
Construction OH Update

“Time to treat health like safety”

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Construction Health Risk Management
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OH in Construction – renewed focus



- Workplan for 2014/15 will major on OH management
- Inspections will cover all aspects of OH risk
 - Silica / respiratory risk
 - RPE
 - MSDs
 - Welfare / Dermatitis

Think Health !



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- *“Health will be at the front of our inspectors’ minds and we will be challenging organisations to think ‘health first’.”*
 - *“..... We will be going back to basics on COSHH [Control of Substances Hazardous to Health Regulations] and the hierarchy of control.. We will take a firmer line in inspection and enforcement.. The controls are out there we expect them to be used now, not just talked about.”*
 - **Heather Bryant, HSE Chief Inspector of Construction**

Occupational Health - Nothing New?

**Health and Safety at Work etc.
Act 1974**

Nothing New?



Health and **Safety at Work etc.
Act 1974**

What about a 'Health Culture'?

- Safety Focused
- Acute vs. Chronic (safety vs. health)
 - Susceptibility / trigger Points
 - Often a One-way gate
- Perception of Risk
 - Huge challenge - education vital
 - Not just 'tomorrows problem'
- Access to Services for peripatetic workforce



Risk Perception Challenges

- Safety hazards are 'visible'
 - Work at Height
 - Heavy Plant
- Health hazards are not visible on site (or the body)
 - ACMs / Respirable dusts
 - Vibration
 - Carcinogens
 - Stress
- Education - No escape – don't just ignore it



Risk Perception

- Education
- The health issues will come home with you



Construction health headlines



- 39 fatal accidents 12/13 (113 in 00/01)
- 98% work place deaths caused by occupational disease
- 2500 deaths each year from asbestos
- 10 people every week die from silica
- Construction has <10% working population but >50% cancer deaths

