

Workshop 2a:

Asbestos – the future direction of compliance

Speakers: Julian Ransom (Savills)

Martin Gibson(HSE)

Chaired by: Karen Cannon

Room: York Room



Setting the standard for maintaining assets
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Workshop 2a:

Asbestos - the future direction of compliance PART 1:

Julian Ransom – Director, Savills

Martin Gibson – Principal Inspector (Occupational Hygiene), HSE



Asbestos: The Future Direction of Compliance (Part 1)



January 2016

Dr Martin Gibson
HSE, Edinburgh



National Housing Maintenance Forum
Setting the standard for maintaining assets

Home Awards Conference Training Publications Best practice Committee Contracto

What is it?
An annual conference devoted to housing maintenance and run by maintenance professionals. It covers strategic issues and provides a focus for networking and promoting best practice. The next conference will be held on 26-27 January 2016. [More...](#)

Quotes
"Thanks for putting on a great awards dinner. We really did have a nice time."

Martin Craven, Specialist and Planned Services Manager
Phoenix Community Housing

NHMF Maintenance Conference
26-27 January 2016 • Hilton Birmingham Metropole

[Delegate booking](#) [View timetable](#) [View catalogue](#)

[What is the conference all about?](#)
[What can you expect as a delegate at the conference?](#)
[What happens on Monday night?](#)

Agenda



- **Aim: Compliance — getting the balance right for risk, health & safety**
- **Introduction:**
 - **Asbestos disease**
 - **Why is asbestos still so important**
- **Domestic properties and asbestos**
 - **Managing refurbishment work**
 - **Dealing with Contractors**
 - **Tenants**
- **“New” ACOP**
 - **Changes in guidance for DTM**
- **Managing asbestos incidents**



