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SPECIAL REPORT

Young workers: Health at risk!

Silica Agreement

The pros and cons, how the negotiations play against the updating of the Carcinogens Directive

SUMER survey

Mapping work hazard exposure in France

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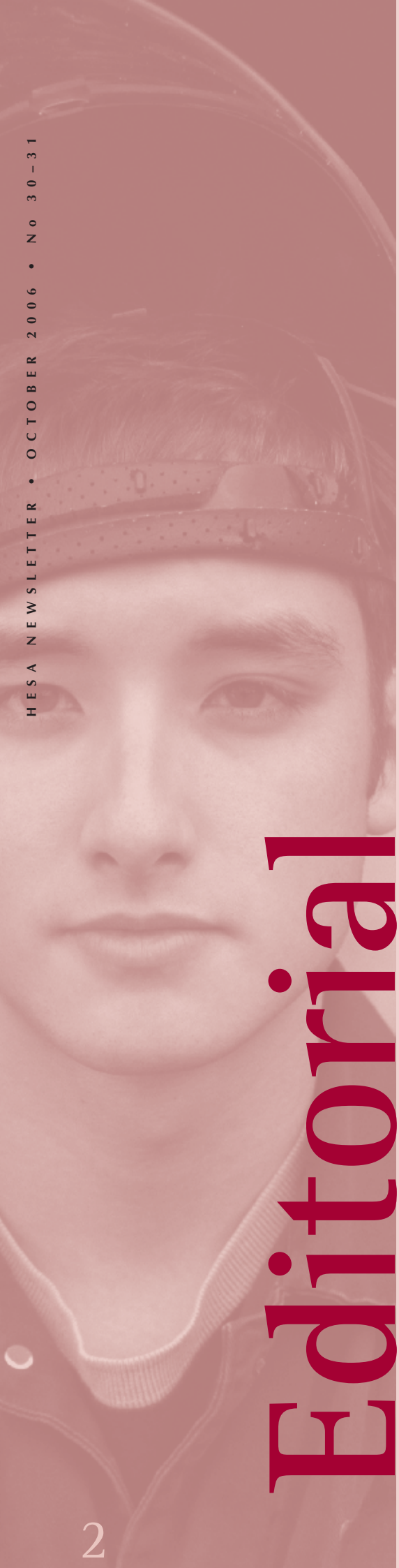

Editorial

Casualisation, worst threat to young

The theme for this year's European Health and Safety Week was young workers. It is a big issue. More than a million young workers are injured in work accidents in the European Union each year. Tens of thousands end up crippled for life. And they are widely exposed to other health risks that will leave them damaged long after the exposure has ended. It is a situation that is creating big social inequalities in health.

There are different ways of coming at the health and safety of young workers. Most common is the paternalist approach, which tries to persuade young people to get into a "preventive culture". It focuses on individual cases – risk-taking, poor training, recklessness, etc. – to disregard any analysis of the employment relationship.

Trade unions believe that the health and safety of young workers depend on tackling casualisation. If there is one common thread in the widely differing situations between countries, branches of industry and occupations, it is casualisation. A prevention policy cannot focus just on specific things like training, information, and reducing individual risks. It must marry better preventive practises to a process that will help turn around the current spread of contingent employment. Behind the many accidents and countless incidents of health damage and other forms of suffering at work lie exploitative relationships.

Young workers are often hired on short-term contracts in order to push down wages, fragment collective solidarity, and downgrade their jobs. Because of this, they often find a gulf between the paper rules and how things are actually done. Even where they know the risks and how to avoid or reduce them, they are denied the means of collective action and representation which would enable them to effectively protect their health and safety.

Job insecurity has enabled employers to enforce creeping deregulation in practise. The rules are still generally there, but increasingly less applied.

workers' health

This year's European Week came amidst the debates that will shape the new Community HSW strategy for 2007-2012. The relevant policy conclusions need to be drawn from this. The new strategy's priorities should include tackling job insecurity and strengthening the structures that underpin prevention – workers' representation in safety, the health and safety inspectorate, and protective services. It should ensure that all workers bar none have access to these structures.

Marc Sapir,
Director of the Health and Safety Department, ETUI-REHS

Check out our Scoreboard of European OHS legislation!

European occupational health and safety legislation is complex and constantly evolving. Some directives are being updated, new initiatives taken by the European Commission are put out for the European social partners' opinion, ambitious regulations like REACH are long in the making. Even those well-versed in the ins and outs of Europe may be at a loss to find their way through the maze.

We thought, therefore, that what was needed was a quick reference tool for tracking progress on the big European issues in health and safety at work through the system. Check out our first Scoreboard of European OHS legislation. It gives you updated details not just on recently adopted texts, but also Commission proposals that are being negotiated or will be put out to consultation soon.

You can also find the Scoreboard online on our website http://hesa.etui-rehs.org > Main topics.

And as if one new feature wasn't enough, this issue also sees the start of a new section "Recommended reading" where we feature recent publications that the HESA Department thinks are worth a look at. If you publish or have written publications that might feature in this section, please feel free to send us a review copy.

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Will the Silica Agreement foil EU legislation?

On 25 April 2006, European chemical and metallurgical industry unions struck a deal with the employers in a range of industries on protecting the health of workers exposed to crystalline silica dust. But the European building workers' union refused to join the negotiations or sign the autonomous agreement. This article looks at the health problems stemming from occupational exposure to silica dust, the contents of the agreement, and why some opted in while others shunned it. It concludes with our analysis of the negotiations set against the background of the current revision of the European Carcinogens Directive.

Free silica or silicon dioxide (SiO_2) is found in both the crystalline and non-crystalline states (amorphous[1]). The three commonest forms of crystalline silica are quartz, tridymite and cristobalite. Quartz is the most commonly found in nature (12% of the weight of the Earth's crust) and is a main constituent of many rocks and soils. While some very high quality synthetic quartz crystals are produced industrially (optics, electronics), almost all quartz for industrial use is extracted from sedimentary rocks (sand). Tridymite and cristobalite are not common in nature and so unlike quartz are not much used. However, cristobalite (and much more rarely tridymite) may be formed when mineral wools, sand and amorphous silica are heated at high temperature.

When inhaled, crystalline silica dust is deposited in the respiratory system. The point of deposition depends on the particle size: the largest particles are deposited in the nasopharyngeal region (upper airway passages – nose and throat) and eliminated by the organism, while the smallest (alveolar or respirable) penetrate to the trachea, bronchi and alveolar ducts (windpipe, upper and lower lung areas) which in humans leads to the development of silicosis.

The WHO describes this irreversible pulmonary disease as one of the oldest known occupational diseases[2]. The form and severity in which silicosis manifests itself depend on the type and extent of exposure to silica dusts[3]. It may be acute (massive exposure causing death within 1 to 3 years), accelerated onset (developing within 5 years of exposure), chronic (displaying symptoms only after several years' exposure, or even long after the last exposure) or asymptomatic (showing up only on x-rays). In later stages, the condition becomes disabling and is often fatal. Frequent causes of death in those affected are pulmonary tuberculosis (a complication from secondary infection by harmless bacteria), and respiratory insufficiencies due to massive fibrosis and emphysema.

Crystalline silica also plays an undoubted part in the development of cancer in humans. Consistent epidemiological findings support an increased risk of bronchopulmonary cancer among people with silicosis[4]. The mechanism of this relationship is not yet fully understood. However, epidemiologic studies have produced contradictory findings that have not so far explained the relationship between cancer and silica *per se*, i.e., in the absence of silicosis.

The most recent European statistics on recognised occupational diseases in the Member States[5] reveal that in the EU-15, 218 workers died from silicosis in 2001, and that 803 new cases were recognised for the same reference year. These figures are sure to be well below the actual number of cases, as it is a matter of record that occupational diseases are under-reported.

The European regulatory framework and preliminaries to negotiations

EU countries already have measures to reduce exposure to silica dust based on Community directives in their national legislation, including having adopted occupational exposure limits (OELs). Some countries – notably the Netherlands and Denmark – have also classified crystalline silica as a carcinogen. These changes were brought in after the International Agency for Research on Cancer (IARC) decided in 1996 to include crystalline silica (inhaled in the form of quartz or cristobalite from occupational sources) in the group of substances recognised as carcinogenic to humans (Group I)[6].

