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PLAINTIFF'S EXHIBIT 114.0

asbestos information committee

copy for Mr. A.A. Cross

ASBESTOS KILLS - NEW FACTS?

COMMENTARY

on Mrs Nancy Tait's pamphlet
May,1977

GENERAL

Mrs Nancy Tait's new pamphlet covers a wide field and its contents need to be evaluated by people whose professional knowledge covers medicine (including medical care, diagnosis and treatment), pathology, epidemiology, statistics,community health, waste disposal, industrial hygiene and legal compensation.

To deal with all these facets of the asbestos/health problem is ambitious and understandably difficult within the compass of a short pamphlet, and it is equally difficult for a brief commentary to discuss the subject in depth or to deal with every single error. We do not comment on the slurs which the pamphlet casts, unnecessarily, on the professional reputation of individual doctors. There are however several points on which obvious comment can be made immediately and with reasonable brevity for the benefit of readers who are not in a position to verify references for themselves.

Page 1

"A spokesman for the Asbestos Information Committee reported, at an Industry-Government Conference in Washington in September,1976".

No spokesman for the Asbestos Information Committee reported at this Washington conference. Mr A A Cross addressed it in his role (at that time) of Chairman, Standing Committee, International Asbestos Information Conference.

Chrysotile a carcinogen

The abstract of Professor Corbett McDonald's latest presentation "Mesothelioma and Asbestos - Fibre Type" concludes that "the risk of mesothelioma after crocidolite exposure would appear to be at least 50 times greater than that associated with chrysotil production."This does not mean that mesothelioma cannot be cause by chrysotile, but it does mean that chrysotile is probably only likely to be a cause of mesothelioma where exposure has been particularly heavy or where a man is exceptionally susceptible.

Nobody in the UK has ever claimed that "chrysotile is safe". Enormous efforts are made to minimise exposure to it, in view of its known associations with all three asbestos-related diseases.

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DHSS Cancer Epidemiology and Clinical Trial Unit

The American National Institute of Occupational Safety and Healt (NIOSH) whatever it may have published, could not possibly have the results of the Trials Unit study because this has not yet been completed. The most that has reliably appeared is the evidence of Mr Julian Peto, published to the Advisory Committee

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on Asbestos, and made available to that Committee on 16th June, 1977, a month after Mrs Tait's pamphlet went to press.

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It is not true to say that "crocidolite was not used" in the production of asbestos textiles at Turner & Newall, Rochdale. Considerable amounts of crocidolite (blue) were used before 1951, and it was encountered in the cheese winding and plaiting sections of the factory up to 1969.

"Excess deaths from circulatory disease"

Mrs Tait has omitted the comment by the authors (Knox, Holmes, Sir Richard Doll and Hill) in relation to such deaths in workers exposed since 1933, that"it seems probable that this is a chance finding of no medical importance". She has also omitted their comment on the excess of other cancers that "the small excess of deaths due to other neoplasms is not statistically significant".

"Women, one of them a non-smoker, had died from lung cancer"

A reader could be forgiven for thinking that quite a number of women had died from lung cancer. In fact two women were reported, one a smoker, one a non-smoker.

Mrs Tait has also omitted the quite important conclusion of the authors that "among men and women who have worked in the scheduled areas only since 1933 the observed mortality from all causes is close to the expected (79 against 81.05)".

"We now learn that instead of 1 in 100 being slightly affected, by 1974 1 in 10 had died from respiratory disease".
Mrs Tait's comment has no bearing on the adequacy of the standard. The British Occupational Hygiene Society recommended a 2 f/ml standard on the basis that this would reduce the risk of encountering the first clinical signs of asbestosis, after 50 years continuous exposure to 1 in 100. The group of workers studied have largely been exposed to appreciably higher exposures than 2 f/ml. However, in a small sub-group which has been exposed for the first time since 1951 at dust levels known to have been in the region of 2 f/ml, there have been no cases of any asbestos disease whatever.

Page iv

"Another company which claimed a trouble-free record had not been in existence for the length of time which normally elapses between exposure to asbestos and development of disease. On average this is 25 years for lung cancer: 35 years for mesothelioma".

The factory described was the Rhooose factory of TAC Construction Materials Ltd, which has been operated by that company for 42 years.

