

A microscopic image showing a dense field of thin, needle-shaped asbestos fibers. The fibers are light-colored and appear to be randomly oriented, creating a complex, web-like texture. The background is dark, making the fibers stand out.

ASBESTOS IN SCHOOLS

AiS and JUAC

- **Aim: to make schools safe from the dangers of asbestos**
- **NUT, ATL, NASUWT, Voice, NAHT, ASCL, GMB, Unison, Unite, UCATT, Hazards**
- **MPs, Asbestos Victims Support Forum, ISBA, ATAC, Solicitors, Experts on risk.**
- **Work together**
- **Common aims. Speak with a common voice**
- **Non-Party political**
- **Members of the DfE Asbestos Steering Group**

Government Policy in Britain

Manage for life of School building

“Asbestos which is in good condition and unlikely to be disturbed or damaged is better left in place and managed until the end of the life of the building

as this presents less risk of exposure to the occupants than the process of removing it.”



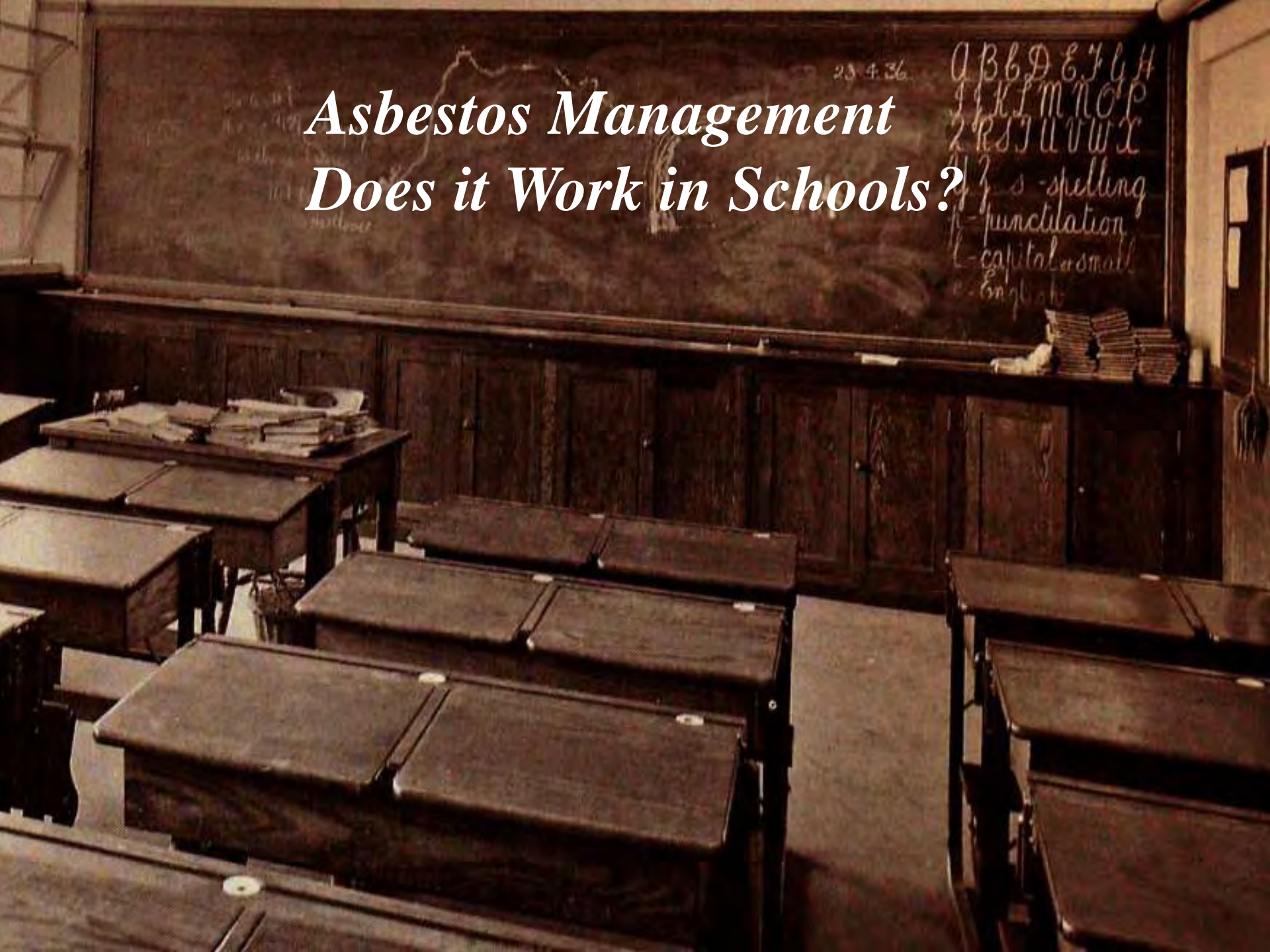
www.parliament.uk

Parliamentary Written Answer Minister of State for Schools
8th February 2011

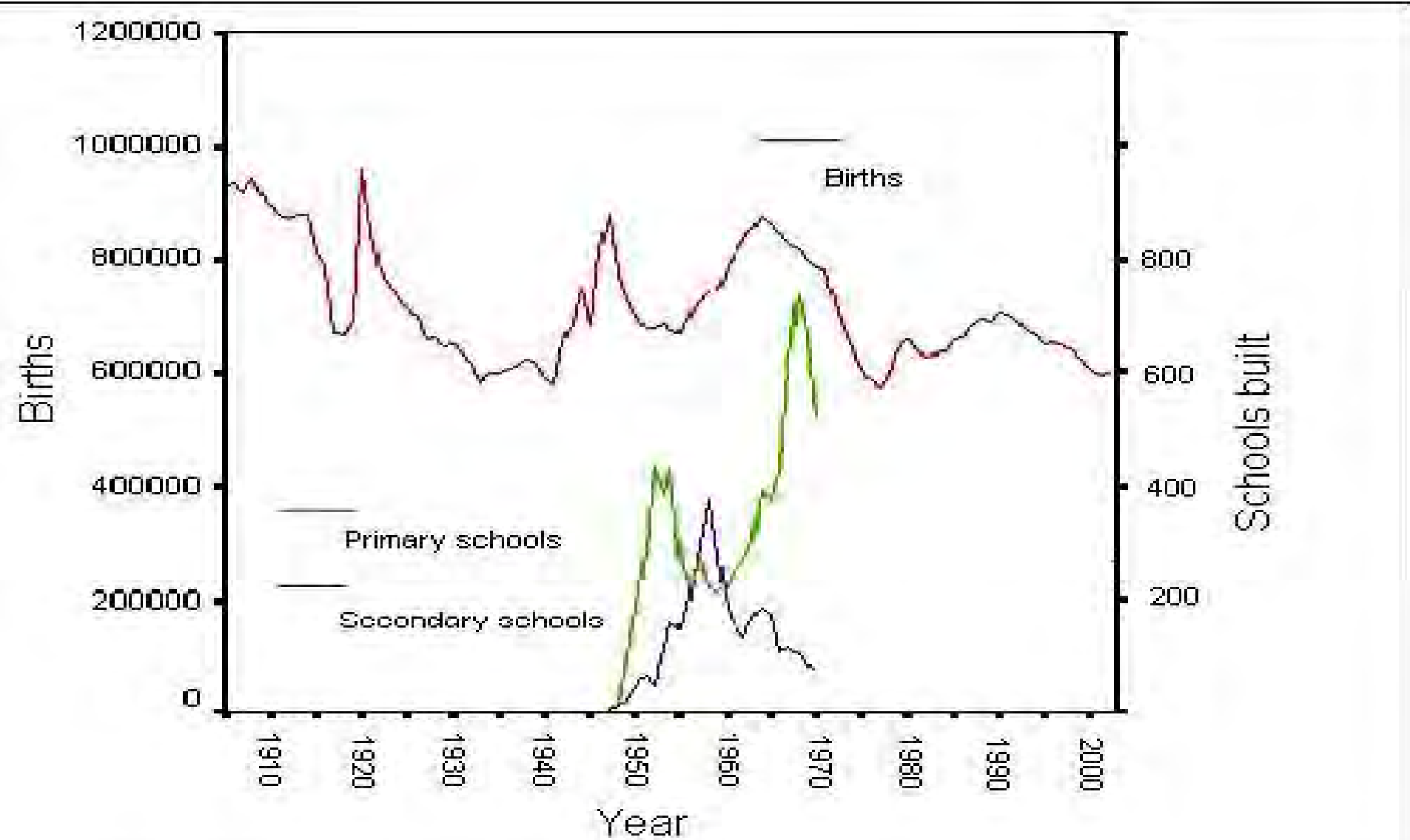
Asbestos Management Does it Work in Schools?

