

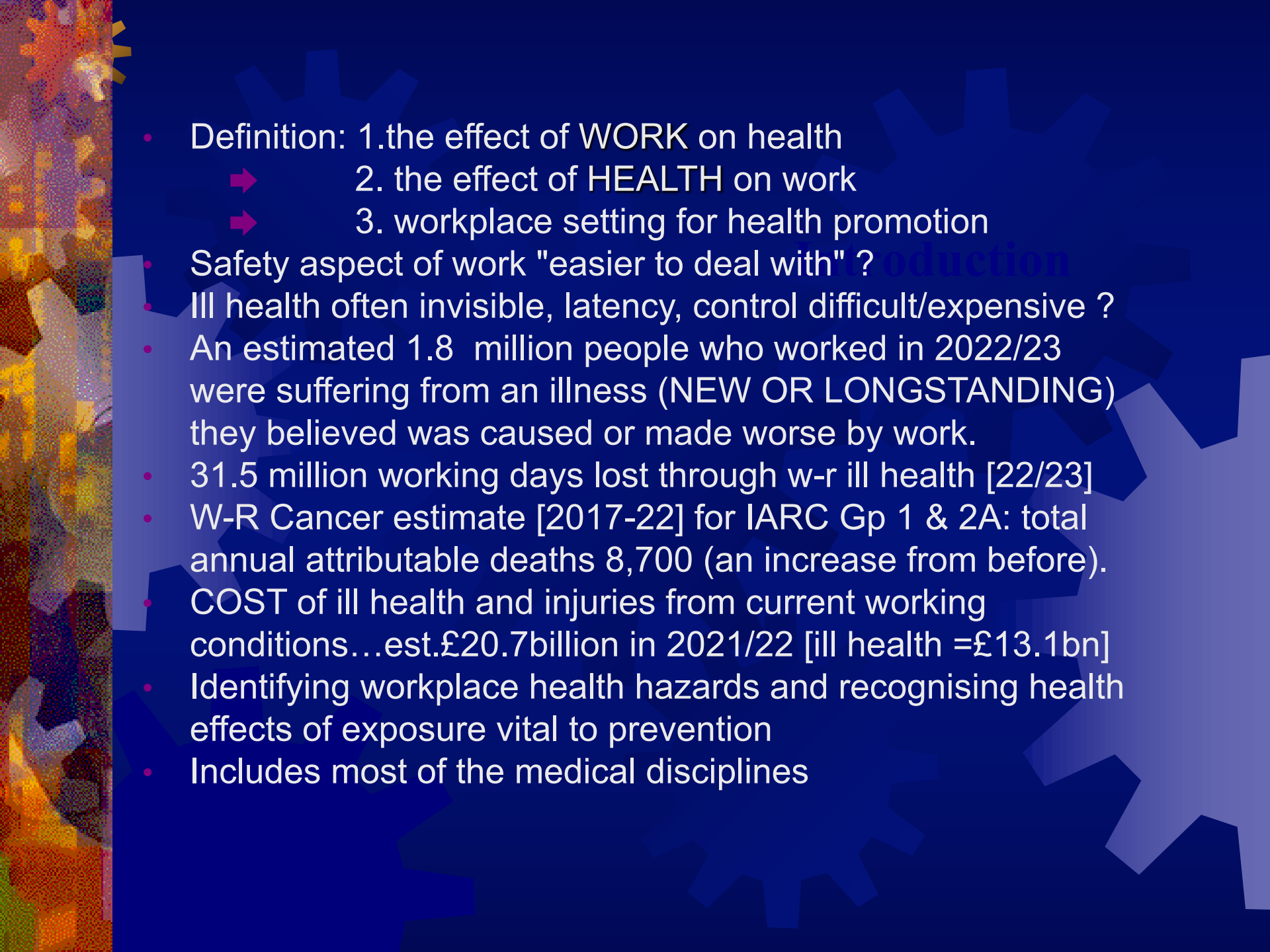
*From Risk Assessment to ...  
.....Health Surveillance  
– the journey explained*

*Dil Sen,  
Consultant in Occupational Medicine  
& Senior Fellow, Higher Education Academy,*

# Intended learning outcomes

..to provide occupational health practitioners with basic information on:

1. what are Hazards in the workplace?
2. understanding the journey from Risk Assessment to Health Surveillance as a process
3. principles and practice underpinning the management of health risks, and the legal requirements.
4. statutory medical supervision of workers and the role of the Doctor.
5. when Health surveillance is required?

