Health and Safety
Executive

HSE Update
CIOB Health & Safety Event

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Introduction

- Health and safety statistics 2014/15
- CDM 2015
- HAVS
- Other work/What an Inspector sees!

- Questions

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I BELIEVE THAT EVERY ONE OF YOU WILL DO EVERYTHING YOU CAN TO ENSURE THAT NO ONE IS KILLED, INJURED OR SUFFERS ILL HEALTH AS A RESULT OF SOMETHING THAT YOU HAVE ASKED THEM TO DO

Health and Safety Statistics 2014/15

HOT OFF THE PRESS – PUBLISHED 27/10/15.

http://www.hse.gov.uk/statistics/index.htm

Headline Figures

142 workers killed at work, a rate of 0.46 deaths per 100,000 workers.

76,000 injuries to employees reported under RIDDOR

1.2 million people suffering from illness they believed caused or made worse by work.

27.3 million days lost due to work related ill health or injury.

Health and Safety Statistics 2014/15

20 workplace fatalities in Scotland

728 health and safety prosecutions in UK, 94% conviction rate with fines of £19 million.

72 cases taken by COPFS in Scotland with 70 convictions

9446 enforcement notices served by HSE across UK.

6330 Improvement Notices, 3110 Prohibition Notices & 6 deferred prohibition notices.

Construction Health and Safety Statistics 2014/15

35 fatalities across UK – 1.62 per 100,000 workers, over 3 times average rate across all industries.

Nearly 50% fall from height.

5414 reported injuries across UK – highest in order – fall from height, slip trip fall, lifting/handling then struck by object.

69,000 self reported work related ill health – MSD 64%, Stress/Anxiety/Depression 20%.

3000 workers suffering breathing/lung problems

3700 occupational cancer deaths – 2600 asbestos, 600 silica.

1229 Improvement Notices, 1900 Prohibition Notices.

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£14.3 billion
estimated cost of injuries and ill health from current working conditions (2013/14)

What is CDM 2015 about?

CDM 2015 applies to all construction work.

The Regulations set out the requirements for managing health and safety on construction PROJECTS

A project is more than a construction site

What stays ‘broadly’ the same

- Application to **all** projects
- Role of the Principal Contractor
- Part 4 technical standards for construction sites
- Schedule 2 – welfare requirements
- Co-ordinators for H&S in the pre- and construction phases

Outline of main changes

- Simplified structure
- Client – greater responsibility
- Domestic client exemption – removed
- CDM co-ordinator role - removed
- Principal Designer role (PD) – introduced
- ‘Competence’ – removed in its current form
- Construction phase plan for all projects
- Threshold for appointments – more than 1 contractor
- Notification is a stand alone requirement – not trigger point for additional duties

Guidance Package

- ‘L’ Series guidance
- Possible ACOP in due course
- 6 CONIAC industry guides – endorsed by HSE
- CDM 2015 HSE website
- ‘Have work done safely’ leaflet for small commercial clients
- Template construction phase plan
- Smartphone App – Construction Phase Plan for small projects

HSE's approach on sites

- No change to HSE's approach to inspection, investigation and enforcement
- NOT Cost Recovery driven
- Risk based, sensible and proportionate
- Looking 'beyond the site gate' where failure to manage risk
- Construction phase plan

Self Employment

The Health and Safety at Work etc. Act 1974 (General Dutes of Self-Employed Persons) (Prescribed Undertakings) Regulations 2015

From 1 October 2015, if you are self-employed and your work activity poses no potential risk to the health and safety of other workers or members of the public, then health and safety law will not apply to you.

H & S Law still applies to self-employed working in high risk industries

Construction, Agriculture, Gas, Railway, Asbestos &

Genetically Modified Organisms.

Hand Arm Vibration Update

The Control of Vibration at Work Regulations 2005

- Implementation of European Directives
  - Physical Agents
- Applies to hand-arm vibration and noise :
  - different approaches required
  - separate guidance from HSE
  - but sources/process causing harm are often the same

Who is exposed to HAV?

- About 5 million exposed to HAV at work
- Greatest numbers in construction industry and related trades
- Highest levels of exposure in heavy fabrication, foundry fettlers, stone masons

Who is exposed to HAV?