Asbestos Exposure and Disease

Further exposures

First exposure
to asbestos
fibres



10-40 years

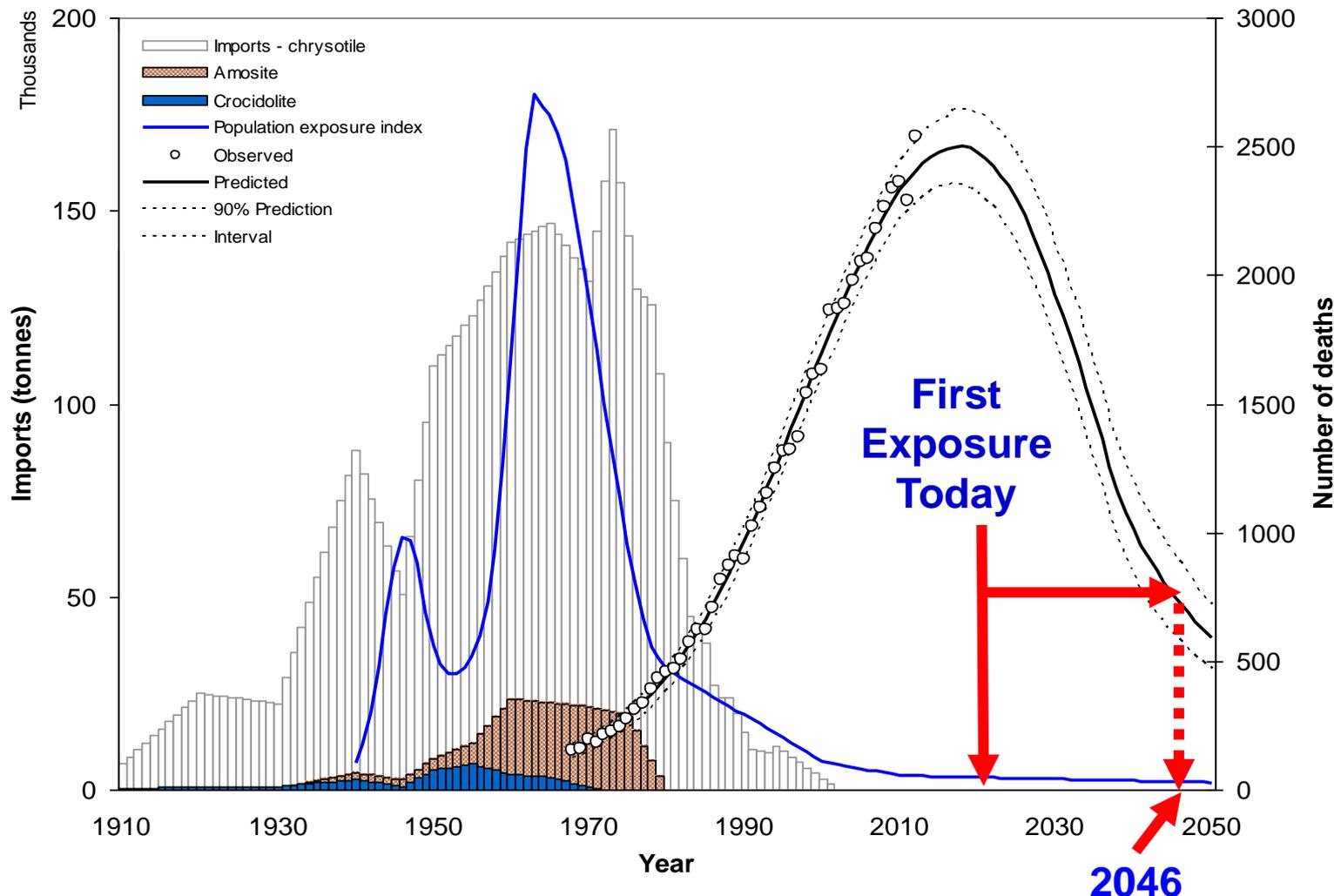
Disease
diagnosed



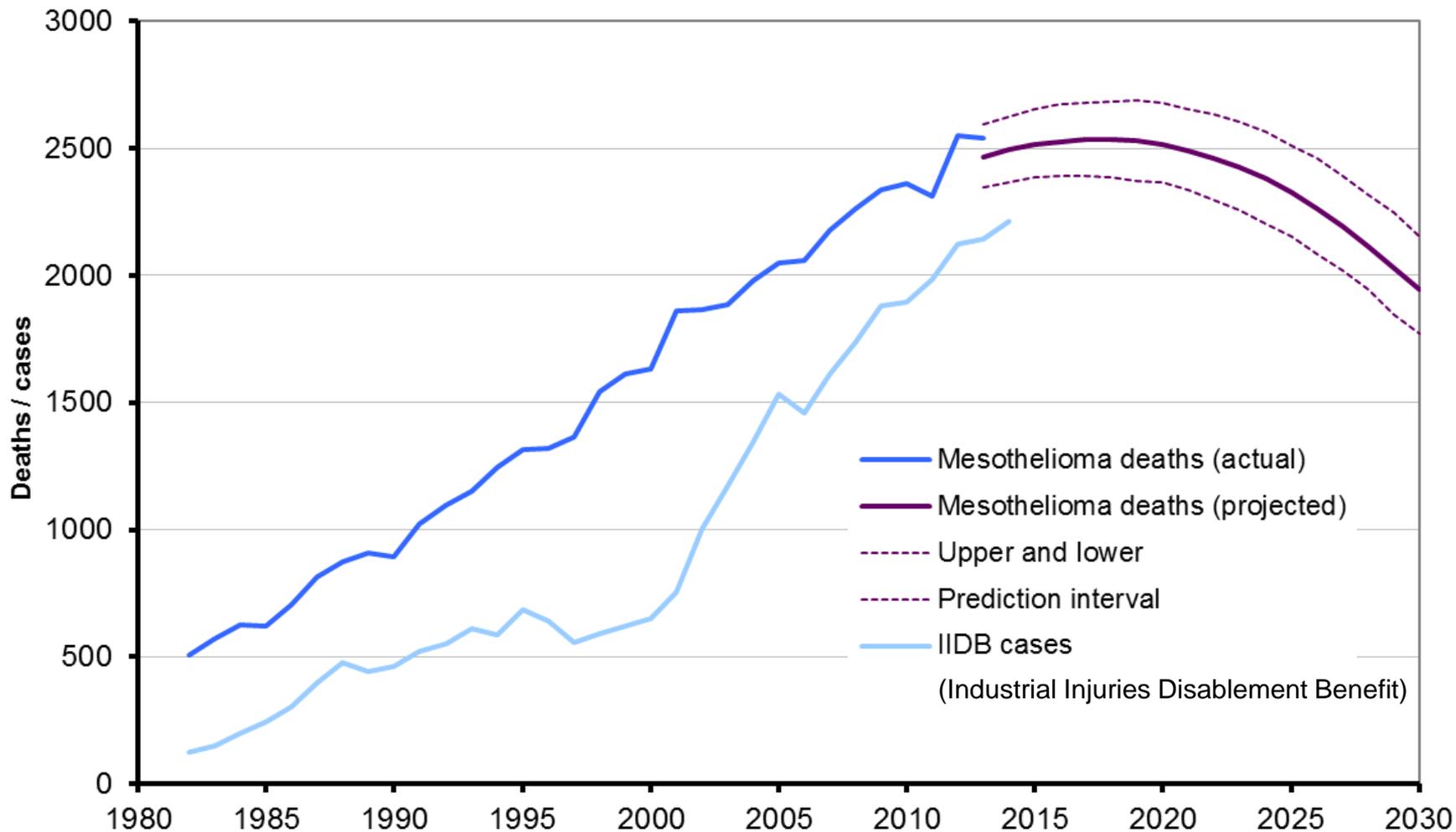
12 months

Death

Latest projections of annual mesothelioma mortality (*and lung cancer)



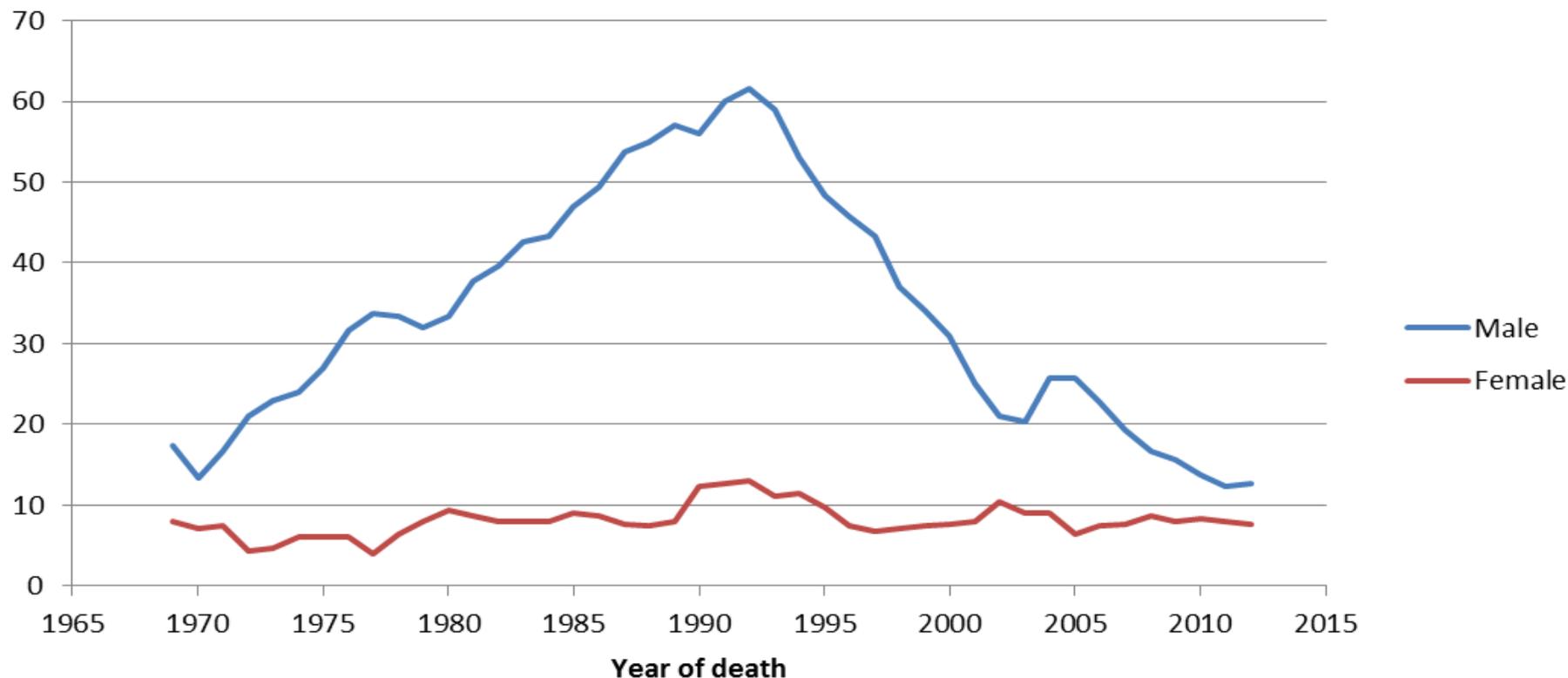
Mesothelioma annual deaths, IIDB cases and projected future deaths to 2030 in GB



