ASBESTOS

NUT HEALTH & SAFETY BRIEFING

This briefing provides up-to-date NUT guidance on asbestos, including facts about asbestos, the law on asbestos management and removal, and advice to NUT health and safety representatives on dealing with asbestos problems.

Facts about Asbestos

1. What is Asbestos?

Asbestos is a naturally-occurring soft fibrous mineral. It has been used widely for many years due to its properties of resistance to heat and chemicals. Many thousands of tonnes have been used in construction of public buildings and, although the use of most types of asbestos is now banned, much asbestos is still present in buildings today.

2. There are 3 main types of asbestos:

- "blue" asbestos, or crocidolite;
- "brown" asbestos, or amosite; and
- "white" asbestos, or chrysotile.

3. Despite the reference to colours, the different types of asbestos cannot be identified by colour alone. All three types of asbestos are classified as Class 1 carcinogens. The import and use of blue and brown asbestos in the UK has been banned since 1984 and the import and use of white asbestos has been banned since 24 November 1999.

4. Where is Asbestos found in Schools?

The most common uses of asbestos in school buildings were:

- spray coatings, mixed with paint or water, for fire protection and insulation on concrete walls and ceilings and on steelwork;

- insulation lagging, particularly around pipework, boilers and ducts;

- insulation boards, for example, Asbestolux in heating equipment and other kinds of equipment such as protective mats in laboratories;

- asbestos cement products such as wall and ceiling panels, corrugated roof panels, tiles, gutters, pipes and decorative plaster-type finishes.

5. Why is Asbestos so Dangerous?

6. Asbestos gives off very small and fine fibres which can be breathed in easily. They can remain in the lungs, or settle in the linings of the lungs and the chest cavity, for long periods after exposure and their presence can lead to many asbestos-related diseases.

7. These can include:

- asbestosis or fibrosis, a scarring of the lungs caused by an accumulation of fibres which leads to chest pain, breathlessness, and strain on the heart;
- lung cancer and;
- mesothelioma an incurable cancer of the lining of the lungs or stomach from which between 1991 and 2000 a total of 73 primary and secondary teachers died.

8. There is usually a long delay between first exposure to asbestos dust and the diagnosis of illness. Neither cancer can be cured; both can rapidly cause death. Asbestos-related diseases currently kill over 3,000 people every year. It is predicted that the number of deaths may reach a peak of 10,000 per year by 2015. The vast majority of people dying now were exposed to asbestos in the 1950s/1960s when use in the UK was at its peak.

9. The risks in schools are clear. Asbestos was widely used in constructing schools in the past but poor structural maintenance and vandalism make schools more vulnerable than other buildings to the risk of release of asbestos fibres. The NUT's 1995 "Crumbling Schools" survey showed that 6 per cent of schools had at some point had buildings closed due to the presence of asbestos. NUT members have died of mesothelioma. It is difficult to pursue successful legal action against former employers because of the uncertainty as to where and when the exposure to asbestos fibres occurred.

10. Asbestos and the Law

In addition to the general requirements of the Health and Safety at Work etc Act 1974 and the Management of Health and Safety at Work Regulations 1999, there are several sets of specific regulations dealing with work with asbestos.

11. General Legal Provisions governing Asbestos Problems

The general duty placed upon employers by the Health and Safety at Work etc Act 1974 to ensure the health, safety and welfare of employees and others will require steps to be taken to deal with the potential risks to health and safety posed by the presence of asbestos.

12. The legal requirements for risk assessment placed upon employers by the Management of Health and Safety at Work Regulations 1999 apply to asbestos in the same way as to any other hazard at the workplace. The employer must seek to identify hazards, assess the degree of risk which they pose, and then take steps to remove or reduce that risk. The NUT's views on how employers should discharge these duties in the context of problems with asbestos are set out later

in this briefing.