- 
- Definition: 1.the effect of WORK on health
    - ➔ 2. the effect of HEALTH on work
    - ➔ 3. workplace setting for health promotion
  - Safety aspect of work "easier to deal with" ? **education**
  - Ill health often invisible, latency, control difficult/expensive ?
  - An estimated 1.8 million people who worked in 2022/23 were suffering from an illness (NEW OR LONGSTANDING) they believed was caused or made worse by work.
  - 31.5 million working days lost through w-r ill health [22/23]
  - W-R Cancer estimate [2017-22] for IARC Gp 1 & 2A: total annual attributable deaths 8,700 (an increase from before).
  - COST of ill health and injuries from current working conditions...est.£20.7billion in 2021/22 [ill health =£13.1bn]
  - Identifying workplace health hazards and recognising health effects of exposure vital to prevention
  - Includes most of the medical disciplines

# Cause & Effect, and Risk

- ➔ Cause - voluntary/involuntary agent acting to bring about an Effect
- ➔ Hazard/cause... ill health/undesirable effect
  - ➔ - a solid, liquid or gaseous: gas/fume/vapour
- ➔ Effect not the same for everyone-problem 1
- ➔ Same hazard but different rates of effect - problem 2 (cancers)
- ➔ Concentration AND dose (conc.x time)
- ➔ Risk - probability that hazard will inflict its harm



## Management of health hazard & risk

- ➔ identification of the work environment - hazards
- ➔ recognition of the effects of exposure – the risks from those hazards
- ➔ control measures – to manage the risks
- ➔ monitoring & review

# Exposure and human health - 1

- ➔ To control a health hazard we need to
  - recognise/identify the hazard/"cause"
  - evaluate the real risk it poses/"assessment"
  - act to prevent or control the "effect"
- ➔ Risk + COSHH assessments tell us
  - where exposure can occur
  - how the substance/material can enter body
  - how it can cause the harmful effect



## Exposure and Human health – 2, things to consider also.....

- Individual susceptibility
- Where does exposure occur?
  - E.g. in production/manufacturing, maintenance, cleaning
- How does the agent get into the body?
  - Routes of entry (on next slide)
- How does it cause harm?
  - Eg. as an irritant, asthmagen, carcinogen???
  - Can inform judgement on health surveillance
- Gender issues
  - Teratogens, mutagens

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## 4 Routes of entry

1. Inhalation
2. Ingestion
3. Skin absorption
4. Direct effects on organs of sense  
eg. ears and eyes



## Key facts



**1.8 million**

Workers suffering from work-related ill health (new or long-standing) in 2022/23

Source: Estimates based on self-reports from the Labour Force Survey, people who worked in the last 12 months



**0.6 million**

Workers sustaining a workplace non-fatal injury in 2022/23

Source: Estimates based on self-reports from the Labour Force Survey



**35.2 million**

Working days lost due to work-related ill health and non-fatal workplace injury in 2022/23

Source: Estimates based on self-reports from the Labour Force Survey



**0.9 million**

Workers suffering from work-related stress, depression or anxiety (new or long-standing) in 2022/23

Source: Estimates based on self-reports from the Labour Force Survey, people who worked in the last 12 months



**60,645**

Work-related non-fatal injuries to employees reported by employers in 2022/23

Source: RIDDOR



**12,000**

Lung disease deaths each year estimated to be linked to past exposures at work

Source: Counts from death certificates and estimates from epidemiological information



**0.5 million**

Workers suffering from work-related musculoskeletal disorders (new or long-standing) in 2022/23

Source: Estimates based on self-reports from the Labour Force Survey, people who worked in the last 12 months



**135**

Workers killed in work-related accidents in 2022/23

Source: RIDDOR



**2,268**

Mesothelioma deaths in 2021, with a similar number of lung cancer deaths linked to past exposures to asbestos

