

SUNWAY MEDICAL CENTRE

Occupational health and Diseases in Construction Industry

Dr Anza Elias
Public Health Physician
MBBS (Aust), M Community Medicine (OH) (UKM), MFOM (RCPI)

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Outline

- Overview occupational health issues in construction industry
- Current national occupational health provision
- Best practices in occupational health for construction
- Ways to move forward

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Introduction

- Occupational safety and health issues remain critical to the construction industry
- In Malaysia, big improvements in safety and health initiatives to reduce the rate of injuries among construction workers
- Despite this, construction remains a high-risk industry and accounts for a high percentage injuries and health conditions related to work

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Introduction

- UK (2011) ¹
 - 4.5% of construction workforce affected by illness caused by or made worse by their work
 - 1.8 million working days lost due to work- related illness
 - 0.9 million due to accidents
- US (2015) ²
 - Alcohol and drug use among construction workers among the highest industries

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Construction industry: The Big picture

- **Cancer**
 - construction has the largest burden of occupational cancer amongst the industrial sectors
 - 40% of occupational cancer deaths and cancer registrations
 - annually cause over 5,000 occupational cancer cases and approximately 3,700 deaths
 - asbestos (70%) , silica (17%)

HSE UK

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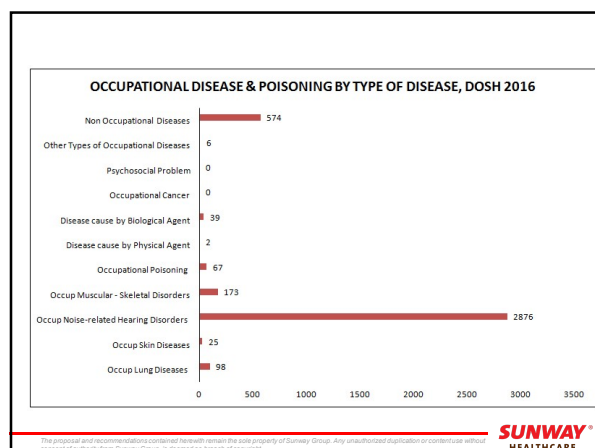
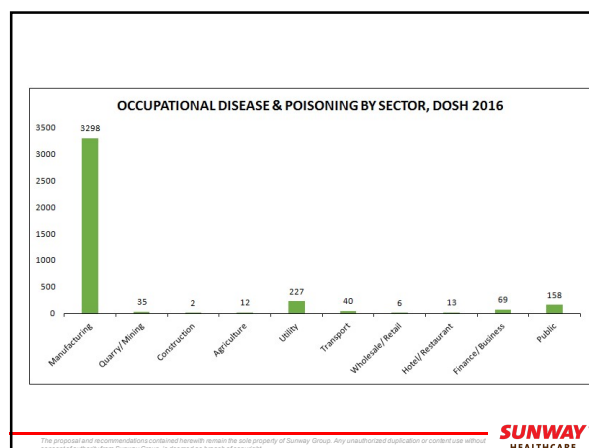
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Construction industry: The Big picture

- **Hazardous substances**
 - dusts, chemicals and potentially harmful mixtures (eg in paints)
 - breathing problems and lung diseases
 - dermatitis from skin exposures to hazardous substances
- **Physical health risks**
 - noise and vibration
- **Ergonomic**
 - back injuries and upper limb disorders
 - manual handling : common cause of over seven day injuries

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Underlying causes

- **The construction site environment**
 - construction work takes place in many and varied environments
 - Different sites can present a range of health risks, including existing ones like asbestos
 - The extent of these risks can also vary between areas of the same site
- **The dynamic nature of the work**
 - construction sites are constantly changing

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Underlying causes

- **Risk appreciation**
 - generally a low awareness of health risks and the controls needed
 - may take many years for serious ill health conditions to develop
- **Employment**
 - workers - either self-employed, work for small companies, or frequently change employers
 - foreign workers
 - often have little or no contact with occupational health professionals

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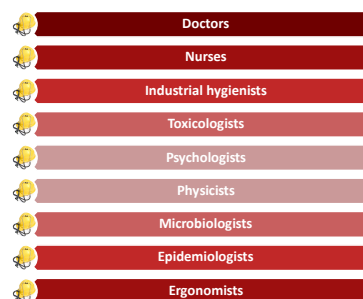
Occupational health

- Multidisciplinary approach to the recognition, diagnosis, treatment, and prevention of illnesses, injuries, and other adverse health conditions resulting from hazardous exposures in the workplace

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Professionals involved in occupational health

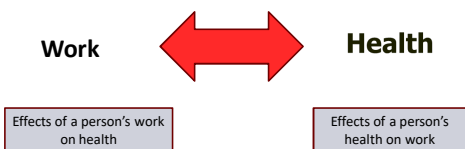


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Occupational Health

- Two-way interaction between Work & Health



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Occupational Health

Health → **Work**

- Disease
- Disability
- Medication

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Occupational Health

Work → **Health**

- Direct cause
- Worsens existing ill-health

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Occupational Health Key Goals