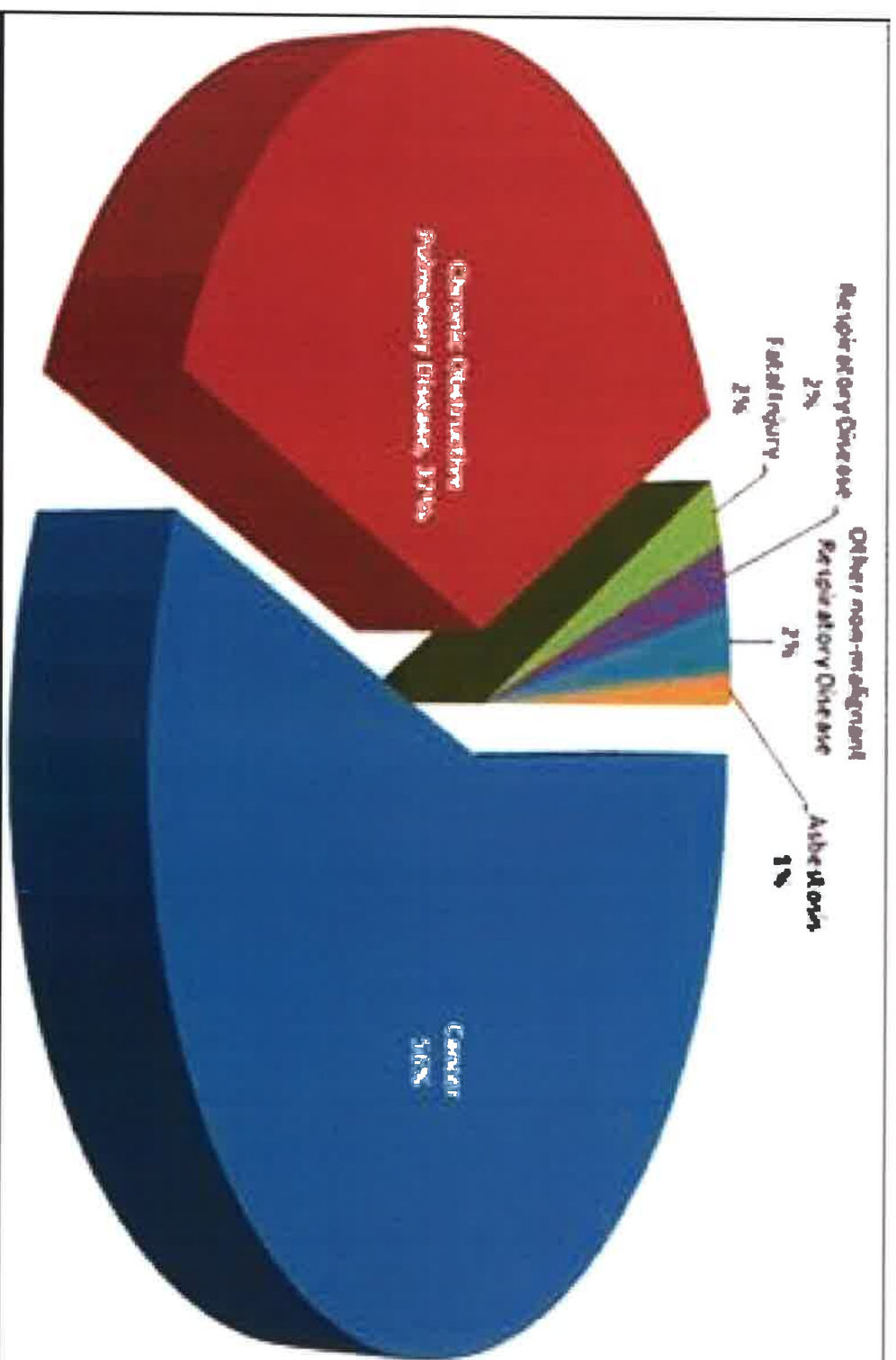
Construction health headlines



- 0.6 million days lost safety related (2009/2010/2011)
- 2.6 million days lost health related (2009/2010)
- 1.7 million days lost health related (2010/2011)
- Noise induced hearing loss for construction 3x industry average
- Hand arm vibration for construction 4.5x industry average
- 50 000 **reported** manual handling injuries
- Average time off per incident is 19 days



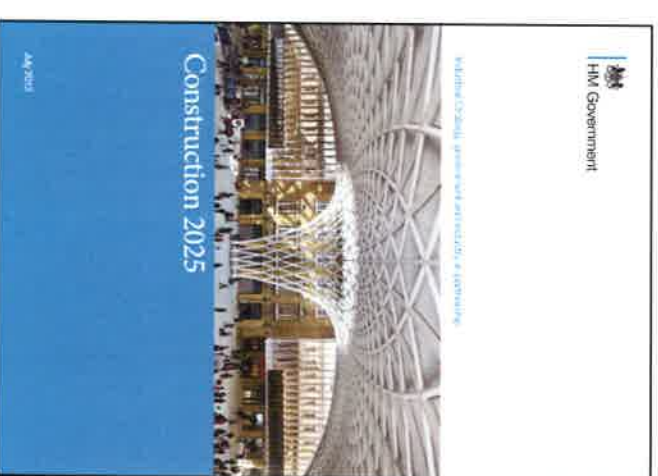
Out of sight – out of mind ?



Improving Image



- Construction 2025
 - Image
 - Skills retention
- ‘Improve the image of the construction industry’
 - Inspiring young people
 - Coordinated approach to H&S
- Corporate Social Responsibility



Health V Wellbeing



- Intrinsically linked – but blurred interface
- Strong government backed drive
 - Dame Carol Black
 - 100 Billion p/a estimated costs
- Is it HSE's role to support the Wellbeing agenda?
- Commercial advantage for industry
 - Reduced 'lost' time
 - Employee retention

What does success look like ?

- London 2012 ?
 - Took the best of previous services
 - Proves a coordinated approach works
 - The service uptake figures impress
 - Financially successful – IES Reports
- Builds trust ?
- Extend to other initiatives



Olympics – surprising numbers!



