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NEWS IN BRIEF

EDITORIAL

Wanted: a clear, ambitious strategy for 2007-2012

In 2002, the Commission adopted a Community health and safety strategy for the period 2002-2006. In a different tack to previous programmes, it aimed to mainstream health and safety at work across other policies, some of which, like the European employment and public health strategies, have no legislative underpinnings.

The Commission also signalled a wish to build partnerships with the other players, specifically referring to the agreements concluded by the European social partners. This approach stems from the Social Policy Agenda, adopted two years previously, which put combining full employment with quality of employment on the agenda.

The strategy for 2002-2006 was seen as a way of adapting to changes in society and work. The Communication surveyed changing patterns of work and their impact on risks. The strategy was flawed from the start by being too vague on what measures would be taken, and when - a failing made worse by the Council of Ministers' inaction.

Early this year, the new Commission published its new Social Policy Agenda focused on two priority areas: full employment and equal opportunities. Under the Communication subheading *A new dynamic for industrial relations*, the Commission flags up plans for a new health and safety at work strategy for the period 2007-2012. It should focus on new risks, safeguarding minimum levels of protection, and coverage for workers not adequately covered.

The Commission's pledge to zero in on these areas can only be welcomed. Protection cannot be harmonized at a minimum level without adopting directives that lay down a common basic set of rights for European workers. Trade unions want the programme to do a stocktaking of public resources (regulatory, financial and human) allocated to health and safety in each member country.

It should also look at how the public authorities are addressing the two challenges of having their remit expanded to include psychosocial risks in particular, and disaggregation of businesses. The lessons of the present strategy's

NEWSLETTER

ineffectiveness must be learned: the new strategy must have better targeted activities, with a timetable. The national and European levels of action must be better joined up, with a special focus on national debates and developments. The trade unions and other players must also help to inform the process.

Trade unions want the Community strategy to focus on two major risks: musculoskeletal disorders (the main cause of illness from a stressor-ridden work organization), and chemicals - a big cause of work-related health disorders, where the regulatory framework is currently being radically overhauled.

Coverage for all workers means finally doing something about the health and safety of workers with no job security. The spread of casual hire-and-fire is taking a heavy toll on health across Europe. Existing Community provisions are not up to tackling the problem.

Workers' right to collective representation, guaranteed in the 1989 Framework Directive, is another key thing. Many workers, especially temporary agency staff and workers in SMEs, are outside this directive. But rights alone are not enough! Trade unions must provide more systematic support to health and safety reps. That is essential if we are to change and improve the quality of work. ■

Marc Sapir, Managing Director, ETUI-REHS

HESAmail: your monthly OSH update

The ETUI-REHS Health and Safety Department has been publishing a monthly e-newsletter since September 2004. We call it HESAmail, because it aims to provide subscribers with an emailed briefing on developments in health and safety at work on the European and international scenes. It gives regular updates on live issues at European level, like musculoskeletal disorders, work-related stress, and the new European chemicals policy (REACH). HESAmail is also our way of keeping you informed about the range of activities organized by our Health and Safety Department, like conferences, seminars, new publications, and so on.

HESAmail is sent out free of charge to our subscribers by e-mail at least monthly, or more frequently if breaking news requires.

You can sign up for the HESAmail mailing list on our website home page:

www.etui-rehs.org/hesa

or send an email giving your surname, first name, postal address and email address, and putting "HESAmail signup" in the subject line, to ghofmann@etui-rehs.org

It costs you nothing to register or have it sent to you.

HESA Publications

REACHing the workplace and Occupational health: new language versions

The ETUI-REHS Health and Safety Department continues to develop partnerships with national trade unions to expand its catalogue of publications and make them available in different EU languages.

Initially available only in English and French, *REACHing the workplace* and *Occupational health* - two brochures to make European OSH policies more accessible to non-insiders - have now been translated into many other European languages.

Most of these language versions, including the English and French ones, can now be downloaded free of charge in PDF format from our website: www.etui-rehs.org/hesa > Publications. The list of languages in which both brochures have now been published, and the contact details for ordering them are given below.

REACHing the workplace in:

- Czech: CMKOS bozpz@cmkos.cz
- Danish: LO-D lja@lo.dk
- Dutch: ABVV francois.philips@abvv.be
- Estonian: EAKL eakl@ekl.ee
- Hungarian: ASZSZ palgergely@netscape.net
- Latvian: LBAS martins@lsab.lv
- Polish: NSZZ Solidarnosc ipawla@solidarnosc.org.pl
- Slovenian: ZSSS lucka.bohm@sindikat-zsss.si

Occupational health in:

- Czech: CMKOS bozpz@cmkos.cz
- Danish: LO-D lja@lo.dk
- Dutch: ACV hfonck@acv-csc.be
- Estonian: TALO talo@talo.ee
- Hungarian: ASZSZ palgergely@netscape.net
- Italian: CGIL alhaique@mail.cgil.it
- Latvian: LBAS martins@lsab.lv
- Polish: NSZZ Solidarnosc ipawla@solidarnosc.org.pl
- Slovenian: ZSSS lucka.bohm@sindikat-zsss.si

The English and French printed versions can still be ordered on our website: www.etui-rehs.org/hesa > Publications.

Encouraged by the success of these two brochures, and believing that this type of publication addresses a real need for clear and to-the-point information on complex European issues, the ETUI-REHS Health and Safety Department plans to produce a new brochure on the European institutions involved in health and safety at work in the near future. ■



Marc Sapir: “An institute in the bridge-building business”



On 1 April this year, the TUTB became the Health and Safety Department of the European Trade Union Institute for Research, Education and Health and Safety (ETUI-REHS) following the merger of the European Trade Union Confederation's three trade union institutes. The founder and Director of the TUTB, Marc Sapir, is now the new institute's Managing Director, but keeps his place at the helm of the department tasked with monitoring European health and safety at work policies. We look at the new institute, its challenges and its ambitions, and talk to the man in charge.

What was behind the merger?

All the existing institutes had been set up by trade union bodies that were members of the European Trade Union Confederation (ETUC). So they were separate organizations, but with the same people sitting on the policy bodies. They had for some time been pointing out the need to work more closely together and to generate synergies. The ETUC's responsibilities for helping to move Community policies on are expanding, especially as a party in the Social Dialogue. So it needed expertise and means by which to help it keep tabs on the debates and be involved in negotiating agreements. That meant improving the linkages between the three institutes it had set up. The process was precipitated in recent months by administrative considerations around the conditions on which subsidies are granted.

How will you knit together three legacy departments of trade union institutes with different histories, specialties and networks?

Even before the new institute was founded on 1 April, department researchers and trainers were already working together on Social Dialogue issues, which is a core area for the ETUC. There are currently social partner consultations under way on health and safety at work issues, for instance, so inter-departmental exchanges go on, especially on working out responses with ETUC Secretariat policy officers. Ditto for discussions with employers, especially on the recent agreements on teleworking and stress, and the current consultation on violence at work. The different specialists that keep these issues under review from different angles, areas of expertise and networks in each department have been pulled together.

Another case in point is the debate around European Works Councils. The Health and Safety Department lacks the resources to actually set up activities, so instead leverages its experience by taking part in and giving input to different training and expertise activities of the committees and workers' reps on them. I could cite other instances of cooperation

with trainers. Joint initiatives have been developed in the past, especially with the old trade union college (ex ETUCO) on trade unionist training in European health and safety at work issues to enable industry and inter-industry unions to act in this area.

Another example of cooperation is the documentary resources of the two former institutes, which have been jointly managed for several years already, notably via *Labourline*, the online consultable catalogue of publications.

What net benefit do you expect the new institute to deliver for the national trade unions and industry federations affiliated to the ETUC?

Let's take one example, the issues around European Central Bank monetary policy. Through training agencies and different information resources, the new institute could give a bigger impetus to knowledge sharing and the debate within and between unions.

I tend to think that European processes where linkages exist with the national level, like the Social Dialogue, the sectoral Social Dialogue, and works councils, are where the new institute can deliver the biggest net benefit by throwing bridges between the European and national levels of work, bringing a whole string of people together. Metaphorically-speaking, you could say that the institute is in the bridge-building business.

How can the new institute argue for workers with the present gloomy outlook for Europe, especially on the social front?

The key player there is still the ETUC and its member organizations. But the new institute can step into the debate by helping unions to pull their strategies and objectives together, by working out the tools needed for trade union development. Building a social Europe depends on what the workers can do to act. We can help them build the bridge, but they have to cross it themselves.

Is there a danger of the influence and specific message of the old TUTB getting watered down in this new set-up?

I'm not worried about that for two good reasons. One is the specific expertise of the staff, which enables them to come at European issues from both a social and technical angle. The staff are still on board and still working on health and safety at work issues.

The other is the recognition gained at both European and national level of workers' right to representation in health and safety. That right has been won after a long struggle by workers to prevent their health and safety being dictated by market forces, and is a fundamental framework that I don't see as directly under threat, although the spread of job insecurity is making it harder to exercise.

The choice was made to frame some aspects of health and safety policy at Community level. To ensure dialogue between the European and national levels, you have to be able to bring different disciplines, experiences and expertise face to face. This is a multidisciplinary job, needing people with scientific knowledge who can also translate workers' demands into technical health and safety at work terms.

You established the TUTB in 1989 and headed it for over fifteen years. What's your view, looking back?

The TUTB was set up fifteen years ago to support the trade unions in the European process of laying down rules, technical standards and legislation on safety and health protection. We didn't have a crystal ball, so we couldn't predict back then the situation we now find ourselves in, not least the reunification of Europe, the rapid pace of technological changes and their impact on work and jobs. I wouldn't want to hype up our achievements and abilities to negotiate these technical changes, and I also have to say that building up a common technical prevention culture is a very slow job. It's no easy thing to be involved in building a technical consensus because trade union participation in the process is extremely limited and difficult.

That is why we have gradually shifted our focus to more specific projects, and developed model schemes, but always with a structural, medium-term approach of trying to influence the way work is done at European level on issues that affect workers' safety and health. We tried to develop an approach with trade unions, obviously, but also with others players at national level. We have widened the field of partners.

The TUTB experience remains a one-off anywhere. This kind of attempt by trade union experts to influence the design of work technologies and equipment is not found anywhere else in the world. I believe we still have a lot to learn from it. Linkages have to be created between plant-level knowledge and European work if European integration is not just to be a managerial tick-

box exercise, or one that aims only to guarantee the smooth running of the market. The concept of a workers' expert means two things to us. It is about the commitment of our staff, who don't confuse technical and scientific expertise with fence-sitting. Also, when setting our priorities and in our working methods, the collective experience of workers and their trade unions is both an indispensable source of knowledge, and the main benchmark for what we do.

We did major pioneering work on the OSH regulations front, producing the first reports on the practical implementation of the directives. The TUTB was the first to produce reports and call the Commission to account over where certain instruments fell short, always taking care to feed the practical problems encountered by workers in the workplace back up to the European institutions. This is something we have to do, and is central in a trade union approach. The linkage between the European and national levels was always an abiding concern for the TUTB. ■

Interview by **Denis Grégoire**, ETUI-REHS
dgregoire@etui-rehs

ETUI-REHS : one institute, three departments

■ Research

The Research Department of the ETUI-REHS focuses on socio-economic issues and industrial relations. As a link between the European trade union movement and academia, it conducts and promotes research on topics of strategic importance for the world of labour: the world of labour and the modernisation of trade unions ; the Europeanisation of workers' representation ; European employment and social policies.

Contact: Birgit Buggel-Asmus, basmus@etui-rehs.org

■ Education

The Education Department provides the ETUC and its affiliated organisations with a European education and training service. It coordinates Europe-level courses which enable trade union officers and representatives from all over Europe to take part in a unique European learning experience - acquiring new information, developing new skills, sharing European trade union values and gaining a broader European perspective on trade union issues.

Contact: Ana Smith, asmith@etui-rehs.org

■ Health and Safety

The Health and Safety Department keeps the drafting, transposition and application of European health and safety at work legislation under close review. It has set up an Observatory on the application of the European directives. It carries out ongoing research into fields like risk assessment, the organisation of prevention, the gender dimension in workplace health, the participatory design of work equipment, asbestos, stress, and violence in the workplace.

Contact: Denis Grégoire, dgregoire@etui-rehs.org

www.etui-rehs.org

REACH: industry's meltdown predictions groundless, but fierce lobbying goes on...

The debate on the proposed European chemicals legislation reform (REACH) has largely focused on its financial costs to the industries affected. Since the Chemicals White Paper was published nearly five years ago, there has been a constant industry outcry that the reform is too bureaucratic, will be too costly to implement, and is driving industry straight towards offshoring and mass job losses. The strategy has paid off, because the version adopted by the Commission in October 2003 is a "REACH-lite" compared to that put out for public consultation on the Internet in May the same year. The demands on industry have been drastically scaled down to reduce the direct costs on it from 12.9 billion to 2.3 billion euros over 11 years¹.

Not content with this victory, the industry has kept up the same scaremongering, citing its own impact assessments of total costs 30 to 100 times those of the Commission. Extensively criticised for their unclear methodology and biased premises, these studies have nevertheless fostered the idea that the European chemicals industry would find REACH hard to take.

In October 2004, the Dutch Presidency hosted an overview workshop of the many studies done to date by industry, the different Member States and environmental NGOs. Thirty six impact studies were looked at². As the issues addressed and methods used differed widely from one study to another, the exercise reached the fairly bland conclusion that: "The impacts of REACH on society as well as on business cannot be estimated with certainty".

While these studies bear out the Commission's estimates of the approximate direct costs of implementation, the predictions vary wildly as to the indirect costs that downstream user firms will bear from the possibility of a large number of chemicals being withdrawn from the market as a result of the new scheme's registration requirements. The studies also find that the health benefits to workers and consumers will be undeniable, but hard to put a figure on. The Commission is suggesting 50 billion euros over 30 years from thousands of occupational cancers avoided each year. REACH's impacts on innovation, by contrast, remain a hotly-debated issue, with probably negative short-term effects overshadowed by the dominant long-term benefits.

"Apocalypse now" fears dispelled

To resolve the many uncertainties, but still with a policy-shaping agenda, the employers' organiza-

tions (UNICE and CEFIC³) made arrangements with the Commission for further impact assessments to be done, based on case studies. These microeconomic studies would analyse the impact of REACH in four chemicals-using industry sectors: motor manufacturing, flexible packaging, inorganic materials (cement, metals, paper and pulp, etc.) and electronics.