At Community level, crystalline silica is still not listed in Annex 1 of Directive 67/548 which lays down the rules on labelling and classification of dangerous substances. The working group tasked with keeping this directive under review last addressed the issue of silica in 1998, deciding that silica was not to be regarded as a priority for classification under Annex 1 of the Directive[7]. In a written contribution ahead of the October 1998 meeting, the European silica producers association (Eurosil) called for a revision of the directive to allow the use of other classification criteria[8]. No further action has been taken on the labelling and classification of crystalline silica since then. All the European Chemicals

[1] Describes a mineral in the non-crystalline state, i.e., lacking an ordered atomic structure (e.g., opal, obsidian).
[2] See: www.who.int/mediacentre/factsheets/fs238/en.
[3] Toxicology data sheet No. 232, INRS. Downloadable on www.inrs.fr/htm/ft232.pdf.
[4] Pelucchi *et al.*, Occupational silica exposure and lung cancer risk: a review of epidemiological studies 1996-2005, *Annals of Oncology*, 2006 17 (7):1039-1050.
[5] Statistics in focus, 15/2004, Eurostat, 2004.
[6] Monographs on the evaluation of the carcinogenic risk of chemicals to humans. Silica, some silicates, coal dust and para-aramid fibrils, vol. 68, Lyon, International Agency for Research on Cancer, 1997.
[7] The October 1998 meeting minutes can be downloaded from the ECB website: http://ecb.jrc.it/classlab/SummaryRecord/5598r2_sr_CMR1098.doc.
[8] Eurosil, Crystalline silica position paper, 25 September 1998. Document ECBI/47/98.

Bureau (ECB), which provides scientific and technical support to the European Commission on dangerous chemicals, has done is to publish non-confidential information collected from industry on the firms concerned, production sites and other data on toxicity in particular[9] under Regulation 793/93[10]. In this ECB document, industry takes issue with the IARC findings and the relationship between cancer and exposure to silica. The question is whether the impending revision of the classification system under REACH and the Global Harmonized System[11] will provide a new framework within which to give practical effect to the obligations on labelling, drawing up safety data sheets and controlling the concentrations of airborne crystalline silica in workplaces.

The EU's Scientific Committee for Occupational Exposure Limits (SCOEL), produced an initial version of its recommendations for crystalline silica in June 2002, prompting a fresh response from the silica industry. The liaison office of the European ceramic industries called it unacceptable for a uniform value to be proposed without taking account of the diversity of silica species and argued that the recommended OEL of 0.05 mg/m³ was not measurable[12]. The silica producers organisation, Eurosil, also began lobbying on a number of fronts on the possible impacts of lowering Member States' existing exposure limits, publishing a socio-economic study and mortality study in the silica industries in Great Britain, and compiling a Good Practices document for discussion with stakeholders[13]. Eurosil also hosted a meeting of experts in Florence in September 2003, to which members of SCOEL were invited.

SCOEL took various comments on board, but did not change its proposed exposure limits. It finalized its proposals at a meeting held in June 2003, at which the Commission impressed upon it that any future activity on setting an exposure limit for crystalline silica would have to include social partner consultations. The Commission also pointed out that the treaty permitted the social partners to negotiate agreements which could be adopted by a Council Decision, and that such an agreement could be an alternative to adopting a directive. The meeting was also told that Eurosil would be hosting a workshop on the needs for research into the health aspects of silica. It was agreed that any members of SCOEL who attended the workshop would do so as experts, and not as members of the committee.

Eurosil then began considering the conclusion of a multisector Social Dialogue Agreement under article 139 of the Treaty as an alternative to "inappropriate" regulation[14] on the basis of a draft "prevention practises" document. In September 2004, the employers' organisation initiated a silica platform linking together ten employers' associations, and set consultations in train with the mine and chemical, metallurgical and building workers' federations (EMCEF, EMF and EFBWW). A number of the employers' associations which were not recognised social partners were granted recognition by the Commission specifically for the purpose. In the end, the official negotiations were joined by all the employers' associations, except for the European Construction Industry Federation (FIEC), while on the union side, the EFBWW stood aloof from the discussions.

[9] IUCLID Dataset, created 18 Feb 2000 – European Chemicals Bureau.
[10] Council Regulation (EEC) No. 793/93 of 23 March 1993 on the evaluation and control of the risks of existing substances. The aims of this regulation include evaluating of the risks of existing substances to man, including workers and consumers, and to the environment, in order to ensure better management of those risks within the framework of Community provisions.
[11] On which, see http://ec.europa.eu/enterprise/reach/ghs_en.htm.
[12] CERAME-UNIE, Comments concerning the SCOEL position for an OEL for respirable crystalline silica (RCS) dusts, Doc. CU/S-02.35, 20 December 2002.
[13] IMA Annual Report 2002-2003, p. 8.
[14] IMA Annual Report 2003-2004, p. 16.

What does the agreement provide?

The agreement's [a] main aim is to minimise exposure to respirable crystalline silica [b] at work by applying Good Practices in order to prevent, eliminate or reduce the health risks to exposed workers. It also aims to increase knowledge of the potential health impacts of respirable crystalline silica and about Good Practices.

It applies to the production and use of crystalline silica and to products containing it, but also covers related ancillary activities like handling, storage and transport.

The agreement specifies that "employers and employees, and the workers' representatives, will jointly make their best endeavours to implement the Good Practices at site level". The list of Good Practices contained in Annex 1 of the agreement will be adapted and updated on an ongoing basis. The Good Practices relate to risk assessments and controls on workers exposed to respirable crystalline silica, monitoring the effectiveness of measures taken and health surveillance of employees, as well as training for workers.

A monitoring system will be installed at each site [c] to determine, in association with the company works' council and the workers' reps if necessary, whether the Good Practices are being applied or not.

A monitoring committee (the Council), comprised of equal numbers of workers' reps and employers, will deal with issues relating to the application and interpretation of the agreement. It will also report on how the agreement is being applied by industry sectors and submit its report to their members, the European Commission and the national workers' health and safety authorities.

The agreement will come into effect six months after its signature for a period of four years, and will then be automatically extended for further periods of two years. Should future European legislation on crystalline silica be proposed, the agreement's signatories will meet to examine the consequences for the agreement.

The agreement has been signed by: APFE, BIBM, CAEF, CEEMENT, CERAME-UNIE, CEMBUREAU, EMCEF, EMF, EMO, EURIMA, EUROMINES, EURO-ROC, ESGA, FEVE, GEPVP, IMA-Europe, UEPG.

a. Full version available on http://ec.europa.eu/employment_social/news/2006/apr/silica_agreement_en.pdf.
b. Respirable crystalline silica is defined as the mass fraction of inhaled crystalline silica particles penetrating to the unciliated airways.
c. A site is an operational entity at which respirable crystalline silica occurs, e.g. production site or use site.

Pass notes on Treaty articles 138 and 139

Article 138 of the EC Treaty provides for European-level management and labour to be consulted on all the employment and social policy matters set out in article 137. There are two compulsory phases in the procedure: the Commission first consults the social partners on the possible direction of Community action; then, it consults them on the content of the proposed measure.

When consulted, however, the social partners may inform the Commission that they wish to use the article 139 procedure of negotiating an agreement between themselves in the area concerned. If they go down this road, they must normally conclude their agreement within nine months. They can then choose between two distinct types of implementation. The agreement can either be made legally binding by a Council Decision (turning it into a Directive), or contractually binding if the social partners undertake to implement it themselves. It is then known as an "autonomous" agreement. The social partners can also negotiate an agreement off their own bat, not initiated by the Commission, as they did with the crystalline silica agreement.

The participants in the intersectoral social dialogue – the ETUC, UNICE (private sector employers), UEAPME (small and medium-sized firms) and CEEP (public sector employers) – have so far concluded three agreements with the force of directives: those on parental leave (1996), part-time work (1997) and fixed-term employment contracts (1999).

They have also signed autonomous agreements on telework (2002), work-related stress (2004) a framework of action on life-long learning (2002) and a framework of action on gender equality (2005).