"Professor Sir Richard Doll of the DHSS Cancer Epidemiology Unit at Oxford has published (again only in America) that, because it is an extremely dangerous material which other materials can replace we ought to ban the use of asbestos".

On 17th May 1977 Sir Richard Doll wrote the following letter to Dr Walter Smither:

"I was most distressed to see the statement attributed to me in the report of the meeting of the New York Academy of Science. It certainly is not my view that the use of asbestos should be banned. It is, however, my view that the use of crocidolite should be banned. Please feel free to use this statement in any way you want".

Community Concern

The views of Dr Robert Murray are quoted as if he was opposed to the opening of a new brake lining factory at Ovens, near Cork. His actual assessment appeared in the Irish Times on 17th May, in the following terms:

"One international medical expert brought to Cork by the IDA literally staked his professional reputation on the belief that neither the factory nor the dump will cause cancer or other diseases among workers or the communities living around them. 'There is no medical reason why this plant should not go ahead,' Dr Robert Murray told the county council meeting".

Page vii

"The £500,000 needed for the AIC's advertising campaign was passed in ten minutes of discussion"

The aggregate of discussions by Board members of member companies of the AIC amounted to many hours, and individual Board members came to the relevant AIC committee meeting with a clear idea of their companies' views. These were unanimous, that the only method of securing a platform for a balanced presentation of the issues at stake was to take paid advertising space, since the industry's views were not receiving more than cursory editorial notice in the media at the time (late spring and early summer 1976).

The Advertising Standards Authority

The ASA did not criticise the AIC advertisement "as being complacent about the latent dangers and oversimplifying the health hazards of asbestos and as giving information which is premature and unsubstantiable". Nowhere in their ruling did the ASA use the words "complacent", "premature" or "unsubstantiable". They said "The advertisement did not, in the Authority's view, make adequately clear that there exists a substantial difference of medical opinion about the extent of the current and future risks related to asbestos. In consequence, there was a degree of over-simplification which might have had the effect of obscuring some of the uncertainties in the medical assessments of the hazards."

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Annual Report of H M Chief Inspector of Factories, 1974

"4 f/ml - twice the official Hygiene Standard".

In 1974 the official hygiene standard of 2 f/ml was not a ceiling but a target towards which industry was expected to aim. The prac of the Factory Inspectorate, as set out in its Technical Data Note was to take no action if a ten-minute sample showed asbestos dust levels to be below 2 f/ml and to ask for improvements if the leve was between 2 and 12 f/ml. It is only in the past few months that Technical Data Note 13 has been superseded by Hygiene Note 1

which demands (a) the lowest level reasonably practicable (b) a ceiling of 2 f/ml when averaged over 4 hours and (c) a ceiling for a 10 minute sample of 12 f/ml.

The 1975 Industry and Services Report of the Health and Safety Executive, which Mrs Tait has not quoted, reports as follows on the industry's achievements two years ago:-

"Of a total of 675 representative personal samples taken in the workers' breathing zone over a 4 hour period, 95% were below the current hygiene standard of 2 f/ml and 99% were below 4 f/ml. A further 280 representative personal samples taken at 18 factories which do not have facilities for undertaking their own medical surveillance of employees revealed 90% below 2 f/ml and 96% below 4 f/ml".

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0.40 f/ml "represents 9,600,000 fibres breathed in a day and is twice the level which the TUC recommends should apply in industry for all types of asbestos".

Most of the fibres breathed in are also breathed out or dealt with by the body's rejection mechanism.

Page x

"For every fibre counted, there are between 100 and 1000 smaller uncounted fibres".

The fibres that are counted are those that are biologically significant (i.e. fibres more than 5 microns long and less than 3 microns in diameter).