- 67% of site workers used the service
- 25% used the walk in treatment centre
- 113,000 clinical interventions
- 14,000 Safety Critical Medicals
 - Main problem? MSD's
- £7M cost savings on lost time for the project
- £81M Projected future savings for workforce

Eating the elephant

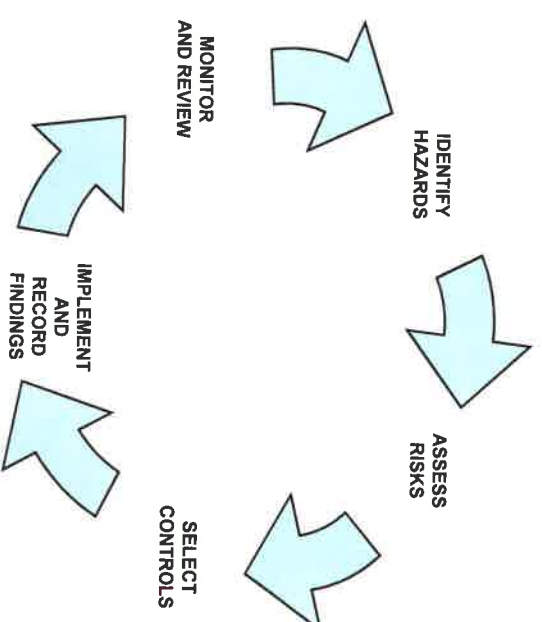


- Clear that industry want to tackle health
- No magic wand
- Coordinated collaborative approach
 - Individual companies
 - Trade bodies & Unions
 - Regulator
 - Health Professionals
- Must manage health like safety



Manage health like safety

- Risk Management Cycle – a familiar friend
 - Identify hazards
 - Assess risks
 - Select Controls
 - Implement SSW & Record Findings
 - Monitor and review
- We often see a skewed approach
 - Jump straight to the end
 - Too much focus on monitoring rather than risk & control



“Back to basics on COSHH”



Reg 7(1) COSHH:

- Prevent exposure:
 - Overriding duty -
- Adequately control where not reasonably practicable
 - Higher the risk, the higher the standard of control
 - Hierarchy of control
- Manage the Risk – not the symptom



'Target Zero'



- Don't see the exposure limits as a target
 - Alarp
 - A line in the sand
- EU based limits
 - Compromise
 - Individual susceptibility
- Same for physical agents

Current successes

- Construction Dust – principally RCS
 - Visible industry change – including SME's
 - 'CLEAN construction' / 'Ban the Broom' etc
- Whole supply chain involvement

Silica initiative



Early foundations:

- Kerbs supply chain initiative
- Guidance issued on cutting
- Inspection priority
- Increased enforcement profile
 - 10 fold increase
- Promotional work via WWT
- Good stakeholder involvement