At sectoral level, the European industry federations (affiliated to the ETUC) also negotiate with their employer counterparts in the sectoral social dialogue committees (SSDC). These are voluntary bodies first set up in January 1999, tasked with developing and supporting the social dialogue at sectoral level. 32 SSDC have been created to date, and have adopted over 360 joint texts between them, mainly joint requests to the Council or Commission (common opinions, declarations, resolutions, recommendations, etc.), with only few mutual undertakings*. A mere five agreements have been negotiated under article 139 of the Treaty – three directly related to the sectoral implementation of the 1993 Working Time Directive in the transport sectors, the other two on training and working time in the railway industry.

This makes the crystalline silica agreement the sixth agreement to be signed at sectoral level under article 139 of the EC Treaty.

* P. Pochet, *Le dialogue social sectoriel, une analyse quantitative*, Chronique internationale de l'IRES, n° 96, September 2005.

Negotiating against the background of the Carcinogens Directive revision

In March 2004, the European Commission set about updating Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work. This included consulting the social partners under the EU Treaty provisions for their opinion on possible changes[15]. One of these was whether occupational exposure limits should be set for other carcinogens, because while different countries had their own statutory OELs for many carcinogens, exposure limits were established at Community level under the Directive for only three substances[16].

After several months' negotiations, an agreement was finally signed on 25 April 2006 by 15 European employers' organisations and two European industry federations for the chemical (EMCEF) and metallurgical industries (EMF)[17]. The signatories to the agreement could potentially cover up to 2 million workers across Europe.

One view argues that the industry-initiated negotiations with the unions were mainly a bid to avoid having an exposure limit set at a level lower than that in force in some European countries and a Community recognition of crystalline silica as being a human carcinogen. This put the issue of what effect the agreement might have on the adoption of an exposure limit at the centre of the debate with the trade unions from the off. Any provision that might lead to the agreement being cancelled if an OEL was adopted was finally dropped, with the parties instead agreeing to evaluate the situation together should future Community legislation be proposed.

What repercussions will the agreement have?

At European level, the agreement can be described as a "first" on several counts. It is the first intersectoral agreement, i.e., across multiple industry sectors. Interestingly, while some signatories were already involved in the European social dialogue through the sectoral social dialogue committee of the extractive industry, the signatories from the foundry industry have at present no body through which to take part

[15] See ETUC positions on http://hesa.etui-rehs.org/uk/dossiers/files/20-Res-ConsultCancerRep-gb.pdf.
[16] Benzene, vinyl chloride monomer and hardwood dust. More information: *HESA Newsletter*, No. 29, March 2006, p. 12. Downloadable at: http://hesa.etui-rehs.org > Newsletter.
[17] http://ec.europa.eu/employment_social/news/2006/apr/silica_agreement_en.pdf.

in the sectoral social dialogue. The other new aspect lies in the fact that unlike the agreements signed at intersector level (telework, stress), this agreement contains no reference to a Commission measure, only to existing Community legislation.

By sending out a positive message about its readiness to adopt Good Practices, industry is probably hoping to avoid (or put off?) crystalline silica being classified as a human carcinogen in the European legislation, and an OEL adopted for it at Community level with its attendant obligations on labelling, drawing up safety data sheets and controlling airborne crystalline silica concentrations in workplaces which could add to the costs and complexity of producing, processing and the industrial use of the countless products that contain crystalline silica.

The two union signatories argue that the agreement will enable the early implementation of practical measures to reduce workers' exposure to crystalline silica dust. The union signatories do not see the agreement as a bar to silica's classification in the European dangerous substances list, or the adoption of a Community OEL. Indeed, both measures are desired and seen as fitting in perfectly with the agreement. The EFBWW does not take the same view, and refused to join the agreement which it sees as standing in the way of the early adoption of Community legislation. The building workers' union argues that the only way to give effective protection to all European workers who are exposed to crystalline silica is to bring in legislation first, and then fill it out with sectoral agreements if need be.

The Commission itself is solidly behind the initiative, which fits in with its policy of promoting and supporting the Community level social dialogue, especially at sectoral level[18]. The agreement also chimes with the Commission's current aim of lightening the legislative burden on industries and supporting voluntary measures[19].

However, since the agreement does not cover all the workers who are exposed to crystalline silica dust[20], the Commission could well find itself having to bring in legislation on it to ensure that the principles of framework directive 89/391 on workers' health and safety are carried out.

Our take on the agreement

Autonomous agreements can lead to improvements in workers' health and safety. But as the document recently adopted by the union representatives on the Luxembourg Advisory Committee on Safety and Health[21], fully endorsed by the ETUC, points out "it would be mistaken to see either industry or inter-industry collective bargaining as an alternative to legislation (...) Collective bargaining supplements and facilitates the implementation of legislation".

As to its contents, the agreement has several things to commend it. One is the introduction of a system

EMF and EFBWW: for or against the agreement?

To find out exactly why the European industry federations decided to join or shun this voluntary agreement, we talked to Bart Samyn, Deputy General Secretary of EMF (pro) and Harrie Bijen, General Secretary of EFBWW (anti).

Why did you sign – or not sign – the agreement with the employers on respirable crystalline silica?

B.S. – EMF signed up because we see the agreement as a great opportunity for practical improvements in risk prevention and health and safety surveillance for workers exposed to silica dust. And it could act as an adjunct to any future Commission initiatives in the field.

H.B. – EFBWW decided not to join the agreement on the grounds that it could stop respirable crystalline silica being included in the European list of carcinogens. We also do not see how it can be easily applied in the construction industry, which is nearly 95% made up of small and medium-sized firms.

Should respirable crystalline silica be included in the European list of carcinogens and should it be covered by the Carcinogens Directive?

B.S. – We still want it put on the Carcinogens List, so that the agreement can be topped-up by legislation. But then, we would have to look at how that legislation would affect our agreement, especially if it involves additional enforcement measures.

H.B. – This is exactly what we are asking the Commission for. We strongly believe that having the same clear legal basis in all Member States is the best way to protect all workers who are exposed to crystalline silica dust.

Would workers in your sector be better protected if employers had to comply with a European occupational exposure limit value (OELV) for respirable crystalline silica?

B.S. – Most European countries already have an OELV for respirable crystalline silica, of course. But an OELV is effective only if there is machinery to enforce it. The agreement we signed provides for that machinery. So, we are not against the idea of a Community OELV, which would certainly be extremely useful, but cannot be the only solution.

H.B. – Absolutely, and we think the indicative value of 0.05 mg/m^3 recommended by SCOEL in 2003 should be used as a basis of discussion for working out the Community OELV.

[18] Commission Communication of 12 August 2004, Partnership for change in an enlarged Europe – Enhancing the contribution of European social dialogue. COM(2004) 557 final.

[19] See on this: "Soft law and voluntary measures: the deregulator's new clothes", *TUTB Newsletter*, No. 26, December 2004, p. 25-27. Downloadable at: http://hesa.etui-rehs.org > Newsletter.

[20] The building workers' federation refused to sign the agreement, meaning that it will not apply to the large number of European construction workers. The ILO estimates that the construction industry employs more than 2 million people in Europe. See: Encyclopaedia of Occupational Health and Safety, 4th edition, 1998 (www.ilo.org/public/english/support/publ/encyc/index.htm).

[21] Vogel, L., and Paoli, P., *New scope for the Community health and safety at work strategy 2007-2012*, ETUI-REHS, July 2006.

Industries where workers are exposed to crystalline silica

The industries covered by the Agreement are set out in Annex 5. They are listed below with a short description of how they are connected with crystalline silica.

• **Aggregates**
Aggregates are granular materials used in construction. The most common natural aggregates are sand, gravel and crushed rock. The free silica content of these materials varies widely.

• **Ceramics industry**
The ceramics industry uses silica as a main constituent in the manufacture of tableware, sanitary ware, wall and floor tiles, bricks, roof tiles, etc.

• **Foundries**
The foundry industry's products are steel or metal castings produced by pouring molten metal into moulds which are wholly or partly made of bonded silica sand.