13. Control of Asbestos at Work Regulations 2002

The Control of Asbestos at Work Regulations 2002 (CAW), define those who own, occupy, manage or have responsibility for premises which may contain asbesos as 'duty holders'. The Regulations place a specific duty on them to identify and manage asbestos in those premises. The regulations also require those in control of premises, for example governing bodies, either to manage the risk from the material, or to cooperate with whoever manages that risk. Under the Regulations, duty holders are required to:

- take reasonable steps to determine the location and condition of likely asbestos containing materials; (ACMs);
- presume that materials contain asbestos unless there is strong evidence that they do not;
- assess the likelihood of anyone being exposed to fibres from these materials;
- prepare a plan setting out how the risks from the materials are to be managed and take the necessary steps to put the plan into action;
- maintain an up-to-date record of the location and condition of ACMs or presumed ACMs in the premises and review and monitor the plan periodically; and
- provide information on the location and condition of the materials to anyone who is liable to work on or disturb them.

The NUT has been calling for the introduction of such requirements for many years.

14. Other Relevant Regulations

Other relevant regulations include the Asbestos (Licensing) Regulations, which govern the licensing of contractors permitted to undertake asbestos removal, and the Asbestos (Prohibition) Regulations, which govern the import, availability and use of asbestos products.

15. Complying with the "Duty to Manage" under the CAW Regulations

Who is the Duty Holder in Education Establishments?

The HSC's Approved Code of Practice on the CAW Regulations states that the duty holder under the Regulations will be "the person in control of maintenance activities" in those premises.

16. The Fair Funding system delegates to governing bodies, financial control of school budgets for routine maintenance and in some cases structural works. The ultimate overall responsibility for health and safety matters affecting employees, however, rests with the employer.

17. The NUT's view is that the principal responsibility under the CAW Regulations for ensuring that asbestos is identified and managed therefore rests with the local authority (LA) in schools where it is the employer, ie in community and voluntary controlled schools. Responsibility will rest with the governing body or college corporation in voluntary aided and foundation schools, sixth form colleges and independent schools. This appears at present also to be the view of the HSE.

18. For practical reasons, the NUT believes that, local authorities should take the lead in works to achieve, in all schools, compliance with, the "duty to manage" asbestos. Whether they are the employers or not, governing bodies should co-operate with their local authorities and follow their advice at all times.

19. Where local authorities are responsible as employers for health and safety issues, and governing bodies have not carried out the necessary work, it is possible for them to arrange for the necessary work to be carried out in schools and to recoup the costs from delegated budgets.

20. Determining the Presence of Asbestos

The "duty to manage" does not specifically require asbestos surveys to be carried out. The Regulations require "reasonable" steps to be taken to identify the potential presence of asbestos. The HSE advises, however, that surveys may be needed depending on what is found during an initial assessment.

21. The NUT believes that asbestos surveys should be carried out in all schools unless there is good reason not to do so. For example, the age of the premises might make it highly unlikely that asbestos will have been used in its construction or maintenance. Many education employers will previously have carried out some forms of survey, in particular the "condition surveys" required under the Asset Management Planning process. It should not be automatically assumed, however, that such surveys satisfy the requirements of the "duty to manage".

22. Surveys should be undertaken by competent personnel. The HSE advises that they can be either external consultants or in-house staff who have received sufficient appropriate training.

23. Where potential asbestos-containing materials are identified, the HSE sets out three options for duty holders in determining the action to be taken. These are:

- to presume that all potential asbestos-containing materials do in fact contain asbestos unless this can be specifically ruled out;

- to establish in each case whether asbestos is actually present or not by sampling; or

- to conclude that no such materials contain asbestos. This is, however, permissible only on the basis of strong evidence, for example records of building plans or age of the building.

24. Where surveys are carried out, the information obtained must be recorded in writing. It should set out whether ACMs/presumed ACMs are present, their location and condition and, if known, the type of asbestos involved.

25. Preparing Management Plans

Duty holders must prepare written plans setting out how the risks from any potential asbestos materials are to be managed.

26. Such plans will need to cover:

- decisions and rationale on options for managing risks;
- timetable and priorities for action on removal or encapsulation;
- arrangements for monitoring materials to be left in place;
- responsibilities of staff;
- arrangements for informing and training staff, including contractors;
- timetable and procedure for review of management plan; and
- dealing with emergency situations.

27. Management plans should in all cases provide that information about the location and condition of presumed asbestos will be provided to all employees, to others who are liable to disturb it and to the emergency services.