Page xi

IARC Statement of scope of problem related to asbestos exposure

The paragraph quoted from an International Agency for Research on Cancer publication does not appear in the main body of the report and is in fact prefaced with the following qualification:-

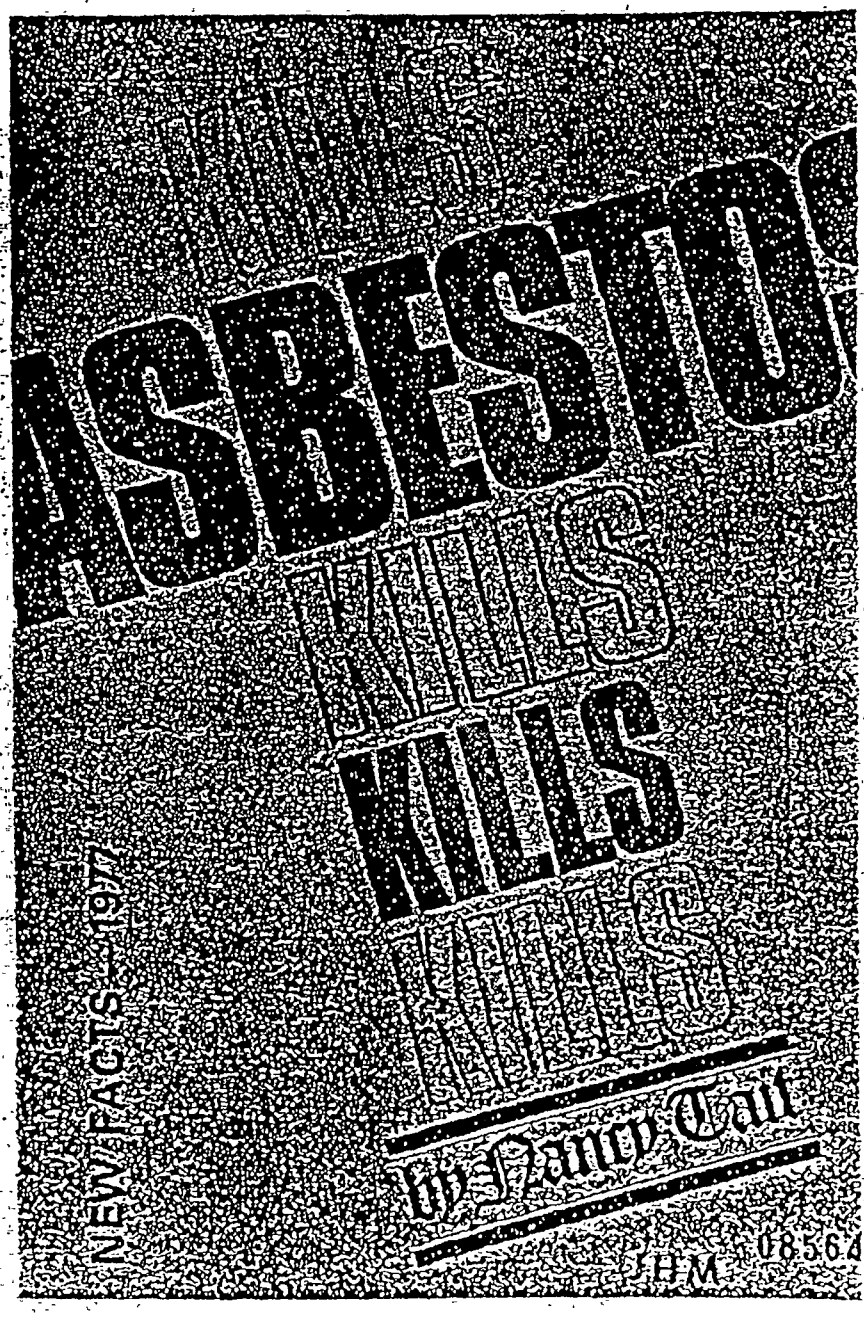
"The present Working Group, convened to evaluate asbestos, felt that in view of the importance of this substance, this monograph should also present a quantitative evaluation of the future scope of the problem in terms of society as a whole. Such forecasts are dependent on several variables which cannot be predicted with certainty. Without implying disagreement with the views of the Working Group, the Director of the IARC has requested that this section appear as an Appendix to the main text of the monograph."

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27th June 1977

The Asbestos Information Committee supported by BNA Group Ltd
Cape Industries Ltd
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Turner & Newall Ltd, a
other British asbestos companies.

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ASBESTO
KILLS
KILLS
by Larry Tait
NEW FACTS—1977
HM 08564

ASBESTOS KILLS

NEW FACTS 1977

by

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asbestos industry, which led to the appointment, by the Quebec Provincial Government, of the 'Comité d'étude sur la salubrité dans l'industrie de l'amiante' of which Judge Beaudry was president.