Source: Counts from death certificates and estimates from epidemiological information



**13.1 billion**

Annual costs of new cases of work-related ill health in 2021/22, excluding long latency illness such as cancer

Source: Estimates based on HSE Cost Model



**7.7 billion**

Annual costs of workplace injury in 2021/22

Source: Estimates based on HSE Cost Model



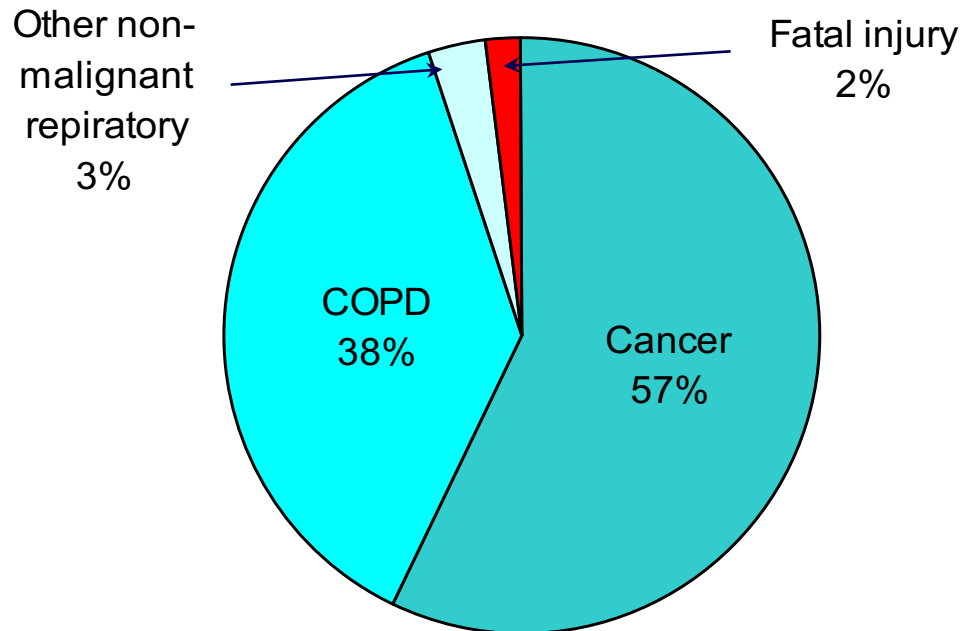
**20.7 billion**

Annual costs of workplace injury and new cases of work-related ill health in 2021/22, excluding long latency illness such as cancer

Source: Estimates based on HSE Cost Model

# Health versus safety - fatalities

## Comparison of work-related ill health and injury fatalities



**\* 98% through ill health**

# Case Study



**Physical processing**

# Assessment of risk to health..

- ★ *An employer shall not carry out any work which is liable to expose any employees to any substance hazardous to health unless he has –*
  - *made a suitable and sufficient assessment of the risk created by that work to the health of those employees and of the steps that need to be taken to meet the requirements of these Regulations.*

*[COSHH, Reg6]*



# The risk assessment should include consideration of...

- ✦ Hazardous properties of the substance?
- ✦ Information on health effects from supplier?
- ✦ Level, type, duration of exposure?
- ✦ Circumstances of the work?
- ✦ Times of high exposure e.g. maintenance?
- ✦ Any relevant workplace exposure limit etc.?
- ✦ Effect of preventive and control measures?
- ✦ Results of health surveillance?
- ✦ Results of monitoring of exposure?
- ✦ Etc...etc...



