

Tackling Occupational Diseases: working together to make a difference

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**Workshop on occupational burden of disease
Brussels
10th October 2014**

Context

- **1.1 million** working people suffering a work related illness (estimated)
- **13,000 deaths & 450,000 new cases** each year (estimated)
- Cost to society – estimated to be around ‘double figure’ billions
- Wide spread of diseases and industries
- HSE priorities: cancer and respiratory disease



Cancers and respiratory diseases



~**9** bus loads
dying **each month**
from **occupational cancer**

~**108** bus loads
dying **each year**
from **occupational cancer**

another ~**50** bus loads
dying **each year**
from **respiratory diseases**



Occupational cancer

- 2005 HSE commissioned Cancer Burden Study (<http://www.nature.com/bjc/index.html>)
- Prioritisation exercise:
 - knowledge of industry
 - strength of evidence of causal link
 - estimates of future cancer burden
 - number of workers potentially exposed
 - likelihood of successful intervention
- **HSE Board agreed priorities: Occupational Cancer and Respiratory Disease**

Cancers and Respiratory Disease

Cancers

- Asbestos
- Shift work
- Welders
- Painters
- RCS
- DEEEs
- Solar radiation
- PAHs coal tars & pitches
- Tetrachloroethylene
- Radon

Respiratory disease

- Industries / workplace activities that have high incidence and/or large number of workers potentially exposed:
 - Construction workers
 - Foundry workers
 - Welding
 - Quarry & stone workers
 - Agricultural workers
 - Vehicle paint sprayers
 - Bakeries

Intervention mix

- Changing behaviours
- Working with others
- Stakeholder event – March 2013
- Invigorating activities
- Thinking outside traditional boundaries



HSE's ambition

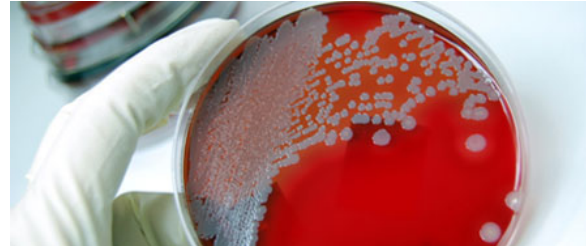
Reduce the incidence of occupational disease through:

- ✓ Prevention and control
- ✓ Sustained HSE activity
- ✓ Focus on improving compliance with the law by supporting evidence based targeted interventions in high risk areas

Work Environments - Hazards



- Toxic Compounds
- Carcinogens
- Sensitisers



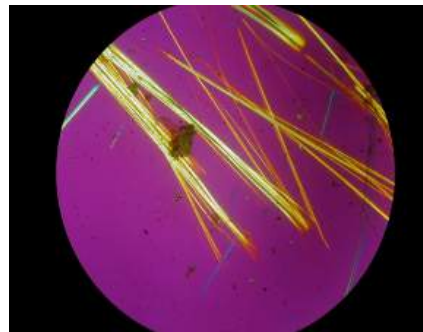
Infections



Organics



Welding
Fume



Asbestos



Silica dust



Case study: Isocyanates



- Isocyanates are the biggest cause of occupational asthma in the UK
- Control of exposure relies on RPE
- Is it working and/or being used properly?