To ensure a measure of transparency and give credibility to these additional industry-funded and -done impact assessments, a stakeholder working group was set up to oversee the process. Representatives of the European Trade Union Confederation (ETUC), and two of its members (DGB and EMCEF⁴), along with delegates from environmental NGOs, were actively involved in the group. One thing they were particularly keen on was to see that the data collected made a clear distinction between fact and opinion.

The keenly-awaited results of this study were unveiled⁵ at the end of April 2005 to the meeting of the high-level group comprised of the two European Commissioners responsible for REACH - Günter Verheugen (Industry) and Stavros Dimas (Environment) - plus the general secretaries of UNICE, CEFIC, ETUC and WWF.

They show very clearly that industry's doom-saying is groundless, and that the costs and impacts of REACH are manageable. The main findings from the studies carried out are:

- there is limited evidence that substances produced or imported in higher volumes are vulnerable to withdrawal as a result of the REACH registration requirements;
- there is limited evidence that downstream users will be faced with a withdrawal of substances of greatest technical importance to them;
- companies recognise some business benefits from REACH (easier risk management and rationalisation of substance portfolio).

The only abiding concern relates to SME chemicals suppliers who "can be particularly affected by REACH having regard to their more limited financial capacity and lower market power in terms of passing on costs".

After five years of industry scaremongering about the workability of REACH and the damage it will do to the entire supply chain, the fears of meltdown have been allayed. While that may help clarify the debate in Parliament and the Council, where the draft regulation is currently being examined, it does not mean

¹ <http://europa.eu.int/comm/enterprise/reach/eia.htm>.

² *Overview of 36 studies on the impact of the new EU chemicals policy (REACH) on society and business.* Downloadable in PDF format from our website: www.etui-rehs.org/hesa > Main topics > Chemicals.

³ Union of industries of the European Community countries and European Chemical Industry Council.

⁴ Deutscher Gewerkschaftsbund and European Mining Chemical and Energy Workers Federation.

⁵ See note 1.

ETUC's REACH conference

The ETUC hosted a REACH conference^a on 11 and 12 March 2005, which issued a reminder of the need to press forward with and adopt urgently the reformed European legislation on chemicals.

By providing missing information on the properties of chemicals, and distributing it properly throughout the production chain, REACH should considerably improve the effectiveness of European worker protection legislation, and start to bring down the number of occupational diseases linked to dangerous substances^b.

Nearly 200 people attended the two-day conference - a hundred-odd delegates from ETUC member organizations, plus many invited guests, including European Environment Commissioner Stavros Dimas, Luxembourg's Minister of State Lucien Lux, representing the Council Presidency, the European Parliament's main rapporteur on REACH, Guido Sacconi, plus representatives from industry, consumer groups and the main environmental NGOs.

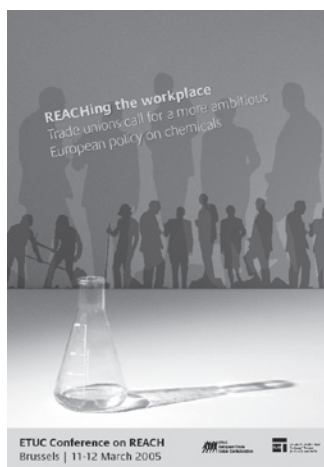
The key demands of the ETUC and its members for improving REACH are:

- the reintroduction of a duty of care for *all* chemicals produced in or imported into Europe;
- tighter registration requirements for low volume chemicals (between 1 and 10 tonnes/year);

- a quality assurance mechanism for information supplied by manufacturers and importers;
- better application of the substitution principle in the authorization phase.

^a The September issue of our Newsletter will be a special report on the conference. See also: www.etui-rehs.org/hesa > Main topics > Chemicals.

^b Musu, T., *REACHing the workplace. How workers stand to benefit from the new European policy on chemical agents*, TUTB, 2004. Downloadable from our website: www.etui-rehs.org/hesa > Publications.



that the industry has given up lobbying hard to get further changes to it.

Same proposal with a new spin

One of UNICE and CEFIC's main demands is on the REACH registration phase, where the industry wants a risk-based prioritization⁶ rather than the volume-based one currently proposed by the Commission. This is the same old industry proposal with a new spin: since the debate has shifted to the difficulties that some SMEs *may* have with REACH, it is now being held up as *the only way* that SME chemical manufacturers will be able to afford to implement the reform.

The ETUC's REACH conference stressed its support for volume-based prioritization on the grounds that a mainly risk-based registration system would be the undoing of the reform (see box). This is because the risk approach can only work if there is data available on the intrinsic risks of chemicals and their exposure levels, both of which are in desperately short supply for most chemicals and are meant to be generated by REACH!

Another industry demand is to restrict the scope of REACH to chemicals intended for the European market, whereas the present proposal would apply to *all* substances produced in or imported into Europe⁷.

Subtext: "providing a good level of human and environmental health protection in Europe is all right, but let's not be so particular about chemicals for export".

This proposal raises a series of ethical issues that affect third countries and the environment, but also workers, who would not have access to the same risk management information depending on whether the chemical they are manufacturing is intended for the internal market or export.

The MEPs on the nine European Parliament Committees responsible for examining REACH⁸ are besieged by industry representatives trying to sell them these and many other "light" versions of provisions, which they argue will make REACH "more workable and profitable while keeping the benefits for industry competitiveness, the environment and human health".

We believe that REACH lies on the cusp between expansion of the internal market and greater respect for the rights and protection of workers and consumers, and is an opportunity to be grasped for a more socially responsible Europe. But for that, industry has to play ball. ■

Tony Musu, Researcher, ETUI-REHS
tmusu@etui-rehs.org

⁶ The order in which chemicals have to be dealt with.

⁷ Above 1 tonne a year per manufacturer or importer.

⁸ See: Musu, T., *Improving REACH, the future European chemicals policy*, TUTB Newsletter, No. 26, December 2004, p. 3-6. Downloadable from our website: www.etui-rehs.org/hesa > Newsletter.

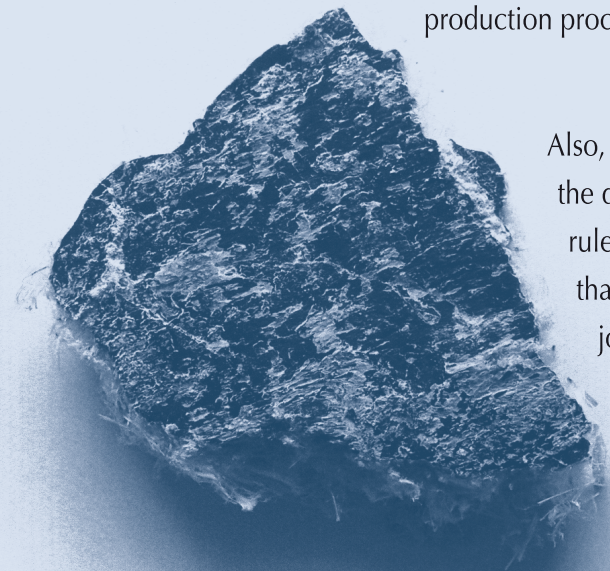
Asbestos in the world

Asbestos has been banned throughout the European Union since 1 January 2005. But the joy is tinged with bitterness. Joy at a ban won after a long and difficult struggle by trade unions and victim groups. Bitter, because the time lost in getting to a total asbestos ban still leaves a death sentence hanging over hundreds of thousands of people.

Nor is it the end of the story. The huge quantities of asbestos used in Europe throughout the 20th century will continue to kill tens of thousands of people every year for the next two decades. European Union experts estimate that asbestos-related cancers will cause approximately 500 000 deaths up to the year 2030 in Western Europe alone¹. Legacy asbestos - especially in waste disposal and building asbestos-stripping operations - puts workers and the community at immense risk. The high cost of these alone should be enough to show up the flaws in industry arguments against replacing carcinogens in production processes.

Also, there are still relevant political lessons to be learned from the debates on asbestos. The drafting of new European Union rules on chemicals (REACH) is meeting the same obstacles that held up the banning of asbestos. Cost arguments and job blackmail still stand in the way of effective workers' and public health protection.

And asbestos is anything but a thing of the past elsewhere in the world. Europe's trade unions have a particular responsibility in the battle for a world asbestos ban, because it is mostly European companies that have developed asbestos production and use. European capital is behind the asbestos mines of Brazil, South Africa, Zimbabwe, Quebec and many other countries. The profits have come back to Europe, leaving deaths and environmental



¹ European Community's first written submission to the WTO Special Group, Geneva, 21 May 1999.

Asbestos in the world

devastation behind. The Turner and Newall and Etex-Eternit groups epitomize the omnipresence of European capital in the asbestos production and using industries. Even today, many European multinationals employ double standards: asbestos-free in Europe, but still using asbestos elsewhere in the world. Waste management also tends to export the death risk to developing countries. Ships laden to the bows with asbestos and other toxic substances regularly ply to Asia, where they are broken up in appalling conditions. This makes solidarity and action by the European labour movement key to the forthcoming battles for a world asbestos ban. ■

Report compiled by **Laurent Vogel**, Researcher ETUI-REHS,
lvogel@etui-rehs.org

2004年11月19日金 20日土 21日日
早稲田大学国際会議場
(東京有明地区有明1-30-14)
開催趣意イベント
■開会式 「日本の汚染遺産」アスベスト問題から考える
■閉会式 「Together for the Future」アジア・アフリカ・ラテンアメリカ・シベリア

2004年世界アスベスト東京会議

GAC

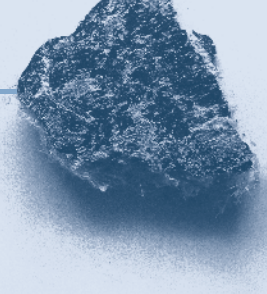
2004年世界アスベスト東京会議実行委員会
〒222-0292 神奈川県横浜市西区みなとみらい2-1-1 横浜みなとみらい21 横浜みなとみらい21ビル
TEL: 044-760-1111 FAX: 044-760-1112
http://www.gac2004.org

An international conference of scientists, trade unions and victim support organizations from most Asian countries was held in Tokyo in October 2004. The conference documents are available at: <http://park3.wakwak.com/~gac2004/en>

European asbestos conference Brussels, European Parliament, 22, and 23 September 2005

The conference is being organised by the European Unitary Left (GUE) parliamentary group and the International Ban Asbestos Secretariat. Its objectives include increasing politicians' (especially MEPs from the new Member States) awareness of asbestos-related problems, exploring options for pressing European multinationals to adopt codes of practice on dealing with asbestos, and examining strategies and planning future initiatives.

Contact : Laurie Kazan-Allen, IBAS,
laurie@lkaz.demon.co.uk
www.ibas.btinternet.co.uk



Offloading the risks to Asia

European and international news on asbestos is regularly reported on our special web page:

www.etui-rehs.org/hesa >
Main topics > Asbestos.

During the first three quarters of the 20th century, asbestos was mainly produced and consumed in the industrialised countries, the two main production centres being Canada and the former Soviet Union. Over the entire 20th century, these two centres accounted for over two-thirds of world asbestos production¹. Other industrialised countries were lesser contributors to asbestos output - the United States and Italy in particular (each accounting for approximately 2% of world production in the 20th century) and, to a minor extent, Greece and Australia (about 1% of 20th century world output combined). Asbestos production in dominated countries was relatively low in comparison with these countries' traditional role as raw materials producers. In Africa, asbestos was mainly mined in South Africa and Zimbabwe (about 10% of 20th century world output combined). To these "medium-sized" producers can be added two countries - China and Brazil - where production took off only late on in the closing third of last century (approximately 7% of 20th century world output combined).

Asbestos consumption was also heavily concentrated in the industrialised countries. Only in the final quarter of the 20th century was the almost uninterrupted growth in asbestos demand reversed in this part of the world. The downturn reflected not economic or technical causalities, but mainly labour campaigning against the use of asbestos, long known to be a health disaster [1]. Perversely, the extent of the damage in industrialised countries is now being measured only after consumption has been slashed or halted altogether. This is because of the long latency for the development of asbestos-related cancers. Generally, the mortality curve for asbestos-related cancers follows the asbestos consumption curve with a lag of about 30 to 40 years [2]. In Europe, the mortality peak will be reached only around 2020, therefore, but differentially by country according to their asbestos consumption curve.

The sharp fall in industrialised country asbestos use produced a global shift in the industry, working to a double standard [3]. In industrialised countries, substitutes were found for asbestos in all uses. Even the exception contained in European Union legislation for asbestos filters in chlorine production is actually less of a technical requirement than a political quid pro quo for the German government's support for an asbestos ban in the European Union. In "developing countries", by contrast, asbestos is still played up as an irreplaceable natural resource that it is safe to use in the right conditions. Often, the same industrial group - the Eternit group is a case in point - will diversify its production by country, lining up under the pro-asbestos lobby banner in some parts of the world, while developing less dangerous alternatives in the most developed countries.

A broad brush picture of world asbestos production and consumption reveals the following trends.

The market in Europe is virtually nil with the signal exception of **Russia** which remains the leading world asbestos producer. Asbestos production and marketing started here in the Urals at the start of the 19th century. By the onset of World War I, Russia was the world's second biggest asbestos producer, although well behind Canada. Essentially halted by the world war and civil war, asbestos production took off again from the late 1920s. Modernisation of the rail network enabled the intensive development of the Uralasbest mine. By the late 1930s, Soviet industry had a widely diversified asbestos products industry. In 1975, Soviet Russia overtook Canada as the world's leading asbestos producer, and remains so today.

The early 1990s, however, saw a dramatic collapse in asbestos production from its 1989 peak of 2 600 000 metric tons (approximately 60% of world production) to just 743 000 metric tons in 1996,

Table 1 World asbestos production during the 20th century (metric tons)

Asbestos production	1900	1940	1960	1970	2000	Cumulative during the 20 th century
Former Soviet Union	NA	102 000	598 743	1 065 943	983 200	67 100 000
Canada	26 436	313 514	1 014 647	1 507 420	320 000	60 500 000
South Africa	158	24 850	159 540	287 416	18 782	9 920 000
Zimbabwe	NA	50 809	121 529	79 832	145 000	8 690 000
China	NA	20 015	81 647	172 365	370 000	7 700 000
Brazil	--	500	3 538	16 329	170 000	4 540 000
Italy	NA	8 271	59 914	118 536	--	3 860 000
United States	956	18 198	41 026	113 683	5 260	3 280 000
World production	31 587	573 728	2 213 533	3 493 800	2 070 000	174 000 000

NA: data not available / -- : zero

¹ Unless otherwise specified, the economic statistics in this article, including the tables, are taken from the reports by Robert Virta of the US Geological Survey, in particular *Worldwide Asbestos Supply and Consumption Trends from 1900 to 2000*, US Geological Survey, Open-File Report 03-83.