28. Duty holders should take immediate action to deal with identified damaged/disturbed materials before preparing their plans. Duty holders should put safe systems of work in place to prevent disturbance of potential asbestos materials. For example, if a wall or ceiling is known, or suspected, to contain asbestos, it is important that contractors do not drill into the asbestos and that teachers do not stick drawing pins into it. If an incident occurs, for example debris falls from a ceiling, or a roof collapses, the area should be sealed off. There should be no attempt made to enter or clear up the area, until a competent person has confirmed that asbestos is not present.

29. The options for managing risks from presumed asbestos will range from adopting a "once and for all solution" whereby competent specialists identify and remove asbestos, to recording information about presumed asbestos and setting up a system of monitoring and review in case of deterioration. *Removal is the option favoured by the NUT*. See section 'DfES/HSE and NUT Policy Towards Asbestos' below.

30. The HSE's present advice is that "if asbestos-containing materials are in good condition and are unlikely to be damaged or disturbed, then it is better to leave them in place and to introduce a system of management."

31. The NUT does not agree that it is preferable to leave asbestos–containing materials in place and seek to manage them. As described below, removal should always be the first consideration. Where this is not immediately possible, safe management may mean that major changes are required in the way in which school staff work.

32. **<u>Insertion of Drawing Pins into Asbestos Insulation Board</u>**

In February 2006, the independent WATCH (Working Group on Action to Control Chemicals) Committee, chaired by the HSE, considered whether the practice of inserting drawing pins into asbestos insulating board (AIB) ceilings or walls, when

putting up displays in classrooms, was an activity which should cease. The conclusion reached was that although the risk involved may be small it was an activity which could, and therefore should, be avoided.

33. The NUT is keen that this message be conveyed to teachers and other school staff who then follow this recommendation where a school's asbestos survey indicates that this is necessary. Staples are no better than drawing pins. Fibre release is likely to be greater when the staple is removed. Where there is no information available as to whether asbestos is present or not, the precautionary approach should be adopted until such time as the situation is clear. This means that, as set out in the Control of Asbestos at Work Regulations 2002, it should be assumed that asbestos is present.

34. In such circumstances, the NUT strongly recommends that members should not mount displays until either:

i. the AIB is either removed or sealed, as a temporary solution; or
ii. it is catergorically confirmed that no asbestos is present.

35. Similar precautions need to be taken before screwing display boards or, for example, interactive whiteboards into a wall.

36. Consulting Employees

When duty holders consider their management plans, they must determine who is going to oversee the processes and how employees are to be consulted and kept informed.

37. NUT health and safety representatives are entitled under the 1977 Safety Representatives and Safety Committees Regulations to be consulted on matters affecting employees they represent. They therefore have the right to be consulted about employers' proposals to undertake work to meet the requirements of the "duty to manage" and to see any records made in connection with this work or other records relevant to asbestos issues.

38. DfES/HSE and NUT Policy towards Asbestos

There are three possible approaches when asbestos material has been identified:

- leave the material in place without sealing it and introduce a management system to keep its condition under review;
- leave the material in place but seal or enclose it and keep its condition under review; or
- remove and dispose of the asbestos material.

39. The DfES has issued guidance to local authorities which identifies options (i) and (ii) as its preferred options where practicable. This is accepted by the HSE as generally adequate to meet the requirements of the law.

40. NUT policy, however, is that *all asbestos should be removed from schools,*

whenever it is found and whatever its form, unless this is completely impracticable. There are considerable problems with leaving asbestos in place, even where it is not in poor condition and is effectively sealed. Its presence may not remain clearly identified and this could lead to exposure during later maintenance or repair work. There is experience of this occuring in several schools.

41. Exposure could occur if teachers were to stick drawing pins into ceilings containing asbestos in order to hang displays. Subsequent exposure could occur if the asbestos is located in an area of high wear and tear or is damaged by vandalism or the activities of pupils.