Biological Monitoring for Isocyanates



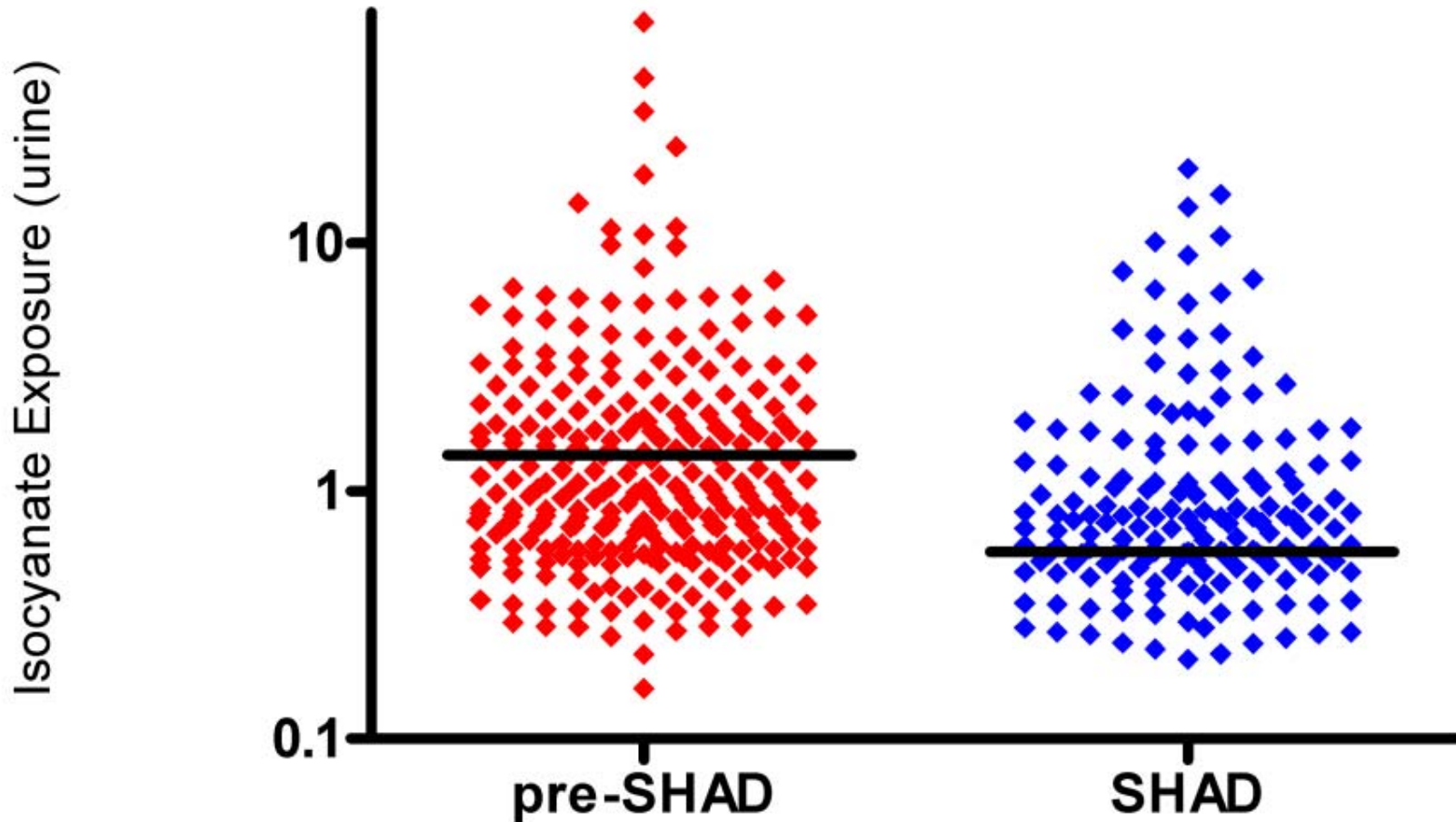
Behaviour:

- 96% sprayers knew they should not lift their visors **but** 40% admitted to doing so.
- No awareness of clearance times for spray booths

SHADs

- Hazards of isocyanates
- Concept of clearance times
- Proper use / maintenance of controls
- Using Biological Monitoring to check controls
- Need for health surveillance
- What HSE expects

Bodyshops attending SHADs have lower average isocyanate exposures



What else is happening?