- Construction has x4.5 all industry average prevalence of hand arm vibration syndrome (HAVS)
- Irreversible!
  - A disabling condition
  - Affects hands so can’t do simple tasks
  - Affects ability to do the job
  - Cold is trigger for symptoms

Hand-arm vibration syndrome (HAVS)

- Serious, disabling and costly …
- … but preventable

Requirements of the Regulations

- **Exposure action and limit values**
- Hand-arm vibration:
  - Exposure action value: 2.5 m/s^2 *A*(8)
  - Exposure limit value: 5 m/s^2 *A*(8)

Rules of thumb for HAV

- Percussive tools
  - **EAV exceeded within ¼ hour**
  - ELV exceeded within 1 hour
    - Some tools exceed ELV within 2 or 3 minutes
- Rotary tools
  - **EAV exceeded within 1 hour**
  - ELV exceeded within 4 hours
    - Some tools exceed ELV within 1 hour
- Note: These are ‘trigger times’

Requirements of the Regulations

- **Eliminate at source or reduce ALARP**
- Health surveillance
- Required if risk assessment shows need – Regulations state HS at regular exposure to 2.5 m/s^2
- Don’t exceed exposure limit values
- Information, instruction and training
- Inform employees about risk
- Train employees to minimise exposure/risk

Continuous Exposure Monitoring

- NOT a requirement of the regulations.
- Useful to confirm ‘trigger time’ estimates.
- Must NOT be used to transfer responsibilities to the tool user.
- http://www.hse.gov.uk/vibration/hav/advicetoemployers/vibration-exposure-monitoring-qa.pdf

Case study: changing the process

Mechanisation removes the risk

- Machine-mounted pick replaces hand-operated breakers

Case study: changing the process
Demolition without noise or vibration

- Use hydraulic crushers instead of demolition hammers

Case study: changing the process

Pile cropping

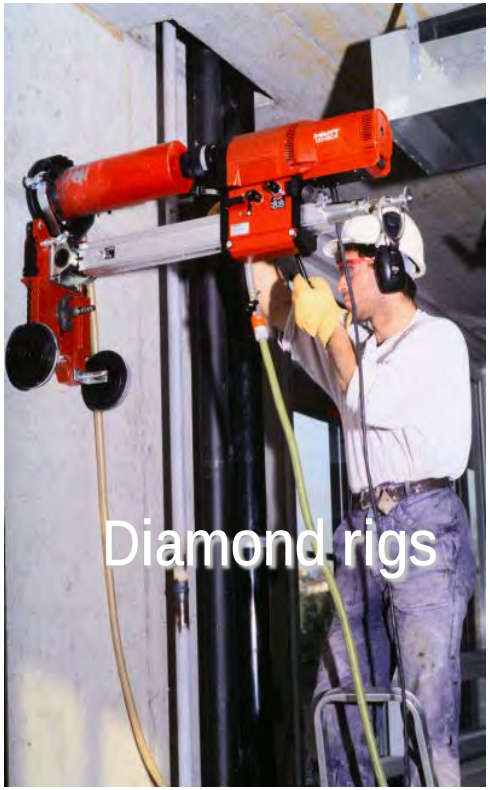
- In construction the biggest reduction in exposure can often be achieved at the design stage

Case study: process change

Scabbling

- Alternative methods of working:
  - Eliminate process entirely
  - Design out process

Design out or work different.