# 5 steps principle

- ✦ Identify the hazards
- ✦ Decide who may be harmed and how?
- ✦ Evaluate the risks and decide on precautions
- ✦ Record your findings and implement them
- ✦ Review your assessment updating as necessary

# Identify...

- ✱ Know the workplace...walk around
- ✱ Ask - your employees
  - ✱ your trade association
  - ✱ manufacturer/supplier (MSDS)
  - ✱ HSE website [[www.hse.gov.uk](http://www.hse.gov.uk)]
- ✱ Check the accident & ill health records
- ✱ Think about long-latency health problems e.g NIHL, cancers

# Who might be harmed & how?

- ✦ Identify high risk groups e.g. maintenance
- ✦ Not just the substance(s), but also other work hazards (e.g. repetition and cement in bricklaying)
- ✦ Some with particular requirements – the pregnant, the young, visitors/M.O.Ps



# Evaluate risks & precautions

- ✦ Law requires *reasonable practicability*
- ✦ Compare with what is 'good practice'
- ✦ Get rid of the hazard altogether?
  - ✦ If not...Hierarchy of Control
    - Don't forget Information, Instruction, Training of employees...or Welfare
    - PPE should NOT be first means of control!
    - Involve staff...they may know more than you!!

# Record and implement

- ★ [No need to record if <5 employees]
- ★ Keep your record simple, dealing with the signif hazards & numbers exposed
- ★ *Action Plan* to get the important things done first
  - Quick temporary solutions till..
  - ...long-term ones are possible
  - Training those on the main risks that remain
  - Regular checks on control measures
  - Clear responsibilities – who leads on what, and by when?
- ★ AND then do them!



