DELIVERING HEALTH LIKE SAFETY

IOSH ESSEX BRANCH
5TH OCTOBER 2018
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- Civil Engineer
- Health & Safety practitioner
- Reconnecting H&S, delivering business success
- Past IOSH CG Chair
- CONIAC Industry representative
- IOSH Councillor
Fatalities

Range: 154/9.8 max, 30/1.4 min

Courtesy of HSE (c) Philip Baker
The toll of work related ill health

- For every fatality there are 100 deaths due to occupational disease
- Over 40% of all occupational cancer deaths and registrations are to construction workers
- Estimated 76,000 cases of work-related ill health - COPD, hand-arm vibration, noise induced hearing loss and MSDs
- Estimated 1.7 million working days lost to ill health - 3 times that for injury accidents
- Costs GB estimated £0.4bn in 2012/13
The health challenge

- Health perceived as *difficult* compared with other management topics
  - Latency - causes *not* obvious
  - Interventions not *perceived* as easy
  - Reasons
    - Lack of *information*
    - Lack of *knowledge* - domain of doctors and nurses
  - Positive outcome not *immediately* obvious

*We need to break the chain*
Rate of work related ill health in construction has been broadly flat in recent years.
How was health considered?

- We “medicalised” it- job for Doctors
- Some employed specialists to sort
- We measured how much harm we caused
- Some did health surveillance where legal requirement

- Was Health in our Health and Safety Management system?
- What did POPIMAR and HSG 65 require?
Progress in understanding health risks

Heathrow Terminal 5: health and safety leadership

- Treating safety differently “a core value”
  - a people focused regime
- Setting new standards for health, safety and environmental performance
- **OH strategy** - the effect of health on work – the effect of work on health
- Improved general health of workforce, worker satisfaction, decreased risk of ill health causing major accidents
Client standards
Prevention first - 3Ws model

- Workplace - health risks associated with work
- Worker - traditional clinical intervention
- Wellbeing - health promotion
Occupational Health - 4Ws model

- **WORKER**: ensuring workforce, is and remains fit for work
- **WORKPLACE**: minimising and controlling hazards to minimise exposure
- **WELLBEING**: seeking to improve the general health of workforce
- **WIDER COMMUNITY**: offering services to wider community

Safety Critical medicals
Health surveillance
Sickness absence follow up
Treatment minor injuries and illness
Voluntary pre employment Health checks
Health promotion activities

Health risk assessment as part of RAMS
Workplace monitoring follow up
Health Impact Frequency Rate (HIFR)
Offering services to wider community
First Aid response Clinics
## Design for Health

**Possible design solutions – requires assessment against other health hazards and control hierarchy (ERIC)**

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Occurrence</th>
<th>Possible symptoms and/or consequences</th>
<th>Possible design solutions</th>
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<tbody>
<tr>
<td>Physical</td>
<td></td>
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<tr>
<td>Noise</td>
<td>Prolonged exposure to high noise levels. Pneumatic tools such as clay spaces or rock drills. Machinery.</td>
<td>Long-term irreversible hearing loss.</td>
<td>Specify low noise methods such as silent piling techniques.</td>
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<td>Specify suitable job rotation, isolate equipment from employees.</td>
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<td></td>
<td>Enclose noise source and provide adequate information of residual risks.</td>
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<td>P.C. to identify additional control methods for any residual risk.</td>
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<tr>
<td>Manual Handling</td>
<td>Hand excavation techniques, Erection of lining by hand, Use of heavy, awkward, slippery, sharp tools.</td>
<td>Pain including low back pain and restricted body movements that can lead to permanent disability. Prolapsed disc. Muscle/tendon damage.</td>
<td>Specify materials which meet structural needs but are low in weight – e.g. concrete blocks which weigh less than 20kg. Adapt design so that mechanical assistance can be employed.</td>
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<td>(lifting, carrying, pushing/pulling)</td>
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<td>Consider site layout and ensure that suitable drop off points exist to minimise distances between this location and the work area.</td>
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</table>
Occupational Health Maturity Matrix