• **Glass industry**
Silica sand is the major ingredient in all types of glass: bottles, jars, mirrors, windscreens, fibreglass, optical glass, etc.

• **Industrial minerals and metalliferous minerals industries**
Industrial minerals (e.g., bentonite, borate, diatomite, gypsum, talc, etc.) contain variable amounts of crystalline silica, as do certain metal ores (mercury, silver, lead, zinc, chromium, copper, iron, gold, nickel, etc.).

• **Cement industry**
Cement is the basic construction material for building and civil engineering structures. Silica is one of the ingredients (13 to 14%) essential to the manufacture of cement.

• **Mineral wool**
Of the various kinds of mineral wool, only glass wool (used in thermal and acoustic insulation, fire protection) is of concern with regard to crystalline silica as it is manufactured using sand.

• **Natural stone industry**
Stone in its natural state is a common building material. Silica dust can be produced in quarries or during stone processing and implementation.

• **Mortar industry**
Mortar consists of a mix of fine aggregate with one or more binders and additives. It has a range of applications in the construction industry.

• **Precast concrete industry**
Precast concrete is a building material widely used worldwide. It is made of a mix of cement, aggregates, additives and water.

But as well as those in the Annex 5 list, workers in other industries are also potentially exposed to respirable crystalline silica dust: the **construction industry** (which uses most of the materials manufactured by the listed industries), the **jewellery industry** (stone cutting and polishing); **dental prosthesis manufacture** (sandblasting, polishing, grinding), **synthetic quartz crystals manufacture** (optics and electronics).

to monitor the application of the Good Practices that involves the workers themselves. Another is the employers' pledge to provide regular training on implementing the Good Practices. The agreement also urges employers to see that the Good Practices are applied by subcontractors working on their sites. Also, Annex 2 of the agreement (dust monitoring protocol) should at last make it easier to collect data on dust exposure levels in the different workplaces, which is important so that firms can gauge how well they are meeting OELs in force in national legislation and for monitoring the progress that is supposed to made in reducing exposure.

Its failings include the fact that, despite citing the importance of strict compliance with the general principles of Framework Directive 89/391 and Chemicals Directive 98/24, the agreement contains no provision to encourage the replacement of crystalline silica by safer alternatives whenever possible[22], even though examples of crystalline silica substitution have already been reported[23]. Another major failing is that the Good Practices defined in Annex 1 neither set hard targets for exposure levels, especially for countries with no exposure limits, nor provide for the transmission of information on risk management for products containing crystalline silica intended for downstream users.

Conclusions

Any assessment of how many European workers are covered by the agreement and what improvements it has delivered in terms of reducing exposure to crystalline silica dust will have to wait for the first report on application of the agreement, which should be in 2008.

The benefit that European legislation on crystalline silica would have compared to an agreement would be to cover all exposed workers and improve risk management by promoting the search for substitutes, imposing a single EU-wide OEL, and improving the transmission of information along the supply chain through labelling and safety data sheets.

The signing of this agreement in the context of the Carcinogens Directive revision could, however, give fodder to those within the Commission who want to put off legislating on crystalline silica. But were such legislation to materialize, then provided the agreement remains in force, it could very well generate synergies that would bring in new signatories.

Whatever else, in light of the response given in the first phase of consultations on updating the Carcinogens Directive, the ETUC's response to the Commission in the second phase of consultations is likely to demand EU recognition for the human carcinogenicity of respirable crystalline silica and the adoption of a revised OEL. ■

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Marc Sapir, Director of the ETUI-REHS Health and Safety Department

[22] Although article 11 of the agreement offers the half-hearted possibility for the parties to "make recommendations as to research ... on safer products or processes".

[23] That most often cited in the literature being substitution by steel shot or other non-silica-containing abrasives (aluminium oxide) which are less dangerous alternatives to sand in abrasive blasting operations. See: "Health effects of occupational exposure to respirable crystalline silica", *NIOSH Hazard Review*, April 2002, no. 2002-129, p. 101-103; and Fiche toxicologique (toxicology data sheet) no. 232, INRS.

SUMER: mapping work hazard exposure in France

The initial findings of a large-scale survey on French workers' exposure to the main hazards of work were recently unveiled. This article takes a brief look at work-related risks in France.

The Géoportail website which offers Net surfers a virtual flight over France through 400 000 aerial photographs, made international headlines when it opened last June. In a way, it was pipped to the post by the French Employment Ministry's somewhat similar exercise of "mapping" not landscapes, but rather the exposure of French workers to the risks of doing their job.

SUMER – the French acronym for health surveillance of work hazards – is the name given to a large-scale survey held between May 2002 and September 2003 in all regions of France. Building on previous initiatives in 1987 and 1994, the health and safety inspectorate together with an Employment Ministry agency – the department for the development of research, studies and statistics (DARES) – set out to paint a more detailed picture of occupational exposure to causes of harm and potentially health-damaging work situations. More space was given over to the section on organisational and relational constraints, for example, to take account of the sharp rise in demand on this issue.

The way it worked was that 1 800 occupational doctors quizzed some 50 000 French employees about their working conditions; half these workers also filled out a detailed self-administered questionnaire to evaluate their situation in respect to the two key aspects of workload and autonomy. The idea of this questionnaire was to get a clearer picture of how workers themselves perceive their job and how their health is affected by their work. The survey sample of employees was representative of the whole working population, including a range of age groups, social status categories (manual workers, non-manual workers, managerial staff), branches of industry (service sector, construction, manufacturing industry, agriculture), and company sizes (from under 10 to over 500 employees).

The coverage was extended over the 1994 survey to include public hospitals, the power industry (EDF-GDF), the Post Office, the national railways (SNCF) and the national carrier, Air France, but not central and local government employees (public research and education, police, armed forces, etc.). The 2003 Sumer survey is representative of 17.5 million employees, or 80% of the French workforce.

Development of work organisation-related risks

The first detailed analyses of the survey data were published in December 2004. From these, it can be said for certain that workers' exposure to most of the risks and physical discomforts of work has risen between 1994 and 2003.

The survey's authors single out the growth of organisational constraints and their impact on workers' health and well-being (see table). Workweeks may have got shorter (20% of employees work 40-plus hour weeks against 29% in 1994), but the feeling of working under pressure has increased. So, in 2003, 55% of employees report having to respond rapidly to external demands (6% more than in 1994) while the share of employees subjected to computer-based controls has almost doubled in ten years. Dependence on workmates has also increased. In 2003, 28% of employees report that their work pace depends on that of a colleague, up two points on 1994. The feeling of working under time pressure is also spreading. In 2003, three in five workers report frequently having to cope with emergency situations that force them to drop one task for another unplanned one – 12% more than in the preceding survey.

SUMER 2003 also reveals that a growing number of employees are working in direct face-to-face or telephone contact with the public. Many respondents feel that this creates a new risk: 23% feel physically threatened by their contact with the public or customers, a percentage that rises to 40% among shop and service workers.

If "new risks" related to changes in work organisation are emerging, exposure to traditional physical

Exposures to organisational constraints

Work pace imposed by:	1994 (%)	2003* (%)
An external demand requiring an immediate response	49.8	55.4
Immediate dependence on colleagues	26.3	28
Permanent checks or monitoring by superiors	28.4	25.5
Computer-based control or monitoring	14.5	27
Having to interrupt a task frequently in order to take on an unforeseen task	46.2	58.4
Working in direct contact with the public	63.2	70.9
Among workers in contact with the public: exposed to the risk of physical attack	18.5	23.2

* Identical coverage: SUMER 2003 survey findings on the same coverage as SUMER 1994.

Source: Premières Synthèses Informations, *L'exposition aux risques et aux pénibilités du travail de 1994 à 2003. Premiers résultats de l'enquête SUMER 2003*, DARES, December 2004, No. 52.1

risks is not going down, despite the steady decline in industrial and agricultural employment.

Chemicals are a telling case in point. The share of employees exposed to chemicals has risen by 3% between 1994 and 2003, especially in construction (+11), industry and agriculture (+7). The survey also shows that the number of workers exposed to at least three chemicals has gone up, as has exposure time. Chemicals exposure is increasingly unequally distributed between social status categories. Unsurprisingly, it is manual workers – both skilled and unskilled – that are most affected by the increase.