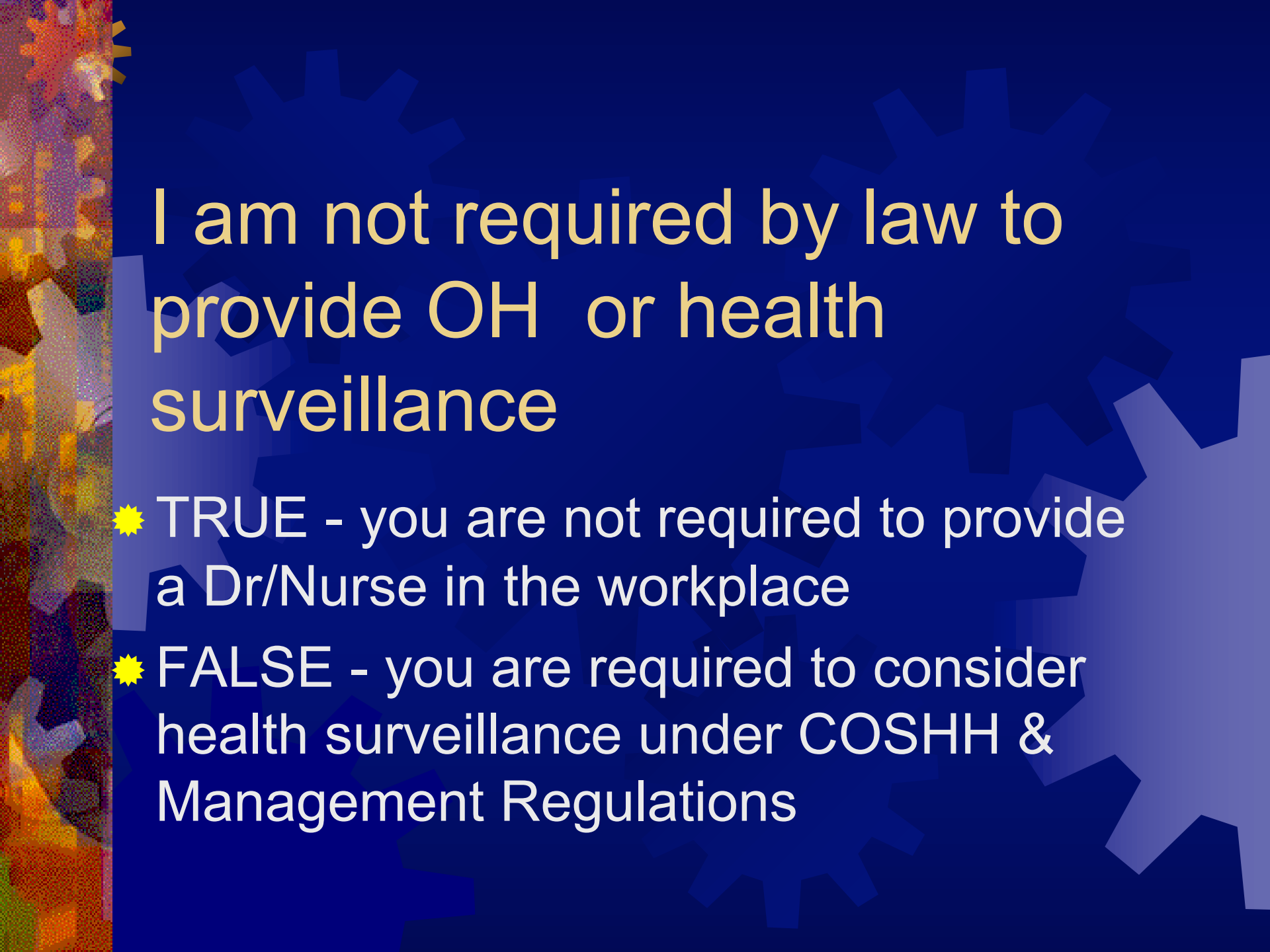
# Review and update

- ✦ Workplaces rarely stay the same, so keep regular checks on things (new substance/hazard or equipment or process)
- ✦ Review the *RA* before things go wrong, looking for further improvements (asking employees, any accidents/near misses?)

# Health surveillance

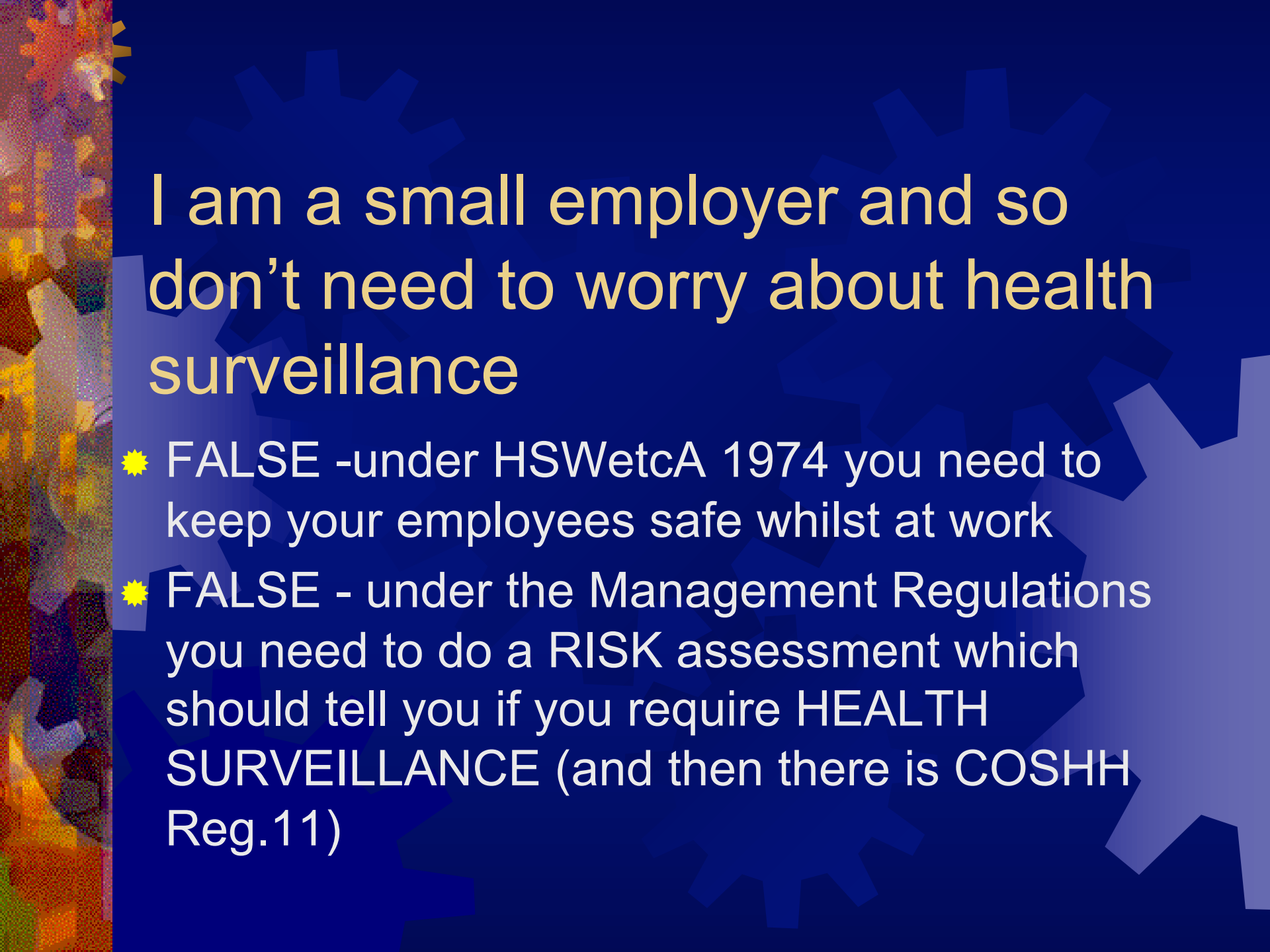
- *exploding some myths*
- *views from the frontline*