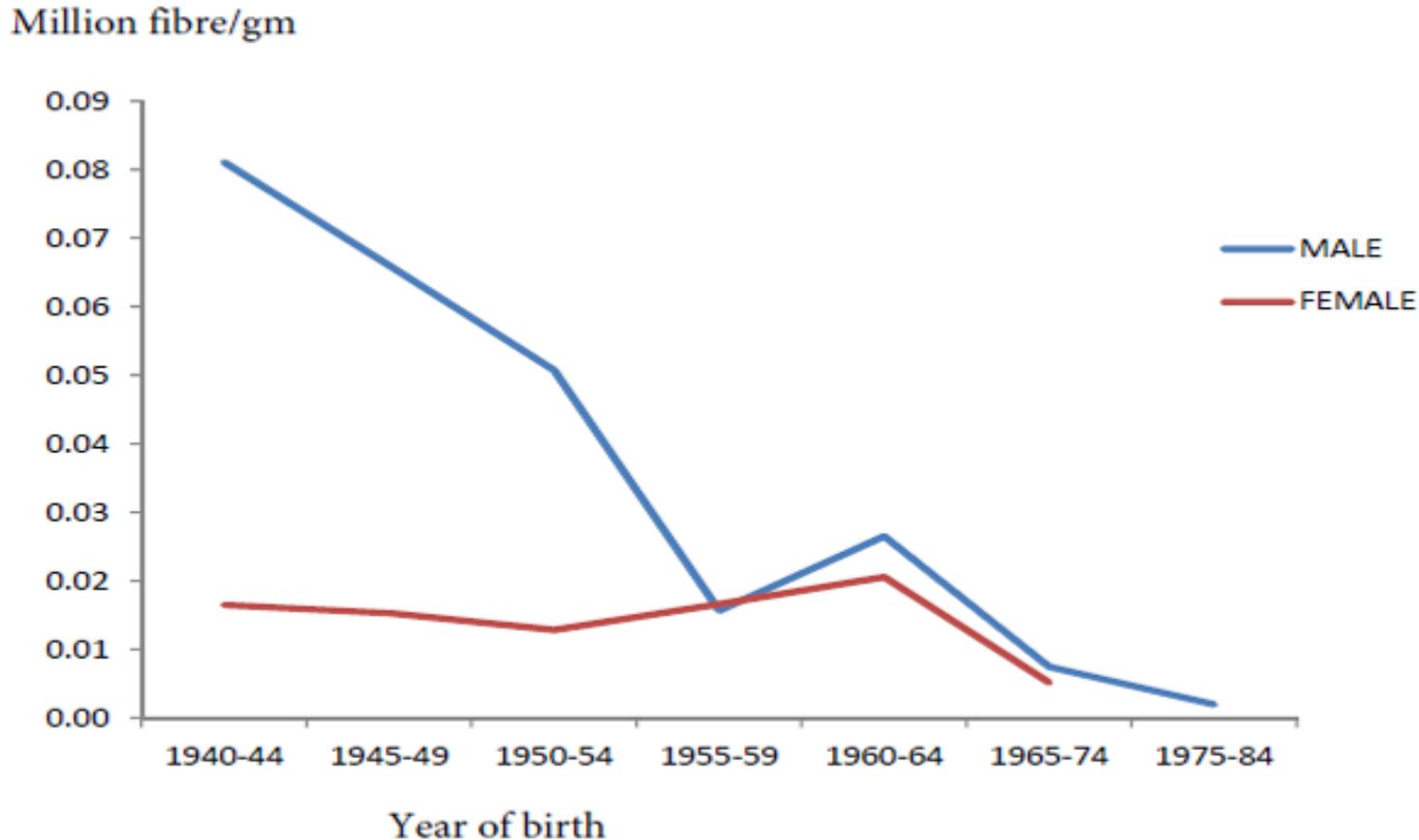
Not all Bad News! Number of deaths in younger age groups is decreasing



Mesothelioma deaths in GB at age 0-49



Average Asbestos Lung Burdens in Britain by Year of Birth (Peto*, 2013)



*Professor Julian Peto (London School of Hygiene)

Asbestos: Why is it still so Important?



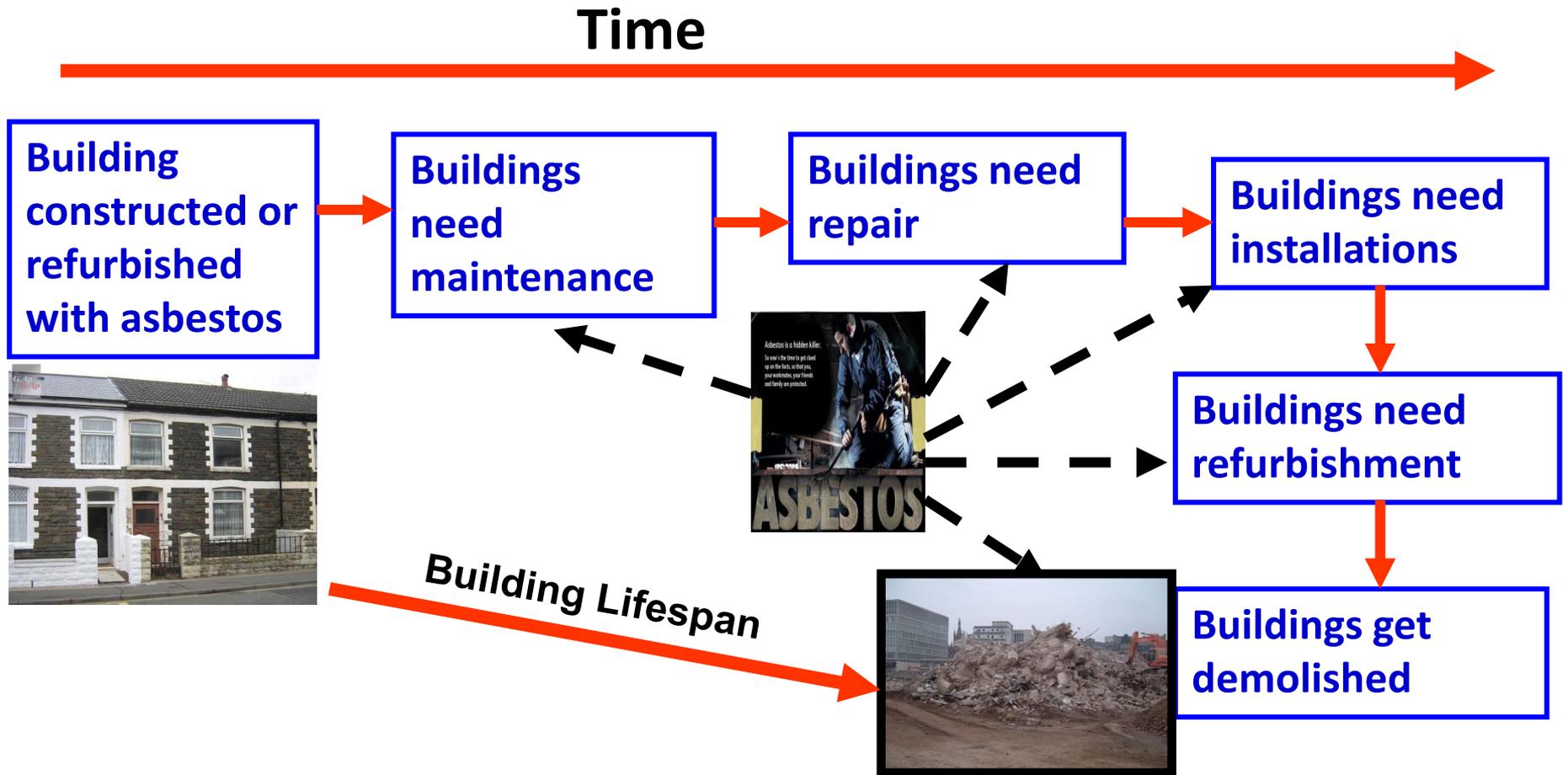
- **“Good News”**
 - Asbestos exposures have significantly decreased from time of manufacture and installation
- **No room for complacency**
- **Still significant risk to “workers” due to:**
 - Widespread presence of asbestos in buildings
 - Potential to be disturbed during “work”