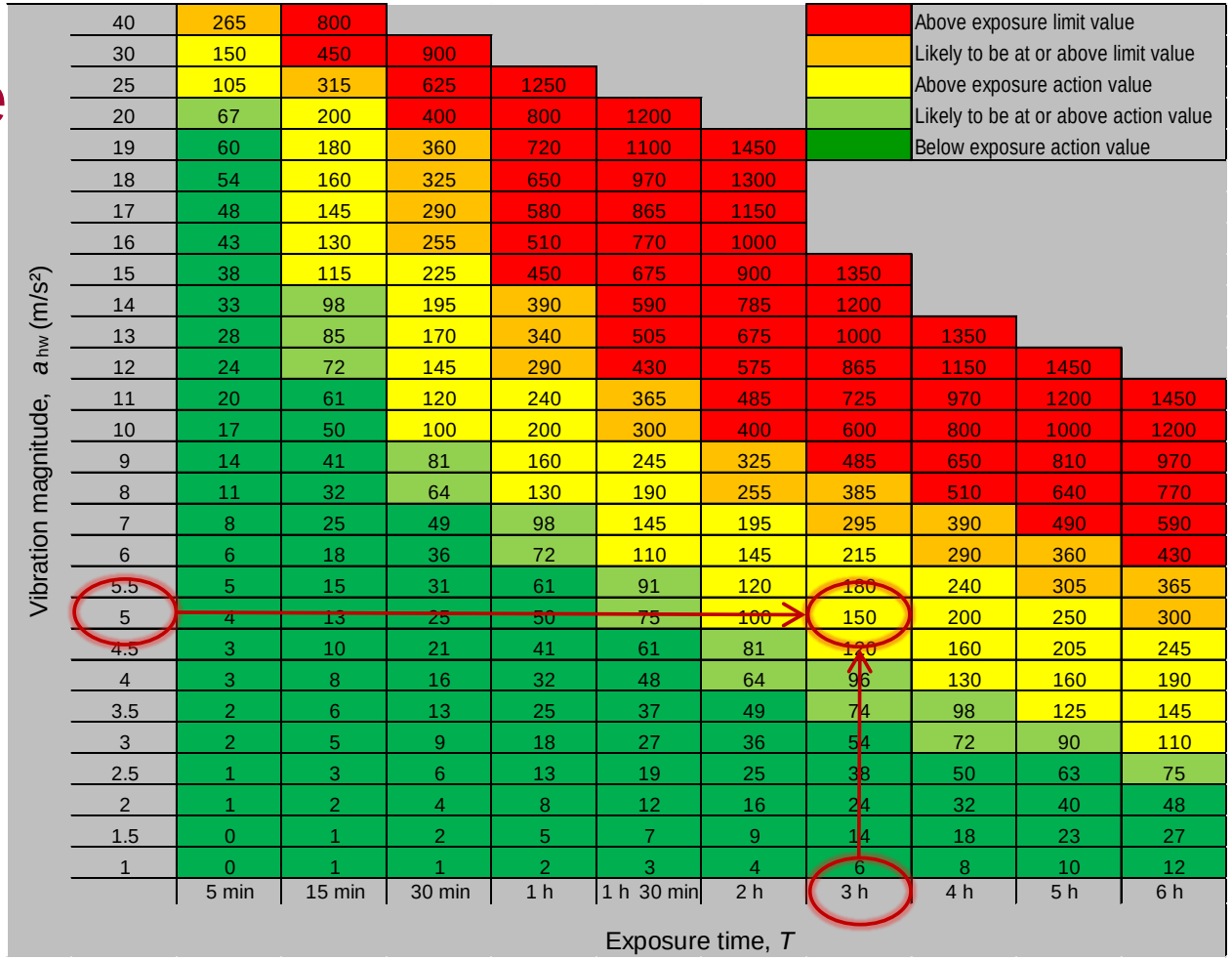
Example of Alternative Methods

Selecting tools for job

- Choose the right tool for the job
  - safety, economy, efficiency
- Declared vibration emission
  - which standard or test condition?
  - realistic vibration level? Ask about likely vibration for your intended use
- Effect of consumables, materials, etc.
- Operator training requirements?
- Maintenance requirements?