I am not required by law to provide OH or health surveillance

- ★ TRUE - you are not required to provide a Dr/Nurse in the workplace
- ★ FALSE - you are required to consider health surveillance under COSHH & Management Regulations



# I am a small employer and so don't need to worry about health surveillance

- ✦ FALSE -under HSWetcA 1974 you need to keep your employees safe whilst at work
- ✦ FALSE - under the Management Regulations you need to do a RISK assessment which should tell you if you require HEALTH SURVEILLANCE (and then there is COSHH Reg.11)



# Health surveillance requires a Dr/Nurse and is too expensive

- ✱ FALSE - it does not always require a Dr or Nurse
- ✱ FALSE - it does not have to be expensive



Health surveillance is an  
“MOT” which my employees  
can get from their GPs

- ☀ TRUE - your employees can get “MOTs” from their GP but that is health screening/life-style screening
- ☀ FALSE - health surveillance is really about checking for the EFFECT OF WORK ON HEALTH before it becomes irreversible





# What is occupational health ?

Occupational health should aim at the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological ability (Joint ILO/WHO - 1950)

*FIT the TASK to the WORKER +functional capacity*

# What is health surveillance ?

- ☀ any process or activity which involves obtaining information about employees' health and WHICH ASSISTS IN PROTECTING EMPLOYEES FROM HEALTH RISKS AT WORK
  - Enquiries (symptoms), inspection, examination
  - Inspection by responsible person
  - Clinical examination/medical surveillance
  - Biological monitoring
  - Biological effect monitoring
  - Review of records & occupational history

# Health surveillance v health screening

- ✱ Health surveillance starts with the hazard/ health screening starts with the disease
- ✱ HS is a legal requirement/ health screening is voluntary
- ✱ HS leads to early disease identification leading to better control or removal from exposure/health screening leads to early detection of disease and earlier treatment

# Legal requirements

- ✦ *“Every employer shall ensure that his employees are provided with such health surveillance as is appropriate having regard to the risks to their health and safety which is identified by the assessment.” (Management Regs.’99)*

# Health surveillance if .....

- ✱ identifiable disease/adverse health effect related to the exposure
- ✱ valid techniques available to detect..
- ✱ reasonable likelihood that disease/effect may occur under particular conditions of work
- ✱ employee exposed to/engaged in one of the substances/processes in Sch 6 of COSHH
- ✱ (surveillance will further protect health)

# Health surveillance is NOT...

- ✦ a substitute for poor CONTROL of exposure
- ✦ an excuse for employers NOT to review their COSHH assessments if appropriate (e.g. changed process)
- ✦ to be considered in isolation; it is one component of overall management of health risks
- ✦ to be considered without informing, instructing, training employees particularly about the hazards & risks
- ✦ to be confused with general health screening, health promotion etc

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# Some specific requirements relating to health surveillance in...

- ✱ CLAW Regulations 2002, R10
- ✱ CAW Regulations 2006, R22
- ✱ IR Regulations 1999, R24
- ✱ Also in Diving
- ✱ Work in compressed air

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# Who can carry it out ?