- Lots of activity already underway across range of disease areas
- Evidence based approach
- Promoting and encouraging others to take action - no matter how small

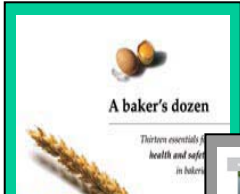
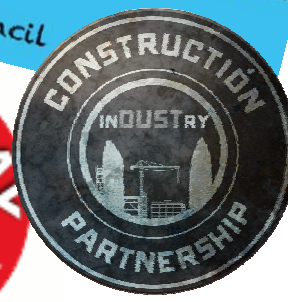


1. High activity / well understood

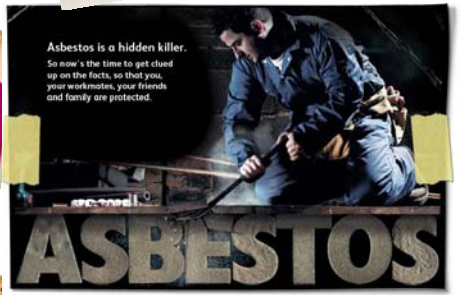


Working together to tackle workplace dust

Stakeholder Group:
Federation of Bakers
National Association of Bakers
Bakers, Food Allied Workers Union
Sainsburys
Local Authorities
Sector Skills Council

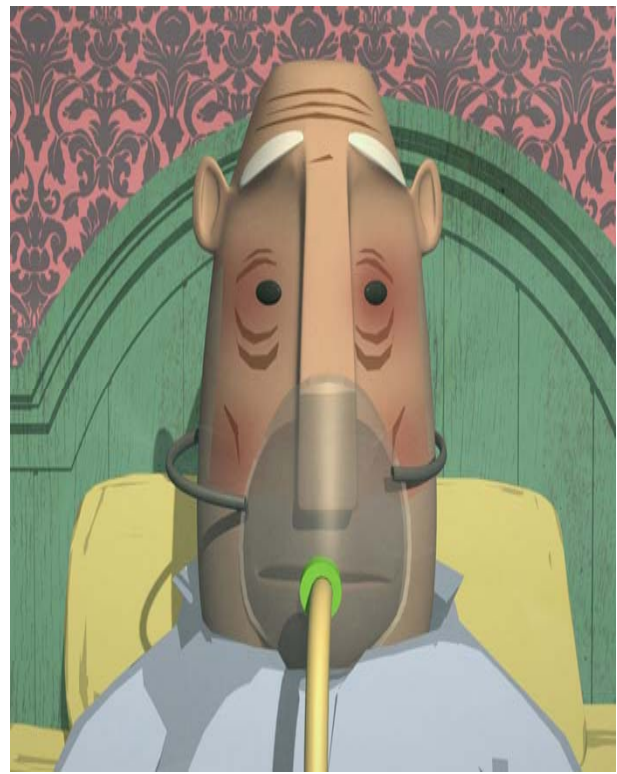


On-tool extraction
Hire Association
Europe



Glove trial - Headline results
62% said they will wear gloves in the future
LA visits had a very positive impact
80% found gloves comfortable to wear
Getting the right glove fit is important

'Stop dust before it stops you'



www.safequarry.com/qpt

2. High activity / develop understanding



Diesel engine exhaust emissions

✓ Research

-The likely impact that developments in fuel and engine technology could have on the perceived trajectory of the problem

-Identification and chemistry of the disease-causing components

-Developments in quantitative and qualitative analytical techniques and equipment