After this general situation review, DARES has regularly published since June 2005 data on four big issues on the French authorities' agenda: noise, carcinogens, postural and joint constraints, and manual handling of loads.

7% of workers are subjected to health-damaging noise at work

Up to 7% of employees are subjected for over twenty hours a week to noises louder than 85 decibels A (dBA), or impact and pulse noise. These noises are classed as "health-damaging" because they can wreck hearing. 25% of employees are subjected to "other noises" that are less health-damaging. Manufacturing employees are worst-affected (18%), followed by agricultural and building workers (12%). Most health-damaging noise in industry is found in the wood-paper, metallurgical and metal working, minerals, car-making and machine-building, textile and food processing industries. By contrast, service industry workers are seldom subjected to health-damaging noise (2.7%).

13% of workers are exposed to carcinogens

2 370 000 people – 13.5% of all workers, mostly male manual workers – are exposed to carcinogens in their workplace.

The ten-year trend in exposure to carcinogens shows a slight rise (about 1% on a constant list of products). The number of highly or very highly exposed workers is also up (from 14% to 17% of all exposed workers), and while collective forms of protection are more widespread, nearly 40% of exposed workers are still not covered by them.

A high proportion of contingent workers is exposed to carcinogens – nearly 15% of temporary agency workers and close to 19% of apprentices and young workers on sandwich training contracts are affected. Over-exposure is also found among workers under 25 years of age (17% compared to under 13% among the over-40s). Exposure to carcinogens is behind significant social inequalities of health: only just over 3% of managerial staff, but more than 30% of skilled and 22% of unskilled workers, face this hazard.

The Sumer survey identified eight carcinogens to which a high proportion of workers is exposed: untreated mineral oils, three solvents (benzene, tetrachloroethylene and trichloroethylene), asbestos, wood dust, diesel exhaust fumes and crystalline silica (mainly quartz, tridimite and cristobalite).

These eight products account for 2.4 million exposures – two-thirds of carcinogen exposures. Crystalline silica is a particularly worrying case (see article, p. 4). More than 200 000 workers are exposed to this carcinogen, approximately half of them in the building industry. The conditions of crystalline silica exposure set alarm bells ringing: 24% are exposed for more than 20 hours a week, dust extraction systems are found in only 14% of cases, and only 39% of exposed workers have personal respiratory protection.

366 000 workers deal with mutagens or reprotoxins

Something like 186 000 French employees are exposed to mutagens (which induce genetic changes) and 180 000 to reprotoxins. The most frequently encountered mutagens are chromium and its derivatives (58% of cases) and benzene (25%). Production and maintenance workers are most exposed (2.7%), followed by research, study, methods and computing staff. The metallurgical and metal working industry is the heaviest user.

Where reprotoxins are concerned, about half the 180 000 workers concerned (1% of all French employees) work in industry, 18% in services to business, and 15% in the building industry. Men are three times more often exposed than women, and account for 80% of exposed workers. The reprotoxin to which French employees are most frequently exposed is lead (66% of cases).

Around 60% of exposures are point exposures – less than two hours a week –, but 13% top twenty hours a week. The risk "seems properly handled" in 57% of cases but "in one in three cases", employees are totally unprotected. The overwhelming majority of those affected are manual workers (63%) and technician and skilled craft occupations (30%).

Postural and joint constraints: one in two workers affected

Up to half of all French workers are subjected to at least one postural or joint constraint, according to SUMER 2003. This means 8.4 million people (48%) affected while doing their job by at least one postural or joint constraint that can be considered "painful". Young workers, apprentices and temporary agency staff are most affected. Over two thirds of manual workers are subjected to a painful constraint, compared to just over one in five managerial staff.

Postural and joint constraints add to the physical discomfort of work and lead to wear and tear, premature ageing and a range of illnesses. They contribute to the development of musculoskeletal disorders (MSD), the main occupational disease in Europe today, which forces many sufferers into early ill-health retirement.

Handling of heavy loads: mechanisation no magic solution

Four in ten workers handle heavy loads in their job, and three out of ten do so for at least two hours a week. Building workers are most concerned: half of them handle heavy loads for at least two hours a week and 20% for at least 20 hours. Factory workers (45%) and farm labourers (43%) are also highly exposed, while in the service industry, shop and health care workers are most affected.

More men (35%) than women (22%) have to handle heavy loads. Temporary agency workers do so for a large share of their working time: 31% of agency-supplied building workers handle heavy loads for at least 20 hours a week. The survey also finds that handling heavy loads is often combined with exposure to other hazards like noise and organisational constraints (tight deadlines, immediate dependence on colleagues, etc.).

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More details:
www.travail.gouv.fr/etudes-recherche-statistiques/statistiques/sante-au-travail/87.html

SURVEY

Non-standard hazards on the rise

The Sumer survey is a vast body of data on a wide array of risks. We asked the survey's "statistics" coordinators, Nicole Guignon, Marie-Christine Floury and Dominique Waltisperger, to explain what it means in layman's terms.

The early findings from SUMER 2003 suggest that exposure to "traditional" physical risks like noise and chemicals is rising, whereas the industrial jobs that generally incur this kind of risk are declining. This doesn't add up, does it?

The SUMER initial findings square perfectly with those of the *Working Conditions* surveys[1]. They show that the physical discomfort of work is not lessening. There may be several reasons why, one of which is the physical discomfort of work in non-industrial activities, especially personal services, logistics, shopwork, the hospitality industry, etc.

But it is also because workers are now readier to report physical discomfort at work. Analyses of the 1984 and 1991 *Working Conditions* surveys, for example, showed that nurses who previously said they did not carry heavy loads started reporting that they do. The undervaluing of nursing has changed how nurses perceive their job. To oversimplify, you could say that "carrying people" has become "carrying heavy loads".

The intensification and undervaluing of work can also provoke attitudinal changes. Changes in risk perception are also being seen among occupational doctors, as SUMER reveals. Risks which they previously tended to see as natural or too unimportant to mention are now being reported. This is a new awareness we are seeing among occupational doctors, especially in relation to biological, and to a lesser extent, short-term chemical, hazards.

So risks that used to be played down are not being brushed aside any more…

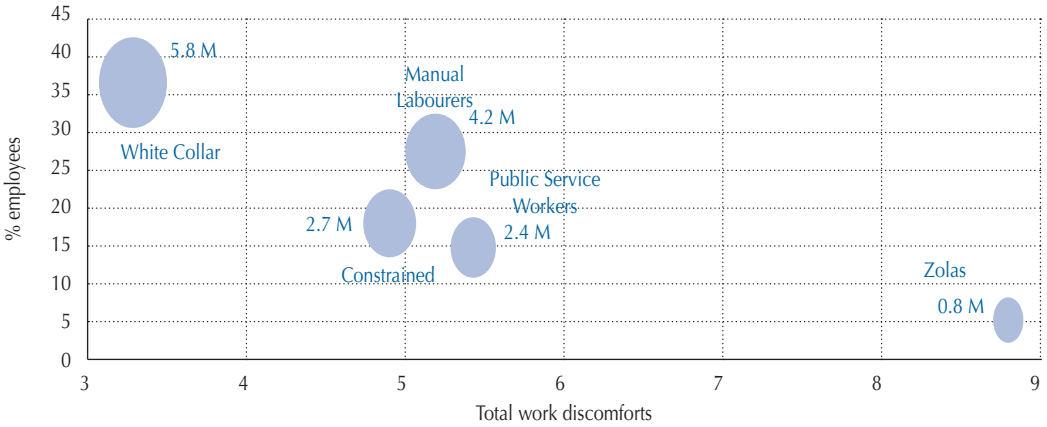
At-risk workers tended to be in denial about situations that were harmful but thought to be natural or "part of the job". Lorry drivers are a case in point: a large share of them used to report that they were not at risk of road traffic accidents. Because that proportion is decreasing, the risk is becoming more visible.

Is one reason for the increased exposure to chemical hazards simply that workers and occupational doctors are more aware of the risk?