Work ↔ **Health**

- Prevent ill-health due to workplace factors
- Prevent pre-existing medical conditions affecting safe & effective work performance
- Improve general health status

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Occupational Health Key Goals

- Need to ensure the workers are safe to carry out specific job tasks
 - forklift
 - commercial drivers health assessment
 - vision tests for identified roles
 - drug and alcohol testing

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Occupational Health Key Goals

- Prevention strategies
 - reduce musculoskeletal injuries
 - reduce noise induced hearing loss
 - Dermatitis
 - Hand arm vibration syndrome

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Occupational Health Risks

- **Hazardous substances**
 - dusts, chemicals and potentially harmful mixtures (eg in paints)
 - breathing problems and lung diseases
 - dermatitis from skin exposures to hazardous substances
- **Physical health risks**
 - noise and vibration

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Occupational Health Risks

- **Ergonomic**
 - back injuries and upper limb disorders
- **Psychosocial**
 - stress
 - depression
 - fatigue
- **Biological**
 - infection

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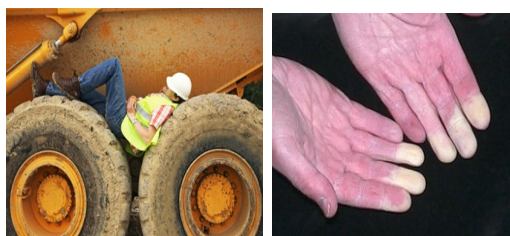
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OCCUPATIONAL HEALTH PROVISION

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Occupational health provision in the construction sector

- Construction employers should have policies which relate not only to safety but also occupational health strategy and provision
- Appropriate procedures should be adopted for the pre-placement confirmation of employee fitness
- Minimum standards for Safety Critical Work
 - DOSH fitness for work: scaffolders, confined space
 - Others: working at height, signaller, tunnelling

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Occupational health provision in the construction sector

- Fit for work assessment after injury/ chronic illnesses
- Return to work program

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DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH
APPLICATION FORM FOR RESTRICTION AS SAFETY CRITICAL WORK

1.1 Name (last/first) : _____
1.2 Date of birth : _____ Place of birth : _____
1.3 Gender : ☐ Male ☐ Female NRIC : _____
1.4 Nationality : _____ SINGAPORE : _____
1.5 Mailing address : _____
1.6 Tel No. (Mobile @ Home) : _____
1.7 Working experience : _____
2.1 Employer name : _____
2.2 Address : _____
2.3 Tel/Fax no. : _____
2.4 RSC No. : _____

Photo : _____

Health Fitness Certificate
for the purposes of permission to work in Confined Space

Name of Person awarded : _____ Date of Birth : _____
Name and address of Employer : _____

I hereby certify that I have examined the above named person on _____
From the information related to health being declared by the person, my clinical examination
and diagnostic tests recorded on medical examination form, I certify that the worker is :
☐ FIT
☐ NOT FIT
for working in confined space.

Doctor's signature : _____
Date : _____ Name of GP/DO : _____
DOSH REG : _____
Name of clinic : _____
Tel and Fax no : _____

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Occupational health provision in the construction sector

- Minimum standards are advised for health monitoring / surveillance
 - Noise Induced Hearing Loss
 - Dermatitis
 - Respiratory disease (sensitisers, silicosis and chronic obstructive pulmonary disease)
 - Hand Arm Vibration Syndrome
 - Musculoskeletal problems
 - Stress
 - Fatigue

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OH services: Requirement

- Noise monitoring
 - Noise Exposure Regulations 1989
- CHRA
- Fitness for work
 - scaffolder and confined space
 - green book and yellow book

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OH services: Health promotion

- Ergonomic- prevention of back ache
- Dermatitis
- Hand-Arm vibration syndrome
- Drug and alcohol free workplace program
- Smoking Cessation program

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BEST PRACTICES IN OCCUPATIONAL HEALTH

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RR584
Research Report

Document prepared by
Construction Industry Safety Committee (CISCA)
Health and Safety Group

HSE
ios

Occupational health standards in the construction industry

Prepared by the Health and Safety Laboratory
for the Health and Safety Executive 2007

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Action Plan

- Needs analysis
 - employees demographics
 - OSH data
 - HR data
 - medical costs
 - sickness absence
 - exit interviews
- Prioritise areas to improve

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Needs Analysis

- Decide what is suitable and relevant for workers and the tasks they perform
 - What must be done to ensure we comply with the law? **Red**
 - How can we ensure the workers are fit, and remain so, to safely carry out the tasks required of them? **Yellow**
 - What other health screening programmes to promote worker involvement in reducing their risks of developing ill health? **Green**

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Conclusion

- Workplace ill health is preventable
- Everyone involved in construction has a responsibility in managing risks to health, and all parties must take ownership of their part of the process
- #GoHomeHealthy@ Construction#

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