23 4 36

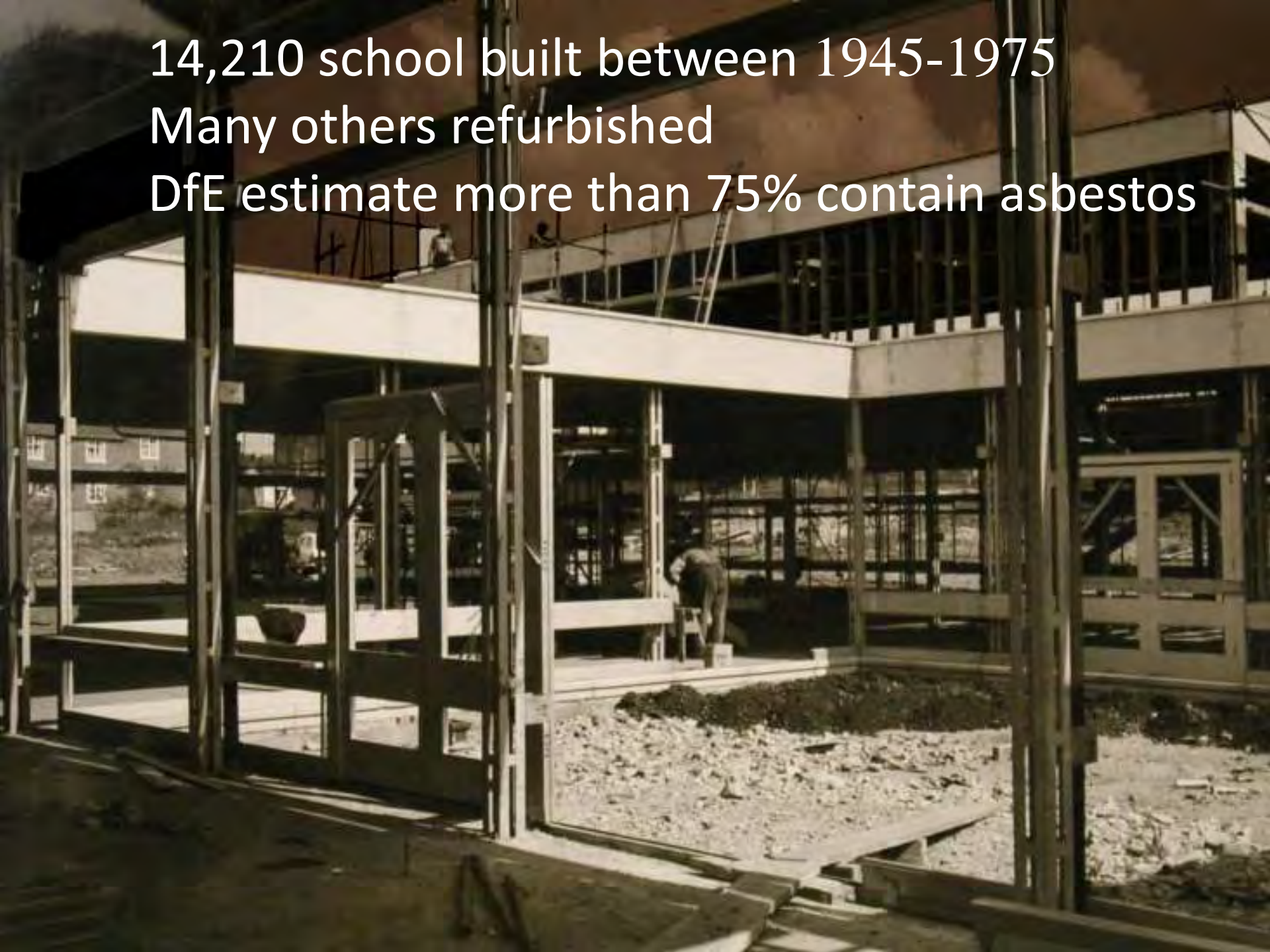
A B C D E F G H
I J K L M N O P
Q R S T U V W X
Y Z
- spelling
- punctuation
- capital & small
- English



SCHOOL BUILDING



14,210 school built between 1945-1975
Many others refurbished
DfE estimate more than 75% contain asbestos