- ✱ “responsible person” suitably trained?
- ✱ doctor or nurse?
- ✱ Dr/Nurse trained in occ.health?
- ✱ others e.g.. audiometry technician?

BUT.....



## EMPLOYERS' CHECKLIST- 4 STAGE APPROACH

- ★ 1. Do I have a health risk problem, or a need for occupational health input, in my workplace?
- ★ 2. What/who do I need to control/provide it (a doctor or nurse or a “responsible person”)?
- ★ 3. Take that action.
- ★ 4. Is it working (check on what's been done)?

# Selecting a provider..

- ✱ industry contacts
- ✱ trade organisations
- ✱ SOM
- ✱ business links etc..

# Medical qualifications...

- ✦ MB BS or MB ChB
- ✦ DOccMed
- ✦ AFOM...it's back!
- ✦ MFOM
- ✦ FFOM
- ✦ (DIH)

# Nursing qualifications....

- ✦ RGN
- ✦ Degree in Nursing
- ✦ SCPHN (OH)
- ✦ DipOHPrac (FOM)
- ✦ OHNC
- ✦ OHND

# From HSE: Competencies of OH Professionals [www.hse.gov.uk]

Title	Description	Qualifications
Occupational health physician (consultant) or Occupational health nurse (advisor, practitioner)	Medical or nursing professional with additional qualifications - occupational medicine (doctor) or occupational health (nurse)	<p><b>Doctors</b> General Medical Council Should hold an occupational medicine qualification, for example: <b>Diploma</b> in Occupational Medicine (DOccMed), usually a general practitioner, has a basic level of competence across the field of occupational medicine and understands the practical and ethical considerations that apply at work</p> <p><b>Associates</b> of the Faculty of Occupational Medicine hold a higher qualification (AFOM) and are usually in training to become specialists</p> <p><b>Members</b> of the Faculty (MFOM) are specialists who should be able to deal with the full range and complexity of workplace health problems</p> <p><b>Nurses</b> Nursing and Midwifery Council (NMC) Should hold an occupational health qualification, for example certificate, diploma or degree which may be recorded on Part 3 of the NMC register Specialist Community Public Health Nursing (SCPHN) CHECK specific competency requirements:for HAVS, audiometry, spirometry...</p>

Title	Description	Qualifications
Occupational health technician (support worker)	A Non-medical or nursing professional	<p><b>There is no governing body or recognised qualifications for technicians.</b></p> <p>If technicians are involved in health surveillance, they should receive training from a competent training provider for the specific aspects of work they are involved in, for example spirometry and audiometry. Their work must be supervised by an occupational health physician or nurse. They must not interpret test results or provide feedback from health surveillance</p>
Responsible person	Carry out low level/simple screening as part of a HS programme	<p>A responsible person is someone you appoint who is competent to carry out simple screening and report any positive findings to an occupational health professional. You can appoint someone from your own workforce to be a responsible person. They should:</p> <ul style="list-style-type: none"> <li>- be trained to deliver the aspects of work they are involved in, such as simple screening.</li> <li>- the training can be delivered by an occupational health professional or via a formal training course</li> <li>- have a clearly defined role</li> <li>- be someone trusted by the workforce</li> <li>- have good communication and interpersonal skills</li> <li>- create and send records to be stored as part of the health surveillance system not make any judgements if symptoms are disclosed to them</li> </ul>

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# MEDICAL ETHICS

informed consent

appropriateness of tests

confidentiality

(drug/alcohol screening)



## ...and CONFIDENTIALITY

- when developing ANY HS process
- but remember employers' rights
- and exemptions



## Uptake and Quality of Health Surveillance for Occupational Asthma in High Risk Sectors – 2012/13 [HSL]

- ☀ motor vehicle repairs, woodworking, bakeries
- ☀ HS for occ.asthma in 14% [19.1% in orgs reporting exposures likely to cause asthma]
- ☀ HS more likely in medium/large [74%] than micro enterprises [7.1%]
- ☀ RA in 67% of workplaces overall
- ☀ 5 reasons for not carrying out HS: other risk reduction measures (eg.PPE); “HS don’t apply to us”; “is an employee responsibility”; “is too costly”; “we don’t know what HS is”.



**Questions?**