It's hard to say, because the SUMER 2003 questionnaire is not the same as the SUMER 1994 one. Things like exhaust fumes and fuels, which are extremely widespread, were not included in the 1994 questionnaire. The likelihood is that the increase in total exposures comes from the inclusion of exposures to substances that did not appear in the previous questionnaire. An industrial hygienists' counter-survey to SUMER 1994 on chemical exposure reporting showed that hygienists tended to find more products than occupational doctors. So the increased exposure to chemicals that SUMER 2003 found – not huge, by the way – does not necessarily reflect an increase in the number of products that workers are exposed to. Also, short-term exposures are better accounted for nowadays.

[1] The *Working Conditions* survey has been carried out every seven years in France since 1978. It is a self-reporting survey by workers on organisation of working time, work paces, autonomy and co-operation, oversight and selected questions on the work environment i.e., physical effort and work-related risks. Since 1991, the survey has also measured the effects of mental workload and computer use. A questionnaire on accidents at work has been included since 1998.

Cluster analysis by type of physical discomfort *



* Based on data collected from 22 400 employees who answered both the main doctor-completed questionnaire and the self-administered questionnaire on "work life experiences".

Source: *Les risques professionnels en France : principaux résultats de l'enquête SUMER*, Maison de la mutualité à Paris, 15 March 2006

Cluster analysis of groups

Group	Over-exposure to the following physical discomforts	Over-represented sectors
White Collar	Work on VDU or maintaining head and neck in a fixed position; Long working week (over 40 hours)	Financial activities, government agencies, social security, business services and capital goods industries
Constrained	Has to account for activity at all times; Night work; Cannot take discretionary breaks	Services to private individuals, education, health, social welfare, semi-processed goods industry
Manual labourers	Handling loads for more than 10 hours/week; Uncomfortable posture; Open-air work; Upper limb vibrations	Building/civil engineering, shopwork, services to private individuals
Public service workers	Physical assault; Conflict with the public	Education, health, social welfare, financial activities, shopwork, services to private individuals
Zolas	Pace constraints; Night work; Handling loads for more than 10 hours/week; Work in cold, heat, damp; Team work; Health-damaging noise	Motor manufacturing, semi-processed goods production, food processing industry, consumer goods, capital goods

This SUMER questionnaire was the first one to tackle work organisation-related hazards, especially mental workload. What do your early analyses of the results show?

There is a lot of mental strain, but it obviously isn't possible to draw comparisons because these aspects were not included in the 1994 survey. The assumption was that managerial staff were subjected to work-related stress, and manual workers to physical discomfort. What we found was that managerial staff subjected to high psychological demands have scope for making decisions, which manual workers – especially what we called the "Zolas" – usually don't (see figure).

Who are the "Zolas"?

There are up to 800 000 of them – 5% of the employed population – mainly industrial workers and heavy manual labourers, disproportionately working in the motor manufacturing, semi-processed goods and food processing industries. We found that "Zolas" combine physical discomfort of work with no scope for making decisions, so they are unable to respond to psychological demands. With respect to physical discomfort, this category of workers is subjected to ten times the average health-damaging noise, for example, as well as three times more exposure to heat, cold and damp than average. Also, "Zolas" work an average of ten hours a week manually handling heavy loads, and often work in teams and on night shifts, generally in jobs subjected to at least three pace constraints determined either by a machine, dependence on colleagues, or their superiors. So they have very little scope for making decisions in their jobs.

Can any gender conclusions be drawn from the early results of SUMER, especially as regards mental workload?

Women are over-represented among those "serving the public", i.e., highly public-facing occupations like health care and shopwork. Women working in these jobs have to deal with psychological constraints stemming from conflicting demands: they have to carry out and complete an uninterrupted task to a set deadline while also responding to demands from the public that interrupt the work being done. The main hallmark of women's employment is that it is often undervalued, which is particularly evident in the lack of social support and scope for making decisions.

What issues will you be looking at in future publications based on SUMER 2003?

We will be putting out sectoral analyses, especially building and civil engineering and health care, as well as publications on work accidents and violence from the public. The data from the self-administered questionnaire, which is new in the survey and designed mainly to find out how workers perceive the risks they run, are being processed by INSERM[2], and should be done by autumn.

Interview by **Denis Grégoire**, dgregoire@etui-rehs.org

[2] National institute for health and medical research.

SPECIAL REPORT

Young workers: Health at risk!

All European and international studies bear out the widespread public impression that young workers stand more chance of being injured at work than older ones. Inexperience, "risk proneness", and not having reached physical and mental maturity are often cited to explain away this excess work accident frequency rate.

Any initiative that helps educate young people about the hazards of work, like that run in France by two vocational schools reported in this issue, must obviously get the support of national and European bodies involved in health and safety at work.

But the ETUI-REHS believes a wider debate is needed that takes in the nature of the employment relationships that characterise young people's work.

The past twenty-odd years of endemic unemployment in Europe, the huge spread of second-class and insecure jobs, the flexibility endlessly enforced on the labour market all badly affect young workers' health. Casualisation always pushes working conditions down, as Laurent Vogel amply shows throughout his contributions to this special report.

Young people's first taste of working life is all the more painful an experience when it comes in sectors where the traditional forms of workers' representation are undermined. The lack of a trade union presence leaves the door wide open to the worst violations of workers' rights, like those described in an article on the fast-food industry.

Superficially, youth might be thought to equal guaranteed health. But the youngest workers are not escaping the epidemic of musculoskeletal disorders in Europe unscathed, as Roland Gauthy shows in this report. Far from it, a series of recent studies show that the constraints resulting from poor ergonomics combine and add up more in young than older workers.

Some of these at-risk workers are very young. Child labour is not about to be finally consigned to the European history books. Gianni Paone of the Italian trade union confederation CGIL reports how loopholes in the law and rabid deregulation are allowing under-age working to flourish in the Europe of Twenty-Five. ■

Health and work in the "contingent" generation

Official figures for 2005 report approximately 193 million workers in the European Union (EU)[1]. A little more than 20 million of these are young workers aged 15-24. But the number of young people with some experience of work is much greater. Most 15-24 year-olds are still in education. For some of these – and all students in technical and vocational education – this includes work experience training. Also, a large percentage of students and schoolchildren have more or less regular part-time jobs to earn some money of their own. This makes it impossible to put precise figures on the number of young workers in Europe.

Health and safety at work data on young workers is very patchy. More or less systematic data are compiled on reported work accidents, and these show a very clear general trend: young workers are more than averagely at risk of work injuries.

The reasons, as always, are involved. Many factors are in play, including length of service with the employer, length of time in job, the industry distribution of young workers, the inclusion of safety training in pre-employment vocational training and its relevance to the work actually done, the workplace safety training received, an active workplace union, being part of a work force, etc. While each of these factors plays a clear contributory part, the broad analysis leads to a central conclusion: young workers tend to aggregate factors of endangerment. This explanation of the labour relations that distinguish young people's work is essential to a proper understanding of how work impacts on their health.

This means getting away from paternalist campaigns that pin the blame for work accidents on casual attitudes and risk-taking behaviour by young workers. The alleged casualness tends often to be no more than a reflection of casualised working conditions, a greater vulnerability to exploitation and lower level of organisation for collective action.

That is why this article falls into two broad parts. The first seeks to examine how young people enter the labour force. The second looks at how their work impacts on their health.

Unemployment, a force for casualisation

Young people are entering the labour force in increasingly insecure jobs. The pressure of unemployment is a driving force behind this. A high percentage of school leavers end up unemployed. Unemployment is a trial that every new generation entering the labour force in recent decades has gone through one way or another. For many, it is something they have personally moved in and out of, or stayed in for prolonged spells. For others, it is a threat made visible by unemployed family and friends and the relentless pressure of near-blackmail by public employment policies to accept contingent jobs in order to bring down unemployment.

Unemployment exacerbates social inequalities between young people. Its effects differ with social background, regardless of educational levels. It is a lot of what forces some young people into unskilled jobs and negates some of the anticipated benefits of higher education in terms of social advancement. Unemployment is one of the most effective economic constraint mechanisms for perpetuating social inequalities, and a daunting tool for imposing degraded working conditions.