TYPICAL SYSTEM BUILT SCHOOL
About Half of Schools in Britain
are System Built



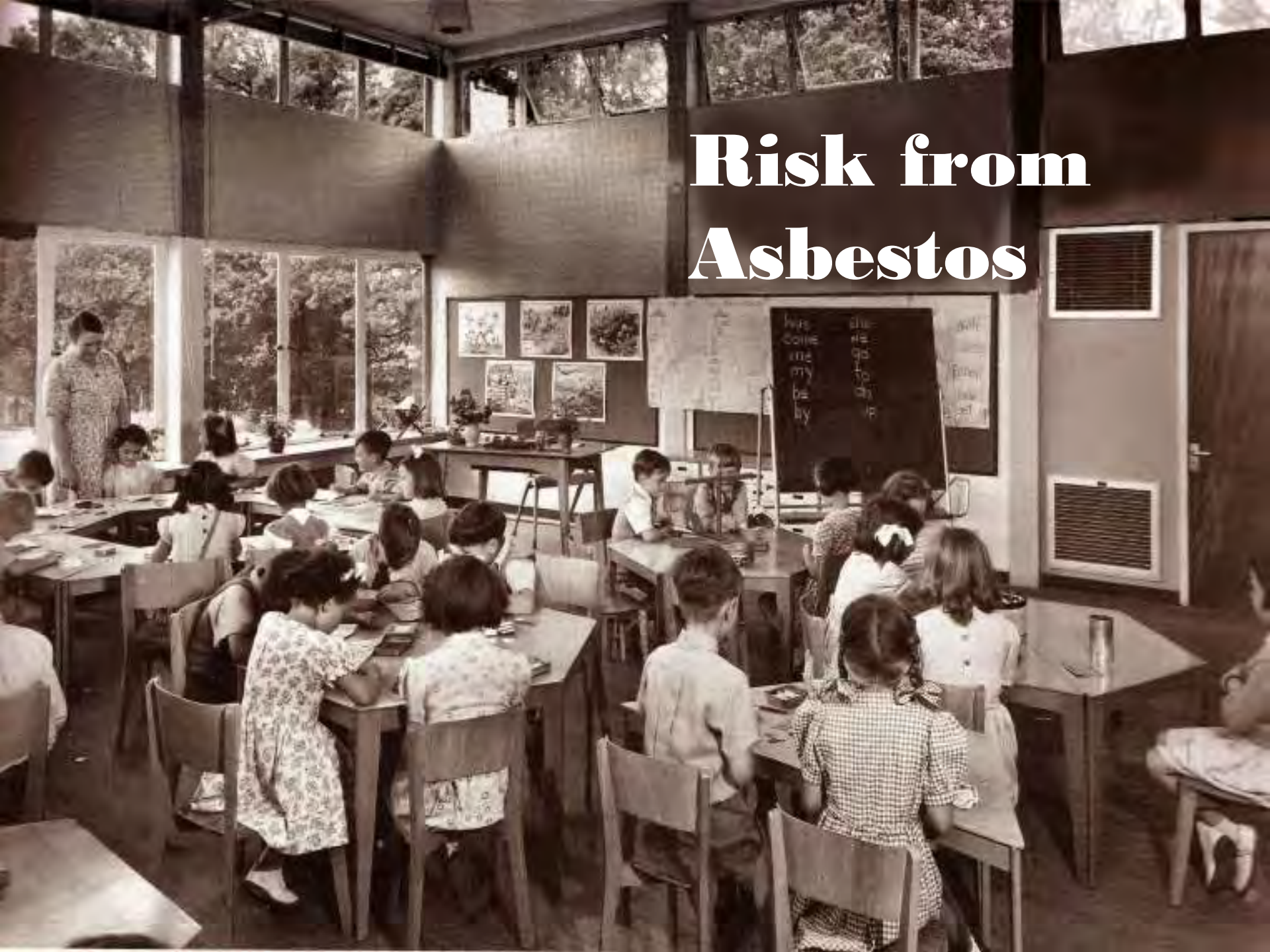
Extensive use of Amosite in Schools

Medical Research Council Report 1997

In general, extensive use was made of sprayed coatings (amphiboles), Asbestolux ceiling panels, and asbestos board (amosite) and asbestos-cement partitioning in system-built buildings constructed in the 1960s.

These particular buildings might thus be considered to pose a relatively “higher risk” of exposure

Risk from Asbestos



**CHRYSOTILE
WHITE**

CAUSES MESOTHELIOMA

**AMOSITE
BROWN**

**UP TO 100 TIMES
MORE DANGEROUS**

**CROCIDOLITE
BLUE**

**UP TO 500 TIMES
MORE DANGEROUS**

•“There is no threshold dose of asbestos below which there is no risk.”

High Court. Dianne Willmore and Knowsley Metropolitan Borough Council July 2009 .

•“Later exposure adds to earlier exposure.”

•All exposures are cumulative and contribute to the risk of the development of a tumour.”

Dr Robin Rudd 1994

A child will inhale ~ 3,000,000 asbestos fibres

During 12.5 years at school

Asbestos in good condition 0.0005 f/ml (500 f/m³)



Fibrous materials in the Environment

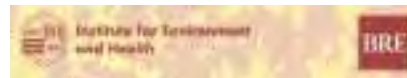
MRC INSTITUTE FOR ENVIRONMENT
AND HEALTH

A person on average inhales ~ 20m³ of air a day

Entire School Population Exposed

Medical Research Council Report 1997

“It is not unreasonable to assume, therefore, that the entire school population has been exposed to asbestos in school buildings.”



Fibrous materials in the Environment
MRC INSTITUTE FOR ENVIRONMENT
AND HEALTH

“Managing presents less risk of exposure to the occupants?”

Committee on Carcinogenicity

Provisional findings:

- Children are more vulnerable to exposure to asbestos
- Children are more vulnerable because they will live longer for the disease to develop.
- A 5 year old child is ~ 5 times more at risk than adult of 30.
- Physical immaturity. Science is incomplete
- Advised to follow Precautionary Principle
- Serious damage to lungs of a child < 5 is permanent

Amosite Cause of High British Mesothelioma Incidence

- **The British mesothelioma death-rate is highest in the world**
- **Britain was the largest importer of amosite.
Major cause of high mesothelioma rate.**
- **Mesotheliomas in Britain among people who were unaware of their exposure are four times greater than elsewhere in the world.**



RR696
Research Report

Asbestos Exposures in Schools

Maintenance

Everyday Classroom Activities



Primary School

30 windows ripped out with crowbars and power saws

Headteacher:

"I had no knowledge of asbestos its capabilities or where it would be found..."

it was a complete foreign language to me."



DRILLING AIB.

**Cloud of Fibres. Many Amosite
2f/ml -10f/ml
(2million -10 million f/m³)**

HSE “School caretakers have been identified as a particular group at risk due to the nature of their work (e.g. drilling and fixing.)”