Where is
asbestos found
in domestic
premises?

- Roof and wall cladding
- Flat roof decking tiles
- Flue-pipes/gutters/down-pipes/airbricks etc
- Soffits
- Window boxes
- Water tanks
- Roof slates
- Roof linings
- Thermoplastic and vinyl floor tiles
- Roofing felts
- Textured coatings/artex
- Internal partitions and wall boards
- Boards at gas/electricity meters
- Airing-cupboards linings and shelving
- Duct and pipes covers
- CHS insulation
- Warm air heating system insulation
- Storage heaters
- Structural panels
- Loose insulation
- Debris from previous poor removal

Asbestos in Buildings..



Asbestos: Why is it still so Important?



Health and Safety
Executive

Mesothelioma Occupation Statistics

Male and female deaths aged 16-74 in Great Britain
2002-2010

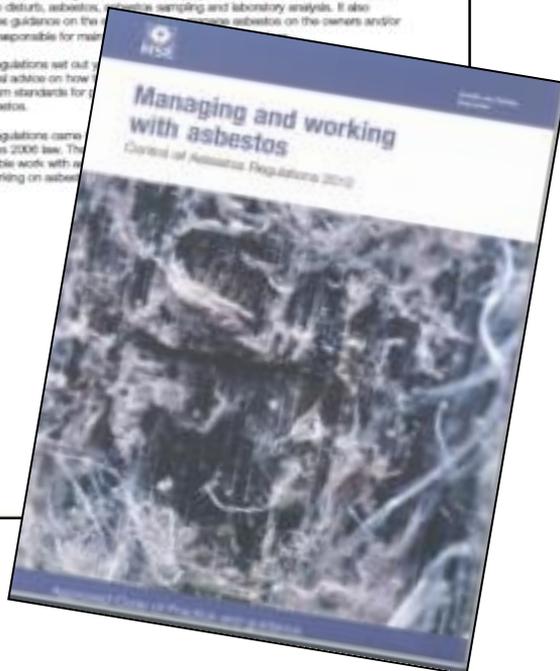
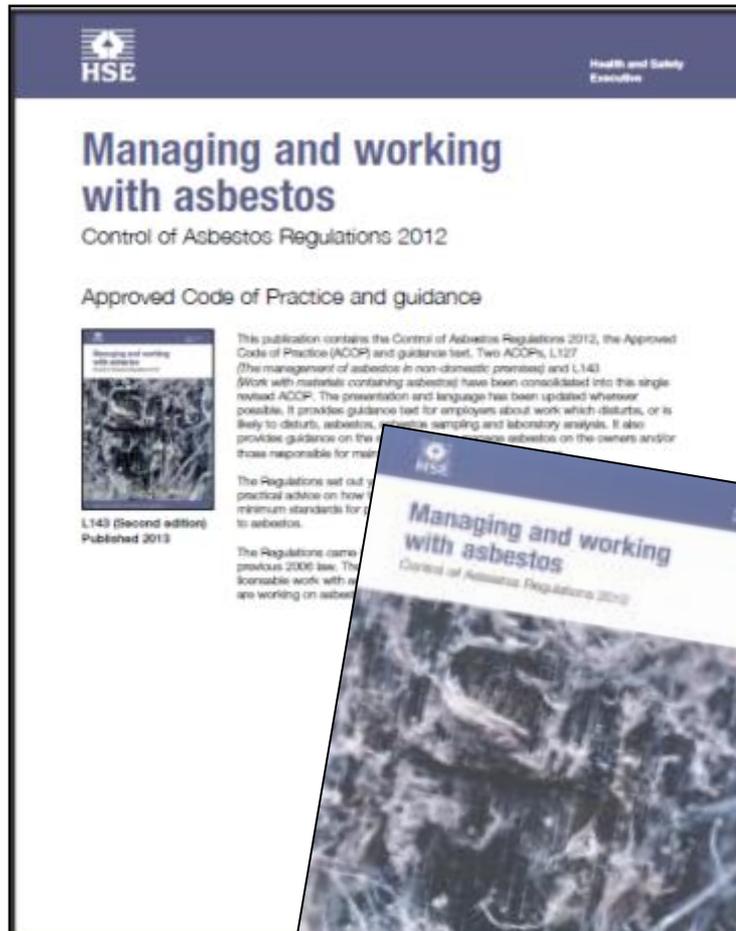
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Workers at Risk of Asbestos Disease:

- **Carpenters and joiners**
- **Plumbers, heating and ventilation engineers**
- **Electricians**
- **Construction Labourers**
- **Construction Operatives**
- **Construction Managers**
- **Other construction trades**
- **Painters and decorators**