The incidence of asbestos disease is under-recorded

The study at the mines and mills in Thetford, Quebec Province,[3] is important because exposure was only to chrysotile, yet 697 or 60% of 1161 workers were found to have abnormal X-rays. 49% of non-smokers and 46% of those who had worked where dust counts were lowest, as in open pits above ground, were also found to be affected. 83.5% of smokers and 76% of those working in very dusty conditions had abnormal X-rays. A mortality study reported excess deaths from lung cancer. 585 of 714 workers found in 1974 to be affected, had not been advised of their condition by the mines clinic doctor, Dr Paul Cartier.

Dr Cartier, who resigned in 1974, had also been the government inspector for the area for a number of years. He has published that he 'considers that asbestosis can be tolerated quite well for many years' and the problem will remain unnecessarily serious for many years to come if a 'too scientific medical concept' is accepted. Others share his views. Professor P.C. Elmes, Director of the Medical Research Council Pneumoconiosis Unit, Penarth, wrote in 1976, 'As it is unusual at the present time to detect asbestosis in workers under the age of 50, it is evident that asbestosis may coincide with other disabilities leading to the necessity for light work and retirement at the age of say 60. Life may not be appreciably shortened and death from unrelated disease is common'. I deplore such callous indifference to the suffering caused by asbestos.

The Mount Sinai study at Thetford which proves conclusively that chrysotile is dangerous, has not been publicised in this country. In reply to a Parliamentary Question, the Chairman of the Health and Safety Commission has stated that a physician from our Employment Medical Advisory Service attended the clinical examination at the Thetford Mines in 1974 but made no report on the visit[4].

Although it is argued that chrysotile cannot penetrate to the pleura to cause mesothelioma, French researchers investigating cases of mesothelioma have identified fibrils of chrysotile in pleural plaques and near the surface of the lung[5]. Mesothelioma has been diagnosed amongst chrysotile miners and their families, yet it is still claimed that the health records of the Canadian chrysotile miners show that chrysotile is safe.

DHSS Cancer Epidemiology and Clinical Trials Unit

Further evidence of the dangers of chrysotile is provided by studies[6, 7] carried out at Turner and Newall, Rochdale, by the DHSS Cancer Epidemiology and Clinical Trials Unit at Oxford University. Parliamentary Questions have been unable to obtain details of these studies[4]. However, the American National Institute of Occupational Safety & Health (NIOSH)[5] quotes these studies as reporting an increased risk of

developing lung cancer (1.8 times the expected)among those first entering scheduled areas between 1933 and 1950, and an excess of deaths from lung cancer (1.9 times the expected) among those who started work after 1950, when new dust control measures had been introduced and conditions were much less dusty. Most workers were employed in the production of textiles for which crocidolite was not used.

One of these studies has been referred to in a paper by a member of the Oxford team (again obtainable only in America), which reports that 1 in 10 of 678 men, who worked only in conditions covered by the Asbestos Regulations 1931, had, by 1974, died from lung cancer, mesothelioma and asbestosis [6]. 17 of these deaths had occured by 1968, as had excess deaths from circulatory disease and from other cancers: cancer of stomach, colon, gall-bladder and prostate. Women, one of them a non-smoker, had died from lung cancer. The researchers Knox, Holmes, Doll and Hill comment that the women's deaths were unexpected 'in view of the rarity of the disease in women in the country as a whole' [8]. Payments by the company (£1 a week to widows) were made as 'an ex-gratia allowance subject to review at any time and its continuance for a specific period cannot be guaranteed'. Relatives were not told that it had been accepted that employment had contributed to death.

Two members of this team, Drs. Knox and Holmes, gave the Standards Committee of the British Occupational Hygiene Society the information on which our Hygiene Standard of 2 fibres per cubic centimetre is based and from which the Committee concluded that if men worked for 50 years in conditions which allowed 2 fibres of chrysotile per cubic centimetre of air (i.e. 2 million fibres breathed in an hour) less than 1 man in 100 would be affected and he would show only the very earliest signs of the effects of asbestos on the lung [9]. The Committee described this data as scanty: no data on cancer was considered although Drs. Knox and Holmes knew it was available. We now learn that, instead of 1 in 100 being slightly affected, by 1974, 1 in 10 had died from respiratory disease.