✓ EU – Carcinogens and Mutagens Directive

✓ Stakeholder activity - workplace exposure

✓ Guidance

3. Well understood / steady activity



Tetrachloroethylene / PAHs

- Research and horizon scanning



Nanotechnology

- Strategic activity and facilitation



4. Develop understanding / steady activity



Shift work

- ✓ Oxford EPIC/Million Women Study

Painters

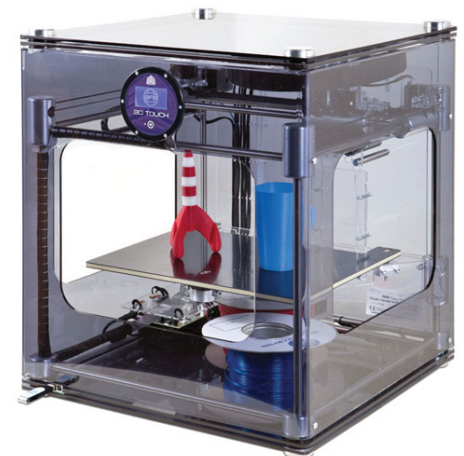
- ✓ Current exposures/working practices
- ✓ Awareness - good general working practice

Strategic research programmes

- ✓ Advanced manufacturing/ novel materials
- ✓ 3-D printing - plus others



You can get more than paint from a tin...