Asbestos in Buildings has to be “Managed”



- Under “Duty-to-Manage” (Reg 4)
 - Applies to “Non-domestic premises”

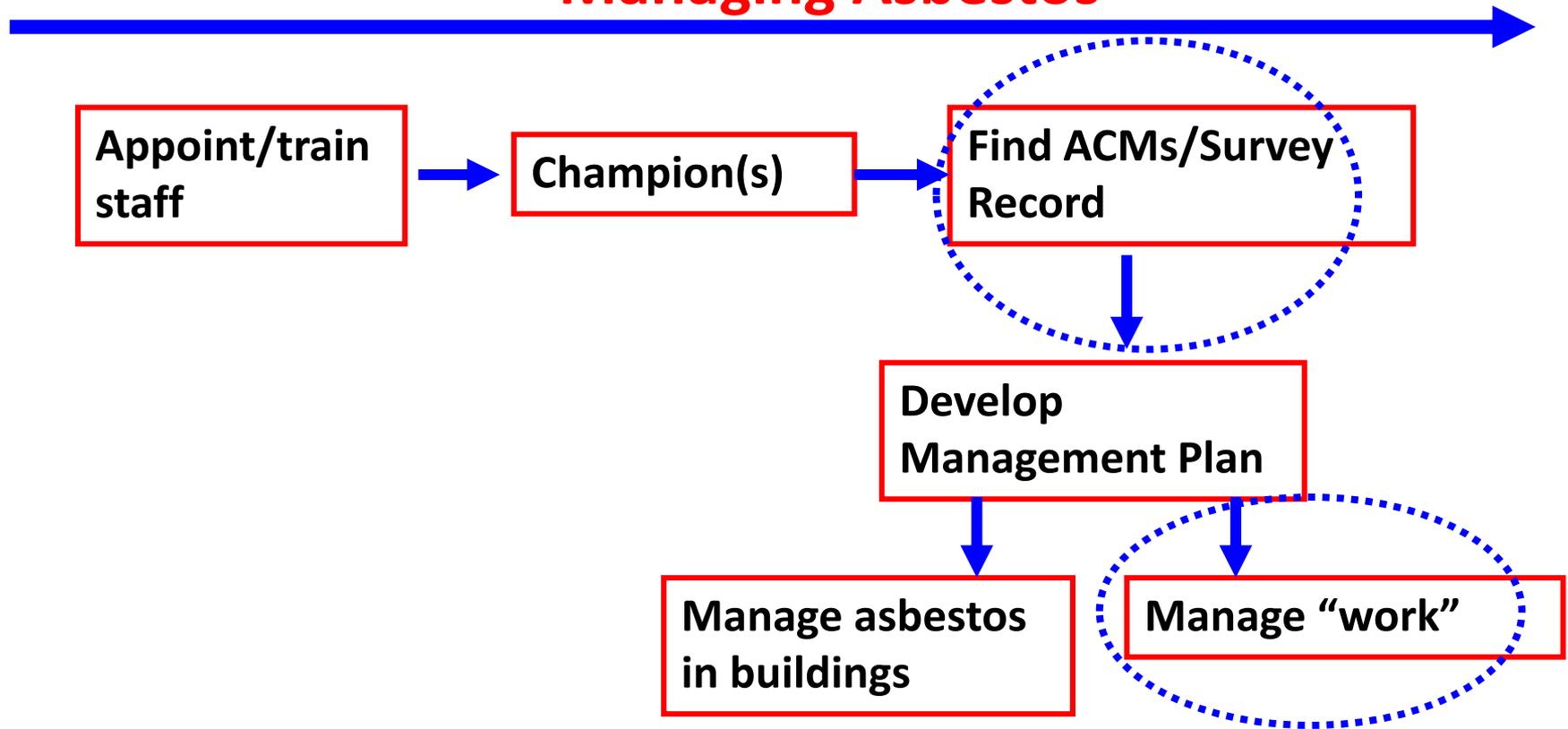
or

- Reg 5: Duty to identify asbestos before any “work” starts
 - Applies to all premises

Overview of Asbestos Management Process....