The Standards Committee reported that inhaled chrysotile fibrils dissolved slowly from the lungs, yet failed to investigate the process and the effects this dissolved asbestos might have. However, recent research in America and France [5] which was not restricted to investigation of the lungs, as happens so often in this country, has identified fibrils of chrysotile, visible only when an electron microscope is used, which have migrated through human tissue to all organs of the body.

Industrial disease statistics

This work has especial significance for those seeking to explain the excess deaths from all cancers which are reported by studies of asbestos and thermal insulation workers. Deaths from these cancers do not appear in statistics as deaths from industrial disease, because only asbestosis and mesothelioma are 'prescribed'. Lung cancer in the UK qualifies for DHSS benefit only if asbestosis is also diagnosed. The TUC has recommended that both lung cancer and cancer of the larynx should be listed as

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Waste disposal

When the use of asbestos is discontinued, waste will still be a problem. Soil covering old dumps in the UK has been found to have eroded, exposing blue asbestos which remains uncovered while companies and local authorities argue as to who should meet the cost of making them safe. In Cork, following protests by residents, Industry has offered to make its waste asbestos into cement pellets *before* it is dumped, but the community feels strongly that the proposed site, near a school, is unsuitable for waste asbestos even in this form and that since experts cannot assure us that there is a level of exposure to asbestos dust which is free of risk, factories and dumps should not operate where homes, schools, shops or farms may be affected.*

Para-occupational exposure

The experts who reported to the Commission of the European Communities on the *Public Health Risks of Exposure to Asbestos*, decided that, 'There are not sufficient data to estimate the size of the population at risk' from para-occupational or domestic exposure They report Dr. Holmes' claim that 'Experience from the Rochdale asbestos industry UK does not reveal any increased prevalence of diseases in relatives; in this case however rather strict hygiene measures are being taken: workers are not allowed to take working clothes home; laundering is performed within the factory'[16].

In fact the company provides and launders only a loose coat-type overall for the majority of workers; even head-covering is optional. Asbestos fibres leave the factory in air and clothing and will continue to do so until showers and a complete change of clothing and shoes is provided for all workers. No mortality study of the community as a whole has been made. In his report to the Standards Committee, Dr Holmes referred to Rochdale as a 'conurbation with a high prevalence of chronic bronchitis' and described two workers as 'members of a local large bronchitic family'.[9]

In another town, although a worker was found at post mortem to have evidence of exposure to asbestos, the dependants were refused pension on the grounds that he was treated as bronchitic, not asbestotic, during life. In other cases, a diagnosis of asbestosis or mesothelioma has been contested until confirmed by post mortem. Only recently have General Practitioners become aware that industrial diseases may affect the community. Many report that their interest is resented by Employment Medical Advisers and company doctors.

Domestic exposure

While some sections of industry still try to claim that there is no risk to the general public from asbestos, others admit that the risks exist, but claim that they can be reduced to an acceptable level. During 1976, reports have reached me of an asbestos Ironstand given to a baby as a plaything, asbestos paper used as pellets by schoolboys, a toy cupboard lined with asbestos and children playing on asbestos dumps or near

* Waste water from asbestos factories and industrial laundries enters the public sewerage system. Sludge is spread on farmland.

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workmen cutting asbestos materials. Such exposures would not be remembered if disease developed in 40 years time. To protect the community the controls would have to be as rigid as those designed to ensure the safe use of radio-active material. Such measures are not practicable in homes, shops, offices, schools and hospitals, where asbestos is frequently handled carelessly when repairs to existing asbestos become necessary or when new asbestos is fitted to meet the requirements of the fire regulations. Industry in America has reported that the dust taken home in a worker's clothes is a permanent cancer risk to the family and that, once in the home, asbestos impregnates carpets and furniture and is recirculated in the breathing zone by any movement, particularly by vacuum cleaning [17]. Those who claim that controls can make the use of asbestos safe, cannot be aware that, although legislation exists in the UK to prevent such practices, many reports reach me of contractors cutting asbestos in occupied premises and leaving unsealed surfaces, dust and debris, which must impregnate the home. The risk will spread across Europe if the European Community introduces Fire Regulations similar to those which created the problem in the UK.