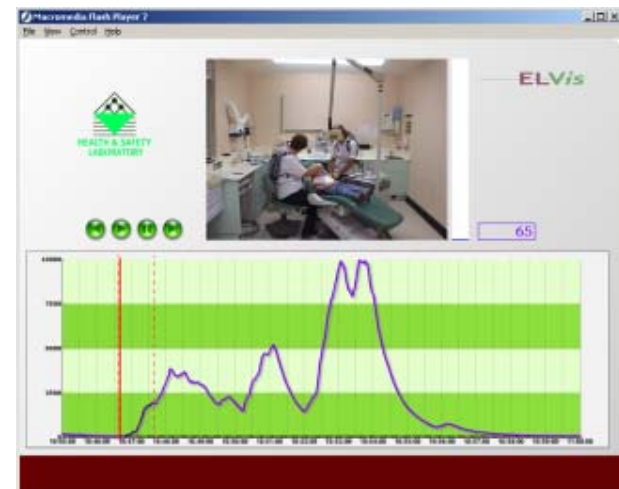
Real time measurement



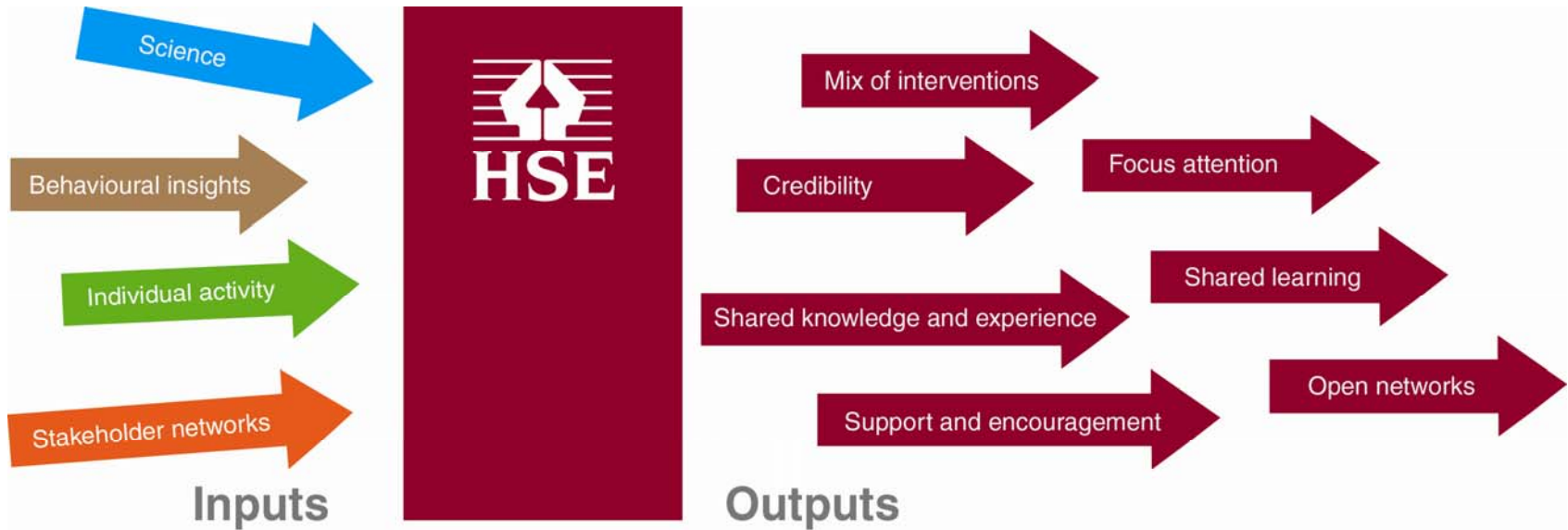
Airborne Exposure



- Organic and inorganic gases and vapours
- Real time detection
- Video visualisation
- Peak exposures
- Identify tasks requiring control
- Risk communication



Maximising impact



Work streams for 2014/15



Tackling occupational disease - developing new approaches



Developing new approaches: Tackling occupational disease - Windows Internet Explorer

http://www.hse.gov.uk/aboutus/occupational-disease/index.htm

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Developing new approaches: Tack...

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Occupational disease

- The facts
- Occupational cancer
- Cancer priority areas
- Respiratory diseases
- Respiratory priority areas
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Tackling occupational disease


Occupational disease is a big issue - a life-altering experience for some, a life-ending illness for others. But by working together, we can create healthier efficient workplaces.



Organisations are already taking steps to reduce the burden of occupational disease. We want you to get involved and share your approaches.

➤ More about the occupational disease burden

How to control risks at work



Health and safety toolbox

Get involved

Join our online community and take action on occupational disease.

The community site acts as a forum for you to promote your work and successful interventions, share ideas and insight, learn from others and discover new approaches to tackling occupational disease.

Together, we can all make a real difference – so don't delay, register today!

Cancer priority areas

- Asbestos
- Diesel engine exhaust emissions
- Painters
- Polycyclic aromatic hydrocarbons
- Radon
- Respirable crystalline silica (RCS)
- Shift work
- Solar radiation
- Tetrachloroethylene
- Welding

Respiratory priority areas

- Agricultural workers
- Bakery workers
- Construction workers
- Foundry workers
- Quarry and stone workers
- Vehicle paint sprayers
- Welders

Done

Internet 75%

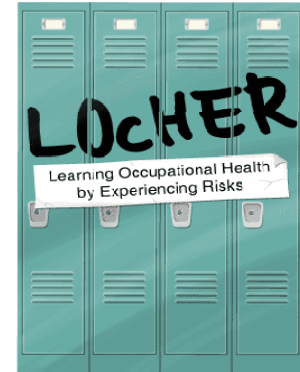
One example of a 'new approach'



The LOcHER Project

- aims to engage with young people in innovative ways to get their attention about occupational health risks:

- Tackling Occupational Disease
- Developing New Approaches
- Learning Occupational Health by Experiencing Risks (LOcHER)



IIRSM International Institute of Risk and Safety Management



Others getting involved

IDI201? Industrial Disease Initiative



BOHS The Chartered Society for
Worker Health Protection



- **Construction Respiratory Disease initiative**
- **BOHS Worker Health Protection Conference (WHPC 2014)**, to take place in Abu Dhabi, United Arab Emirates, from 20 to 23 October 2014.

Asbestos Behaviour Change Campaign Autumn 2014

www.beware-asbestos.com

Campaign Audience

Primary:

- The most at risk workers – trades people working on small sites and projects in the construction and maintenance industries.

Secondary:

- Workers employed by larger businesses in the construction and maintenance industries.