Managing Asbestos



Social Housing Organisations

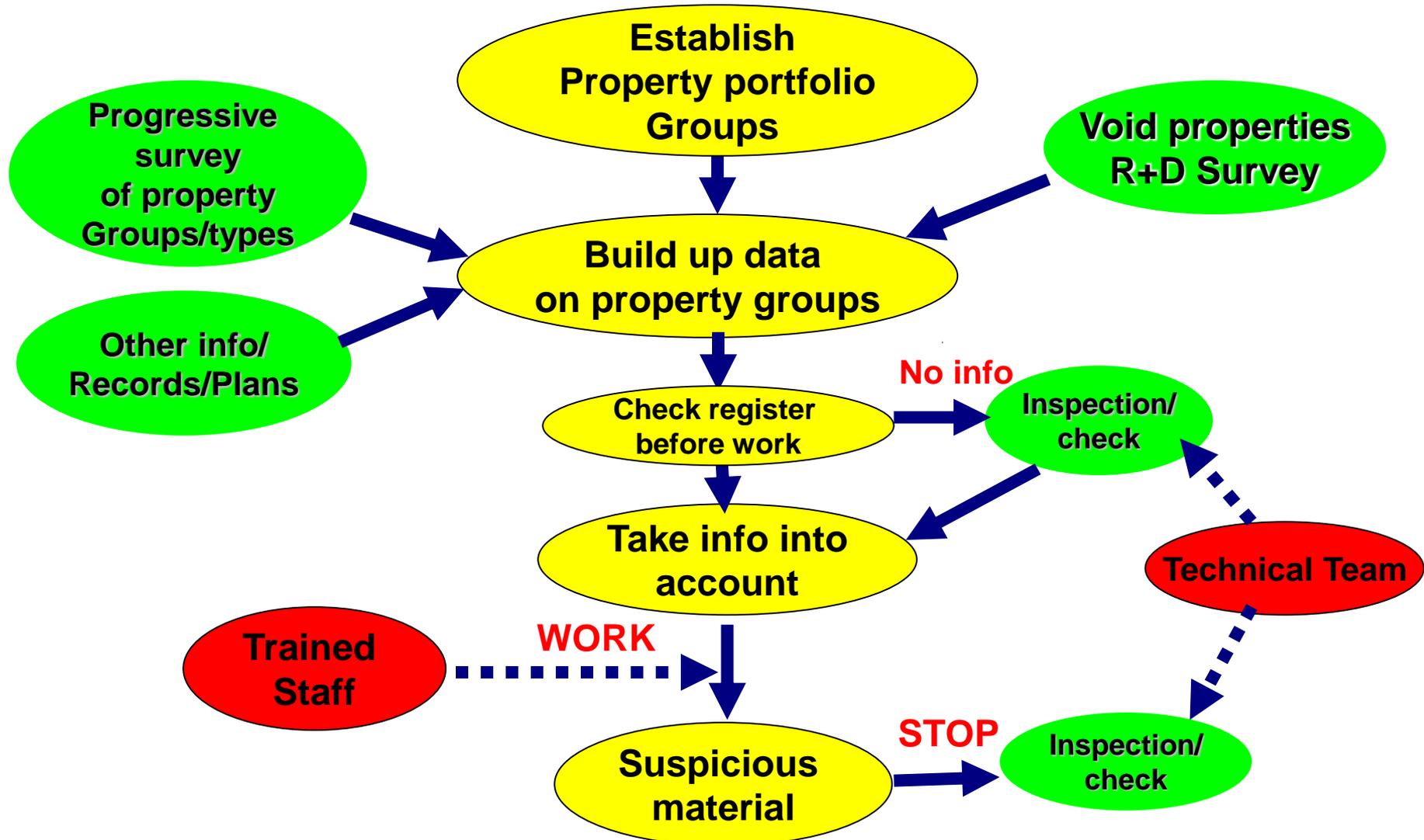
“Managing” Asbestos: The System



- Need clear policy and “robust” management systems
- Adequate resources:
 - Personnel/time (in-house/ ext)
- Clear duties/responsibilities
- Training (TNA)
- “Asbestos Register”:
 - Current and accessible
- Clear operational and management procedures
- Auditing/checking



Social Housing Organisations: “Managing” Asbestos: Framework for dealing with Maintenance and Refurbishment Work



Survey Checklist/Domestic Premises Records

Print out for each property: Simple advice



Address/ Reference	External	Cement Panels	Internal	AIB Bath Panels	AIB Partition Walls	Loose Fill Insulation
Building Archetype		Cement Roofs		AIB Airing Cupboards	AIB Boiler cupboard	Lagging on Pipes & HW Tanks
Building Type		Gutters, Down Pipes & Flues		AIB Fuse Box Boards	Cement Water Tanks	Sprayed Coatings
Building Age		Soffit Boards		AIB Gas /electric meter	Textured Coating	
				AIB Fire Door Panels	Vinyl Floor Tiles	
				AIB Fire Back Panels	R/Plastic Cisterns	
				AIB Window Paneling		
				AIB Ceiling Tiles		

- Simplify for target user
- Use tick box system
- Add room locations as necessary
- Customise as necessary
- Add more items

Employers/Duty Holders



Primary duty is to employees and other contractors

- **Housing Associations/ LAs/ Social Housing must focus on risks of workers in:**
 - **Own properties**
 - **Domestic properties**

“Management” for Maintenance/Refurb Work



- **Ensure “Asbestos Register” or survey report completed**
 - Areas not surveyed/accessed/inspected: must presume contain asbestos
- **System to consult/check register before work**
 - Arrange refurb survey if info absent or unreliable (*eg not current*)
 - Or arrange pre-inspection check

DTM: Future Direction of Compliance: Management Plan (para 129 (ACOPL143))



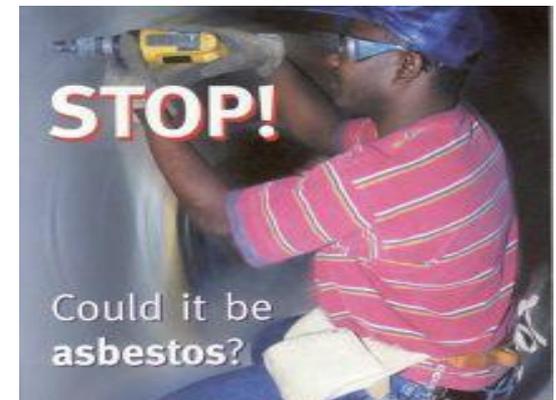
- Should be written
- Should set out how the risks will be managed. Details should include:
 - Identify the person(s) responsible for managing the risk
 - Instructions that plan/register must be checked before work starts (and how this will be achieved). Procedures/arrangements to ensure that:
 - Register will be checked in good time before work starts
 - Checks made that the asbestos information has been understood and will be taken into account (*RAMS?*)
 - Checks made that the correct controls will be used and that contractors are competent (*Audit?*)
- Further emphasis in Para 134: Work should only start once the DH is satisfied that the information in register is *known and understood* by workers

“Management” for Maintenance/Refurb Work



- **System to manage work and workers**
 - Check asbestos trained/competent
 - Pass on asbestos information
 - Check asbestos information has been understood and will be taken into account
 - Check correct controls will be used
 - Monitor work
 - Check clean up

Evidence for all of the above?



Responsibilities to Tenants



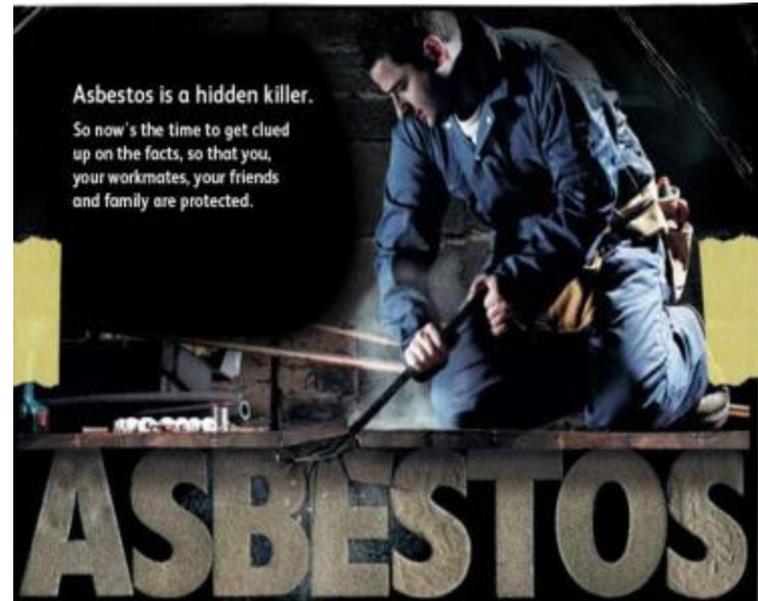
- **“Duty-of-care” applies afarp**
- **Suggested actions:**
 - **To provide some information on presence of asbestos**
 - **Where ACM identified, make safe any in poor condition**
- **“Duty” does not extend to monitoring condition**