The Advisory Committee on Asbestos

No attempt has yet been made to deal effectively with the problem in the UK where many still claim that 'chrysotile is safe' and where the Advisory Committee on Asbestos has issued an interim statement which has only recommended that further research is necessary and that exposure to all forms of asbestos dust should be reduced to the minimum reasonably practicable [18]. This has pleased the Asbestos Information Committee.

The Asbestos Information Committee

This Committee is responsible for some of the major problems arising from the use of asbestos which face government, workers and the community.

The £500,000 needed for their 1976 advertising campaign was passed in ten minutes of discussion although, in 1975, their expenditure on advertising in the UK was cut back from £55,000 to £50,000 [1]. One of their full page press advertisements was criticised by the Advertising Standards Authority as being complacent about the latent dangers and oversimplifying the health hazards of asbestos and as giving information which is premature and unsubstantiable. The Authority also criticised the advertisement because it did not make it clear that the Asbestos Information Committee was set up by, and is funded by, a consortium of asbestos manufacturers, but implied that the AIC was connected with the Government's Asbestos Advisory Committee and obtained its advice from official government sources. That advertisement will not appear again.

Asbestos Kills

As part of their campaign, the AIC produced a commentary on *Asbestos Kills*. It

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contains untrue statements such as 'cases are registered (by Pneumoconiosis Boards) solely on the identification of disability due to observed fibrosis', 'The Industry was helpful to Mrs Tait at the time of her husband's death' and 'Mrs Tait's source for this statement is an allegation in a television programme'.

Although much of the commentary is concerned with trivial details only, the first page shows clearly the attitude of industry to safety measures and control. Ignoring the official Health & Safety Executive Hygiene Standards to which I referred and which state that occupational exposure to chrysotile dust should not exceed 2 f/ml when measurements are averaged over a 4 hour period, or 12 f/ml when measured over any 10 minute period, the AIC implies that much higher dust counts are accepted officially, by claiming:

> 'Since the BOHS Standard was not a "2 fibre" standard but a "100 fibre year per millilitre" standard the allowable concentration for anyone with 25 years continuous exposure would be 4 f/ml, and with only 10 years continuous exposure, 10 f/mL' The BOHS only advised the Dept. of Employment, it did not set the standards.

The AIC claims '. . . . a working atmosphere which is adequate in relation to asbestosis is regarded as adequate in relation to lung cancer also' as if this were the official opinion, although both the BOHS and the Health and Safety Executive have published that the numerical relationship between asbestos and cancer risk is not known.

Asbestos Kills quotes from the Annual Report 1974 of HM Chief Inspector of Factories, that 97 of 400 samples were found to be above the Hygiene Standard of 2 f/ml. The AIC claims that this is 'a typical piece of misrepresentation' because 65, above 2 f/ml, were not above 4 f/ml' — twice the official Hygiene Standard. Would a motorist's plea that he had not disregarded a speed limit of 30 mph, because he was travelling at less than 60 mph, be accepted?

The Asbestosis Research Council

Asbestos related diseases A guide for the General Practitioner by Dr Smither of Cape Asbestos, states that it is published by the Asbestos Information Committee, supported by BBA Group Ltd, Cape Industries Ltd, Turner & Newall Ltd and other British Asbestos Companies and also by the Asbestosis Research Council.

Completely independent research is rarely possible. The industry, which influences research by commissioning its own studies, by financing the Asbestosis Research Council and by grants to the World Health Organisation and International Agency for Research on Cancer, also controls information which researchers need, such as medical records and dust counts.

The presentation of information may be unconsciously influenced by prejudice or may be deliberately slanted. Summaries can be so brief as to be misleading.

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Ingested asbestos

Dr Smither, writing in *Woman's Own*, claimed that the asbestos in all the beer consumed in this country in a year, would fill only a small cup. He did not mention that in *Asbestos – its special attributes and uses*, the AIC has published that chrysotile fibrils are so fine that less than 1 gram, (1/30 ounce) would reach 477,680 miles to the moon and back, which distance represents 385 million million fibres of a size thought to be capable of causing cancer.