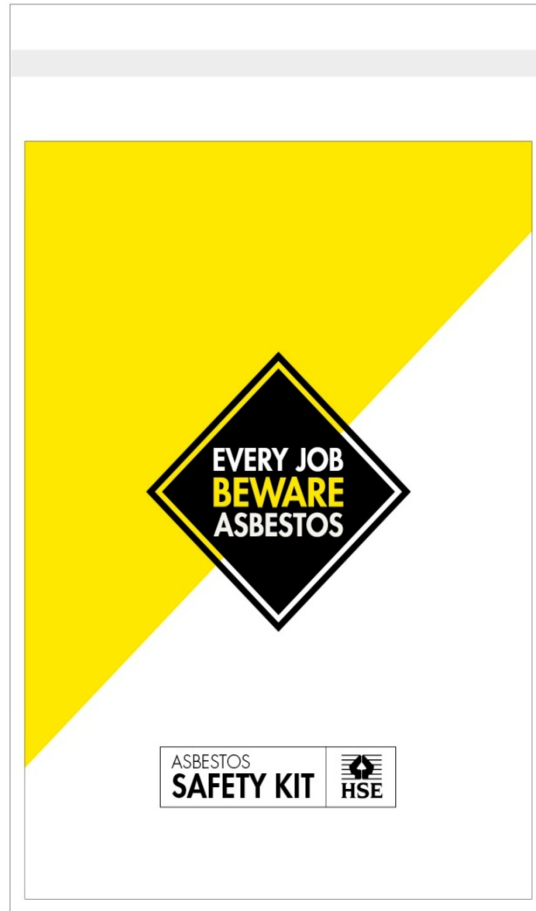


The Asbestos Safety Kit
What's in it?



01

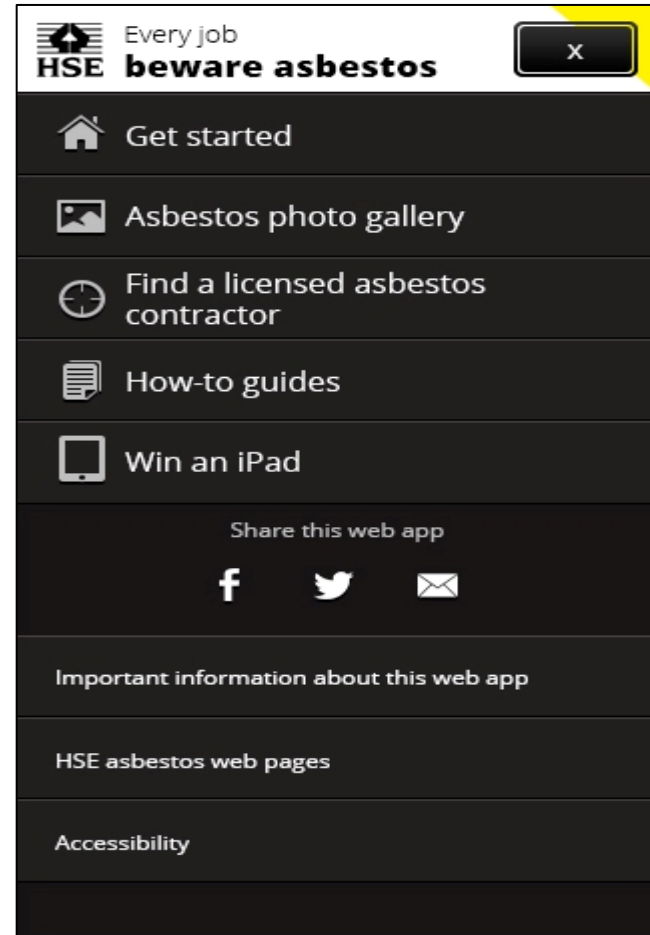
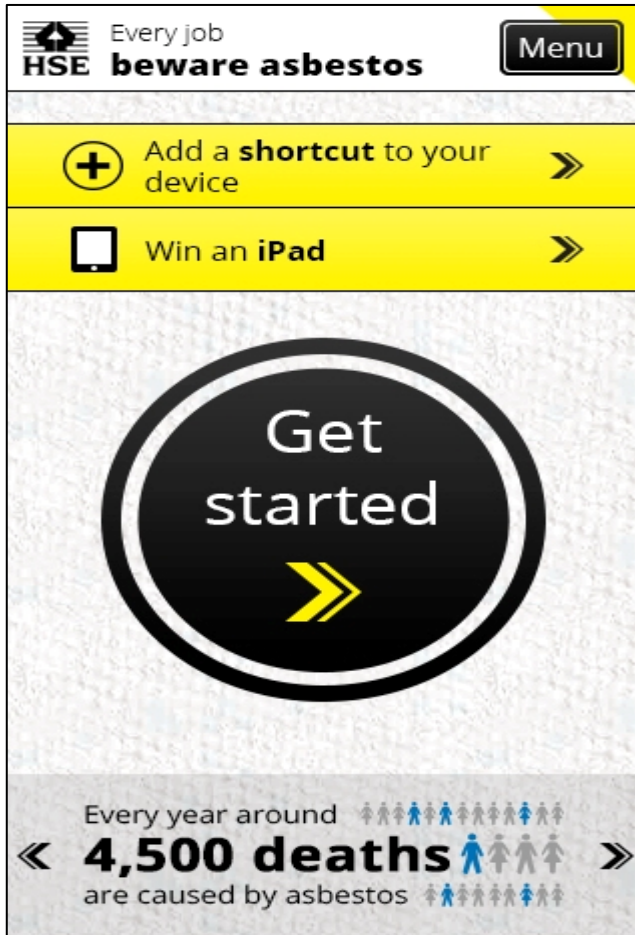
Note cards explaining where asbestos hides and what it looks like