Asbestos Risk for Tenants in Domestic Properties



- No risk from ACM in good/sound condition and un-disturbed*
- ACM does not need to be removed
- Presence should not be a concern for occupier
- Risk only arises if ACM is *disturbed* or worked on

**No mandate to survey but how will DH know condition?*



Advice to Tenants



- **Have a positive policy**
- **Provide information as part of general information eg new residents pack, news letter**
 - **No risk from asbestos just being there**
 - **Asbestos provides an important function eg fire protection**
 - **Will be checked if any work in the area is required**
 - **Helpline**

New Analyst Guide 2016: Future Direction of Compliance



- **Due: Spring/ Summer 2016**

- **Main changes:**

- **Licensed work: 4-Stage Clearance: Photographic evidence required**

- **Dust sampling to be avoided**

**ANALYST GUIDE HSG 248
DRAFT 6 December 2014**

CONFIDENTIAL AND SENSITIVE

Contents

- 1 Introduction
- 2 Quality assurance and accreditation schemes
- 3 Training and qualifications
- 4 Bulk sampling and analysis of materials for asbestos
- 5 Sampling and analysis of airborne fibre concentrations
- 6 Cleanliness of premises and plant: Site assessment for reoccupation
- 7 Sampling and analysis of soils for the presence of asbestos
- 8 Supervision and management work carried out by Analysts
- 9 Personal protective equipment
- 10 Decontamination procedures
- 11 References and further information

Appendices

- 1 Fibres in air: Sampling and evaluation of by phase contrast microscopy
- 2 Asbestos in bulk materials: Sampling and identification by polarised light microscopy (PLM)
- 3 Water Absorption test
- 4 Asbestos in soil and made land
- 5 Discrimination of asbestos fibres on air samples
- 6 Four stage clearance procedures
- 7 Template for certificate of reoccupation
- 8 Template for the inspection certificate for the hygiene facility

Asbestos Removal Work and 4-Stage Clearance



Health and Safety Executive

Appendix 3: Template for certificate of reoccupation

Company name: _____
Address: _____
Tel: _____
Fax: _____
Email: _____

 UKAS logo and accreditation number: _____

Certificate of reoccupation (Certificate number and 4-stage number)			
Contract number	Site number	Reference number	
UKAS accredited methods used and declaration			
Notes: Methods accredited by UKAS must have a declaration. If you are reporting outside the scope of the method:			
Technique, address and contact details for the client			
Site address for clearance			
Scope of the assessment and brief description of works, including dates carried out			
UKAS certificate number if relevant was obtained	Designation of the area of the clearance	Date of assessment from the date of work	UKAS certificate from
Assessment number			

Relative to the method guide for sampling, analysis and clearance procedures Page 37 of 100

4-Stage Clearance: Photographic Evidence



To provide:

- Occupier with greater reassurance and confidence the process has been thorough and complete



Photos expected in 4-SC



Photographs expected for each of the following:

Stage 1:

- 1: Skip area and waste route are free from obvious asbestos debris and waste sacks
- 2: Transit route is free from obvious asbestos debris and waste sacks
- 3: The DCU is free from obvious asbestos debris and waste sacks. [Photos should be taken of the clean end, shower and dirty end.](#)
- 4: The areas surrounding the enclosure/work area are free from obvious asbestos debris and waste sacks.

Stage 2:

- 1: The airlock and baglock are free of waste bags, materials and unnecessary equipment
- 2: All ACMs have been completely removed from the underlying surfaces. [Sufficient photos should be provided to cover the removal work areas](#)

- 3: The interior surfaces inside the enclosure are free from debris and fine settled dust. [Sufficient photos should be provided of the enclosure including high level surfaces.](#)

Stage 3:

1. The areas are dry. Sufficient photos should be provided to cover the relevant area(s)
2. The NPU's are sealed
3. The sampling pumps in each of the sampling locations
4. The brush used for the air disturbance

Stage 4:

1. The former enclosure area. [Sufficient photos should be provided to cover the relevant area\(s\)](#)

Photo evidence that 4-Stage Clearance has been Conducted



Transit Route



Analysts: The Digital Age



- Numerous photos required (Date+time)
- Insert into Certificate for Reoccupation (CfR)
- Provide CfR on site
- **Colour printer**
- CfR template has been updated
- *Register System?*

Health and Safety Executive

Appendix 3: Template for certificate of reoccupation

Company name: _____
Address: _____
Tel: _____
Fax: _____
E-mail: _____

 HSE logo and accreditation number: _____

Certificate of reoccupation			
[Certificate number and 3 area numbers]			
Contract number	Job number	Reference number	
CfR completed (method used and date/time)			
[Note: Methods accepted by CRO must have a date/time. If you are reporting outside the scope of the method]			
Works address and contact information for the client:			
The address for clearance:			
Area to be assessed and level description of works, including dates started and			
Clearance number of following are attached:	Clearance number of the area to be assessed	Plan of submissions from the plan of work	ADB verification from
Attachment number:			

Reference the website guide for applying, applying and issuing processes Page 10 of 10

Asbestos Incidents:



- Dealing with asbestos incidents

Incidents: Decontamination

- **Assess situation for extent and type of contamination**
- **Distinction between “minor” contamination in many areas and “major” contamination**
- **Many areas/ items can be cleaned/ decontaminated**

Asbestos Incidents:



- Visually assess the extent of
 - Debris
 - Spread
 - Suspect material

Major Contamination



“Domestic Disturbances!”



Can Still be
Significant

Level of Risk???



Minor Contamination: Clean Up Procedures?