Asbestos occurs widely in food, drink and drugs: it has been used for water and sewage pipes and to cover reservoirs and to lag tanks. Industry is anxious to deny that ingested asbestos is dangerous. However, the IARC has quoted recently 'Epidemiological studies have consistently shown an excess risk of other cancers, especially of the gastro intestinal tract, following exposure to mixed fibres . . . However, such risks have been less than that for lung cancer, . . . increased exposure to inhaled asbestos particles leads to increased digestive system cancer'. (100,000 colostomies are recorded in the UK and the figure is increasing by 8,000 a year) 'Smoking has not been found to be associated with an increased risk of mesotheliomas or cancers of the stomach, colon and rectum, which occur with equal frequency among smoking and non-smoking asbestos workers' [19].

Measurements of asbestos dust concentrations

The practice of referring to fibres per cubic centimetre of air, rather than to the number of fibres in the total volume of air breathed, also encourages under-estimation of the risk. Dr Smither claims that 0.40 fibres per cc constitute a negligible risk, but this represents 9,600,000 fibres breathed in a day and is twice the level which the TUC recommends should apply in industry, for all types of asbestos. When reporting as ranging between 0.01 and 0.23 f/cc, the fibres produced by a toaster, a hairdryer, an ironing board, a cooker or a radiant ring, Dr Smither did not make it clear that each measurement was only of the contribution which that single appliance made at that time to the general level of asbestos in the home nor did he make it clear that the measurements he reported had been adjusted by subtracting background measurements from his results. Such scientific exercises bear little relationship to the experience of an individual who must breathe the asbestos which has accumulated in the home from all sources. Government Departments claim that domestic appliances and oven gloves, iron stands, cooker braids and simmering mats, need to be replaced only when damaged or frayed, but it is during the process of wear that fibres are rubbed onto clothing or released into the room, to collect there permanently, as do the fibres taken home on a worker's clothes, as industry has reported. [17]

The method of counting asbestos fibres which is currently in use, is recognised to be inadequate. When a number of laboratories are asked to assess the same filter, it is usual for different counts to be reported by each laboratory and even by individuals in a single laboratory. Only a small proportion of the fibres present can be distinguished

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by the methods used. Industry has reported that '... an air environment containing 0.5 f/cc definitely cannot be distinguished from one of 2.0 f/cc with only one or a few determinations and may not be distinguishable even with many determinations'[17].

Fibre size, shape and penetration are now thought to be the factors which make asbestos carcinogenic. A fibre with a diameter less than that of a cell (that is finer than 2.5 microns) may pierce a cell. If the fibre is longer than 2 microns, the damaged cell may be unable to engulf it and the cancerous proliferation may be triggered. Very short, straight fibres may reach the pleura by penetrating to the alveolar areas of the lung; others may migrate.

Fibres less than 1 micron in diameter cannot be seen when the counting methods recommended for use with the Hygiene Standards are used. Those between 1 micron and 1.8 microns in diameter, even if seen, are not counted. For every fibre counted, there are between 100 and 1000 smaller, uncounted fibres.

Labelling

The AIC has publicised that industry has introduced a number of voluntary measures designed to afford protection, but these are only partially effective. The warning labels and leaflets, announced in July 1976, are still not readily available; the voluntary ban on crocidolite applies only to the raw fibre. Imports of products containing crocidolite, even in the form of free fibre, are uncontrolled and need not be labelled.

Industry's concern

Another claim which the AIC has publicised widely is:

'Sadly, existing sufferers can only be helped by good medical care and fair compensation to them and their dependants. This responsibility the asbestos industry has willingly undertaken and many millions of pounds have been paid both in direct compensation and in maintaining the earnings of employees transferred to lighter less exposed work'.

Compensation

If millions of pounds have been paid in compensation, then many more workers must be affected than industry will admit, since few receive large sums. Turner and Newall paid widows £1 a week in 1976. If death is from industrial disease, the DHSS adds 55p a week to the normal widow's pension, or makes a single payment of up to £300. Following much publicity, Turner & Newall has now increased from £1 to £6 a week its 'Ex Gratia Allowances paid during the pleasure of the board of Directors.' The DHSS has not increased its payments. In many cases, dependants find that the additional company payments may be deducted from state benefits. Few can themselves afford, or are able to obtain through a Union, the expert legal and medical

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advice which must support a claim. Employers do not have these disadvantages when contesting claims.

Medical care

'Good medical care' can deal only with symptoms; there is no treatment or cure. The International Agency for Research on Cancer at Lyon has written 'The only way to fight cancer deaths related to asbestos is to eliminate exposure to asbestos.' This can only be done by limiting the use of asbestos to situations in which it can be totally enclosed or to which only those provided with full protective clothing are allowed access. Showers and a complete change of clothing before leaving the work place, are essential.