Table 2 Apparent consumption of asbestos in Europe (metric tons) *

	1920	1950	1975	1990	2000
Overall consumption in Europe	40 905	506 396	2 697 091	2 582 294	537 302
Former Soviet Union	1 629	136 458	1 286 697	2 151 800	507 125
United Kingdom	21 199	107 606	137 487	15 731	244
Germany	6 828	93 842	378 143	15 084	189
France	445	38 921	136 587	63 571	- 30
Europe (excluding former Soviet Union)	39 276	369 738	1 410 394	430 494	30 277

* Apparent consumption is calculated as national asbestos production plus imports less exports. Negative apparent consumption means that exports (or re-exports) of existing stocks for the year concerned were higher than national production plus imports.

rising back up to around 1 260 000 metric tons in 2003 (900 000 metric tons in the Russian Federation and 360 000 metric tons in Kazakhstan). The fall owed everything to the general upheaval in manufacturing industry and construction, and nothing to occupational health or environmental protection concerns. It was the result of shock therapy from the reintroduction of capitalism. The country's principal asbestos mine (Uralasbest) was privatised, partly sold off to German investors, eventually ending up under the control of new Russian capitalists. It was even declared bankrupt in 1997, only to resume its activities afterwards.

There was virtually no debate on asbestos either under the Soviet regime or since. Following the banning of asbestos in the European Union, the Putin government set up a panel of experts to give an opinion on a possible Russian asbestos ban. The panel mainly consisted of occupational medicine specialists. Its final report is an impassioned defence of asbestos use [4]. The Russian press tends to take a jingoistic approach to the asbestos issue. The struggle by world trade unions and victim support groups to get asbestos banned is sometimes portrayed as the product of a trade war waged with "the deep pockets of transnational trusts" [5]. The pro-Russian asbestos lobby claim that it holds relatively little danger for health. With the same arguments coming out of Canada, Zimbabwe and Brazil, asbestos victims must count themselves really unlucky not to have been exposed just to these pure national varieties of chrysotile.

The Russian authorities continue to deny the health havoc wrought by asbestos. This rose-tinted view is challenged by the figures from Eastern European countries that imported Soviet asbestos almost exclusively. Szczecin in south-east **Poland** has been the site of a large asbestos cement factory since 1959. The town's population has one of the highest rates of pleural mesothelioma in the world, and 125 times the Polish average. The prevalence of lung and stomach cancer is also very high [6]. A recent article in the Russian press voiced concern about the practise of

asbestos-using firms handing out production residues to private individuals as filling material, bumping up asbestos pollution of the environment [7].

Canada's language divide

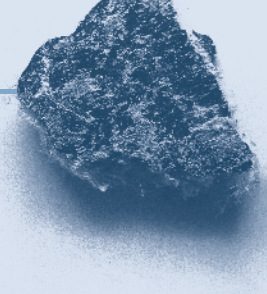
The situation on the North American continent is broadly as follows.

Canada was the leading world asbestos producer until 1975, benefiting from its proximity to the main consumer market - the United States. The asbestos mines initially opened by English capital were mainly located in rural Quebec, where low pay and much worse working conditions than in other mining sectors in North America could be imposed. Canadian asbestos production was fated to decline when the United States market all-but disappeared and asbestos demand shrank steadily in the other countries of the American continent.

There is no evident economic reason why Canada continues to produce asbestos. A combination of transport costs and significantly higher labour costs than rival producers put it at a competitive disadvantage on the other markets that are still available. The fact that almost all the production is exported as crude fibres is also at odds with general Canadian mining policy, which is to promote value added by processing raw materials for export [8]. Canada is the main purchaser of asbestos-containing manufactured goods from the United States². The cost of these imports is significantly higher than the total value of asbestos production in Canada (estimated at nearly \$119 million Canadian in 2001 and approximately \$98 million in 2002) [9].

Canada therefore remains the prime mover in a world pro-asbestos crusade, but takes great care not to practise what it preaches to others - its own asbestos consumption is very low. Over 95% of its output is exported. No, the real reason behind Canada's asbestos policy and its many inconsistencies is the Quebec national question.

² At a cost of US\$169 million in 2004. Chiefly brake linings containing asbestos and/or replacement fibres. The figures do not show whether these products were manufactured in the United States or are re-exported.



Two things are key here. The asbestos miners were in the vanguard of the post-WW2 labour struggle, with both labour and national claims. Nationalist ideology effected a sort of transference of the miners' struggles onto the product of their labours. Throwing asbestos production into question would be tantamount to betraying the national cause. But it was a self-contradictory transference in that one part of the asbestos miners' struggle was also against the health havoc wrought by production.

But the asbestos issue also highlights a real problem in Quebec's economic development. The asbestos-mining region is a mono-industry rural zone, which the disappearance of asbestos production could plunge into a deep crisis. Real as this problem is, its solution depends essentially on the ability of labour action to push through industry reconversion policies. It would be naive to believe that allying with Quebec employers to effectively hold the federal authorities to ransom can keep a production going forever which is finding fewer and fewer outlets and is a danger to public health. Asbestos region workers know that they are fighting to keep alive an industry that has killed members of their own family and will have far-reaching consequences in user countries. For asbestos victims, the agonies of the disease are compounded by the obligation of not speaking out against those responsible for it. Mesothelioma sufferers are being asked to keep quiet and die so as not to disrupt the "social partnership" of the pro-asbestos camp.

Canada operates one double standard in practice by exporting almost all its asbestos to countries in Asia and Latin America, and another in regard to protection of workers inside the country. In the English-speaking provinces, trade union action has almost totally eliminated asbestos in all new production.

Quebec's provincial government and national labour unions³ have an official agenda of boosting asbestos use [10]. The nationalist party, the Bloc Québécois, wants asbestos use to be increased Canada-wide, recently tabling a motion in the federal Parliament to that effect [11]. In practise, there are a growing number of "buts" and misgivings, while many Quebecers privately admit that they do not want to see a rise in asbestos-related risks.

This split between Quebec and the English-speaking provinces means that Canadian workers enjoy very different levels of protection. Labour standards in all the English-speaking provinces lay down an exposure limit of 0.1 fibre/cm³ (as in the European Union), while Quebec Province and federal legislation⁴ standards prescribe an OEL of 1 fibre/cm³. In

the English-speaking provinces, therefore, dockers may be exposed to ten times higher levels of asbestos than building workers. In Quebec, all workers are excluded from the most protective standard, which is without doubt a factor in their higher mortality from asbestos-related diseases, especially in the asbestos-using construction and manufacturing industries [12, 13].

Environmental pollution from appalling waste management in the mining region and exposures in asbestos-containing buildings is also a growing concern in Quebec [14]. High mesothelioma death rates among Quebecers are partly connected with this pollution and partly with housework-related exposure (wives washing their husband's work clothes, in particular).

United States: a near-ban in 1989 overturned by the courts

The United States was the biggest asbestos user during much of the 20th century in many manufacturing sectors and the construction industry (consuming about 18% of cumulative world asbestos production throughout the century). During the first half of the century, US consumption averaged 62% of world asbestos production. The second half of the century falls into two equal periods. Up to approximately 1975, the US remained one of the largest asbestos consumers; after that, demand slumped.

Table 3 Apparent asbestos consumption in the United States (metric tons)

1900	20 400
1920	153 000
1940	238 000
1950	660 000
1960	643 452
1973	803 000
1980	358 708
1985	162 000
1990	41 000
2000	14 600

The Environmental Protection Agency (EPA) started moving towards an asbestos ban in 1979. Pressure from business circles and the Canadian government pushed the Reagan Administration to act to stop the EPA from putting its plan into practise. In 1984, the issue was transferred to the federal Occupational Safety and Health Agency (OSHA) and the Consumer

³ Quebec has three kinds of trade union organisation. National unions affiliate to federations and confederations in Quebec Province. Canadian unions organize workers both in Quebec and in the English-speaking provinces. "International" trade unions organise workers throughout Canada and in the United States. Broadly, the national trade unions are anti an asbestos ban, while the Canadian and international unions are pro-ban.

⁴ Canada's ten provinces each enact their own labour standards, which apply to the great majority of workers. Federal labour standards apply to federal civil servants, and such sectors as telecommunications, international and inter-province transport (road haulage, railways, forestry forwarding), airports, airlines, banking, uranium mining, etc.

Product Safety Commission (CPSC). With both organisations failing to act, the EPA reclaimed the initiative. It carried out a detailed assessment of the health threats posed by all forms of asbestos, and then in July 1989 enacted a regulation outlawing most asbestos-containing products [15]. That regulation was overturned by a federal Court of Appeal in 1991 [16].

Since then, trade unions and environmental groups have continued to fight for an asbestos ban. With the federal government singing from the employers' song-sheet, this seems unlikely anytime soon. But the huge cost of damages won by asbestos victims has deterred most sectors of the economy from continuing to work with asbestos. Halliburton - a name familiar to the public from its role in Iraq and being headed by current US vice-president Dick Cheney - is a case in point. It is facing 300 000 law suits from asbestos victims claiming damages in excess of \$4 billion.

Overall, asbestos use has shrunk to relatively marginal levels. From its 1973 peak of over 800 000 metric tons, it fell to around 40 000 metric tons in 1990, just under 15 000 metric tons in 2000, and 3 000 metric tons in 2004.

Latin America: standstill in Brazil

As asbestos use declined in the United States, there was a discernible shifting of the risks to **Mexico**. From the 1970s, Mexico had as it were helped the US transition towards (nearly) asbestos-free production by manufacturing asbestos-containing products for its northern neighbour [17]. This partly explains the doubling of asbestos consumption in Mexico between 1970 (40 000 metric tons) and 1980 (79 000 metric tons).

Mexico's asbestos-using manufacturing base is characterized by extreme disaggregation of businesses, rendering any control nigh-impossible. In 2001,

Mexico had 1 881 asbestos-importing firms, many of them subsidiaries or subcontractors of US companies. From the 1990s, however, Mexican exports of asbestos-containing products began to diversify. In 1992, the US was almost the only export market (96%). By 2000, 58% of asbestos-containing exports still went to the United States, but 40% were to Central American countries and Cuba. This trend is likely to have continued. Having all-but eliminated asbestos in its own manufacturing production, the US is gradually reducing the use of asbestos-containing products in construction (largest traditional user) and its automotive industry (where asbestos was used in the manufacture of brake linings).

The movement to ban asbestos in Latin America has chalked up some signal successes of late. Argentina, Chile, Uruguay and Honduras have all outlawed it. Generally, consumption of asbestos is declining in the other countries, even where it is not actually illegal. But it is a slow, and not necessarily irreversible, trend⁵. So, some sources report rising asbestos consumption in a handful of countries latterly (Mexico, El Salvador and Cuba are sometimes cited), offset by downturns in most other countries.

Brazil is a case apart (see article page 17). The asbestos ban demanded for over ten years by trade unions seemed on the cards in 2003 following the election of President Luiz Inacio da Silva, known as "Lula". So far, the federal government has bowed to pressure from the asbestos lobby. In **Colombia**, the government is in thrall to multinationals, and trade union freedoms are under serious attack, making it hard to speak out about the effects of asbestos. A ban is highly unlikely as things stand. Recent data on asbestos production and consumption in Colombia are patchy⁶. A request to the Colombian Ministry of Mines for precise statistical data has gone unanswered. In Peru, labour unions are pressing for a ban, and have found a resonance among MPs.

Table 4 Apparent asbestos consumption in different Latin American countries (metric tons)

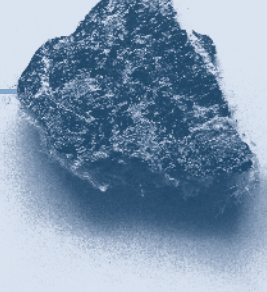
	Brazil	Colombia	Cuba	Venezuela	Mexico	Peru	Argentina	El Salvador	Chile
1970	37 710	16 763	NA	10 161	40 460	1 828	21 141	963	8 800
1975	103 778	15 000	NA	15 548	60 395	3 500	16 678	3 866	2 000
1980	195 202	27 057	NA	9 111	79 014	4 870	21 410	3 324	NA
1985	144 789	26 620	1 658	4 669	54 868	3 242	7 108	1 769	NA
1990	163 238	21 437	1 500	1 418	39 316	1 060	6 863	904	7 749
1995	182 129	22 925	3 000	5 012	19 154	4 947	6 088	398	11 666
2000	181 689	12 189	3 000*	2 727	26 880	1 188*	2 333	1 678	1 460

NA: data not available

* Figures for 1999 (no figures available for 2000)

⁵ Short-cycle changes are not necessarily significant, since they also reflect swings in the business cycle and, especially construction sector activity.

⁶ Virta (Asbestos in *Minerals Yearbook*, 2004) estimates annual asbestos production in Colombia in 2003 and 2004 at 60 000 tons. Colombian sources were unable to confirm this.



Asbestos victims in Egypt: call for international solidarity

Crippled by asbestos and with no pay coming in, 64 sacked Egyptian workers have been occupying the Ura-Misir asbestos-cement water pipe manufacturing plant since November 2004.

That was the month in which the Egyptian government banned any further production or import of any kind of asbestos in Egypt. The ban marks the culmination of three years' struggle by the Ura-Misir workers to get their occupational diseases recognized, and health and safety rules applied in the factory.

The owner of Ura-Misir, Ahmed Loukma, refused to comply with different ministries' enforcement notices, and has had his factory closed down several times since 2002. After the last closure, in September 2004, he stopped paying 52 workers, all sick with asbestos diseases. When the future asbestos ban was announced in November 2004, Ahmed Loukma sacked the 52 workers, plus a further 12, between the end of December and the start of January 2005. The factory is still closed today, and the sacked workers are occupying it to claim their back pay, compensation for health damage, severance pay or to be re-employed in conditions that meet health standards. They are also suing for compensation in the courts.

Their struggle has attracted support from international NGOs and trade unions, including the ETUC. For more information and to support the action, see our website: www.etui-rehs.org/hesa > News.