42. The NUT will accept sealing or encapsulating of asbestos only as an interim measure in some circumstances prior to removal. The principles of risk assessment require that employers should seek firstly to remove risks rather than to reduce risks or institute protective measures. In all cases where asbestos is identified in a school, the NUT will press the employer to arrange for its *complete removal*. Most local authorities have retained responsibility and funding for the costs of asbestos removal, so this should not adversely affect a school's financial position.

43. Dealing with Cases of Suspected Asbestos

NUT safety representatives should contact their NUT Health & Safety Adviser or NUT Regional/Wales Office whenever the presence of asbestos is suspected. This is particularly important when the suspected asbestos material is in a poor condition since urgent consideration may need to be given to closing part, or all, of the school.

44. There should be full consultation between the local authority, head teacher and all safety representatives. NUT safety representatives should be involved in all such discussions even if the asbestos is found in an area where NUT members do not work, such as, for example, the boiler room, since errors in removal might result in asbestos contamination of a far wider area of the school.

45. First Steps: Closing off the Affected Area

Where the presence of asbestos is suspected, the speed of action should be determined by the level of risk which appears to be posed. Dealing with suspected asbestos which is in a poor, flaking condition or which is "friable" , i.e., easily crumbled, is of greatest urgency, although suspected asbestos which is sealed and less likely to be releasing fibres should still also be promptly investigated.

46. The first priority is to ensure that nobody continues to work or pass through the affected area. There are two legal provisions which will support employees in withdrawing from areas in which asbestos is suspected.

47. Section 7 of the Health and Safety at Work etc Act 1974 requires employees to take reasonable care for the health and safety of themselves and others which means that teachers are required to withdraw pupils and themselves from potentially hazardous situations.

48. Section 28 of the Trade Union Reform and Employment Rights Act 1993 gives workers the right to stop work and leave their place of employment in the case of serious and imminent danger to their health and safety.

49. Both sections may be cited in support of the right of teachers to withdraw themselves and their pupils from affected areas in schools where asbestos is found. Further agreement should be sought to shutting the building concerned or the whole school, if appropriate. The NUT Health and Safety Adviser or NUT Regional/Wales Office should be fully involved.

50. Next Steps: Identification and Testing

51. In many cases, it is not possible to identify asbestos through visual inspection alone. Microscopic analysis by means of "bulk sampling" is essential. Procedures for the taking of bulk samples should be set out in order that the environment and its occupants are protected together with the person undertaking the sampling. Schools should never be requested to send in samples of the suspect material since this might involve accidental exposure to asbestos fibres. Reports of the results of analysis should be made available to the school safety representative and to the NUT Health and Safety Adviser or NUT Regional/Wales Office.

52. The risk posed by asbestos is quantified by finding out the amount of asbestos fibres in the environment by means of air sampling tests. Tests at the start of the process to determine the extent of the problem are called "reassurance tests"; tests at the end of the process to check on the success of removal are called "clearance tests".

53. Air sampling tests are most commonly carried out by "phase contrast microscopy" using membrane filters. Surface dust disturbance is necessary before the tests in order to disturb the asbestos fibres which will settle in still air. Tests of this kind should conform to guidance given in HSE Guidance Note EH10 and should be undertaken over a four hour period either during normal occupation of the building or in simulated occupational conditions.

54. Laboratories reporting on the results of air tests should be "NAMAS-accredited" i.e. accredited by the appropriate professional body.

55. Results of air sampling tests should be provided to safety representatives or the NUT Health and Safety Adviser or NUT Regional/Wales Office. The HSE recommends that the asbestos levels for any type of asbestos should be less than 0.01 fibres per millilitre (f/ml). The NUT adheres firmly to these limits when dealing with cases of asbestos. Where the limits are exceeded, the NUT will insist that the area must not be used; where asbestos levels are within the limits the NUT will accept that the area can be used.

56. HSE Guidance Document MDHS 100 "Surveying, Sampling and Assessment of Asbestos-containing Materials", contains detailed guidance on identification and testing of suspected materials, while HSE Guidance Note EH10 sets out detailed information on air testing. Further advice on these areas should be sought via NUT Health & Safety Advisers and Regional/Wales Offices

57. Sealing and Encapsulation

NUT policy is to seek the *complete removal of asbestos materials*. Only complete removal will help to ensure health and safety in schools. It must be accepted, however, that priority must be given to the removal of asbestos in poor condition which constitutes the greatest risk to the health of those within its vicinity. In some circumstances, as an interim measure, asbestos may need to be sealed or encapsulated.