03

Type 5 disposable overalls - vacuum packed

www.beware-asbestos.com



Asbestos web app



Asbestos deal with it

Drilling and boring through decorative coatings (e.g. Artex)

1 Use the right kit

- ◆ Cover work area with plastic sheets secured with tape to help catch waste
- ◆ Wear a disposable, correctly fitted FFP3 face mask and Type 5 disposable overalls
- ◆ Wear the overalls one size too big and put the legs over the top of footwear
- ◆ Do not re-use disposable overalls and masks

Next step >>

Asbestos deal with it

Drilling and boring through decorative coatings (e.g. Artex)

2 Keep dust down

- ◆ Put a blob of wallpaper paste or shaving foam on the place where you are going to drill
- ◆ Drill through the paste/foam
- ◆ If you are running cables through the hole, make it large enough so that the cables pass through easily
- ◆ Use a damp cloth to wipe off the paste/foam
- ◆ Wipe the side where the drill comes out if you can reach it and also wipe the drill bit
- ◆ Put the used cloth in a plastic sack
- ◆ Put a blob of sealant around the hole

If you are drilling through thick board, drilling large holes or drilling more than 6 holes, place a plastic cowl around the drill bit and insert the nozzle of a Class H Vacuum cleaner to collect the dust

Get a licensed contractor if the panel is badly damaged, or stuck to others with paint

Nobody must spend more than one hour a week working with AIB, whether doing a few small jobs or one big job

Prev step Next step

Asbestos deal with it

Drilling and boring through decorative coatings (e.g. Artex)

3 Clean up properly

- ◆ Use a damp cloth or Class H vacuum cleaner with a special filter to clean up
- ◆ Do not use a domestic vacuum cleaner or a brush as these will spread asbestos fibres into the air
- ◆ Double bag all waste including masks, overalls, cloths and plastic sheets in plastic sacks, seal with tape and label as asbestos waste
- ◆ Contact the local tips in your area to find one that accepts asbestos waste

Prev step

HSE's ambition



....is to reduce the incidence of occupational disease through:

- ✓ Emphasis on prevention and control of exposure
 - ✓ Sustained HSE activity
 - ✓ Focus on improving compliance with the law by supporting evidence based targeted interventions in high risk areas.
- To lead and harness the actions of others toward achieving this ambition