Africa: South Africa leads the way

The asbestos ban in **South Africa** is an outstanding result. For a producer country going through hard economic times to ban asbestos is an encouraging new development. South Africa's workers see the fight against asbestos as inseparable from that against apartheid and the colonial past⁷. Most asbestos mines were opened with English capital. European multinationals were systematically guilty of double standards [18] by refusing to apply European-standard prevention measures in their South African sites. In the Penge asbestos mine, exposure levels measured in 1983 were 130-134 fibres/cm³, or 260 times the limit value of the time in British companies [19].

Asbestos production in the Turner and Newall mines in Southern Africa was designed to ensure labour exploitation through a combination of capitalistic production relations and specific attributes of colonial oppression [20]. Workers were not employed under individual contracts. The production unit invariably comprised a male worker plus several members of his family (assorted women and children). This family unit had considerable autonomy to organize its work. A guaranteed output was ensured through performance pay. This meant that the women and children generally received no individual wages, and mining industry employment legislation did not apply to these kinds of contract. Up to the 1970s, workers in some mines received part of their wages in the form of vouchers exchangeable for goods in the company-owned store (the "truck" system).

It was mostly manual work. Under apartheid, the works doctors employed by asbestos-producing and -using firms put their employers' business interests before any health concern. Black workers' asbestos-related illnesses were seldom recognised as occupational diseases. Workers were often laid off as soon as they showed signs of breathing disorders. For recognized cases of asbestosis, black workers received much lower compensation than white workers. South Africa now has to deal with the terrible burden of the environmental damage caused by asbestos mining as well as the health damage of exposure on three fronts: at work, at home and from environmental sources.

In **Egypt**, recent labour action succeeded in getting the government to ban asbestos, although one of the groups at the forefront of the fight, the Ura-Misir workers (a former subsidiary of the Spanish company, Uralita), are suffering reprisals from the authorities (see box).

Zimbabwe continues to produce asbestos in a shambolic context of wheeling and dealing [21]. The main asbestos mines, located at Shabanie and Mashaba, were owned by Matumwa Mawere, a close business associate of President Mugabe. He is a former World Bank official who bought the mines and asbestos cement companies from the UK company Turner and Newall for a pittance in 1996. The tab for his production losses has been generously picked up by the State. In May 2004, Mawere was arrested in an affluent suburb of Johannesburg in South Africa, reportedly in connection with allegations of corruption. He is also accused of having

⁷ The Building Allied Mining and Construction Workers Union (BAMCWU) had been campaigning since 1986 for an asbestos ban in South Africa and neighbouring countries from where many asbestos mineworkers were drawn.

falsified asbestos export figures to avoid having to declare his group's foreign currency holdings [22]. The spoils of Matumwa Mawere's fall from grace in the ruling circles of the Mugabe regime have been divided between the rising stars of the Party-State [23].

These problems have sidelined occupational health issues. And yet, as far back as the 1980s, seriously worrying data were available on chrysotile asbestos-related cancers among Zimbabwe's miners [24]. Every attempt by South African unions to open a debate on these issues was rebuffed by the regime. Asbestos is even used by the government to attack the country's main trade union confederation, which made the mistake of trying to distance itself from the regime. In June 2005, the press accused the ZCTU (Zimbabwe Congress of Trade Unions) General Secretary, Mr. Wellington Chibebe, of having sold out to imperialism by calling for an asbestos ban. He issued an immediate denial and fell back in behind a pro-asbestos line⁸.

Elsewhere in Africa, asbestos is still permitted, but, for economic reasons the continent is not a prime market. Estimated asbestos consumption in Africa varies widely depending on the source. Some countries, like Nigeria and Morocco, have no reliable statistical data. But it is certain that Africa is little more than a marginal user on the global asbestos market. The highest estimate, from the Chrysotile Institute, claims 80 000 metric tons of asbestos used in Africa in 2003 (i.e., 4% of the world market); the lowest estimate is under 2% of world consumption, with 20 476 metric tons in 2000⁹. The same source puts that at less than one fifth of Africa's 1985 consumption when asbestos use on the continent peaked at 112 435 metric tons. The banning of asbestos in South Africa seems likely to strengthen the falling trend of consumption in Africa.

In **Oceania**, asbestos has been banned in Australia, and New Zealand has announced its intention to follow suit.

The shift towards Asia

Asia is now the asbestos industry's prime market - it is lobbying hard to avoid a ban there. The Russian Federation and Asia account between them for more than 85% of asbestos consumption. The Chrysotile Institute puts this at 1 730 000 metric tons out of a world consumption of 2 080 000 metric tons in 2003. It has been a sudden change. In 1990, Asia (excluding Russia) accounted for less than a quarter of world asbestos consumption. Five years on, it already accounted for over half.

The Asia-wide situation is one of marked contrasts, however. The **Middle East** is not a very big market for asbestos. Any official ban aside, asbestos consumption is following the same downward trend there as in the industrialised countries. Most uses of asbestos were made illegal in **Japan** in October 2003. Asbestos consumption has declined significantly in South **Korea**¹⁰, **Taiwan** and **Singapore**. Most asbestos-using firms in Taiwan relocated to mainland China, Vietnam and Thailand in the 1990s. Asbestos consumption has recently started to trend downwards in Vietnam, but it is too soon to tell if this is a long-term trend or a reflection of the business cycle¹¹. **China**, **Thailand** and the **Indian sub-continent** are where asbestos consumption is tending to rise most sharply.

China has also become a major asbestos ore producer. Conditions in China's asbestos mines are particularly horrendous. There is a large number of small mines in rural areas. Initial sorting and weaving of the fibres was long done by peasants as a side-job at home. The conditions of Chinese asbestos production prompt many questions. There are concurring reports that China's largest asbestos mine is worked by prison labour. In 1995, the celebrated Chinese dissident, Harry Wu, succeeded in photographing the Xinkang mine in a prison camp in the country's south-western Sichuan Province. He reported that most prisoners worked about a fifteen-hour day without protective equipment [25]. This information is corroborated by the mine's inclusion in the list

⁸ See *The Herald* (Harare), 9 and 10 June 2005.

⁹ These figures are for consumption of asbestos ore, and do not include the asbestos-containing manufactured goods. Accurate figures are also lacking for some African countries.

¹⁰ Where asbestos consumption peaked at 2 kg per capita in 1992. It stood at 0.5 kg in 2001 (report by Mr. Domyung Paek, Seoul University, to the Global Asbestos Congress, Tokyo, 2004).

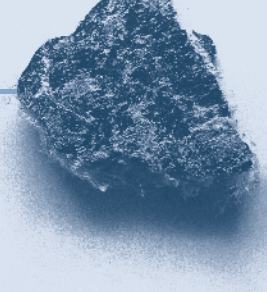
¹¹ Indonesia's asbestos imports fell slightly between 2001 and 2002, and sharply in 2003; information collected in the early months of the year points to a likely increase in 2004 (report by Zulmiar Yanri, director of occupational safety and health, to the Global Asbestos Congress, Tokyo, 2004).

Table 5 Apparent asbestos consumption in Asia (metric tons)

	1920	1950	1975	1990	2000
China	--	102	150 00	185 748	410 190
India	1 847	11 160	61 826	118 964	124 516
Thailand	NA	NA	42 521	116 652	120 563
Japan	4 965	12 245	255 551	292 701	98 595
Korea	NA	610	61 303	76 083	28 972
Total consumption in Asia	6 812	25 383	702 351	976 459	861 381

NA: data not available

--: zero



A worldwide trade union campaign against asbestos

Global Unions kicked off a world campaign to ban the use of asbestos on 8 June 2005 in Geneva. The campaign was announced at the International Labour Organisation's (ILO) annual conference attended by some 4 000 worker, employer and government representatives.

Guy Ryder, General Secretary of the International Confederation of Free Trade Unions (ICFTU) said the campaign would be a country-by-country process aimed at getting a ban on asbestos which continues to kill over 100 000 people a year throughout the world.

Global Unions have delivered a letter to every government attending the ILO conference, asking them to become involved nationally banning asbestos and supporting a world ban on the commercialisation and use of the product.

"Asbestos is a threat to everyone, not just workers. From children in schools, to young and old in private and public buildings where asbestos is present and to whole communities where it exists as a pollutant", said Guy Ryder.

of companies using forced labour drawn up by the US Customs Service in 1992. The Laogai Foundation reports the mine as having an annual output of 30 000 metric tons. The asbestos produced by prison labour is marketed under the Kangyin brand.

Working conditions in Chinese companies are characterised by serious occupational health failings¹². The lack of free trade unions makes it hard for workers to stand up for their health. The official trade union confederation is a delivery system for the Chinese Communist Party and many new capitalists have come from party leadership circles, their close family members, in-laws and allies. Foreign multinationals have tended to forge alliances with leadership loyalists through mixed ownership companies or subcontracting networks. Some analysts have readily talked of "an institutionalised aversion to worker participation in safety issues" [26].

The legislation in force is often inadequate, but still systematically flouted. The health and safety inspectorate is ineffective due to understaffing, poor technical capability, and widespread corruption. A study was done of six categories of occupational hazards in 1990-1991 in 1 438 firms located in fifteen different provinces [27]. It found that the rules were being enforced in 41% of workplaces. Wide variations were found by type of risk: for benzene and chromium, most of the workplaces inspected were regulation-compliant. For asbestos, not one of the twelve workplaces inspected was obeying the law! And 24.5% of the workers examined in these workplaces were considered to be suffering from definite or suspected asbestosis (the average rate for all diseases examined for was 15.4%).

There are few epidemiological surveys of occupational lung cancers in China notwithstanding the large numbers of workers exposed to such risks [28].

Those that are available, however, point to asbestos becoming a major cause of mortality for the exposed workers. A cohort study of 5 893 workers in eight asbestos-using workplaces found 183 cancer deaths out of a total 496 deaths. That represents a relative risk of 5.3. Another study of workers exposed to chrysotile only observed relative risks of 6.6 for lung cancers and 4.3 for all cancers. Another survey in the textile sector of female former asbestos weavers pointed to lung cancer-specific death rates 3.88 times higher than for the control group [29].

This high prevalence of asbestos-related diseases shows that Chinese official figures on occupational diseases have only the most tenuous relationship with reality. In the past forty years, barely 4 300 workers have secured recognition of an asbestos-related occupational disease [30]. The Chinese studies are also valuable for once again giving the lie to claims about the relative innocuousness of chrysotile asbestos. The Chinese researchers who have studied asbestos display a more robust independence, attachment to ethical principles and disciplined methodology than researchers of other countries who have collaborated with the asbestos industry.

The situation is certainly no better in **India**, Pakistan and Thailand. India is a small producer but a big user of asbestos. Production is dispersed among many small mines located in rural areas. Production waste is discharged into the environment, contributing to high levels of environmental pollution. Overall, there is an observable correlation between increasing asbestos use and worsening respiratory health in the Indian population [31]. **Thailand** now has the highest per capita asbestos consumption. Asbestos imports rose from 90 700 metric tons in 1987 to 181 348 metric tons in 2002. The figures on worker exposure are appalling: the Thai statutory OEL of 5 fibres/cm³ was exceeded in over 36% of

¹² On working conditions in China, see: www.chinalaborwatch.org.

cases surveyed [32], and the OEL of 0.1 fibres/cm³ was exceeded in more than 96% of these cases.

In **Pakistan**, Noor Jehan, a researcher at the University of Peshawar, carried out a systematic analytical study of mesothelioma cases in the North-West frontier province [33]. She found 601 cases having occurred between 1995 and 2003. One characteristics of the situation is the very high prevalence of mesothelioma among female homemakers (around 200 cases) and farmers (about 100 cases). This was related to the crude work organisation of asbestos cement manufacture. The asbestos bags, mostly from Canada, are opened in public places or farms without taking the slightest precaution. The fibres may be used in the same mills where flour is ground. They are mixed with cement and water by the whole family. No information is provided about the danger of fibres and the precautions to be taken. Photographs I have seen show work being done in a kind of fog of airborne asbestos fibres.

All the available data for emerging Asian countries for the asbestos market tally - the exposure levels of Asian workers vastly exceed the woefully inadequate standards set by local legislation. In **India**, a study done in informal sector enterprises working with asbestos found exposure levels of 18.2 fibres/cm³ (more than 180 times the admissible OEL in the European Union) [34]. Waste management is virtually unheard-of. The unused asbestos is scattered around villages or densely-populated towns.

A survey in fourteen villages in Jharkhand State, where there is an abandoned asbestos mine, found a high prevalence of respiratory problems [35]. It was found that fibre-containing asbestos waste often ran off to other villages downstream from the mining zone in the monsoon season, and in the dry season, warm winds carry fibres across the area.

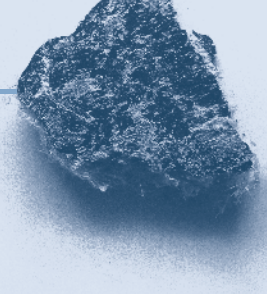
Some countries (chiefly **Bangladesh** and **India**) have another source of asbestos pollution: shipbreaking of scrap vessels from Europe and North America. The Russian Federation has also recently been found to be exporting asbestos industry waste to India [36]. This seems not to betray the greatest confidence in its own claims about the benefits of controlled asbestos use.

The Indian sub-continent, China and Southeast Asia hold more than 40% of the world population. The health impacts of the sharp rise in asbestos consumption will take a relatively long time to filter through. It is a major public health disaster waiting to happen. Arguably, the scale of the disaster will be magnified in Asia by the extremely poor working conditions, residential areas lying cheek by jowl with workplaces

resulting in wholesale public exposure, especially babies and infants, and the lack of health surveillance for the immense majority of exposed workers. A race against the clock is now going on in the countries concerned, therefore, where many trade unions and victim support groups have joined forces to try and stave off the disaster. But it is no easy task. Asia's workers rightly expect the labour movement in other parts of the world to act against multinationals and States that are directly or indirectly involved in producing, selling and using this killer fibre. ■

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Asbestos ban: Brazilian government fudges the issue

Brazil is the world's fourth asbestos producer, and the biggest asbestos producer and user in Latin America. Asbestos production started in the 1930s but took off under the military dictatorship. It soared from around 1 000 tonnes in 1965 to 169 000 tonnes in 1980, levelling-off at around 200 000 tonnes in the 1990s.