Dianne Willmore

Supreme Court Judgment 9 March 2011

Negligently exposed to asbestos as a pupil at school

Exposure above background level

Materially increased risk of mesothelioma

Two current mesothelioma cases

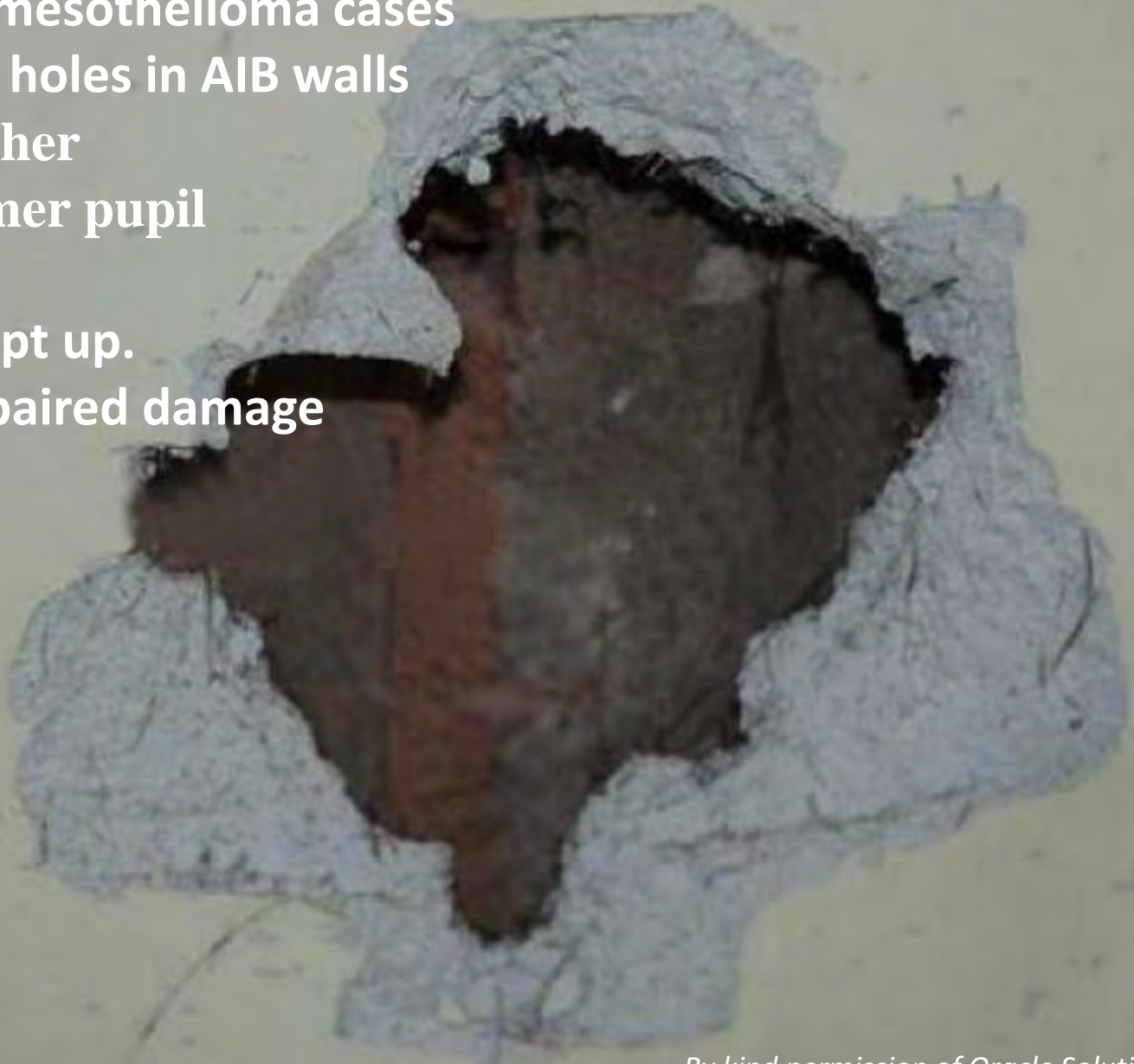
Pupils kicked holes in AIB walls

One is a teacher

One is a former pupil

Cleaners swept up.

Caretaker repaired damage



A GMB survey of 22 school kitchens in County Durham
20 contained damaged asbestos
Broken ceiling tiles, cracked plates on wall pipes, ovens and sterilisers.



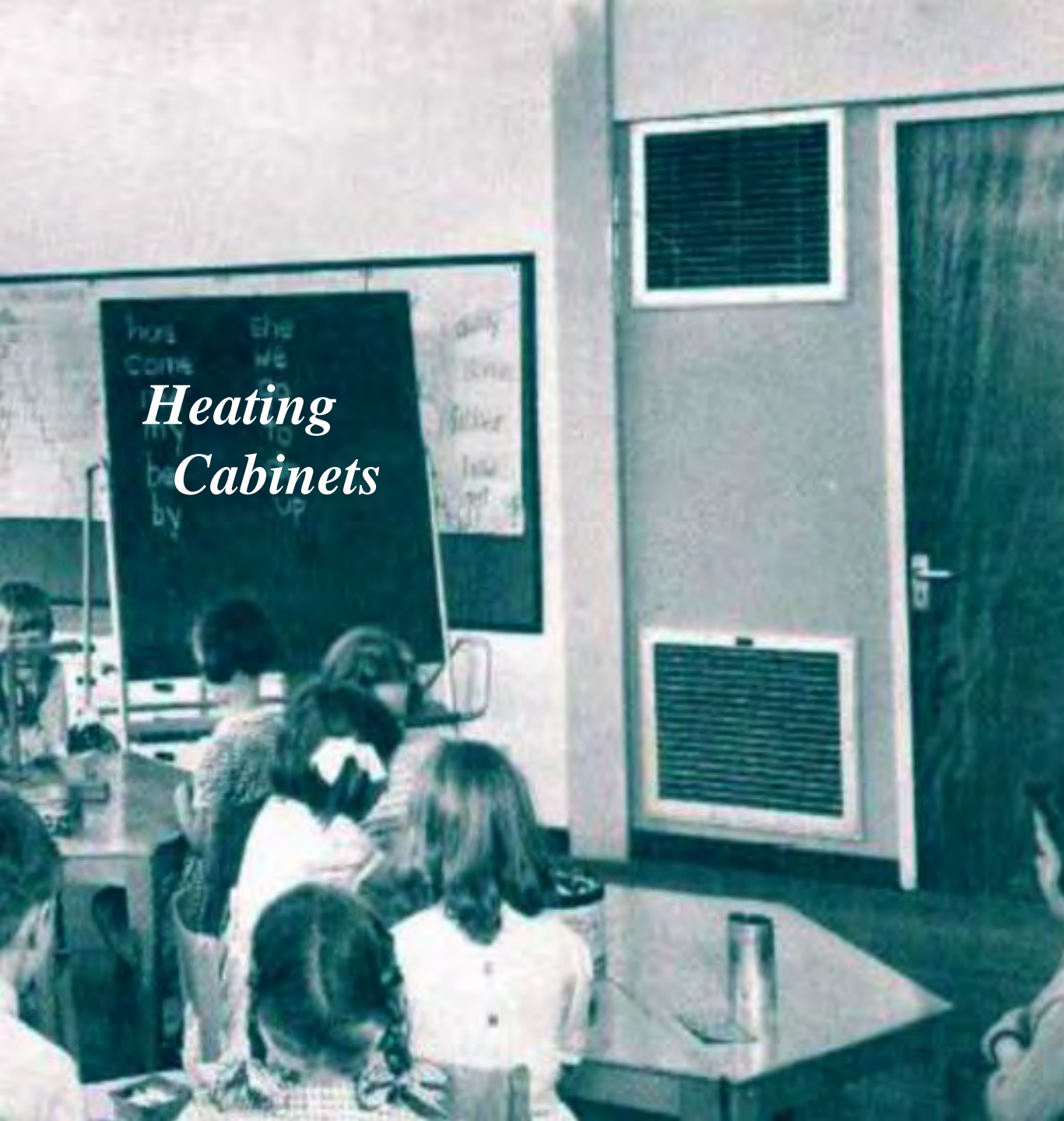
GMB 2001

A person wearing a red protective suit is using a brush to clean a wooden surface inside a cupboard. The surface has some brown stains. The background shows a white wall and a wooden shelf.

**Classroom
Cupboards
AIB back**

Cleaning 0.07 - 0.84 f/ml
(70,000 f/ f/m³ - 840,000 f/ f/m³)

Removing Stationary 0.02 - 0.05f/ml Amosite
(20,000 f/ f/m³ - 50,000 f/ f/m³)



Heating Cabinets

*“One of the most
popular forms of
heating schools”*

The Role of School Building in Post War England

1981

0.06 f/ml
(60,000 f/ f/m³)

Amosite

HM Principal Inspector of Factories 22 October 1981




“The apparatus needed regular cleaning if it was to function properly.”

“Students have a habit of opening up any available cupboards.”