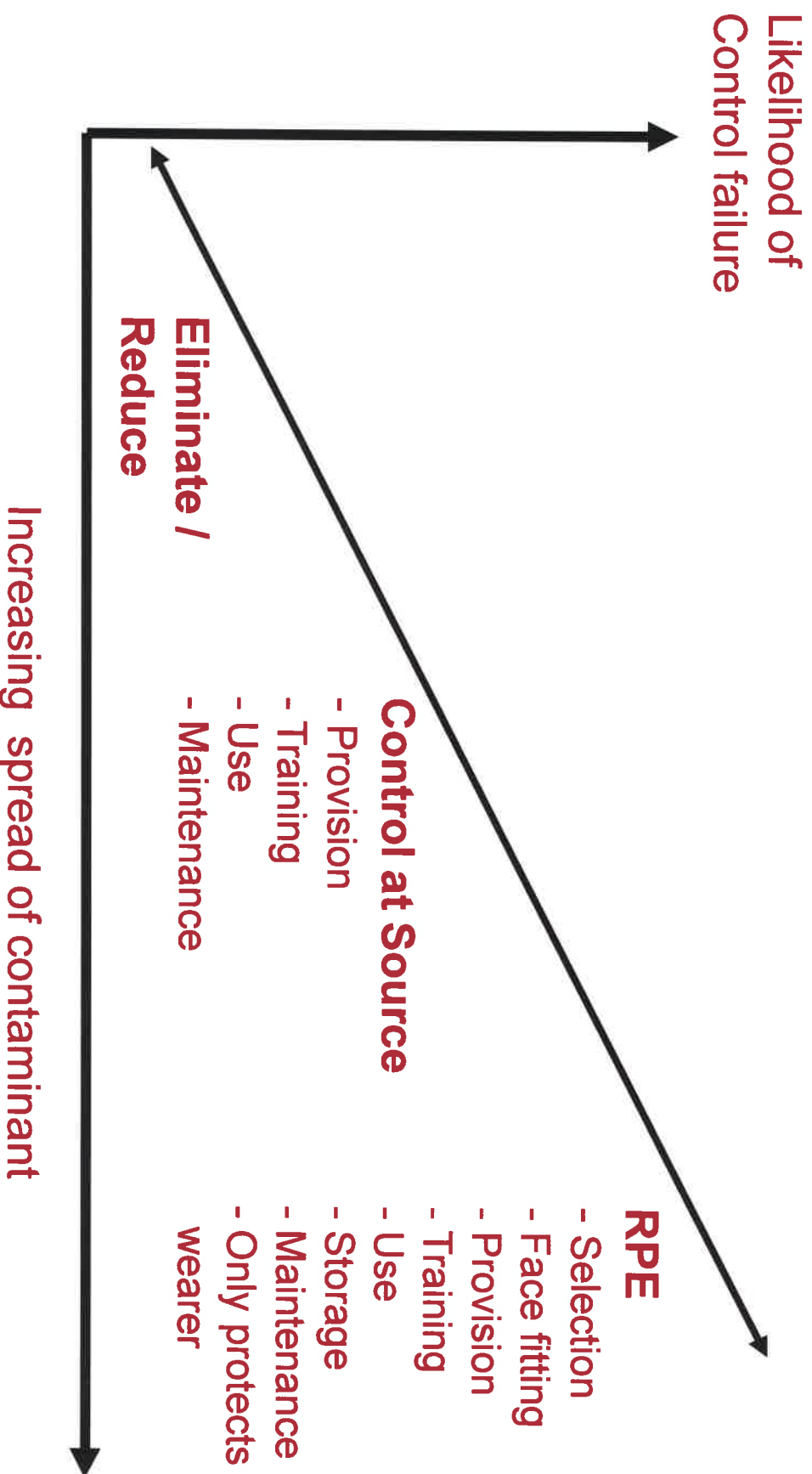
Overview



- **Construction Dust Partnership**
- **Agreed Objectives:**
 - Raise Awareness
 - Promote Controls
- **Momentum**

