Health and Safety/CDM Regulations

Philip Baker
Construction Industry

Range: 154 max, 35 min

Courtesy of HSE (c) Philip Baker
UK Construction Industry 2011 – 2012
2.3 million days lost
More people are off with MSD than with any other issue
# CANCER REGISTRATIONS

## UK Construction Industry 2004

56% of all registrations are in construction industry

<table>
<thead>
<tr>
<th>Cause</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos</td>
<td>2,773</td>
</tr>
<tr>
<td>Solar radiation</td>
<td>841</td>
</tr>
<tr>
<td>Silica</td>
<td>701</td>
</tr>
<tr>
<td>PAH, coal tars and pitches</td>
<td>471</td>
</tr>
<tr>
<td>Painters and decorators</td>
<td>344</td>
</tr>
<tr>
<td>Diesel engine exhaust</td>
<td>290</td>
</tr>
</tbody>
</table>
Other construction worker ill health issues

- COPD
- Dermatitis
- HAVS
- Musculoskeletal disorders.
6,100 Industrial Injuries Disablement Benefit cases

- 2/3 (4,080) lung related disease (2,215 mesothelioma)
- 130 deafness
- 70 asthma
- 30 dermatitis
- osteoarthritis of knee (carpet/floor fitters) added

Half of workers will have left the industry before they reach 60 i.e. instead of retiring they invalid themselves out.

New cases in 2014
INDUSTRY CHANGE

- Huge change in harm from early 1990s
  - \( \frac{2}{3} \) to \( \frac{3}{4} \) of major accidents happening on sites that have fewer than 10 people working on them
- See HSE Plan of Work
- Focus on simplification.
COST OF ILL HEALTH

2/3 of the £14.3bn cost of work related injury and ill health in Great Britain is due to work related ill health - £9.4bn

UCATT says that the absence of sick pay leads to presenteeism which puts workers’ colleagues health at risk.
Small refurbishment sites – 46% below standard
- 692 enforcement notices
- 983 notifications of contravention

“Inspectors had to deal with … workers being exposed to silica dust and asbestos …”

“breaches were also followed up with clients and designers, reinforcing their duties under CDM2015 and helping them understand their responsibilities.”
“The mis-conception that health issues cannot be controlled is simply not true and ruining people’s lives. Harmful dust, whether silica or wood, is a serious issue and can be managed effectively with the right design, equipment and training.”

“Each week 100 construction workers die from occupational diseases.”
1 in 5 work-related deaths are caused by mesothelioma.

20 Tradespeople die every week from mesothelioma of which:
- 8 Joiners
- 6 Electricians
- 4 Plumbers

Source: HSE http://www.hse.gov.uk/asbestos/basics.htm
STRIPPING DEBRIS
Man made mineral fibres – glass or stone
- Break into shorter lengths not thinner fibres

Pre 1996 – “old mineral wool” category 2A carcinogen

Post 1996 and pre 2000 – ‘harmless’ category 2B (half life of several hundred days)

Post June 2000 – not bio persistent (half life < 40 days)
Medical problems from dust include:

- Lung cancer
- Chronic Obstructive Pulmonary Disease (COPD)
- Silicosis
  - Respirable crystalline silica (RCS)
  - A worker is at risk if the dust they breathe over a full shift contains more RCS than this.
Engineering controls – using a vacuum

Figure 12: Brushing up activity
Respiratory protective equipment – last form of control

http://www.bsif.co.uk/campaigns-projects/clean-air-take-care/

http://fit2fit.org/onsite-insight
SOLAR RADIATION

- 5 workers a day get skin cancer in UK
- 90% of all skin cancer deaths could be prevented if people controlled their exposure to UV
- Around 40% of all malignant melanoma cases involve construction workers
People who have been diagnosed with non-malignant melanoma are 9 times more likely to get it again.
American truck driver
Window side is ‘20 years older’ than the other side
From New England Journal of Medicine
CAUSES OF INJURY

- Trips 19%
- Manual Handling 36%
- Falls from height 7%
- Others 13%
- Machinery 5%
- Struck by objects/vehicles 20%
PLASTERBOARD LETTER BOX

28/09/2011
Why less than 20kg

- Height
- Posture
- Twisting
- Alternatives
- Mechanical handling.
This is inevitable when building block work. According to HSE guidelines, these blocks should weigh less than 10 kg!!
BACK BENT > 20 DEGREES
TWISTING THE TORSO
BLOCKS

- Midi blocks
- Hollow blocks
LAYING

- Twin skin laid flat.
HAND ARM VIBRATION SYNDROME

Hand arm vibration syndrome (HAVS)
- Vibration white finger
- Repetitive strain injury (RSI)
- Carpel tunnel syndrome
- ‘Tennis elbow’.
BREAKING PILECAPS
PILE REBAR CAGES
CAST IN CHANNELS
PAINTERS

- Cancers
  - Lung
  - Bladder
  - Stomach

- 245 painters died in 2005
- Latency.
DERMATITIS

- Hands (and other parts of your body) can end up looking like this
CEMENT ALKALI BURN
AVOID FLUX FUME - CRIMP
Lead in painted surfaces
Guide on repainting and removal for DIY and professional painters and decorators

1 This document replaces the earlier British Coatings Federation publications on the subject of lead in decorative coatings, which includes the booklet 'Old Painted Surfaces: A guide to repainting and removal for DIY and professional painters and decorators' published in 1988.
WELFARE FACILITIES

- Good enough to take your family into
- Designers need to think about space provision/location
- Designers need to think about electricity, water and drainage connections.
IOSH No Time to Lose campaign – www.notimetolose.org.uk
ANY QUESTIONS?

It is better to know some of the questions than all of the answers
(James Thurber)

The important thing is not to stop questioning
(Albert Einstein)

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