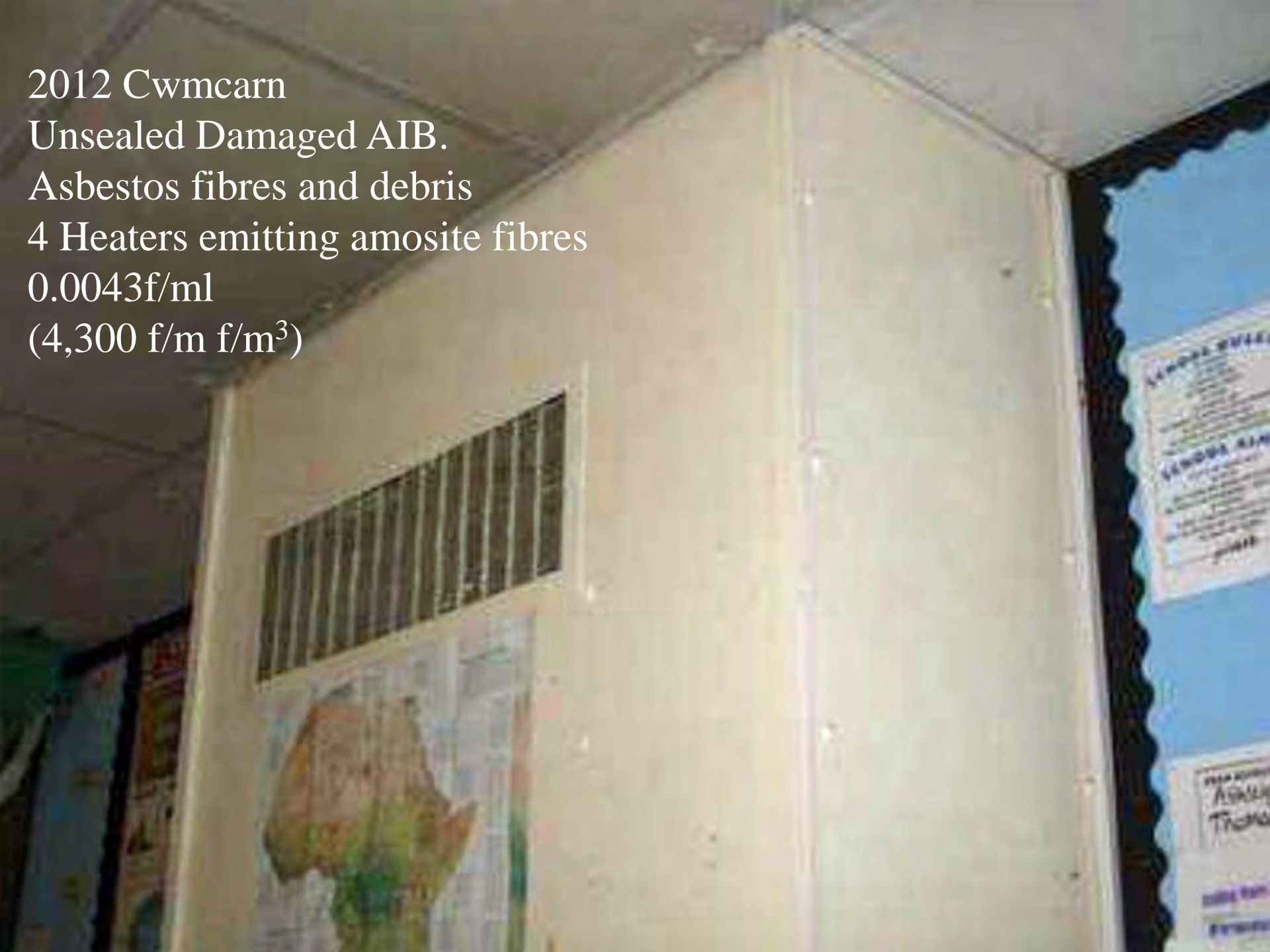
AIB baffles deflect air into classroom

A close-up photograph of a metal structure, possibly a pipe or duct, showing significant damage. A section of the metal has been torn away, revealing a white, fibrous material inside. The metal surface is dark and appears to be rusted or heavily soiled. The background is dark and indistinct.

“If damaged, fibres can be readily circulated...”

Scape CLASP asbestos handbook

2012 Cwmcarn
Unsealed Damaged AIB.
Asbestos fibres and debris
4 Heaters emitting amosite fibres
0.0043f/ml
(4,300 f/m f/m³)





School corridor. Sprayed asbestos ceiling
Pupils threw pens to stick in ceiling.
Caretaker regularly patched damage



1987.

Kicking AIB Wall 0.87 f/ml

(870,000 f/m³)



**ASBESTOS INSULATING BOARD.
MATRIX and AMOSITE CLOUD**

Handling AIB 1-5f/ml



1987

**Slamming a Door
Five Times**

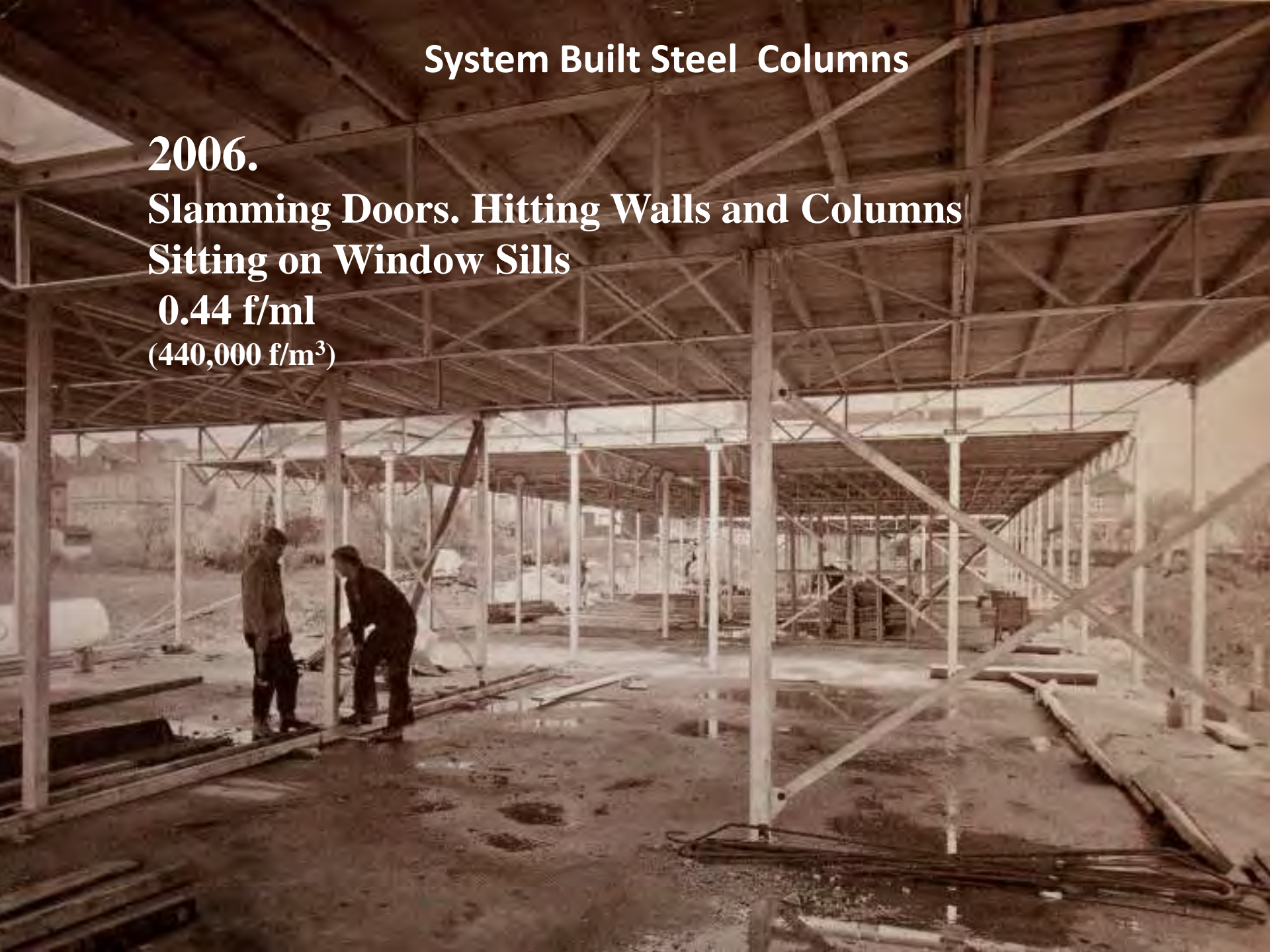
**0.33f/ml
(330,000 f/m³)**

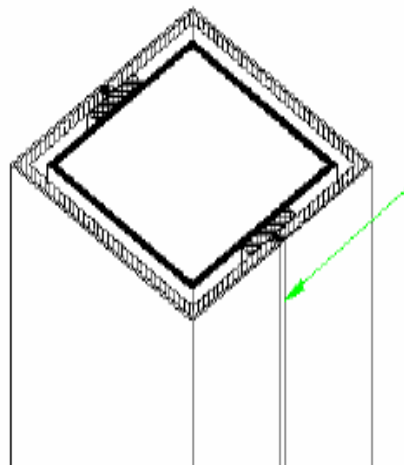
System Built Steel Columns

2006.