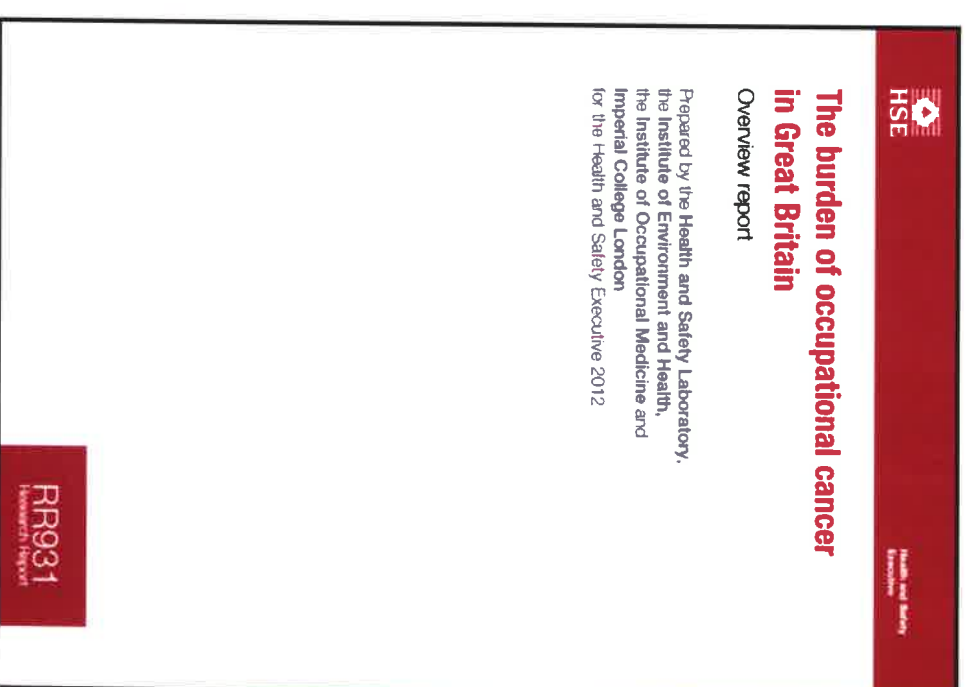


Control: Effective Methods



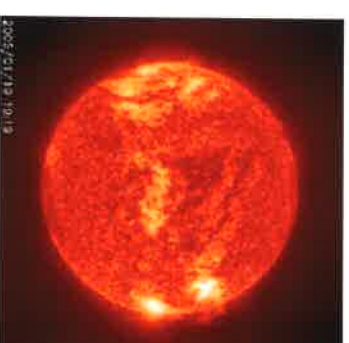
Emerging issues

- Burden of Occupational Cancer report
 - Dr Lesley Rushton – Imperial College
 - Bespoke UK data
 - Attributable fraction
 - 56% of male registrations are from Construction
 - High Risk Groups highlighted



Burden of Cancer

- Asbestos & silica we know about
 - Typical **Registrations** per Yr
 - ACM – 2750
 - RCS - 700
- Interesting / worrying data clusters
 - Solar radiation - 841
 - Paint / coatings - 334
 - Diesel exhaust - 290
 - Bituminous products (PAHs) - 471



Manual Handling & MSDs



- Stubbornly shocking statistics
- Construction is our worst industry
- >50 000 MSD's in construction p/a
- 2million days lost in 2010
- Av lost time per reported injury – 19 days

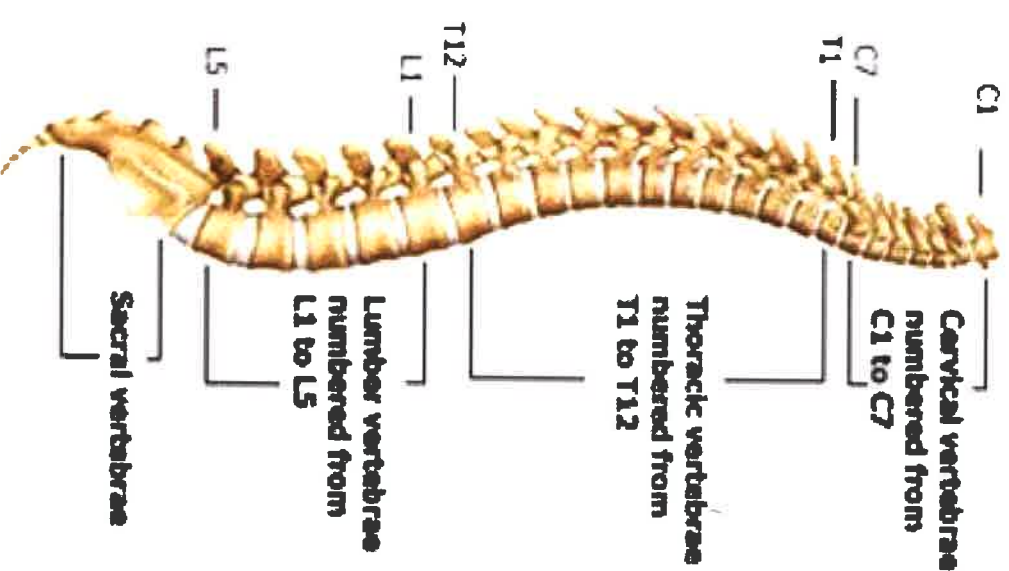
Why so bad

- Almost all construction tasks involve MH
- *Accepted* Occupational Hazard
- Dynamic and often difficult / harsh work environment
 - Cold and slippery – far from ideal
 - Planning materials transit is challenging
- Risk perception and image



Physiology

- Torn muscles will heal – slowly
 - Ligaments less so
- Joints do not
 - Prolapsed Intravertebral disks – commonest injury



Psycho-social risk factors

Increasing evidence that factors such as:

- Low job satisfaction
- Low social support
- Lifestyle issues
- Stress

**Interact with and reinforce physical factors,
impeding recovery**

Common observations on site...