58. It is not possible to give specific guidance on circumstances where the only course to take is the immediate removal of asbestos, as opposed to any intermediate action. Specific advice should be sought from the NUT Health and Safety Adviser or NUT Regional/Wales Office. In general, however, the following points will be relevant.

- Friability (ease of flaking or crumbling) - This affects the likelihood of fibres being released from the material concerned. For example, lagging or sprayed asbestos is more friable than asbestos cement, where the fibres are bonded within the cement, although fibre release is still very possible from the latter.

- Location/accessibility - This is an important factor in schools, since asbestos materials of low friability may nevertheless be located in areas with a high degree of wear and tear or subject to damage by vandalism or the activities of pupils.

- Damage - This should include consideration not only of existing damage but also of the risk of further damage to the suspected material.

- Asbestos content of the material - This might vary from, for example, 50 per cent asbestos content, considered as high, to less than 10 per cent in asbestos cement boards.

- Previous treatment - Where asbestos has already been treated by, for example, sealing or encapsulation, this may have reduced the risk providing it remains intact.

59. Some local authorities use a "weighting system" which allocates points for factors such as those above in order to prioritise the work required. Prioritisation should be agreed between the local authority and Union locally.

60. Proper encapsulation requires such steps as enclosure by hardboard or metal sheeting or sealing by special paints. Ordinary paints or wallpaper are not adequate. Decisions to seal or encapsulate asbestos should not be made before consultation and agreement. Encapsulation should proceed only where there is no high degree of wear and tear and the implementation of further safeguards is essential.

61. Following encapsulation, areas should be clearly identified and a register of location should be kept for future reference and be readily available. Maintenance programmes are needed to ensure that the seals remain in good condition and adequately labelled. A “permit to work” system will be needed for future maintenance work or alterations to the building.

62. Removal

Asbestos removal should be undertaken only when the school is not occupied i.e., during holidays, weekends or evenings. Only in exceptional circumstances should removal proceed when the school is in session. In such circumstances the areas where removal is taking place must be either physically separate from the occupied parts of the school or be capable of being sealed off in some other way.

63. Removal should be undertaken only by contractors who are local authority approved and expert in asbestos stripping procedures and are licensed under the Asbestos (Licensing) Regulations. The contractors are required by these Regulations to provide adequate information to persons who may be in the vicinity of the work or who may be affected by the work, while the Control of Asbestos at Work Regulations impose an obligation on employers to provide adequate information and protection to employees affected by the removal of asbestos.

64. Recording Exposure

The NUT believes that all cases of actual or possible asbestos exposure should be recorded by the employer via the Occupational Health Service or some other form of employer register of exposure. Records of exposure need to follow teachers as they move between employers, as well as being retained by the original employer. The register should be open to examination by employees and safety reps. If exposure is not registered by the employer, then the individuals should ask to have it entered on their GP medical records. Where employers refuse to keep a register, teachers should keep their own records. This could be in the form of a copy of a letter sent to the employer detailing the possible exposure. Similar arrangements should apply in the case of pupils' possible exposure. In many respects children are more at risk. Given their age and the long latency periods associated with asbestos cancers, they are potentially at greater risk of developing an asbestos-related disease later in life.

65. The NUT believes that employers should adopt a policy of openness in respect of possible asbestos exposure. Experience has shown that an honest assessment of the risks involved is more reassuring than attempts to withhold information in the mistaken belief that it will cause panic.

66. Getting Help from your Union

NUT safety representatives should contact the NUT Health & Safety Adviser or NUT Regional/Wales Office whenever problems with asbestos arise, particularly when asbestos in poor condition may be present and closure of all or part of the school may be necessary. NUT Health and Safety Advisers or Regional/Wales Offices should be involved or consulted during and after the process of asbestos removal.

67. The attached checklist will assist NUT safety representatives in evaluating proposals for asbestos removal before removal begins and during and after the removal process.