Diagnosis

An EMI Scanner, which is said to diagnose asbestosis at a much earlier stage than is possible by other methods, is available to those living in the Manchester area. A Safety Representative, Mr R Jackson has succeeded in obtaining similar facilities in the Humberside Area and, because of the high incidence of asbestos disease amongst Thermal Insulation Workers, he recommends that they should press every Area Health Authority to install this equipment.

Treatment

In America, a research programme at Mount Sinai, to find an effective treatment and means of early diagnosis for mesothelioma, has been funded by an initial donation of £300,000 from Johns-Manville and the International Association of Heat & Frost Insulators and Asbestos Workers. Professor Selikoff has predicted 70,000 cases of mesothelioma amongst American asbestos workers during the next 40 years. In the UK Dr. Muriel Newhouse estimated that 7%-11% of workers employed at an asbestos factory, now closed, would die of mesothelioma.

Inadequate control

The IARC has published that, 'In spite of the fact that the hazards from exposure to asbestos dust had been clearly defined by Merewether and Price in the UK (as early as 1930) ... insufficient action was taken. ... By the time the cancer potential had been recognised and defined (1935-80) asbestos had permeated much of modern industry, and, indeed, modern society, ... in circumstances that we now understand are inadequate for the control of occupational disease, including cancer. As a result, we are now faced with a double dilemma, of how to deal with the consequences of previous inattention and error, in terms of human disease, and of how to avoid further exposure which could produce disease in the future. ... In many studies of groups of asbestos workers, for example, approximately 20% of all deaths are the result of lung cancer, three-quarters of which are attributable to their work with asbestos'.[19] Should

estimates prove accurate, some 200,000 deaths from lung cancer and 50,000 deaths from mesothelioma are forecast for US and these take no account of deaths which will arise from future exposures.

Yet any attempt to deal with the effects of the problem on people, rather than on statistics, is attacked by industry as 'emotive'. Despite rising profits, industry claims that it cannot afford to introduce more effective methods of dust control and threatens workers with unemployment.

It is understandable that workers and unions involved in the manufacture of asbestos should fear the threat of unemployment, but every worker employed in the production of asbestos puts at risk hundreds of others. For brake-linings, the figures are given as 135 at risk from servicing and repair work, for every 1 paid to produce them. In addition, there is the risk to the general public from asbestos dust which accumulates in the environment, when released by any of its 3,000 uses. Industry should be prepared to contribute to the cost of putting its house in order. A constructive approach such as the TUC proposals for licensing of the thermal insulation industry and its programme for a change to alternative materials, is possible. Redundancies can be avoided; the introduction of new processes and new materials could create employment. British Rail are enforcing a Hygiene Standard of 0.05 fibres cc when stripping crocidolite from existing rolling stock. The Post Office has adopted the TUC recommended standard of 0.2 fibres cc for all existing asbestos. Both use alternatives for new work. Such measures will be effective if applied rigidly throughout industry and the community.

Help needed

The number of people suffering as a result of past mistakes is increasing and there is an urgent need for an organisation to help those who develop asbestos disease and their dependants by providing sympathetic advice and information on treatment, nursing care, benefits and compensation. Action is also needed to counteract the misleading information published by the Asbestos Information Committee and to ensure that the risks are understood and safety regulations adequately enforced.

I have written mainly about the situation in the UK, but my visits to Europe and correspondence from the rest of the world, show this to be a problem which needs to be tackled internationally. The Health & Safety Executive is extending its work in industry in the UK, but its powers and resources are limited.

Those whose lives are affected by the industry, that is those who use asbestos, their families and neighbours (in fact every individual in the community) should be heard and there should be research to ensure their safety in the future and to alleviate the suffering of the victims of past neglect.

I hope that plans for a Trust in the UK will mature in the near future and that the

European Foundation for the Improvement of Working & Living Conditions, which has invited me to submit my proposals for dealing with the problem, will extend the work to Europe.

A levy on imports of raw fibre and products containing asbestos would make substitute materials more competitive and could be used to finance the change to alternative materials and the work which needs to be done for those who develop asbestos disease.

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