The Lula government's announcement in March 2004 of an imminent asbestos ban in Brazil had the opposite effect to that intended. A year later, SAMA, the operator of the Minaçu asbestos mine in Goiás State put out a triumphant press release announcing an all-time production high. With a total 255 104 tonnes of output over the twelve months to March 2005, it had achieved its highest level since the record books began. While the consensus among economic analysts was that asbestos production in Brazil was in its death throes, current production levels are well above what they were under the military dictatorship and the predecessor governments to the Lula coalition. What lies behind this spectacular turnaround?

A powerful social movement to outlaw asbestos

A wide range of Brazilian organisations had demanded the banning of asbestos, ranging from trade unions through environmental and public health defence organizations to asbestos victim support groups. Production of asbestos and asbestos-containing manufactured goods is a two-tier system: a small handful of companies dominate the sector (in practise, now just Eternit), with a swarm of small and very small companies handling the least profitable and most dangerous work. Historically, the dominant industry presences came from Europe, with the Brussels-based Eternit and Saint-Gobain companies controlling much of the sector, from mining to primary processing, mainly in the form of asbestos-cement. During the production boom under the military dictatorship, it was nigh-impossible to speak out publicly against the damage asbestos was doing to workers' health¹. Practically, the only exception was Paulo Nogueira Neto, who trailblazed environmental defence in Brazil and

¹ Recent articles in the *O Globo* daily newspaper illustrate how European and US multinationals colluded with the military dictatorships in Brazil and Argentina to crack down on trade unionists and political opponents (José Casado, *Empresas ajudaram militares na repressão a sindicalistas*, *O Globo*, 15 May 2005; and *As empresas e a ditadura argentina*, *O Globo*, 16 May 2005).

was the first Secretary of State for the Environment from 1974 to 1986. He first called attention to the dangers of asbestos in 1975, but his warnings were countered by a disinformation campaign run by the employers' organisations. Prior to 1983, there are almost no reported medical studies on asbestos-related diseases: the literature reports fewer than twenty cases, even though asbestos has been used since the early 1930s. In 1983, an occupational health doctor reported 14 cases of asbestosis in a single company. The following years saw a disturbing rise in the number of reported cases.

Asbestos was gradually to become a focus of labour dispute and debate. In 1987, an inter-agency group on asbestos was set up in São Paulo State. Trade unions were to play an important role in it and, with help from labour inspectors, lifted the lid on poor working conditions and widespread health damage in asbestos-using firms². Labour Party (PT) MPs in Rio de Janeiro State have been calling for an asbestos ban since 1993. Brazil's main central labour federation, the Unitary Labour Confederation (CUT), came out in favour of an asbestos ban in 1994. In the same year, motor manufacturing industry trade unions won a tripartite agreement to have asbestos replaced by less dangerous fibres, but the agreement was blocked by a government refusal to ratify it in 1996. In December 1999, the CUT set up a national campaign around the slogan "Asbestos kills. In time". Brazil's other union federations have also lined up behind an asbestos ban.

In 1995, ABREA, the Brazilian Association of People Exposed to Asbestos, was set up in Osasco, a city in the São Paulo industrial belt. The association's membership includes many current and former Eternit workers, and is expanding rapidly in other parts of Brazil. There is also political opposition to asbestos, and bans were declared by municipalities and States in the late 1990s in face of the Cardoso government's failure to act. Most of the prohibitions were prompted by the Labour Party. At state level, the lead was taken by Mato Grosso do Sul State, which outlawed asbestos in January 2001, followed in May and June 2001 by three of the country's most populous States - São Paulo, Rio de Janeiro and Rio Grande do Sul. Pernambuco State brought in banning legislation in May 2004, followed most recently by Mato Grosso State in April 2005, initiated by a female Labour Party MP³. Nearly twenty municipalities have also decided to outlaw asbestos use in new building construction, Brazil's biggest metro area, São Paulo, among them in February 2001.

The industry reaction was swift. Most State laws and municipal ordinances were appealed to the federal

supreme court, where they were struck down on the grounds of allocation of legislative authority between the federal State and subnational tiers of government. The supreme court's decision is not on the legitimacy of an asbestos ban per se, but the fact that the decision is for the federal authorities to take.

The situation in early 2002 appeared to be stalemated. State asbestos bans looked like dead letters, and the federal government under Fernando Henrique Cardoso was shying away from any initiative. Some government ministries (Health and Environment) favoured an asbestos ban, while the main government coalition party (the PSDB) was largely swayed by asbestos lobby spin. President Cardoso has taken no official line, but his fence-sitting favours the status quo. Brazil's decision to join with Canada in the 1998 WTO proceedings to challenge France's asbestos ban leaves little doubt about where the government's real sympathies lie⁴.

Lula's election: all change or more of the same?

Many thought that the election of Luiz Inácio da Silva (Lula) as President of the Republic in October 2002 would lead to an early asbestos ban. The new government, formed in January 2003, included many ministers from the Labour Party, including in the four key ministries for this issue - Labour, Environment, Mines and Health - as well as leaders from the main central labour federation, the CUT. Considerable time was lost during 2003, but there is no evidence to suggest a change of line. At the international conference on asbestos held in Dresden in September 2003, the Brazilian government representative announced, "We are taking work forwards which will lead to an asbestos ban". He had approved the Conference final declaration, recommending a worldwide asbestos ban. It would appear that in "taking work forwards", the objective became somewhat lost to sight. Instead of preparing a responsible and fair transition by coming up with solutions in terms of jobs for asbestos mine-workers, the government sent out a host of conflicting signals.

In March 2004, the government announced a ban on asbestos. Labour Ministry official Ruth Vilela clearly described it as government decision⁵. In June 2004, an interdepartmental committee was set up of representatives from all seven ministries concerned plus the Presidency Civil Office. It was due to give its conclusions on an asbestos ban by the end of 2004.

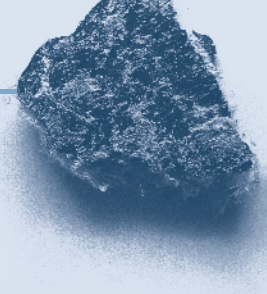
Out of the blue, the Mines and Energy Ministry decided on 16 July 2004 to set up another committee

² Giannasi, F., A atuação Interinstitucional no controle da Exposição ao Asbesto: A Experiência de São Paulo, *Revista Brasileira de Saúde Ocupacional*, vol. 16, nº 63, São Paulo, 1988, p. 73-75; and Giannasi, F., As Condições de Utilização do Asbesto nas Indústrias de Fibrocimento do Estado de São Paulo, *op.cit.*, p. 41-50.

³ Assembléia proíbe amianto em MT, *Diário de Cuiabá*, 15 April 2005.

⁴ See: Asbestos disputes in the WTO: battle won - but not the war, *TUTB Newsletter*, No. 17, June 2001, p. 20-28.

⁵ Fernandes, F., Rolli, C., Governo vai banir uso de amianto no país, *Folha de São Paulo*, 28 March 2004.



to promote the so-called “controlled use” of asbestos. Various organisations, including the National Occupational Health Association, slammed the move as a ploy to slow down the banning of asbestos. The Minister in charge was Dilma Vana Rousseff, the leader of the Labour Party. On 16 August 2004, the National Environment Board moved in the opposite direction to put asbestos on the hazardous waste list⁶. In September 2004, a further deeply negative signal was sent out when the Brazilian government failed to support the inclusion of chrysotile in the list of hazardous chemicals that are subject to the Rotterdam Convention’s prior information and consent procedure before being exported⁷. The interdepartmental committee eventually produced a thousand-plus page report in April 2005, evidencing the split between the two views within the government. Labour Minister Ricardo Berzoini (Labour Party) worked for a consensus view right to the end, but was foiled by an alliance of the Minister for Mines (a Labour Party colleague!), and the pro-employer and sometime head of the country’s biggest meat producer, Development, Industry and Foreign Trade Minister Luiz Fernando Furlan. This left the President of the Republic with the final say. The “Civil Office”, the President’s staff of close officials responsible for coordinating action across government departments, has so far hung fire on the matter. This can only favour the status quo, and has been hailed as a victory by the asbestos industry. With good reason...

Money talks

Pressure from asbestos multinationals, mainly the Eternit group⁸, and the industry lobby explain much of the Brazilian government’s issue-dodging. With help from the Chrysotile Institute (a Canadian organisation funded by the asbestos industry and Canadian government), the asbestos lobby mounted a wide-ranging propaganda campaign of playing down, not to say denying outright, the dangers of asbestos. Also, as per usual when workers’ health protection is on the agenda, the employers lobby ran a scare campaign on job losses. Giant hoardings and countless press adverts spun the message that asbestos provided 200 000 jobs in Brazil. What the campaign glossed over was that were asbestos to be banned, the processing industries would easily be able to continue their production with substitute products. As in Quebec, an upsurge of nationalist rhetoric claimed that attacks on asbestos were a disguised attempt to undermine Brazil’s national economic development.

The arguments may have been fairly lightweight, but other more persuasive means were also deployed.

Through SAMA, the company that runs the Minaçu mine, the Eternit group had “invested” heavily in the Brazilian political world and managed to build up a pro-asbestos lobby within Parliament based mainly on MPs from Goiás State, where the mine is situated. The weekly magazine *Epoca* published a report on 7 April 2005 showing how SAMA had funded the recent election campaigns of various Goiás State MPs. It is not partisan about the political influence it buys. While former President Fernando Henrique Cardoso’s centrist party, the PSDB, came off best with 350 000 *reais* for two candidates⁹, the old-school right was not left out (the PFL got just under 200 000 *reais*). Nor did the Labour Party turn down the interested support of the multinational (its candidate received 70 000 *reais*). The Brazilian press was quick to point out the contrast between the financial treatment meted out to Eternit workers suffering from mesothelioma, and the company’s open-handedness to political parties. After 22 years’ working in Eternit’s Osasco factory, where he contracted mesothelioma, Nelson de Oliveira received a payout of just under 25 000 *reais*. When the money came into his account, he had already been dead for two days. Approximately a third of his compensation went to pay for his funeral and headstone.

But the asbestos industries also engaged in systematic harassment of those who speak out against them. Eternit has brought repeated lawsuits against a São Paulo labour inspector, Fernanda Giannasi. While they have all been thrown out, their clear purpose was to browbeat labour inspectorate staff. Fernanda Giannasi’s bosses also piled on pressure to pull her off asbestos-using plant inspections¹⁰. The general political context in Brazil is not currently conducive to an independent and effective labour inspectorate¹¹. Their budgets have been slashed, and employers have mounted an assault on the more enterprising inspectors. The murder of three labour inspectors and their driver on 28 January 2004 shows the level of violence that some employers’ circles are ready to use against a labour inspectorate that they see as standing in the way of free enterprise (see box p. 21).

“Government falters while society moves on”

Government inertia contrasts with the robust movement in Brazilian society to get asbestos banned. Significantly, the mass circulation *Epoca* weekly magazine published an article on 29 April 2005 titled *Government falters, society moves on*, reporting on the Asbestos Tribunal, a gathering of academics, asbestos victims, trade unionists and political personalities in São Paulo in April 2005. A pro-asbestos

⁶ CONAMA Resolution No. 349, *Diário Oficial da União*, 17 August 2004.

⁷ See: Chrysotile: Canada undermines Rotterdam Convention, *TUTB Newsletter*, No. 26, December 2004, p. 35. Brazil sided with the Bush administration and abstained.

⁸ Eternit’s asbestos-cement production-related activities in Brazil generate turnover of some 430 million *reais* a year. Total industry turnover is around 2 billion *reais*. Direct employment in asbestos-cement companies amounts to approximately 5 000 workers. Indirect employment is estimated at about 200 000 workers. (Fernandes, F., *Governo adia decisão de banir amianto do país*, *Folha de São Paulo*, 20 February 2005).

⁹ A *real* is worth approximately 0.33 euros.

¹⁰ See: Kazan-Allen, L., Open Season on Brazil’s Labor Inspectors, *International Journal of Occupational and Environmental Health*, Vol. 10, No. 2, 2004, p. 240-241.

¹¹ The special teams of child labour inspectors were dissolved in November 2004, for example.

press campaign was stopped by the national advertising standards authority as encouraging consumption of a substance known to damage health¹². All the Brazilian Chrysotile Institute's attempts to challenge the decision were thrown out.

The number of lawsuits against companies that exposed their workers to asbestos are also increasing, and the amounts awarded in damages are acting as a deterrent to some Brazilian employers. A large number of asbestos-using firms are planning to switch over to less harmful substitutes. Most spectacularly, Saint Gobain's Brazilian subsidiary, Brasilit, has gone over entirely to asbestos-free production, investing 100 million *reais* in a factory that manufactures the asbestos substitute, polypropylene, at Jacareí in São Paulo State. The company employs 850 workers and has an annual turnover of some 200 million *reais*¹³, or just under half of Eternit's turnover for asbestos-cement production.

Brazilian researchers have developed new processes, in particular for using plant fibres in the production of building materials. In public, Eternit looks set to defend asbestos to the death, but behind the scenes it is not ruling out reconversion. While the general press is filled with its proclamations of steadfast loyalty to asbestos, the specialised economic press reports that Eternit is considering cutting loose from its Minaçu mining subsidiary, SAMA¹⁴, and is preparing to diversify its production¹⁵. What this adds up to is the conditions for a rapid pull-out from asbestos. The government's indecision is creating widespread uncertainty and obstructing an appropriate switch-over that respects asbestos workers' interests, and paves the way for viable, job-creating alternatives.

Some MPs are trying to spur the government to action. Two Green Party MPs, Eduardo Jorge¹⁶ and Fernando Gabeira, have revived a bill to outlaw asbestos first tabled in 1996. It is supported both majority and opposition MPs alike. It is too soon to tell whether it will come onto the statute books. The asbestos lobby has a powerful influence in the Brazilian Parliament. On 17 March 2005, the Speaker of the House, Severino Cavalcanti¹⁷, gave his public backing to the Goiás State pro-asbestos group of MPs. Whatever else its merits, the parliamentary

debate will compel the country's political leaders to show their hands and force the government to finally take a public stance on the matter.

