneering condescendingly at workers and their unions. Liability avoidance is the name of the game and the driving force behind most of today's so-called safety initiatives, from Behaviour Based Safety to post-incident drug and alcohol testing.





# Compromising the Compromised

The three main workers' health and safety rights were first articulated in the 1970s. We have since accepted compromise after compromise, on the theory that some recognition was better than nothing. Information we get is severely compromised in both quality and quantity. The right to refuse/shut down work (the right to protect oneself) is bureaucratized - detailed procedures that if not followed to the letter expose workers to discipline or discharge. The right to participate via Joint Health and Safety Committees and workers' safety representatives is reduced to trivial discussions on the margins of genuine health and safety decision-making.



# A Plan of Action !

## Let us recall what we really want:

We demand to enjoy fully these rights:

- to KNOW about workplace hazards,
- to REFUSE or SHUT DOWN unsafe work,
- to fully PARTICIPATE in health and safety decision-making.



# Right to Know

Chemicals: Mandatory disclosure of complete chemical compositions and an accurate evaluation of the hazards (primarily) and risks (secondarily and only if assessed with our full participation) of all materials we work with – singly, and in combination. Where gaps in toxicological knowledge exist, we want independent research forthwith. We have the right to know - fully, completely, wall-to-wall and without exemptions or excuses or condescension – everything there is to know about the hazards of our work. Industrial secrecy, the excuse for concealment, only keeps knowledge out of the hands of workers and consumers - competitors already know what is in their competitor's products.



# Right to Refuse / Right to Shut Down

The absolute right to refuse to perform, or to shut down, any work we perceive to be unsafe or unhealthy without fear of retaliation or discipline. Any work so refused or shut down must be independently investigated – with the participation of the worker(s) who refused or shut down the work – and established as safe or modified to be safe before work is recommenced.



# Right to Participate

Full partnership in the development and implementation of all health and safety policies, programmes, procedures, processes, risk assessments, inspections, audits, investigations, and so on. We are the real experts in what goes on in our workplaces. We want health and safety done WITH us, not TO us; and the only people with the moral authority to assess a risk are those who must face the risk.



# Health and Safety as Organizing Issues

What we have today is a weak, compromised version of these three principal rights. An entire generation of trade unionists has grown up without knowledge of the history of these demands, how they were (partially) won, or the organizing potential behind them.

Occupational health and safety is OUR issue. We MUST re-capture health and safety from the management hacks, consultants, apologists, psychologists, insurance underwriters who have taken it over from us.

It's time.



# To Do:

- Demand workers' rights to: (i) know (ii) refuse or shut down unsafe work (iii) participate
- Create or maintain a local union HSC; share info
- Investigate accidents and diseases – and tell us
- Place employers OHS obligations in CBA : (i) make work safer (ii) not blame the worker; “accept and correct, not conceal and appeal”
- Demand stronger OHS laws / enforcement
- Organize ! Unions make work safer !





*Thank You !!*



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