Asbestos Removal Action Points for Safety Representatives

Make sure that:

- an asbestos survey has been carried out in the school and a copy of the survey report provided to you;

- the location of any asbestos is known and, where appropriate, labelled, a risk assessment undertaken and staff and contractors instructed to refrain from practices, such as drilling, which could result in the release of fibres.

- appropriate arrangements have been made for management, including removal where possible asbestos materials;

- if ceilings or walls are known to be made of asbestos insulating board, or if such information is not available, teachers and other staff are instructed not to use pins or staples to mount displays of pupils' work, since this will result in exposure to asbestos fibres.

- you are fully involved, together with your NUT Adviser or NUT Regional/Wales Office, whenever any work involving asbestos is planned.

ASBESTOS

CHECKLIST FOR NUT SAFETY REPRESENTATIVES

The following checklist will assist NUT health and safety representatives when problems are encountered with asbestos.

General

> Has the local authority conducted an asbestos survey of the school in order to determine the location and condition of asbestos containing materials and is it available to you?

> Has your school received local authority guidance on the new 'duty to manage'?

> Is there an agreed local authority procedure on steps to be taken in dealing with problems of suspected asbestos and asbestos removal and are you aware of its provisions?

> Does it include:

- a reporting procedure for suspected asbestos;
- details of who at local authority and school level will be responsible for maintaining and up-to-date record of the location and condition of materials containing asbestos or suspected asbestos which are left in place?
- a commitment to ensure that employees and contractors are informed about the location and condition of those materials?
- a commitment to removal of asbestos wherever possible;
- a commitment to removal of asbestos outside school session times?
- guidance on avoiding the use of drawing pins and staples to mount displays where walls or ceilings contain asbestos insulating board.

When Asbestos is Discovered

> Have pupils and staff left the affected area and has the area been sealed off?

> Has testing been arranged by means of bulk sampling or air tests to be carried out by a reputable body?

Before Encapsulation or Removal Work

> Have the local authority safety officer and NUT Health and Safety Adviser or NUT Regional/Wales Office been consulted regarding the plans for encapsulation or removal?

> Has it been agreed that work will be carried out when the school is not is session?

> If asbestos is to be removed, is the removal company licensed to carry out asbestos removal and approved by the local authority?

> Have the local authority safety officer and NUT Health and Safety Adviser or NUT Regional/Wales Office received and agreed to:

- the company's safety policy and proposed work methods?
- the company's proposals on location of its decontamination unit, i.e. 'dirty' and 'clean' changing rooms and shower unit?
- the company's proposals for environmental monitoring for asbestos contamination?
- the company's proposals for post removal analysis and air tests by a reputable body?

During Removal Work

> Are the work area and the decontamination area cordoned off and, where necessary, signposted "Asbestos - Cancer Hazard - Keep Out"?

> Is the work area sealed up with heavy duty polythene sheeting and taped air-tight? Has it been tested for leaks with a smoke bomb? Is there an air lock at the entrance/exit to the work area?

> Are the polythene sheets billowing inwards, showing that the work area is under negative air pressure from the exhaust ventilation inside the plastic tent?

> Do the workers wear transit overalls between the decontamination unit and the work area?

> Are there monitoring instruments outside the work area checking on asbestos contamination - especially if normal work is continuing? Are monitoring results being given to the client's supervisors and Safety Reps?

> Is waste asbestos being removed in double, heavy duty plastic sacks labelled "Asbestos - Cancer Hazard"; or better still by large-diameter vacuum pipes feeding directly into sealed waste hoppers outside the building? How and where is the asbestos toxic waste being disposed?

After Encapsulation or Removal Work

> Have “clearance” air tests been carried out and are the results available to you?

> Are areas of encapsulated or sealed asbestos conspicuously labelled “Asbesto – Cancer Hazard” so that employees, pupils and future maintenance workers are warned?

> Is there a system for continuing to check the safety of all asbestos that is encapsulated or sealed?

> Has the local authority informed all staff about their possible exposure, recorded the possible exposure to asbestos on employees’ personal files and advised staff to have the possible exposure recorded on their medical records?