

Occupational Health

Improving health at work

Occupational Health

2,000,000 people within the UK currently suffer from an illness caused by, or made worse by the working environment.

(HSE)

Work related musculoskeletal disorders (in the construction sector) almost twice than for all other industries.

(HSE - Health and safety in construction in Great Britain, 2014)

In 2005/2006 the construction industry had the second highest rate of self reported illness attributed to work (3,800 cases per 100,000)

(Health and Safety statistics 2005/06 HSE Books 2006)

Construction workers have a higher overall mortality rate, independent of social class, than any other industrial sector.

(WHO 2005)

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Leading categories of ill health for the construction industry:

- Hand Arm Vibration Syndrome
- Noise Induced Hearing Loss
- Dermatitis
- Respiratory diseases (sensitisers, silicosis and COPD)
- Musculoskeletal problems
- Skin cancers

I presume nobody will disagree, that the geotechnical industry involves all of these?

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Still concerning that very few risk assessments or safety arrangements address these issues

The majority of efforts focus on rightly important topics such as preventing trench collapse, drill rig failures, moving vehicles etc.

Although these are important, health should not be forgotten

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Health and Safety at Work etc. Act 1974

Section 2(1):

*It shall be the duty of every employer to ensure, so far as is reasonably practicable, the **health**, safety and welfare at work of all his employees.*

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Is about controlling peoples exposure to hazards against established control limits

There is more awareness now of exposure to physical hazards, since the Physical Agents Directives (noise and vibration)

These are now generally widely understood by industry, even if they are not uniformly addressed

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Dusts, vapours and skin absorbable substances

There are well defined limits on commonly encountered substances which cannot be exceeded, outlined in EH40, but we rarely see them mentioned in risk assessments

- Crystalline silica (0.1 mg/m³ – 8 hr TWA)
- Carbon monoxide (30 ppm – 8 hr TWA)
- Benzene (1 ppm – 8 hr TWA)

However there are well accepted methods of measuring exposures – following HSE MDHS standards where applicable

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Many substances carry Bmgv figures

Although not legally binding (except in a few cases such as lead), monitoring exposure through direct testing of individuals provides confirmation that the system of controls is working

- Carbon monoxide
- Dichloromethane

As examples

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The main issue is 'risk perception'

Increase		Hinder
Observable	↔	Not observable
Known to be exposed	↔	Unknown to be exposed
Immediate effect	↔	Delayed effect

20% of the population (over 18s) in the UK still smoke

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Taking it forward

Identify where health hazards require further action through risk assessment. Further guidance can be found in the relevant ACoPs

You may require external expertise to carry out some of the tests and monitoring to the correct standards, to determine exposure levels. Failing to do so, may expose you to complacency or over-prescriptive measures and unnecessary cost.

An occupational hygienist backed up by a UKAS accredited laboratory for testing may be required for some of the tests.

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Taking it forward

For areas where risks are reliant on 'people controls', then health surveillance may be required.

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Where is Health surveillance required?

- (a) there is an identifiable disease or adverse health condition related to the work concerned; and*
- (b) valid techniques are available to detect indications of the disease or condition; and*
- (c) there is a reasonable likelihood that the disease or condition may occur under the particular conditions of work; and*
- (d) surveillance is likely to further the protection of the health and safety of the employees to be covered*

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The Management of Health and Safety at Work Regulations 1999

Regulation 6:

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 are identified by the assessment.

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Not only do employers have duties towards their employees but under Section 3 of the HASAWA employers also have a duty to ensure that the safety of third parties is not compromised.

In the current context, therefore, the employer needs take into account the individual employee's fitness both in respect of those activities where an employee's fitness may be likely to affect their own health and safety and those where it may affect others' health and safety.

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“Where the ill health of an individual may compromise their ability to undertake a task defined as safety critical, thereby posing a significant risk to the health and safety of others”

Candidates shall not be suffering from medical conditions, or be taking medical treatment likely to cause:

- Sudden loss of consciousness
- Impairment of awareness or concentration
- Sudden incapacity
- Impairment of balance or co-ordination
- Significant limitation of mobility

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Pre employment screening

Vital for safety critical functions

Good practice for general health surveillance

- Sets a benchmark to monitor performance of control measures
- Can be useful in defending civil claims

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Ongoing assessment

Required under the Management regulations

- Monitors performance of control measures
- Detects early symptoms

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Drivers for implementation

- SSIP deemed to satisfy schemes
- Main contractors demanding compliance

'In 2014/15 and beyond occupational disease and ill health is a key priority. We will be significantly increasing our focus on preventing occupational ill health; including respiratory risks, hand-arm vibration and occupational cancers, across all sectors of the industry.'

HSE Construction Division – Plan of Work 2014/2015

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Considering duties under CDM

It cannot be left to contractors to monitor occupational health as the only control. Although their role will be vital, the HSE consider the designers duty fundamental to preventing occupational ill health

- Eliminating risk on site
- Reducing health hazards by design of processes

'We will also be looking 'beyond the site gate', examining how other duty holders such as designers and clients have, and can, influence health and safety standards on site.'

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You are likely to require

Exposure surveys for noise, HAVS, substances, dust etc. as part of your risk assessments and control programs beyond the provision of PPE

Health surveillance programs to include:

- Safety critical worker checks
- Audiometry
- Spirometry
- Skin checks
- HAVs

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Taking it forward

Identify an occupational health provider or nurse

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Don't forget the laboratories!

In at least 2 cases, laboratories we have subjected to dust exposure monitoring, showed initial crystalline silica levels above the WEL.

These were clarified by IOM tests

In both cases, LEV and a robust cleanliness program were required to bring levels down to acceptable standards and all staff are now subject to health surveillance programs

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Thank you.