Exporting the risks to poorer countries

Brazil is currently the fourth world asbestos producer after Russia, China and Canada¹⁸. Over half Brazil's asbestos production is exported to other countries. Its main markets for this killer fibre are Thailand (28% of export sales), India (21%), Mexico (12%), Indonesia (9%) and Colombia (7%). Working conditions in these countries leave no room for illusion about what good the "controlled use" of asbestos will do. Brazil's policy on asbestos is in some ways akin to Canada's. Asbestos use on the Brazilian home market has fallen sharply in recent years (almost 50% in the six years between 1997 and 2003), while exports have soared, more than doubling in the same period. In 1997, 30% of Brazil's asbestos output was sold abroad. In 2003, that had risen to 60%, while asbestos imports were about a third of what they had been in 1997. While asbestos fibre exports have increased significantly, exports of asbestos-containing manufactured goods have levelled off at 59 million tonnes in 2003 against 60 million tonnes in 1997. In other words, the Brazilian government is pursuing a policy of an international division of labour where the most dangerous activities are transferred to poorer countries. The Brazilian government also refuses to carry out prior information and consent procedures with the public authorities of the countries concerned by asbestos exports, showing how little credence it places in the possibility of controlled asbestos use. For the Lula government to keep up its asbestos production and world exports would be to sacrifice thousands of workers' lives to asbestos industry profits.

But there is another way. Former asbestos producer and exporter South Africa is moving towards a total ban. From being the sixth-largest world asbestos producer in 1997 (with 60 000 tonnes), it cut output to under a quarter in five years to be wound down altogether. This shows that there is no iron law about "once an asbestos producer, always an asbestos producer". ■

¹² Decision 251-04 of the national advertising standards authority prohibiting the campaign run under the slogan "Asbestos – chrysotile. Respecting life – growing Brazil".

¹³ Brum, E., Cançado, P., Barrocal, A., Vida e morte pelo amianto, *Epoca*, 7 April 2005, p. 10-13.

¹⁴ Mandl, C., Eternit estuda separa mineração de amianto, *Valor Online*, 3 September 2004.

¹⁵ Mandl, C., Frisch, F., Eternit planeja diversificar productos, *Valor Online*, 1 December 2004.

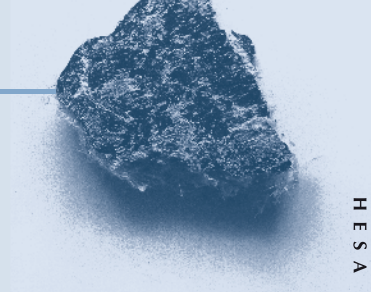
¹⁶ Eduardo Jorge is a former Labour Party MP who went over to the Green Party after a rift with the Labour Party leadership.

¹⁷ Cavalcanti is a leader of the Progressive Party (PP), a right-wing party.

¹⁸ Brazil, Canada and Kazakhstan's outputs are fairly close. Brazil's place varies between fourth and fifth world producer, according to the year, with around 10% of the mineral market.

	1997	1999	2001	2003
Production	208 447	188 386	172 695	231 117
Imports	38 941	24 049	33 136	11 856
Exports	63 164	49 418	53 919	144 343
Apparent domestic consumption	184 224	147 716	151 912	98 630

Source: Ministério de Minas e Energia, Departamento Nacional de Produção Mineral



Contract killers go after labour inspectors

On 28 January 2004, three labour inspectors and their driver were mown down by hired killers on the Unaí-Buritópolis road in Minas Gerais State. They were on their way to inspect the working conditions of seasonal bean harvest workers on the region's big farming estates. But they were also actively working against the forced labour and forms of slavery still found in rural Brazil. The slaying was a professional hit.

In July 2004, the federal police arrested the murderers, who admitted to carrying out the contract killing. The man who ordered it, businessman Hugo Pimenta, seemed to have no personal grudge against the murdered inspectors. But the police investigations revealed close links between his road haulage business and large agricultural interests.

In August and September 2004, the police rounded up a number of businessmen. The main suspects behind the organization of the slaying are two brothers: Norberto Mânica, one of Brazil's biggest employers in the bean-growing sector, and Antério Mânica, who is also a local political luminary^a. In October 2004, despite being held on remand, Antério Mânica managed to get himself elected mayor of Unaí on a PSDB list^b. According to Pastoral Land Commission Chairman Tomás Balduino, the list also had the backing of José Alencar^c, federal Vice-President and Defence Minister in the Lula government^d. The examining magistrate's investigations revealed that nearly a dozen businessmen and landowners had contributed to help pay for the killing.

The main agricultural employers' organization in Minas Gerais State is also keeping up its vindictive campaign against the labour inspectorate. In a letter sent to Vice-President José Alencar after the inspectors' murder, the organization complains of "inspection terrorism", and against all the evidence denies the existence of farm slavery in the State^e.

It is no surprise, then, that organizations fighting to ban asbestos in Brazil should take very seriously the many attempts at intimidation and death threats against labour inspector Fernanda Giannasi, who has championed the cause of workers exposed to asbestos.

^a Dantas, L., PF indicia Mânica por assassinatos em Unaí, *Folha de São Paulo*, 6 August 2004.

^b Suspeito por morte de fiscais do trabalho se elege em Unaí (MG), *Folha Online*, 4 October 2004.

^c The Liberal Party's José Alencar owns Brazil's biggest textile group, and has very close links with employers' circles in his home State of Minas Gerais.

^d José Alencar é conivente com o trabalho escravo, diz dom Tomás, *Folha de São Paulo*, 20 April 2005.

^e Memorandum of the Farming Federation of Minas Gerais State, 9 July 2004.

Musculoskeletal disorders: where we are, and where we could be

Introduction

Work-related musculoskeletal disorders (MSD), how to prevent them, and how to halt the spread, have been on the agenda for years, but the prevention plans worked out have not stopped the epidemic growing and invading all sectors.

MSD may be seen as the cause of pain and suffering by some, or lost efficiency and productivity by others, but the general consensus – of workers, employers and authorities – is that something must be done about this disastrous growth: action is needed to halt this suffering and these losses. We must curb this negative trend¹ that affects all sectors and all European Union (EU) countries, new, old and future members alike.

The worst-case scenario is that MSD could undermine the economic development of the EU and its competitiveness on world markets!

The forces are there to be joined, consultation processes are in hand, but the will to get to the root of the problem and really get a grip on its major causes in the workplace seems lacking.

What follows, therefore, is an attempted survey, or rather analysis of why the system has failed, leading on to avenues of exploration for reversing the trend; for that, I shall first (re)define the concept, then, consider the updated figures, give a critical description of the European mix of preventive measures, to show finally how the system has failed.

Object, scope and definitions

MSD cover a wide variety of phenomena and experiences (discomfort, disorders, pain). They are not accidents, but injuries² to joints, muscles, ligaments, tendons, peripheral vessels or nerves. These injuries are mainly associated with effort, movements, postures and vibrations, but also with work organisation and psychosocial factors. They bear different names according to the body part affected or the presumed pathomechanics of the injury.

A wide range of acronyms and terms are used to give a unified name to syndromes that are work-related, and appear at different sites of the human musculoskeletal system. This terminology relates either to the presumed cause of the syndrome (repetition, build-up), or the location of the injury, and so has a shifting content unsuited to preventive measures.

The frequency, speed and acceleration of movements, external forces, prolonged static load, extreme postures or hand-arm and whole-body vibrations, are risk factors classically associated with MSD.

Where MSD are described by cause, they are referred to as RSI (Repetitive Strain Injury) or WRULD (Work-Related Upper Limb Disorders), etc.

When described by symptoms, they are named according to the kind of body tissue affected:

- muscles: neck strain, myalgia, myositis, acute lower back pain;
- tendons: tendinitis, epicondylitis, de Quervain's disease, trigger finger;
- joints: acute painful shoulder or frozen shoulder, bursitis, back pain, acute lower back pain, neck pain;
- blood vessels: Raynaud's syndrome (white finger);
- nerves: carpal tunnel syndrome, thoracic outlet syndrome, sciatica.

MSD covers all symptoms involving the musculoskeletal system (back, upper and lower³ limbs) with, in this case, a work-related cause. Eliminating or reducing these injuries means tackling MSD risk factors. The injuries may be to the musculoskeletal system, but that interacts with all the other systems that enable it to function, including the central nervous system that controls and integrates the emotions and outward signs of stress.

An approach to MSD by anatomical zone – upper or lower limbs, regions of the back, thoracic or pelvic girdle – is misguided⁴, and neither desirable nor relevant because, while the anatomical approach usefully describes the body, it is of no use in describing the body at work since, *by definition*, it then functions in a whole-body way: none of its individual parts are separated from the body entity (except in the event of amputation or dissection, which are outside the scope of this article!); the brain, central and peripheral nervous systems control and feel all that affects the “physical” body, not as an independent entity, but in interaction with the *whole work environment* including its organisational and psychosocial aspects.

Only a *systemic approach* can give insights into the synergy between the body subsystems (anatomical, physiological, psychological, etc.) and the continuous

¹ A trend being a broad change over time.

² Diminished range of movement, swelling, numbness or tingling, loss of sensitivity.

³ Often overlooked (see below).

⁴ Because of the risk of failure of any proposed measure, as is borne out by the MSD statistics.

adjustment of body parameters to environmental parameters: these adjustments (conscious, semi-automatic or unconscious) are what maintain the human body's homeostasis.

It is always risky to upset this delicate "body balance" with short-sighted oversimplified approaches that over-segment the approach to MSD: that is undoubtedly one reason why prevention in this area has failed.

Epidemiology

The number of MSD sufferers is growing in all industrialised countries (USA, EU, Asia, etc.). The most recent Dublin Foundation research⁵ indicates that European workers have not escaped the trend (see box).

European workers reporting (%):

■ Back pain	33 %
■ Overall fatigue	23 %
■ Muscular pain in:	
- neck and shoulders	23 %
- upper limbs	13 %
- lower limbs	12 %

Among the potentially causal agents of MSD*, European workers exposed to (%):

■ Painful or tiring positions	47 % (for > 25% of working time) 28 % (permanently)
■ Repeated movements (arms and hands)	31 %
■ Stress	28 %
■ Vibrations	24 % (for > 25% of working time) 10 % (permanently)

* Although limiting it to these factors would be misconceived because, for example, poor lighting, exposure to cold (meat or fish cutting), etc., put the workers concerned at greater than average risk of contracting MSD.

Source: Paoli, P., Merllié, D., *Third European Survey of Working Conditions 2000*, Dublin, European Foundation for the Improvement of Living and Working Conditions, 2001.

Furthermore, MSD account for approximately 15% of the cost of work-related accidents and occupational diseases. A study⁶ done in France, commissioned by ANACT from ISEOR⁷, estimates the hidden costs of MSD as being 10 to 30 times higher than their visible costs in high prevalence workplaces (companies with over 500 employees in the engines and electronics industries), working out to between 6 800 and 11 200 euros per person affected a year from high absence rates and productivity losses (about 7%).

Why should there be this rise in MSD when measures are in place to prevent them? As well as unsuit-

ability of the existing means and inadequate implementation (considered below), it is known that some categories of workers and some sectors have been more exposed to MSD.

Risk sectors:

- agriculture, fishing and forestry;
- extractive and manufacturing industries;
- construction;
- wholesale and retail trade, maintenance;
- hotels and restaurants.

Highest-risk occupations:

- tailors;
- construction workers (bricklayers, tilers and carpenters);
- meat, fish, etc., cutting trades;
- packers, dockers, warehousemen (loading and unloading);
- secretaries and keyboard workers.

But the world of work has changed, and new patterns of work organization have emerged:

1. just-in-time work organization and lean production, zero delay, storage and defect, and job enlargement (e.g., customer-facing duties);
2. modern, computerized work methods, using data comms, with continuous performance assessment;
3. current forms of "human resource"⁸ management focused on non-standard employment (temporary, work week exclusive of meal periods, flexitime), sales reps with laptops enabling remote control of their sales performances, etc.

Amongst other things, these new patterns of work organization lead to increased stress, unpredictable work schedules, non-standard and/or insecure working patterns, deterioration of workplace human relations worsened by a work-life imbalance, working in unsuitable physical postures due to increased interfacing with a screen, mouse, keyboard or other input device, and, finally, the development of MSD among workers who previously had no incidence of it.

The system has failed - but why?

As shown in the table (see p. 24), there is a substantial mix of European preventive provision made up of Framework Directive 89/391 and individual directives, as well as standards and a series of other instruments (guidance, etc.) that supplement or fill out the directives.

It is clear that this mix is not working at all for MSD: not only has it not brought them down, but each fresh study adds new disastrous findings to mar the European statistics.

One reason for this is that the mix of directives, standards and other instruments is not in a coherent

⁵ <http://www.fr.eurofound.eu.int/publications/files/EF0121EN.pdf>.

⁶ <http://www.eurofound.eu.int/ewco/2004/02/FR0402NU03.htm>.

⁷ ANACT: National agency for the improvement of working conditions. ISEOR: Institute for socio-economic research in organisational management.

⁸ A curious expression giving humans a non-human attribute, "resource" characterising the economic (temporary and hence depletable) nature of a good.

The lineup of European preventive instruments

The main battery of legislation that applies to MSD consists of the following directives:

■ Framework Directive	89/391/EEC	■ Work equipment	89/655/EEC
■ Screen equipment	90/270/EEC	■ PPE	89/656/EEC
■ Manual handling of loads	90/269/EEC	■ Machinery	98/37/EC
■ Physical agents (vibrations)	2002/44/EC	■ Working time	93/104/EC
■ Workplace	89/654/EEC	■ Equal treatment	2000/78/EC

These directives are supplemented by a series of instruments, like the European EN standards, which fill out the details or enable them to be implemented.