Under-25 unemployment in the EU is approximately double the all-working-population rate. In June 2006, under-25 unemployment stood at 17.4% in the EU-25 (against 8.1% for the whole working population and 6.8% for the over-25s)[2]. There are wide between-country differences[3] (from 5.8% in the Netherlands up to 32.3% in Poland) but, everywhere, there is a very wide gap between under-25 and all-working-population unemployment. While not unknown, the phenomenon has spread particularly sharply in the ten new EU Member States. The International Labour Organisation (ILO) reports 8.2% growth in youth unemployment in these countries between 1993 and 2003, rising from 22.5% to 30.7%[4].

Where health and safety at work is concerned, unemployment seems to increase inequalities and significantly hasten health damage. Far from giving a "respite" from work-related health damage, it seems to actually aggravate its effects. This can be looked at from two angles. On an individual level, unemployment may be connected with past health damage and even if not, has effects that induce loss of social status (loss of self-esteem, loosening of social network ties, etc.) and loss of income. For young people specifically, unemployment is a big factor in keeping them dependent on their parents. Among workers, unemployment affects both those who have gone through it, and those who see it as a threat looming over them. It works to undermine action for health.

Swedish research provides interesting insights into the links between youth unemployment and health damage [Hammarström, 1994]. Some studies [Reine, 2004] argue that the negative effects of unemployment affect young people worse than adults[5]. Also, the health of young female workers

[1] Unless otherwise specified, the figures in this article are for the 25 Member States of the European Union (EU-25). Figures whose source is not indicated are taken from Eurostat. Where no age is specified in statistics, "young worker" means workers aged 15-24.

[2] Eurostat, Euro-indicators, No. 103/2006, 1 August 2006. Seasonally-adjusted unemployment rates.

[3] Regional variations are even wider than national variations. In 2004, under-25 unemployment topped 42% in ten regions of the EU. Seven of these were in Poland, one in Slovakia, one in Italy and one in Greece (Eurostat, Regional unemployment in the European Union and candidate countries, *Statistics in Focus. Population and social conditions*, 3, 2005).

[4] 7th ILO European Regional Meeting, *Facts on youth Employment*, February 2005.

[5] Although other studies make different findings. These conflicts raise methodology issues. Where unemployment-related health damage is measured from the direct point-in-time health impacts on the unemployed, unemployed young people "benefit" from the generally better health of their age group. But attempts to measure the lifelong impact of unemployment on health tend to find that anyone who has experienced prolonged or repeated spells of unemployment has less satisfactory health than those who have been in more regular or continuous employment.

suffers markedly more than that of young male workers during recessions. One possible explanation for this is the greater concentration of women in personal services occupations – sectors where an economic recession may produce a sharper decline in working conditions [Novo, 2001].

Part-time unemployment

To get the fuller picture, a word needs to be said about the scale of part-time unemployment. In 2005, 25.7% of young workers were part-time (against 16% in the 25-49 age bracket and 20% of 50-64 year-olds). Here again, national differences are wide-ranging: 2.2% of young people work part-time in Slovakia compared to 68.6% in the Netherlands. While part-time work is predominantly female across Europe, it also affects a relatively sizeable share of the youngest male age-groups. Much of this stems from students' needs to finance themselves with paid work.

But another growing share does not reflect demand from young workers. In many lines of business, there is quite simply no other choice. A French survey found that among part-time workers who wanted to work more hours, under-25s were over-represented relative to their share in all part-time workers [Puech, 2004]. The same trend recurs in Italy: in 2005, 51.2% of young part-time workers reported wanting to go full-time compared to an average 38.4% for all workers [Ministero del lavoro, 2006].

Not all young people are equal in unemployment

While young people bear the brunt of unemployment, they are not all affected to the same degree. Three distinguishing factors in particular predominate in all EU countries:

1. Female unemployment is generally higher than male unemployment;
2. Unemployment rates are significantly increased by social class as reflected by educational levels in particular. Also, lower educational attainments tend to be one reason for more extended spells of unemployment;
3. Unemployment among young immigrants and those of immigrant descent is generally above average for their age group as a whole. Minority groups not of immigrant origin may be affected by ethnic discrimination in employment opportunities (especially the Roma in Central and Eastern Europe, the Catholic minority in Northern Ireland, Russian-speaking communities in the Baltic republics). There is widespread employment discrimination in Europe against populations from former colonial possessions (black minorities of West Indian origin, people of Asian origin in Great Britain, people of North African immigrant descent almost everywhere in Europe, etc.) including second- and much-later generation immigrants. Neither naturalization nor higher educational attainments suffice to counter such discrimination.

These data are so important that it would be mistaken to look at the impact of unemployment only on those who directly experience it. Higher female or migrant worker unemployment rates also put more pressure on employed members of these groups. Higher unemployment tends to go together with more widespread job insecurity, lower pay and greater segregation in occupations and branches of industry.

Contingent employment

Young workers throughout the EU are much more affected by casual hire-and-fire than their adult colleagues. A full list of all kinds of unstable employment is outside the scope of this article. Employment policies have been hugely inventive in coming up with a wide variety of working arrangements whose common theme has been the partial elimination of the protective elements of the permanent employment contract.

Looking just at fixed-term contracts and temporary agency work, the growth of contingent employment among young people is seen to be a general trend in Europe. On average, 14.9% of employees had a contingent contract in the EU-25 in the third quarter of 2005. However, this average conceals disparities by age, economic activity in the job, and Member State. Workers aged 15-24 are much more likely to be on contingent contracts: in the third quarter 2005, this was the case for 43.2% of young employees, compared to 11.6% of workers aged 25-54 and 7.4% of those age 55 and over. Additionally, contingent contracts are more prevalent in sectors where poor working conditions and weak labour organisation are the norm, like agriculture (34.6%) and construction (22.1%).

In most of the new Member States, young people's employment conditions have worsened drastically. In Poland, for example, the share of 15-24 year-old workers on contingent contracts rose from 13.6% to 64.9% between 1997 and 2005[6].

Agency work is the form of contingent employment where the highest concentration of young people is found, although as this working arrangement has come more into the mainstream over the last ten years, the number of workers who never manage to leave temporary agency employment has increased [Storrie, 2002]. The share of under-25s among temporary agency workers ranges between 30% and 50%, with peaks of 52% in the Netherlands and 51% in Spain. The fact that young workers make up approximately 10% of Europe's entire workforce gives them a probability of working as a temporary

[6] Eurostat, *European Union Labour Force Survey* (http://epp.eurostat.ec.europa.eu).

agency employee 3 to 5 times higher than the average of workers. While on paper, temporary agency workers are covered by health and safety legislation, the reality is very different – they almost never have health and safety reps and have only very limited access to preventive services.

Contingent employment is sometimes played up as a stepping stone into more stable jobs. The facts scotch this idea. Spells of contingent employment tend to be longer and ultimately act as a quite harsh selection process. Some young people are shut out of the labour market altogether because of health damage. Some never manage to break out of a cycle of alternating spells of full- or part-time unemployment and periods of contingent employment. For women, this cycle may be combined with periods devoted exclusively to unpaid family work. Some with highly-sought skills manage to find stable employment. Generally, the average age at which workers manage to get a steady job is rising, but some never do.

This is illustrated by the passing of the "Biagi reform" in Italy in 2003. This legislation, strongly supported by the employers and the right-wing coalition headed by Silvio Berlusconi, introduced new contingent statuses under the cloak of promoting youth employment. In 2005, the share of non-tenured employment among the newly-created jobs had risen materially and now accounts for up to a third of new jobs. Contrary to government spin, the new contingent job laws have not been a springboard into more stable employment. An Italian study [IRES, 2005] done between June and August 2005 investigated what had become of workers who were in contingent jobs in June 2004 when the new law came into force. A year into the new legislation, only 7% of the contingent workers who were previously on so-called "continuing, coordinated co-worker" ("co-co-co" – longer-term temporary freelancer) contracts had secured a permanent job, 6.3% a temporary employment contract, 70% were still in contingent jobs lacking full employee status, approximately 6% had opted for self-employment, while nearly 8% were completely outside the labour market (some probably working cash-in-hand). The findings for the other contingent statuses were little more encouraging. Among project workers, 5% were in steady jobs, while 6.3% had left the (legal) labour market. All the rest were still in contingent employment. Of workers with occasional freelancer status, 2.1% had secured a permanent job, while 12.8% had left the legal labour market.