**Slamming Doors. Hitting Walls and Columns
Sitting on Window Sills**

**0.44 f/ml
(440,000 f/m³)**





Gap in Column Casing





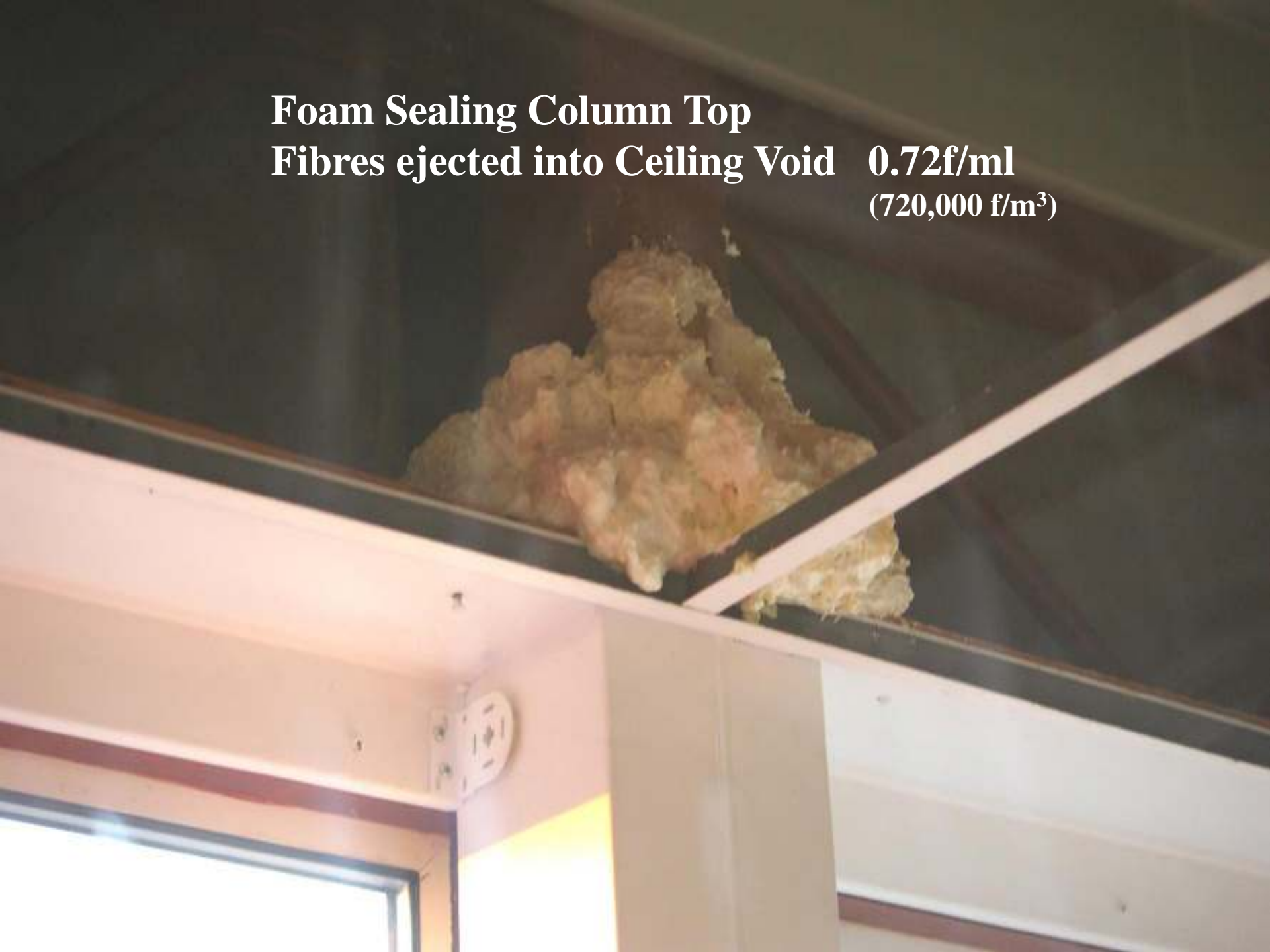
“Asbestos which is in good condition is better left in place and managed?”

Figure 11: View of base of column from which the casing in figure 10 was removed. A large amount of friable AIB debris can be seen.

A photograph showing a white rectangular column standing on a wooden floor. The column is positioned in a corner. At the base of the column, the silicone sealant is missing, leaving a gap between the column and the floor. The floor is made of light-colored wooden planks. The text "Missing Silicone Sealant Column Used as Goal Post" is overlaid on the right side of the image.

**Missing Silicone Sealant
Column Used as
Goal Post**

Foam Sealing Column Top
Fibres ejected into Ceiling Void 0.72f/ml
(720,000 f/m³)





Failing to identify
asbestos in columns.
Failing to manage

Improvement Notices

Walsall Metropolitan
Borough Council
12 Improvement Notices.

12 Oct 2007

“This was an extremely onerous
and expensive task”

DCSF/HSE Questionnaire asbestos management in system built schools– July 2010

Glasgow CC: You have failed
to manage the risks from
asbestos ...

In particular the primary
schools under the control of
Glasgow City Council

18 February 2010

HSE ENFORCEMENT NOTICES



DfES 1986. MANAGE

INTRODUCE MANAGEMENT SYSTEM

Where there is no extensive damage and no loose or friable debris, and where the material is accessible, it will be necessary to seal or enclose it and to introduce a management system.