Licensed Work: “Debris” *is* covered by CAR2012 (Para 13 L143)



- If debris contains insulation, coating, AIB (even when not fulfilling its original purpose), then a licensed contractor required

UNLESS

- It does not meet the licensable conditions set out in Reg 2(1) ie
 - Exposure not Sporadic + Low Intensity (ie exposure >0.6 f/ml over 10mins); or
 - Control limit not likely to be exceeded
- Cleaning up debris should *not* give rise to high fibre levels in many cases

Dealing with Asbestos Debris



- **Minor amounts of debris (eg AIB) will not need a licensed contractor**
- **Can be cleaned up by wetting, picking up physical pieces and wiping with tak rags/damp cloths**
- **Wear Type 5 coveralls, disposable RPE**
- **Double bag waste**

(Asbestos Essentials/ Task Sheets)

Dealing with asbestos contaminated surfaces/materials

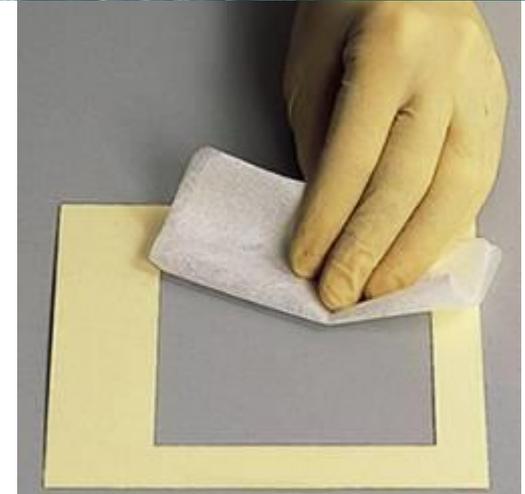


- **Need a balanced/proportionate approach:**
 - Many items can be physically cleaned/wiped down eg all hard surfaces, plastics, metals, wood, paper/books
 - Other surfaces eg carpets, fabrics etc can be cleaned so that there is no visible debris/dust
 - Occasionally detected single fibres represent inconsequential amounts of asbestos

Wipe/Surface Sampling

- Tendency towards this type of sampling
- Analysis by TEM
- Ultra sensitive for asbestos
- Will detect individual asbestos fibres
- What does this mean?
- Area is **NOT** contaminated with asbestos
- Fibre levels are inconsequential

Surface Sampling



Workshop 2a (Part 2):

Asbestos - the future direction of compliance PART 2:

Julian Ransom – Director, Savills

Martin Gibson – Principal Inspector (Occupational Hygiene), HSE



What we are going to cover (Part 2)

Part 1. Dr Martin Gibson (HSE)

- New HSE Guidance (HSG248)

Part 2. Julian Ransom (Savills):

- The future direction of asbestos regulation?
- Continued trends influencing practical compliance regimes (a practitioners view)
- Questions and debate

Guidance / Documentation / AMP

Legislation (eg. CAR 2012 + HSW 1974 + CDM 2015)



Approved Codes of Practice (eg ACOP L143)
British Standards



Published Guidance (eg HSG 227 / 264 / 248)



Web Information (eg HSE Web Site + Asbestos App)
Best Practice Publications (asbestos retail guide)
Professional Associations/ LAs (ARCA / UKAS)



Case Law (drives interpretation eg Dianne Willmore vs Mosley)
Significant Events (RP Prosecutions HSE + Regulator intervention
..... HCA)

Management Plan (*Your Own* processes/ systems to reflect)

HSE + Gov Office for Science: Workshop

Stakeholder Workshop Aug 2015:

- *Growing Concerns* re 'Asbestos in The Built Environment'
- 42 Industry specialists (practitioners and scientists)
- Workshop Groups + consensus driven output
- Presentations upon:
 - asbestos related disease in the UK (amosite specifically)
 - improvements in analytical/ laboratory techniques
 - Dutch lead research (lower exposure recommendations)
 - Australian asbestos management/ research

HSE + Gov Office for Science: Workshop

Australian 'Control' Group Research:

Associate Professor Alison Reid (School of Public Health)

- *Wittenoom Central Australia*
- *Blue Asbestos (Crocidolite) Mining*
- *7,000 employees (1943 – 1966)*
- *Unrestricted fibre exposure*
- *Planes navigated via blue dust*
- *Tailings distributed throughout the town*
- *High resultant asbestos related disease/ death rates*
- *Low average life expectancy especially amongst children*

HSE + Gov Office for Science: Workshop

Workshop Output Priority Ranking (evidence gaps):

1. Risk of leaving vs. removing ACMs in buildings
2. Measuring asbestos concentrations at lower levels (Dutch Health Council recommendation)
3. Effectiveness of managing ACMs in place - Problems with accuracy of surveys relied upon by Dutyholders

Also: Specific concerns regarding Amosite risk / young workers.

These outputs currently represent the views of the attendees, but will be used to help inform the asbestos programme.

A Practitioners (my) Personal Observations

Trends/ direction of travel:

Improved ACM Removal + Record Keeping:

- Emphasis in new guidance (HSG248) and why (.. residue)? 
- Survey Report NOT a specification
- Better Commissioning + RAMS evaluation
- Who Audits (DH own analyst or the removers?)
- Who collects certification (claim resilience)
- Register updated/ auditing sufficient
- Low risk work the hardest
- Design the process in Work Flow



A Practitioners (my) Personal Observations

Trends/ direction of travel:

Improved Compliance Management Structures

- HCA + HSE investigation driven?
- Directors of Compliance appointments (removing group silos)
- The need to evidence adequate control (audit function)
- Consistency of approach (surveys + RA/actions)

CDM Regulation Changes

- Previous over reliance upon CDMC role?
- New CDM Policies :
 - Principal Designer + Contractor TOR (clarity needed)

A Practitioners (my) Personal Observations

Trends/ direction of travel:

Improved Communications

- ACOPL 143 Mandate (is Register information 'Understood')
- Increased Contractor Expectation (refusal to work)
- Informing Building Users (incl. Tenants?):
 - Increased tenant representation (claim resilience)
 - The need to evidence adequate control (audit function)
 - Consistency of approach (inform after voids only?)
- *Some* Register Systems much improved:
 - Support RA based regime + work flow
 - Better Management Reporting (eg ref to Register)
 - Demonstrable audit function (certification HSG248)



In Summary
**‘Crystal Ball’ Future Direction of Asbestos
Compliance**

SUMMARY

- New Guidance Spring 2016 (Analysts Guide HSG248)
- Continued Regulation (HSE/ HCA / other)
 - Concerns over ACMs in Built Environment
 - Guidance Framework but Dutyholder to interpret (RA)
- Debate re ACM Removal vs Leave in Situ
- Robust RA + Audit trail requirement emphasis
- Improved Measurement Techniques
- Possible reduced exposure control limits (practical?)
- Amosite Risk focus (increased RA score?)
- Increasing Communication Expectation (contractors + building users/ tenants)

The image shows the Savills logo, which consists of the word "Savills" in a stylized, lowercase, sans-serif font. The letters are a vibrant red color with a subtle gradient and a slight shadow effect, giving them a three-dimensional appearance. The logo is set against a background that transitions from a bright yellow at the top to a light blue at the bottom, with a soft, blurred effect.

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