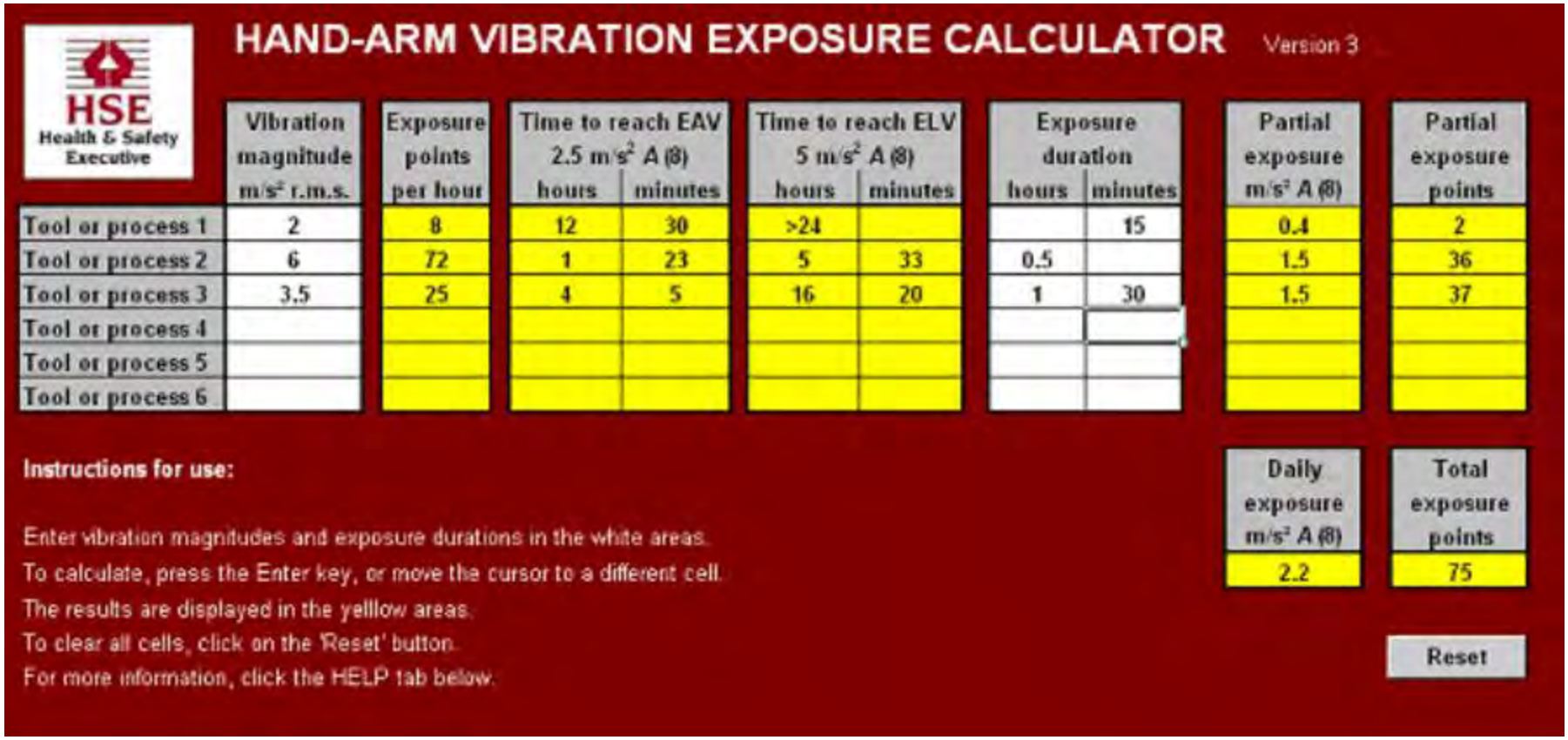
Tools for estimating exposure

- To encourage rapid exposure determination, and risk assessment



	5 min	15 min	30 min	1 h	1 h 30 min	2 h	3 h	4 h	5 h	6 h
40	265	800								
30	150	450	900							
25	105	315	625	1250						
20	67	200	400	800	1200					
19	60	180	360	720	1100	1450				
18	54	160	325	650	970	1300				
17	48	145	290	580	865	1150				
16	43	130	255	510	770	1000				
15	38	115	225	450	675	900	1350			
14	33	98	195	390	590	785	1200			
13	28	85	170	340	505	675	1000	1350		
12	24	72	145	290	430	575	865	1150	1450	
11	20	61	120	240	365	485	725	970	1200	1450
10	17	50	100	200	300	400	600	800	1000	1200
9	14	41	81	160	245	325	485	650	810	970
8	11	32	64	130	190	255	385	510	640	770
7	8	25	49	98	145	195	295	390	490	590
6	6	18	36	72	110	145	215	290	360	430
5.5	5	15	31	61	91	120	180	240	305	365
5	4	13	25	50	75	100	150	200	250	300
4.5	3	10	21	41	61	81	120	160	205	245
4	3	8	16	32	48	64	96	130	160	190
3.5	2	6	13	25	37	49	74	98	125	145
3	2	5	9	18	27	36	54	72	90	110
2.5	1	3	6	13	19	25	38	50	63	75
2	1	2	4	8	12	16	24	32	40	48
1.5	0	1	2	5	7	9	14	18	23	27
1	0	1	1	2	3	4	6	8	10	12

HAV Calculator - www.hse.gov.uk/vibration



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HAND-ARM VIBRATION EXPOSURE CALCULATOR

Version 3

	Vibration magnitude m/s² r.m.s.	Exposure points per hour	Time to reach EAV 2.5 m/s² A (8) hours	Time to reach EAV 2.5 m/s² A (8) minutes	Time to reach ELV 5 m/s² A (8) hours	Time to reach ELV 5 m/s² A (8) minutes	Exposure duration hours	Exposure duration minutes	Partial exposure m/s² A (8)	Partial exposure points
Tool or process 1	2	8	12	30	>24			15	0.4	2
Tool or process 2	6	72	1	23	5	33	0.5		1.5	36
Tool or process 3	3.5	25	4	5	16	20	1	30	1.5	37
Tool or process 4										
Tool or process 5										
Tool or process 6										

Instructions for use:

Enter vibration magnitudes and exposure durations in the white areas.
To calculate, press the Enter key, or move the cursor to a different cell.
The results are displayed in the yelllow areas.
To clear all cells, click on the 'Reset' button.
For more information, click the HELP tab below.

Daily exposure m/s² A (8)	Total exposure points
2.2	75

Reset

Summary : What do you need to do to control HAV at work?

- **Assess** risks to develop an action plan
- **Reduce** risks for all employees
- **Investigate** and **implement** good practice and industry standards for control
- **Prioritise** higher risk cases with a programme of control measures
- **Health surveillance** to detect symptoms of HAVS and feedback to control measures

Refurbishment Initiative – Health Risk

What an Inspector sees!

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Any Easy Questions?