DfEE Administrative Memo 3/86
15th August 1986

October 2012 Cwmcarn High School closed

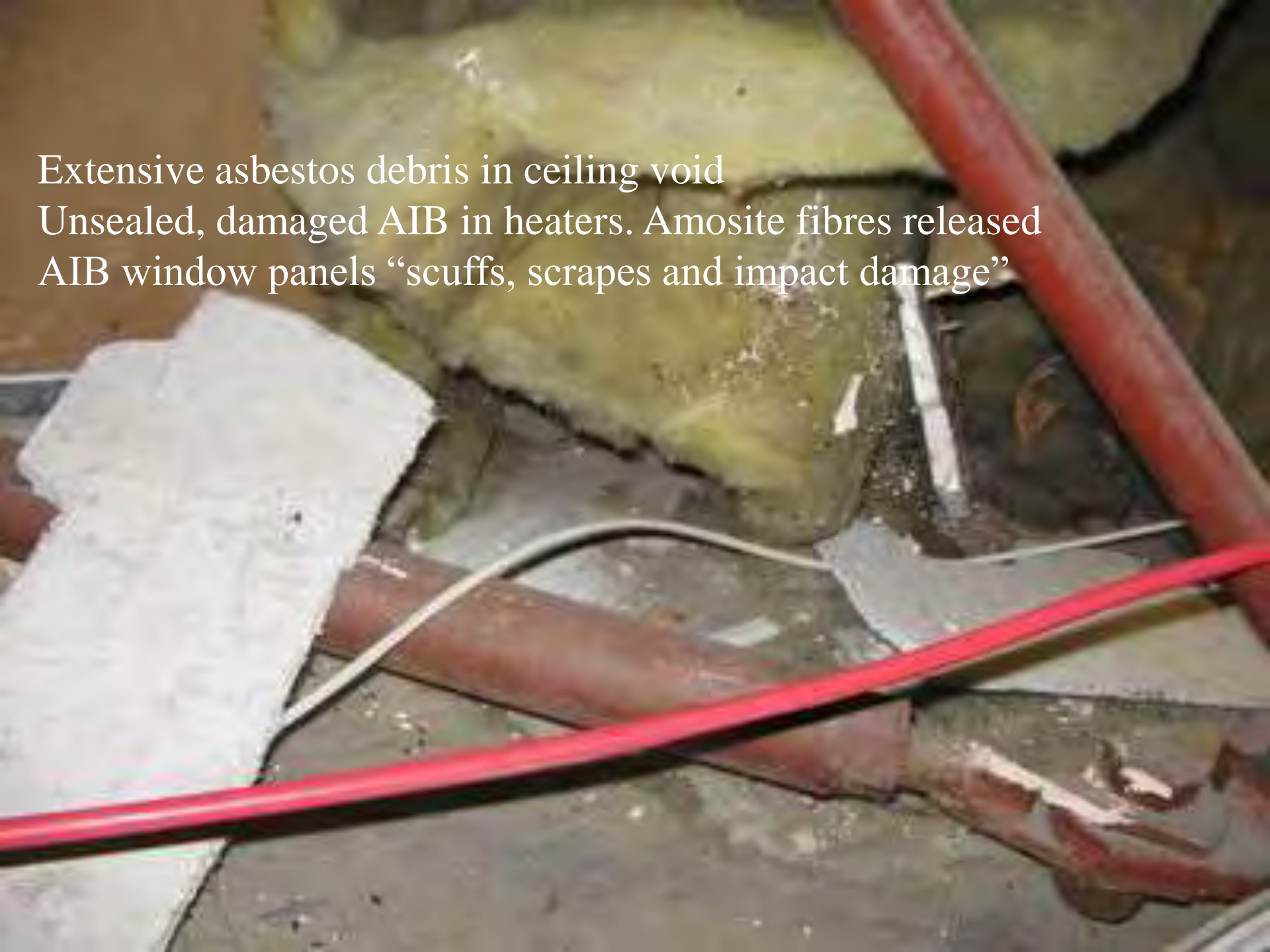
Asbestos contamination and heaters pose a potential serious risk to health

Asbestos remediation costs £1,047,944.08

Plan to open in September 2013



Extensive asbestos debris in ceiling void
Unsealed, damaged AIB in heaters. Amosite fibres released
AIB window panels “scuffs, scrapes and impact damage”



**Training
and
Awareness**

JUAC Survey of 600 members:

80% of safety reps had not had asbestos training , or unaware if they had.

70% of safety reps not consulted on asbestos management

30% unaware if asbestos register existed

VOICE Survey of 790 members:

77% had not had asbestos training , or unaware if they had

67% had not been told whether there was asbestos in the building

NASUWT survey of 1,923 members

57% did not know if asbestos present in school or not

13% asbestos in bad condition

2011 HSE inspections 164 school visited

Outside LA control

80 schools did their own maintenance

41 had no training for maintenance staff

51 had no written management plan

28 had Enforcement action

110 given “Advice” to improve asbestos management



Deteriorating School buildings

“Schools are not managing their asbestos either effectively or safely.”

“These are not minor problems that have crept in over recent years; rather they are fundamental problems that are endemic in schools in the UK.”

“Over the years the school stock has not been well maintained so that as the fabric of the buildings has deteriorated then so has the asbestos.”



A photograph of a school hallway. The hallway has a wooden handrail and a light fixture. The walls are a light color, and the floor is dark. The perspective is from a low angle, looking down the hallway.

Secretary of State:

“The condition need of some schools is so severe that urgent action is necessary.”

Ministerial Statement .Priority School Building Programme 24 May 2012

British Council for School Environments:

"Some are in a terrible – and dangerous – condition."

The Observer 20th May 2012

Chief Executive of Partnership for Schools:

“80% of schools were beyond their shelf life.”

BBC Radio 4 Today Programme 1 Apr 2010

Local Government Association (LGA) and Association of Directors of Children's Services (ADCS) 2010:

“£15 billion capital investment is the absolute minimum councils need between now and 2015 to ensure every child can be taught in a classroom which is safe and structurally sound.

Nearly £5 billion is considered essential for the next financial year, 2011-12.”

LGA media release – 24th September 2010

Priority School Building Programme

May 2012

£15 billion needed
£2billion allocated

587 schools in the worst condition applied
261 will receive funds

Progressive Removal

**DISTURBANCE IS CONTINUING RISK
PROGRESSIVE REMOVAL
SAFEST MOST COST EFFECTIVE (AMA 1985)**

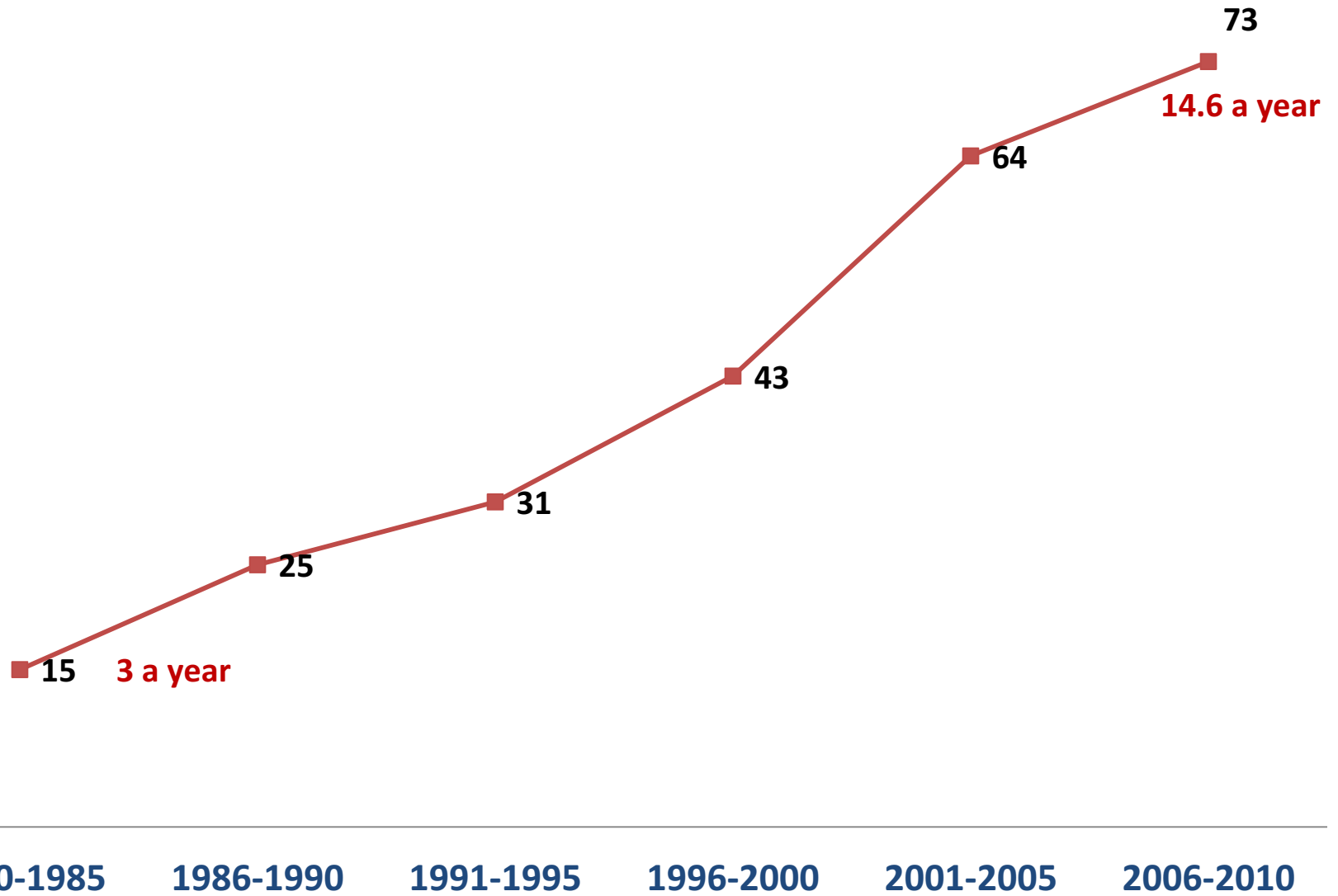
2.2.8 A policy of progressive removal should be adopted.
This does not, and cannot, imply the immediate
removal of all asbestos materials,