European ergonomics standards (EN)

General design principles	EN 614-1, EN 614-2, EN ISO 6385, EN ISO 13407, ENV 26385
Safety of machinery	EN 457, EN 547-1, EN 547-2, EN 547-3, EN 563, EN 574, EN 614-1, EN 641-2, EN 842, EN 894-1, EN 894-2, EN 894-3, prEN 894-4, EN 981, EN 1005-1, EN 1005-2, EN 1005-3, prEN 1005-4, prEN 1005-5, EN 13861, prEN 14386, EN ISO 14738
Physical environment	• Noise/speech : EN ISO 9921 • Climate : EN 563, EN ISO 7726, EN ISO 7730, prEN ISO 7933, prEN ISO 8996, EN ISO 9241-6, EN ISO 9886, EN ISO 9920, EN ISO 10551, ENV ISO 11079, EN ISO 11399, EN 12515, EN ISO 12894, EN 13202, EN ISO 13731, prEN ISO 13732-1, prEN ISO 13732-3, prEN ISO 14505-1, prEN ISO 14505-2, EN ISO 27243, EN 28996
Physical work load	EN 1005-1, EN 1005-2, EN 1005-3, prEN 1005-4, prEN 1005-5
Mental work load	EN 614-2, EN 9241-2, EN ISO 10075-1, EN ISO 10075-2, EN ISO 10075-3
Workplace and equipment design	• General: EN ISO 9241-5, EN ISO 9241-6, EN ISO 11064-1, EN ISO 11064-2, EN ISO 11064-3, EN ISO 11064-4, prEN ISO 11064-6, prEN 14386 • Anthropometry : EN 547-1, EN 547-2, EN 547-3, EN ISO 7250, EN ISO 14738, EN ISO 15535, EN ISO 15536-1, EN ISO 15537, prEN ISO 20685
Visual information, VDTs and software	• General : EN ISO 9241-1, EN ISO 9241-2, EN ISO 9241-3, EN ISO 9241-4, EN ISO 9241-5, EN ISO 9241-6, EN ISO 9241-7, EN ISO 9241-8, EN ISO 9241-9, EN ISO 13406-1, EN ISO 13406-2 • Software : EN ISO 9241-10, EN ISO 9241-11, EN ISO 9241-12, EN ISO 9241-13, EN ISO 9241-14, EN ISO 9241-15, EN ISO 9241-16, EN ISO 9241-17, EN ISO 13407, EN ISO 14915-1, EN ISO 14915-2, EN ISO 14915-3, prEN ISO 23973
Displays and controls	EN ISO 9241-4
Personal protective equipment	prEN 13921-1, prEN 13921-3, prEN 13921-4, prEN 13921-6

Source: FEES list (Federation of European Ergonomics Societies), www.fees-network.org
See also the European Committee for Standardisation (CEN) site: www.cenorm.be

⁹ For instance, the directives are based on criteria that are neither described nor specified.

form or one that is conducive to enforcement: it is a tangled, complex and disparate jumble (with no systematic linkages or references back) demanding specific skills⁹ – in particular risk assessment and analysis, biomechanics and ergonomics – and abilities to extract the essentials (from the lineup of measures) that many companies, like SMEs for example, just do not have.

It is argued by some that the existing legislation and its supplementing standards are more than adequate, if not too much, but also - for this latter reason - that they are poorly applied... The subtext here is that simply helping to spread them, make them more “usable”, and increase their application will stem the rising MSD epidemic!

What needs improving in existing Community legislation and other instruments^a

Failings and lack of clarity in the directives concerning the human body at work which forms an indissociable whole whose different systems work in synergy:

- upper limbs^b: hands, wrists, elbows, shoulders;
- lower limbs: feet, ankles, knees and hips are not directly dealt with, they are not specifically referred to, but slips, trips and falls, as well as many sudden strains that are passed onto the trunk are due to direct stresses from these, resulting in acute lower back pain and other accidents;
- nervous system: mental, sensory and emotional workload are sources of work-related stress.

Characteristics of movements, postures, forces and interfaces that potentially cause MSD but are not systematically addressed:

- movements: range, precision, repetition, pace, and length of exposure;
- extreme postures and deviations;
- forces generated and static muscle work;
- interfaces: protection of contact zones (hands, elbows, knees).

Psychosocial^c and organisational factors that are missing^d from the existing directives, when the causal agents of work-related stress (stressors)^e are involved in the development of MSD or potentiate it when added to biomechanical disorders.

Directive 90/269/EEC on the manual handling of loads which:

- lists some movements but omits others;
- ignores the dynamic aspects of the task (picking up and putting down an object along a trajectory) which induces locomotor movements;

- completely omits high-risk handling operations of patients and animals.

VDU Directive 90/270/EEC ignores factors that lead to unsuitable postures, causing neck pain, acute lower back pain, and the prevention of muscle pain by damage to muscle fibres subjected to stresses from very low physical loads or even no physical load but a cognitive, social or sensory load accompanied by stressors (work on PCs, in particular)^f.

Singular vagueness of vocabulary and failure to define the criteria used when there is a common vocabulary published in the *Official Journal*^g:

- some directives (VDU, Manual Handling, Work Equipment) refer to "ergonomic principles" but provide no criteria for them;
- but these same directives neither define the fundamental concepts necessary to manage "repetition", "weight" or "force exerted" risks, nor indicate how to measure them.

^a A more comprehensive reasoned study can be found on our Website: www.etui-rehs.org/hesa > Main topics > MSD.

^b The Manual Handling Directive refers neither to hands or fingers: it is incomplete.

^c Buckle, P., Devereux, J., et al., *The role of work stress and psychological factors in the development of musculoskeletal disorders*, Health & Safety Executive, 2004. Downloadable from: www.hse.gov.uk/research/rrhtm/rr273.htm

^d Work organization, psychosocial load, skill discretion/decision authority, social support, face interaction with customers and the public must be taken into account.

^e For more details, see the European framework agreement on work-related stress signed in 2004 by the social partners. See: www.etui-rehs.org/hesa > Main topics > Stress at work.

^f Known as the *Cinderella effect*.

^g Issues of ergonomics, repetition, etc., are dealt with in a series of European standards, drawn up by CEN under mandates from the EU, in particular under Machinery Directive 98/37.

We seriously challenge this claim because – while they are admittedly under-used – it is equally clear that the existing tools are completely unfitted to putting a stop to both the MSD epidemic and its trend.

This is because it is now scientifically established that MSD result from exposures to mechanical factors, and that while reducing biomechanical risks can improve the situation, it is not enough in and of itself to eliminate MSD.

From a review of the epidemiological literature¹⁰, Paulien R. Bongers (TNO Work & Employment, Netherlands) concludes that high work-related stress and off-workplace stress reactions are consistently associated with all upper extremity problems.

In a recent article¹¹, Valerie Woods (Robens Centre for Health Ergonomics, University of Surrey, GB)

makes the finding from an examination of 52 studies, that there is good evidence for an association between poor social support (supportive colleagues, good communication, satisfactory work relationships, help with difficulties, support away from the workplace) and the emergence of MSD, and that, when returning to work after a sickness absence, social support is part of a coping strategy¹²; employers must take steps to improve health at work through sound management and organisational practises.

Grant D. Huang¹³ led a study of United States marines suffering from MSD. The authors concluded that reducing musculoskeletal morbidities meant looking at biomechanical factors and specific work organization factors, especially time pressure, together.

The contemporary ergonomics approach argues clearly for an integrated, systemic approach, and

¹⁰ Bongers, P.R., et al., Are psychosocial factors, risk factors for symptoms and signs of the shoulder, elbow or hand/wrist? *American Journal of Industrial Medicine*, 41:315 - 342, 2002.

¹¹ Woods, V., Work-related musculoskeletal health and social support, *Occupational Medicine*, 55:177 - 189, 2005.

¹² The mix of cognitive, emotional and behavioural efforts an individual makes to control or withstand internal or external strains that undermine or exceed their resources or abilities to adjust to a situation.

¹³ Huang, Grant D., Individual and combined impacts of biomechanical and work organization factors in work-related musculoskeletal symptoms, *American Journal of Industrial Medicine*, 43:495-506, 2003.

against any fragmentation of risk factors which dooms any preventive approach to failure.

This is why existing Community legislation and its supplementing standards absolutely must be corrected and filled out¹⁴ (see box p. 25).

How to stem the growth of MSD in Europe?

The main aim is still to tackle the primary causes of MSD. That, indeed, is what Framework Directive 89/391/EEC lays down with the principle of eliminating or at least reducing the risk, which is the basis of our take on the issue, and the preventive approach.

To deliver that aim, it is vital to plug the loopholes identified, spell out the terms and concepts used so as to make them usable at the workplace (especially in small and very small workplaces), to systematically lay down and spell out the criteria to be used in MSD risk assessments.

The Framework Directive and individual directives contain mechanisms that cannot be consistently and proactively applied to the potential causes of work-related MSD; it is essential to come up with a powerful Community tool for the prevention of MSD.

If it is to be valid and not repeat past mistakes, this tool must incorporate a number of aspects, including:

- Interdisciplinary approaches, where there is systematic interaction between the different disciplines of health and safety at work, management and organisation (as opposed to jealously guarded personal domains lined up side-by-side).
- A participatory approach combined with mechanisms that not just enable but actively stimulate and promote it in the firm.
- A feedback of workers' and firms' experience.
- Harmonization of rules and methods for assessing:
 - workload:
 - physical
 - mental and sensory (mental activity and processing)
 - social (face-to-face work with customers, patients, offenders)
 - work environment:
 - climate, noise
 - toxic agents, dust
 - wearing of Personal Protective Equipment
 - working capacity:
 - when working
 - following an incident, accident or on-demand to ensure that working capacity matches the job requirements
- Education and training for all those involved:
 - employers and supervisors;
 - workers and their representatives;
 - occupational health and safety service ancillaries and experts;

- OSH inspectors.

- Static work and its characteristics: what is meant by it, when does work change from being static to dynamic, how to avoid the drawbacks, etc.?
- Repetitive movements, including where loads are slight or negligible.
- Improving the vocabulary used: it must be precise, and clearly understood when used by all parties concerned in the firm (without having to buy in consultancy, which it is well-known will not be done in 90% of cases!).
- Defining the criteria used, for example:
 - heavy: what weight? in what circumstances?
 - frequent: how many times per minute?
 - correct handling: what movement, what posture, how many people, what path, what mechanical or human help?
 - good posture: preservation of normal lumbar curvature of the spine?
 - large: what volume?
 - bending of the trunk: how many degrees in what direction (bending, twisting or leaning)?
 - environment: what criteria should apply to the reference factors in the Annex to the Manual Handling Directive (air temperature, air velocity, relative humidity)? - which are silent where the task and clothing worn are not known - in order to integrate these factors in known models.
- Standardisation of the criteria for occupational diseases, to allow comparison of figures and strategies applied across the EU.

Conclusion

MSD have for years been the main complaint suffered by workers. They are the cause of growing distress, affect all categories of worker on a large scale, and cause significant, and probably under-estimated, losses to business. The efforts made and preventive instruments implemented have not worked: MSD-related complaints, distress and sickness absences are soaring.

Petty reforms of the "guidance to good practises" type cannot be expected to - and will not! - deliver a worthwhile result. The battle against the many causal factors of MSD is a big one: getting a grip on this scourge will mean getting concerted action going across the board - workers, employers and their respective representatives, the authorities (EU and governments), prevention and occupational health experts (ergonomists, industrial psychologists and doctors).

That clearly demands more than good will - it means leveraging financial and human resources, and skills. But these are investments that will yield results only in the medium or long term. Skipping this effort or trying to ignore the epidemic and hoping it will go away when the effects are to be seen every day, is just to brush a ticking time bomb under the carpet.

¹⁴ Not forgetting the gender dimension, as most work damaging to the musculoskeletal system is done by women (who also often have to do double duty, which adds an extra set of musculoskeletal stressors).

The Framework Directive requires dynamic risk management; its principles – elimination or reduction of risks, and appropriate steps by reference to available knowledge and technical means – must be applied without limitation to MSD risks; because we are dealing with the human body at work rather than a mechanical risk, the problem must be addressed holistically; here *holistically*, means “all actors” as well as “whole body”, including the characteristics, mechanisms and physical, psychological, physiological and social reactions of the body in a work situation.

No such tool presently exists to supplement the Framework Directive; it is more than imperative that one should be designed, disseminated and implemented. The need then will be to monitor its practical implementation and effects, and improve it in order to deliver the objectives - turning the tide of MSD, and taking the work forward until this 20th and 21st century plague is defeated. ■

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Health and Safety Department (formerly TUTB) publications on ergonomics and MSD



Developing a participatory approach to the design of work equipment
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Wendy Morris, Prof. John Wilson
and Theoni Koukoulaki

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Europe under Strain
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Rory O'Neill

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ISBN : 2-930003-41-3



Musculoskeletal Disorders in Europe,
Special Report, *TUTB Newsletter*,
No. 11-12, June 1999

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USA: occupational health under the first Bush Administration, 2000–2004

OSHA, the US federal agency for occupational health, was set up in 1971 with two core tasks. One was to be the federal occupational health and safety inspectorate; the other was as a regulatory agency, drawing up rules to improve prevention.

OSHA's track record under President Bush's first term is particularly dismal. Both core tasks were systematically sidelined as it fell in with employers' demands. This situation is not limited to health at work, but extends across most other spheres where public regulation is required to limit unbridled profit-chasing by business, like environmental protection, food health, medicines control, etc. A group of former federal agency heads led by Carol Brower, former director of the EPA (federal Environmental Protection Agency), has produced a damning report on it [1].

Voluntary approaches v inspection

OSHA's inspection activities have been largely pushed aside in favour of "voluntary approaches" that leave workers' health at the mercy of employers' goodwill. *Voluntary Protection Programs* (VPP) have been in use as tools for deregulation since 1982. Set up under the Reagan Administration, they allow employers to agree with OSHA that in return for their promising to set up a prevention management system, OSHA will not routinely inspect their workplaces, except in special circumstances. Punishable

infringements also get special treatment. Where the system breaks down is in leaving it to companies to self-report their accident and disease performances. In many cases, trade unions have found that the reports did not reflect the reality. Also, workers are under immense pressure not to report all accidents and return to work earlier after a work-related accident or disease absence. The trend of recent years has shown a marked anti-trade union turn in these voluntary approaches, one aim of which is to obstruct union activity in occupational health. The new national industry alliances between OSHA and employers exclude the unions in 56 cases out of 57, the one exception being safety in road construction.

The voluntary approach focus has also slashed the number of infringement penalties handed out by OSHA. In December 2003, *New York Times* journalist David Barstow published a series of articles on health at work [2]. These detailed investigations won him a Pulitzer Prize, and showed how employers were getting away virtually scot-free with causing workers' deaths. In 1 242 fatal accidents between 1982 and 2002 where OSHA found that a *wilful safety violation* had been committed, it brought prosecutions in only 7% of cases. This reflects an underlying political agenda - the California State inspectorate prosecuted in a third of cases. The *New York Times* report gave a striking run-down of the difference in penalties by the victims' social status group. For 2 197 fatalities, employers had to pay a

Bush Administration's assault on REACH

The Bush Administration has been systematically trying to torpedo the REACH* project to reform European chemicals legislation ever since it was unveiled. It has waged a full-on campaign in alliance with chemical industry multinationals. A report by the US House of Representatives published on 1 April 2004 at the instance of Congressman Henry A. Waxman (Democrat, Los Angeles), lifts the veil on what the Bush Administration has been up to.