- Knowledge
- Leadership
- Worker involvement
- Health strategy
- Internal consultation
- Learning
- Traditional- all health risks
- Strong management
- Continuous improvement
- Collective ownership & responsibility
- Inclusive across supply chain & project lifecycle
- Future proofing
- Integrating health & well being in cost efficient manner
- Integral to business success
Health Frequency Impact Rate

- Developed by Park Health at London 2012
- OH version of Near miss report
- Delivered by Occupational Hygienists
- Developed at Thames Tideway to include positive observations

HFIR = number health impacts x 100,000/ total hours worked
Mates in Mind

Mental health issues account for 37% of all new and long standing cases of work-related ill health.

2015/16 mental health issues account for 42% of all new cases of work-related ill health.

https://youtu.be/MmvZ8I5cfNM
Benefits for construction more widely?

- Putting big project progress into context of UK construction industry

Ease of implementing London 2012 OSH interventions on later projects by organisation size
(O'Brien, Cambridge CEM masters, 2016)
HSE Construction Sector Health Plan

- Embedding the principles of the Construction (Design and Management) Regulations 2015 (CDM)
- Focusing on a reduction in the cases of occupational lung disease, MSDs and work-related stress
- Supporting small businesses to achieve improved risk management and control

Managing Health Like Safety

Applying common principles to risk management

Plan to prevent exposure - assess risks

Implement arrangements to prevent exposure

Check the success of implementation
### OH through an SME Lens

<table>
<thead>
<tr>
<th>Priority</th>
<th>Types of check</th>
<th>Examples</th>
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<tr>
<td><strong>Red</strong></td>
<td>Legal requirements based on risk</td>
<td>- Skin checks for dermatitis from cement exposure</td>
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<td>- Respiratory questionnaire for silica exposure</td>
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<td>- Lung function tests and x-rays for silica exposure</td>
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<td>- Audiometry for noise exposure</td>
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<td></td>
<td>Health surveillance</td>
<td>- Hand-arm vibration (HAV) syndrome questionnaire and tests for HAV exposure</td>
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<td>There are also other health checks required by driving licence law</td>
<td>- Biological monitoring for lead and mercury in blood, and cadmium in urine</td>
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<td>- Medical surveillance for asbestos and lead</td>
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<td><strong>Amber</strong></td>
<td>‘Fitness for task’ health checks for safety-critical tasks</td>
<td>- HGV medicals for Group 2 drivers (including drivers of construction plant)</td>
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<td>- Health checks for night workers</td>
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<td><strong>Green</strong></td>
<td>Health screening</td>
<td>- Health monitoring for musculoskeletal problems</td>
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<td>- Pre-placement health checks</td>
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<td>- Forklift/car drivers’ health assessment</td>
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<td>- Breathing apparatus user medicals</td>
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<td>- Vision tests for identified roles</td>
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<td>- Exit medicals</td>
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<td>- Drug and alcohol testing</td>
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<td>- Height</td>
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<td>- Weight</td>
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<td></td>
<td></td>
<td>- Blood pressure</td>
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<td>- Cholesterol</td>
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Occupational Lung Disease

The Construction Dust Partnership

- Eliminate dust by design or substitution
- Control at Source
- PPE/RPE as well where above inadequate
- Safe handling/storage
- Maintenance
- Limit people, duration, quantity
  - Ventilation
  - Hygiene
  - Management
  - Training

Construction Dust Partnership
www.citb.co.uk/cdp
Summary

• Ill health kills 100 x more construction workers than accidents
• Major Projects making progress
• Health even bigger challenge to SMEs than Safety
• Apply same Principles to manage Health- prevent exposure not surveillance
• Respect for workers and real engagement
MSD’s
Stress
Mates in Mind

https://youtu.be/MmvZ815cfNM

Mental health issues (stress, depression & anxiety) account for 37% of all new and long standing cases of work-related ill health. During 2015/16 mental health issues account for 42% of all new cases of work-related ill health.