given that any asbestos is a
hazard, however slight, and that buildings will be
occupied and have to be maintained, and inadvertent
disturbance is a continuing risk.

Nevertheless, progressive removal is
thought to be both the safest and most cost
effective solution,

Asbestos Deaths

School Teachers' Mesothelioma Deaths



School support staff are also dying of mesothelioma

- **School Caretakers**
- **School Cleaners**
- **School secretaries**
- **Teaching assistants**
- **School cooks**

No Statistics for Children's Subsequent Deaths

Latency from first exposure:

Average	35-40 years
Low level exposure average	50 years

Therefore there are no statistics for subsequent mesothelioma deaths for children exposed to asbestos at school

Teacher's and Support staff Deaths are the Tip of the Ice-berg

Evidence to Education Select Committee.

**It is reasonable to assume in the order of
100-150 female mesothelioma deaths a year
will occur from asbestos exposure as a child at school.**

Professor Peto Education Select Committee 13th March 2013

Male and Female deaths a year = 300

- **Reasonable to assume 3000 deaths will occur from
asbestos exposure as a child at school**

2012

All Party Parliamentary Group on Health and Safety:

“This is a national scandal.

Urgent action is needed to prevent more pupils, teachers and other staff being exposed to this deadly killer dust.”

Jim Sheridan MP
February 2012

Asbestos in schools
The need for action

**All-Party Parliamentary
Group on Occupational
Health and Safety**

<http://www.asbestosexposureschools.co.uk/pdfnewslinks/APPG%20report%202012.pdf>

The All-Party Group recommends that:

- Standards in asbestos **training** should be set and the training should be mandatory.
- DfE and HSE jointly develop asbestos **guidance specifically for schools...**
- A policy of openness** should be adopted....
- Pro-active inspections** should be reinstated...
- Data should be **collected centrally** on the extent, type and condition of asbestos in schools...
- The Government should set a programme for the **phased removal** of asbestos priority to those schools where the asbestos is the most dangerous or damaged.

February 2012

MESOTHELIOMA
THE PRICE I PAID
FOR TEACHING!

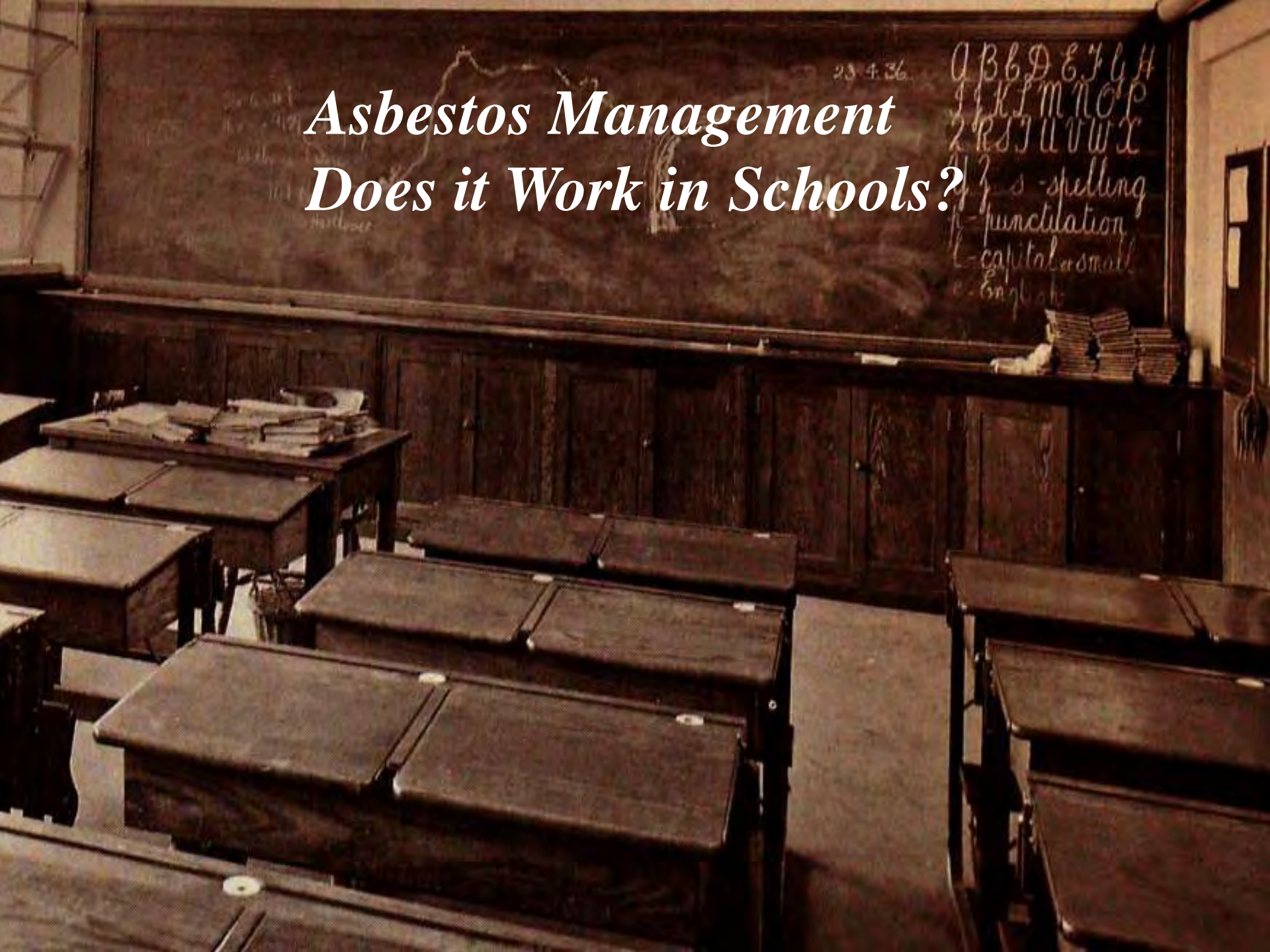


ELIZABETH BRADFORD

Asbestos Management Does it Work in Schools?

23 4 36

A B C D E F G H
I J K L M N O P
Q R S T U V W X
Y Z
- spelling
- punctuation
- capital & small
- English



Further Information

www.asbestosexposureschools.co.uk