For example:

- two lengthy telegrams sent by Secretary of State Colin Powell to United States embassies in March 2002 and April 2003 to coordinate pressure on European Union countries;
- contacts with the governments of third countries like Australia, Canada, China, Indonesia, etc., as well as with employers' circles in Japan, Malaysia, Mexico and other countries;
- a strategy to split European Union countries by fostering contacts with some States like France, Germany and the United Kingdom that might oppose the reforms.

The report claims that these pressures offer some explanation as to why the Commission proposal presented on 29 October 2003 is a step backwards from its initial plans.

The full version of the report on the Bush administration's lobbying campaign can be downloaded from our Website: www.etui-rehs.org/hesa/uk/dossiers/files/admin_reach_rep.pdf

* *Registration, Evaluation and Authorisation of Chemicals*. For more information on REACH, see the article on p. 5 and our website: www.etui-rehs.org/hesa > Main topics > Chemicals.

total \$106 million in fines. For a single case of fraud against investors, the WorldCom company was fined \$750 million.

Full-on deregulation

The picture for regulation is bleak. OSHA has repealed more standards than it has enacted [3]. One of the first steps taken by the Bush Administration and the Republican majority in Congress was to repeal its ergonomics rules. The employers' organisations that led the assault on the ergonomics regulations had put \$11 million into Republican candidates' fighting funds for the 2000 Senate/Congressional elections. The decision to scrap the rules is particularly bad for women, who make up 44% of the workforce, but account for 64% of registered musculoskeletal disorder sufferers in the United States.

Of the 24 standards repealed during President Bush's first term, 13 are seen as "economically significant" for employers. A standard is economically significant when the cost to business of applying it amounts to at least \$100 million. By contrast, the 16 new standards put forward have only limited economic impact. In some cases, standards have been drawn up in response to direct pressure from private companies who put their bottom lines before workers' health. OSHA's proposed standard on the performances of respiratory protection masks which appears to be the direct result of lobbying by manufacturer 3M is a case in point. The company was keen to avoid too-detailed a performance assessment of its masks for fear of losing market share to rival producers of better quality equipment.

OSHA bowed to industry pressure in deciding not to set new limit values for crystalline silica even though the current limit value of 10 mg/m³ is deemed too high by the National Institute of Occupational Safety and Health, NIOSH [7]. NIOSH argues that a limit value of 0.05 mg/m³ would be appropriate, and that current measuring technology enables it to be enforced. It is a life-and-death issue. Silicosis caused 13 744 deaths in the United States between 1968 and 1990 according to the American Public Health Association. Even today, between 200 and 300 workers die of silicosis each year, and this is probably under-reported, as many exposed workers have no access to health surveillance. OSHA has counted on "voluntary approaches" to improve on the current limit value. A study in the construction industry shows that the policy has failed [4].

The real measured exposure levels in the construction industry are particularly disturbing. Crystalline silica also causes lung cancer. Peter Infante, former Director of OSHA's Office of Standards Review, reported that most of the officials responsible for drawing up standards had resigned because of direct industry pressure, supported by the Bush Adminis-

tration. He himself resigned in 2002 after failing to push through preventive health measures on beryllium, a metal that causes pulmonary disease and is a recognised carcinogen. Industrial hygienists working for OSHA say that being dictated to by industry interests has particularly affected prevention of chemical risks in recent years. Because the cost of these to employers is relatively small, prevention of cancer and reproductive health damage have slipped down the policy agenda.

OSHA's missionary work

OSHA has of late been trying to sell its voluntary approach model to other countries. The Bush Administration missionaries have tried to persuade other States of its merits as an alternative to public regulation. At the September 2004 Amsterdam conference on occupational health, senior OSHA official Paula White was invited by the Dutch Presidency to talk up the system. She claimed that voluntary prevention programs (VPP) had saved industry over a billion dollars. What she forgot to mention is that for several years past¹, companies have no longer been obliged to report all musculoskeletal disorders and hearing damage². As things stand, it is arguable that much of the savings made comes not from improved prevention, but other sources like under-reporting of work-related diseases and policies of getting accident and disease victims back to work quickly.

OSHA has tried to get VPP spread throughout the European Union, which would enable companies in such programmes to largely evade control by health and safety inspectors. So far, the attempts have failed, except in Ireland and Northern Ireland. ■

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¹ The rules were officially repealed on 30 June 2003, but had been "on ice" for the two years before that.

² Previously, they had to report all workers that had suffered hearing loss of at least 10 decibels. Now, only losses of at least 25 decibels are reported. OSHA's own estimates put the difference at 135 000 cases a year.

“Systematic human rights violations” in the meat industry

“The line is so fast there is no time to sharpen the knife. The knife gets dull and you have to cut harder. That’s when it really starts to hurt, and that’s when you cut yourself”. This testimony of a North Carolina meat-packing plant worker is taken from the report *Blood, Sweat and Fear: Workers’ Rights in US Meat and Poultry Plants* *, published last January by Human Rights Watch. In it, the human rights group paints a stark picture of the appalling working conditions found in US meat and poultry processing plants, even branding them as “systematic human rights violations”.

Automated lines running at too-high speed, cutting movements repeated thousands of times resulting in musculoskeletal disorders (MSD), work in cramped spaces, lack of training and protective equipment, forced overtime, sackings of workers who try to set up a trade union, etc. Welfare at work and guaranteed freedom of association are clearly not words in the meat and poultry industry employers’ vocabulary. The problem is that US legislation that is supposed to ensure health and safety at work is not binding on these industry employers, because the federal authori-

ties’ two main criteria for production line speeds are preventing meat and poultry from going off, and not curbing business profitability and productivity. Preventive measures have been considerably eased since George W. Bush took office.

The first thing the new Administration and Congress did was to repeal the ergonomics rules brought in under the Clinton Administration in January 2001, and replace them with non-binding guidelines claimed to “adequately protect workers”. In 2002, a new work accident reporting form was imposed on the Occupational Safety and Health Agency (OSHA). It was missing the MSD column, which slashed the non-fatal occupational accident and sickness rate in the meat processing industry down to 11.5 incidents per 100 workers a year from 21.5 in 1996. “These data show clearly that our efforts to improve worker and workplace safety in the industry continue to bear fruit,” claimed a triumphal press release from the American Meat Institute Foundation ...

* The report can be read and downloaded free of charge from: www.hrw.org/reports/2005/usa0105/index.htm.

Italy: Berlusconi government back-pedals

On 3 May 2005, the Berlusconi government withdrew a draft statutory instrument that would have slashed workers' occupational health rights¹. Spurred on by employers' campaigning across Europe for "better regulation and legislative simplification", the Berlusconi government had tabled draft legislation in October 2004. It met with fierce resistance from the unions. Strikes were called in some regions to get it dropped. Even regional authorities and the main organizations of prevention professionals rebuffed it, cautioning against the dangers of deregulation. The Council of State also pointed out conflicts between the draft and existing legislation.

In the end, the Berlusconi government was forced to yield, and announced that it was withdrawing its draft on 3 May. But the unions are still geared up for action, should other attempts at "legislative simplification" be made to cut workers' rights to protect life and limb. ■

¹ See *TUTB Newsletter*, No. 26, December 2004, p. 35.

Work kills in Europe, too

Work can kill, and not just in Chinese mines or Indian sweatshops. It is too easy to forget that work fatalities are a European problem, too. A report published in May by the Dutch trade union FNV¹ entitled *Worked to death in the Netherlands. A survey*², is a jolting reminder of the fact.

The document highlights for each major cause of death (cancer, suicide, infectious diseases, heart disease, nervous system disorders, etc.), the work-related factors that may have been involved, and puts forward figures. An introduction admits the difficulty of the exercise, because the work/death link does not show up in Dutch

statistics other than for fatal work accidents.

What the union has done, therefore, is to extrapolate incomplete national data and figures from international studies or those done in other countries (Finland and the United States). The authors are quick to point out that they are only the "best possible estimates", but no less informative for that on more than one count.

For example, the report lays to rest the idea that workplace accidents are the main cause of work-related deaths. The FNV estimates the number of deaths from accidents at the workplace as nearly thirty times lower than occupational cancer deaths. The study paints a bleak picture of a total 5 545 deaths a year due to working, 3 000 of them from work-related cancer, 1 200 lung and respiratory tract diseases, and 800 cardiovascular disease, whereas fatal work accidents account for "just" 110 cases.

The report notes that asbestos causes 400 new cancers each year in the Netherlands, the feared mesothelioma, pleural cancer or peritoneal cancer, which is a near-certain death sentence. Two thousand lung cancer deaths a year are estimated as being work-related, mainly from exposure to exhaust gases and passive smoking in the workplace.

The role of organic solvents in "nervous system disorders" is also singled out. Around 300 000 workers use these substances every day, especially painters, body shop painters, and printers.

On the consequences for mental health and psychological well-being, the report estimates that 100 000 workers are frequently confronted with aggressive behaviour at their workplace, suggests that 13% of suicides are work-related (harassment, work

pressure, etc.) or due to work-related traumas (dismissal/redundancy or assault, for example). Health workers, members of the armed forces and police are high-risk groups for this. The report's findings include the fact that suicides among military personnel are 65% higher than among the civilian population.

The report also highlights the risks connected with new working patterns. So, "flexible workers" suffer nearly 15% of all work accidents, but account for only 4% of the working population. ■

¹ Federatie Nederlandse Vakbeweging.

² *Werkgerelateerde sterfte in Nederland. Een verkenning*, Stichting FNV Pers, May 2005, 29 p.

Netherlands: bank workers unimpressed by "better health at work" agreement

"Not very" just about sums up how happy Dutch bank workers feel with their working conditions. Dutch bank staff gave a score of 4.7 out of 10 to an agreement intended to cut the number of complaints of work pressure and computer-related physical disorders (Repetitive Strain Injury - RSI). The agreement was signed in November 2001, and ran out at the end of 2004.

In March this year, Dutch trade unions unveiled the findings of a questionnaire circulated to staff in the country's main banks. 75% complained of work pressure, while 26% claimed that using a computer at work had caused them health problems (eyestrain, backache, etc.).

Although a program enabling computer users to take work breaks is available in most of the banks, it is used by under 50% of staff, mainly because of pressure of work. The most-often cited causes of work pressure in the questionnaire were excessive work load, under-staffing, and uncertainty about the

future created by reorganizations. The overwhelming majority of bank staff thought management were not paying enough attention to the problem.

The survey also highlights different perceptions between head office and local branch staff, with the former reporting greater satisfaction with the agreement's achievements.

These agreements, known as *covenants*, are concluded by the government with the social partners. They are officially promoted - the Dutch government helps to fund them - and have mushroomed in different sectors in recent years. But they are non-binding, and enforcement is left to the employers' discretion, so this "alternative" to traditional collective agreements is more likely to bring comfort to employers than heal the physical ills and mental scars left by worsening working conditions for thousands of Dutch workers. ■

Source: *Tussen droom en daad. De goede bedoelingen van een arboconvenant en de weerbarstige praktijk*, Stichting FNV Pers, March 2005, 28 p.

South and Eastern Europe: New project aimed at strengthening the social dialogue in health and safety at work

ETUI-REHS¹ has opened discussions with the three global players in the field of social, labour and health policies - WHO, ILO and IOE² - on strengthening social dialogue in OHS in the countries of South and Eastern Europe (SEE).

The initial idea came about this year during negotiations of the Stability Pact for South and Eastern Europe. The project aims at strengthening the capabilities of countries in dealing with OHS by stimulating social dialogue for setting up occupational health and safety policies, by supporting the development of national strategies

and legislation. Moreover the creation of the key models of occupational health services and workplace dialogue play an equally important part of the project.

The SEE countries cover Albania, Bosnia and Herzegovina, Bulgaria, Croatia, The Former Yugoslav Republic of Macedonia, Republic of Moldova, Romania, Serbia and Montenegro. Bulgaria and Romania are expected to join the European Union in 2007. The rest of the countries are the potential EU members.

The initial meeting of the project partners, representatives of Stability Pact and focused SEE countries was held at the beginning of May 2005. During this meeting, the agenda of the project was clarified and finalised. The first steps were set up. They involve the addressing of social partners in specific countries, the creation of the network of contact persons, the elaboration of the national reports on present situation in OHS, the negotiations with the potential donors and the preparation of the draft of one of project modules.

In this phase of the project, the ETUI-REHS will be actively

involved in two subtopics. The first one is the elaboration of the first module dealing with the social dialogue in OHS. The second one is the assistance to countries writing national reports.

This project presents a unique opportunity for transfer of knowledge among SEE countries alone and among SEE countries and the European trade unions. If this project is supported sufficiently by donors, we can expect the involvement of trade union experts from the Member States in training courses.

The representative of The Former Yugoslav Republic of Macedonia, prof. Jovanka Karadzinska-Bisljmovska from the Institute of Occupational Medicine in Skopje said at the meeting: "We need your support definitely. Health and Safety at work in my country and in neighbouring countries is an area that has been left aside. We have to try to change this situation in favour of a better working environment for our workers." ■

¹ European Trade Union Institute for Research, Education and Health and Safety.

² World Health Organisation, International Labour Organisation and International Organisation of Employers.

THE HEALTH AND SAFETY DEPARTMENT OF THE EUROPEAN TRADE UNION INSTITUTE - RESEARCH, EDUCATION, HEALTH AND SAFETY (ETUI-REHS) aims at promoting high standards of health and safety at the workplace throughout Europe. It succeeds the former European Trade Union Technical Bureau (TUTB), founded in 1989 by the European Trade Union Confederation (ETUC). It provides support and expertise to the ETUC and the Workers' Group of the Advisory Committee on Safety, Hygiene and Health Protection at Work. It is an associate member of the European Committee for Standardization (CEN). It coordinates networks of trade union experts in the fields of standardization (safety of machinery) and chemicals (classification of hazardous substances and setting occupational exposure limits). It also represents the ETUC at the European Agency for Health and Safety in Bilbao.

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The ETUI-REHS is financially supported by the European Commission.



HESA Newsletter No. 27 June 2005

The information contained in this issue is mainly as at 31 May 2005. The **HESA Newsletter** is published three times a year in English and French.

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Managing Director of the ETUI-REHS
5 bd du Roi Albert II, bte 5
B-1210 Brussels

Editor: Denis Grégoire (dgregoire@etui-rehs.org)

Production assistant: Géraldine Hofmann

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Translation: Glenn Robertson

Reference material: Jacqueline Rotty

Circulation: Géraldine Hofmann

Graphic design: Coast, Brussels

Printed in Belgium

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