- What have we got on site that we can use ?
 - Don't consider tool hire services for MH
- 'Were only doing a few'
 - Cumulative effect over time
- 'Lifting aids will just slow us down'
 - Kerbs have proven otherwise
- 'MH solutions will cost us a fortune'
 - Many manual lift solutions are not costly
 - Claims already are a high cost
 - and injuries are wrecking lives....

Industry management approach

- Smaller Projects:
 - MH Solutions often never considered
 - Team lifts
 - ‘just go and get some more lads’
 - Poor posture
 - Just causes injuries
 - Total lack of site layout planning
 - Problem is rarely risk assessed
 - and then is it only for the PCs paperwork?



HSE's ability to influence

- Small sites initiative
- Educate –
 - Dynamic and problematic nature of sites
 - Chronic nature of the injuries
 - Emphasise effects of repetitive tasks
- Enforce where necessary
 - To assess the risks for high hazard tasks
 - To plan future sites with MH risk hierarchy in mind
- Need to challenge *acceptance* by the front line workers



Always try to lay between shoulder and waist height.

Use staging or adapt work platforms to help.

If laying in red zones, reduce laying rate or consider a half size block.

Arrange block stacks and spot boards at a comfortable position



Avoid double handling by carrying from block stacks to the work area.

Use handling equipment to take the blocks to where they are to be laid.

Powered barrows with attachments can take blocks across rough ground



Always select the lightest block you can that has the required strength.

If using large foundation (trench) blocks, consider units with handholds to help grip.





Panels are difficult to grip. Carrying them causes poor posture and risks injury. Using panel grips enables good grip, better posture and is faster



Stooping and twisting whilst moving panels cause huge strain on the body over time. A panel handling trolley allows better vision and one person can move several panels at once.



Fixing to ceilings is a common cause of strain for workers holding panels. Using a panel lifter allows one person to quickly fix panels with far better posture.



'Letterbox' Solution



Promote a Culture

- Handling aids abound
- Need to be in every toolbox

Welfare / Dermatitis



Cement dermatitis

Cement
Solvents
Adhesives
Oil
Fluxes



Education



Cement burns



Dermatitis

- Use less corrosive, irritant, non-sensitising materials
- Use contained handling systems
- Provide appropriate gloves and hand care
- Ensure early installation of welfare facilities (including showers where necessary)

Dermatitis - controls

Good welfare is crucial:

- **Hot and cold running water**
- **Sinks big enough to wash forearms to elbow**
- **Suitable soap and means of drying**



Hot Running Water?



Don't Forget the Toilets



Current noise control strategy!





CONTROLS –

Actions to reduce exposures



Noise controls



- Modify existing noisy equipment
 - ‘Buy quiet’ policy
- MAINTENANCE
- Use barrier protection
- Noise exclusion zones
- Work schedules

Brokk remotely controlled concrete breaker



Mounted equipment and vehicles



Tools



- LWIT

- HERMMIN

Tools - Guidance

- New website
- HSG 53 revision
- CIS sheets –
 - ‘On tool extraction’
 - Handling Concrete Products
- Busy Builder Sheets
- COSHH Essentials
- Internal OG’s

Respiratory protective equipment at work

A practical guide



Controlling construction dust with on-tool extraction

HSE information sheet

Health and Safety

Introduction

The HSE has a range of guidance for controlling dust in the workplace. This includes guidance on the use of on-tool extraction systems to control dust at the source.

The hierarchy of control

The hierarchy of control is a systematic approach to risk management. It involves identifying hazards, assessing risks, and implementing control measures to eliminate or reduce risks.

Using the hierarchy to control dust

The hierarchy of control can be used to control dust in the workplace. This involves identifying dust hazards, assessing risks, and implementing control measures to eliminate or reduce risks.



Control based

Control based measures are those that are designed to control the dust at the source. This includes the use of on-tool extraction systems to control dust at the point of generation.

In summary



- Occupational Health is firmly on the agenda
- Will be a primary focus of this years CD Plan
 - Time to treat health like safety
 - Manage the **Risk** not the symptom
 - Two campaigns likely this year
- Striving to drive down the appalling statistics
- Questions?