Women and workers in southern Italy were most excluded from the labour market. The same survey reveals startling levels of dissatisfaction among contingent workers: 80% report being (somewhat or wholly) dissatisfied with their working conditions. Contingent workers are particularly critical of being denied fundamental rights in three areas: maternity protection, trade union rights and social security sickness coverage. A more recent study points up the gender dimension of the spread of contingent work among young people in Italy[7]. Just over 22% of females aged 20-24 are working cash-in-hand – three times more than same-age young males.

Concentration in specific sectors

The distribution of young workers between sectors and occupations is clearly a big factor. The educational system tends to reproduce class divisions in society. The share of working-class children entering higher education is still very small relative to those from well-off families, which explains the heavy over-representation of manual workers (usually from manual worker families) and low-skilled non-manual workers among workers aged 15-24.

Youth employment in the EU is concentrated in four sectors: retail trade (4.6 million young workers in 2005), manufacturing industry (3.6 million), construction (1.9 million) and the hospitality industry (1.8 million).

The sectors with the highest ratio of youth employment to all workers are the hospitality industry (22.7% of young workers in the whole workforce), followed by the retail trade (16.3%) and "other personal, social and community services activities" (13.7%). National situations diverge somewhat from the European average. In some countries (Belgium, France, Germany, Italy, Austria, Portugal, Cyprus and Hungary) construction ranks among the top three sectors for youth employment. Elsewhere, there is a very high concentration in the hospitality industry (over 50% of young workers in this sector in Denmark where they comprise less than 15% of the whole workforce; 47.9% in the Netherlands; 37.8% in the United Kingdom). A more forensic analysis reveals very clear segregation in certain activities like call centres, fast food, amusement parks, private security services, etc.

A reason behind deskilling

A look at the working conditions in activities with high concentrations of youth employment is highly enlightening. They tend to make a combination of exacting requirements in different areas. Physical endurance, manual dexterity and precision in building trades, multitasking and extreme time pressure in call centres, a combination of physical constraints, repetitive work and a smiling, likeable, laid back demeanour in fast food and holiday villages. The list of examples could go on. All have one thing in common: the work done by these young people is seen as unskilled because much of it is not seen as really work at all. It is deskilled because a big part of the real skills is dismissed. Or, more precisely, it is presented as inherent to, and normal for, young people.

[7] ISFOL, Dipartimento di Scienze demografiche dell' Università La Sapienza, Giovani e mercato del lavoro: squilibri quantitativi, qualitativi e territoriali. Primi risultati di una indagine conoscitiva. The early results are on: www.csmb.unimo.it/adapt/bdoc/2006/48_06/06_48_54_GIOVANI_E_MERCATO_DEL_LAVORO.pdf.

Young and casualised: a killer combination

Spain is one European country where young workers are hardest hit by the growth of contingent employment. An analysis of Spanish work accident figures reveals some of the ways that casualisation is affecting young workers.

The work accident rate falls in an almost perfect inverse correlation to rising age. But adding a variable that is a descriptor for casualisation – like being on a fixed-term contract – it becomes clear that the workers in all age groups on such contracts have markedly higher accident rates than workers on unlimited term contracts in all age groups. So, while the accident rate for fixed-term contract workers is lowest in the 25-29 age group, it is still very much higher than the highest rate for workers on unlimited term contracts, which is found among the youngest workers (16-19).

Looking at the trend over time of work accidents, the Spanish statistics clearly show how the situation of young workers has worsened as the reforms to add flexibility to the labour market have taken hold. The work accident rate for under-24s rose by 7% between 1996 and 2004, but fell for all other age groups [UGT, 2006]. The sharpest increase was in the 16-19 age group, which is now well above double the all-worker average.

Work accident rate per 1000 workers, 1996 and 2004

	1996	2004
All workers	**67**	**59**
16-19	115	139
20-24	87	90
Total for under-24s	**92**	**99**
25-29	77	63
30-39	66	56
40 and over	57	49

Source : UGT

Spain: work accidents resulting in at least one day's absence, by age and contract type

	Unlimited term contracts		Fixed-term contracts		Other	Total	
Age	WA	IR	WA	IR	WA	WA	IR
16-19	4546	8624.58	26375	12933.23	1091	32012	12544.70
20-24	38943	7466.07	106156	12998.16	4936	150035	11211.70
25-29	62496	5052.22	97290	10357.71	6281	166067	7631.05
30-34	61828	4172.21	74832	11436.96	5924	142584	6674.34
35-39	59650	4188.61	59754	11548.90	5427	124831	6429.62
40-44	52510	3970.81	44783	12526.71	4875	102168	6081.79
45-49	42826	3724.00	30657	13300.22	3830	77313	5600.36
50-54	38623	4280.51	25052	15219.93	3593	67268	6305.00
55-59	28737	4437.46	13602	14080.75	2484	44823	6022.98
60-64	13245	4626.27	5436	13194.17	1172	19853	6060.13
over 64	1445	4339.34	679	16560.98	208	2332	6252.01
not specified	98		1475		51	1624	
Total	**405593**	**4473.44**	**492450**	**12084.37**	**40145**	**938188**	**7139.02**

Source: Computer records for work accident reports, Ministry of Labour and Social Affairs, 2002
WA: total work accidents
IR: incidence rate calculated by number of accidents/100 000 workers in the social security scheme
Accidents on the way to and from work are not included.

There is a phenomenon at work here very similar to that seen in the undervaluing of the real skills of many predominantly female occupations. It is "normal" for young leisure industry workers to move to the music and seem to revel in their job even if the bright and breezy facade belies long hours of heavy work, overwhelming fatigue and splitting head pains. It is "normal" for a building apprentice to lug back-breaking bags of cement, not ask questions about paint solvents and teeter perilously along unsecured scaffolding to prove themselves up to the job. It is "normal" for young motorcycle couriers to weave in and out of traffic, risking a dozen accidents a day to deliver packages safely to customers, wearing his rain -sodden orange uniform with pride. But the fact is that there is nothing normal in any of that.

The turnover that generally typifies these young people's jobs is a measure of the oppression that these stereotypes convey. There is significance in the fact that the highest youth employment sector – the hospitality industry – also tends to be that with the highest turnover. In a study on the fast food industry [Nkuitchou, 2005], Raoul Nkuitchou Nkouatchet concludes: "Casualisation in the fast food industry, reflected in very high levels of staff turnover, enables the big chains to retain only 'ideal' and particularly enthused workers. The ideal fast food workforce in the eyes of those who run it is what customers want to find in outlets when they go in: smiley young people! It is no coincidence that these young people are highly productive: those who become disenchanted are 'helped' by the organization to leave its restaurants. This is one of the keys to why the fast food industry is flourishing."

Casualisation is closely linked to low pay for young workers. One can be casualised because "deskilled", but also "deskilled" because casualised. Sectors like academic research or personal services, as well as hi-tech firms at the cutting-edge of the computer industry, employ large numbers of highly skilled people on very low pay. A new term has been coined in Spain for these hundreds of thousands of young people who, however well-qualified, stay stuck in "peripheral jobs" never earning salaries above 1000 – "*mileuristas*". It has become the new buzz word. "Mileurista" blogs are popping up everywhere, they get press coverage, groups are being set up. "Mileurista" Carolina Alguacil [Jimenez Barca, 2005] defines them like this: "The *mileurista* is a young higher ed graduate, fluent in several languages, with post-graduate and masters degrees and specialised qualifications (...) who earns no more than 1000. Over a third of their salary goes on rent because they are townies. They have no savings, own neither a home nor a car, are childless and live for the day… It can be fun, but ultimately wears you down". In fact, for most young females and young male immigrants, this is on the optimistic side, as they seldom earn more than 750.

Higher work accident rates

The all-EU work accident frequency rate for young workers is higher than for their older workmates. This is clear to see from the Eurostat data. In 2003, 16.4% of work accidents resulting in more than three days off work involved workers aged under 25, who made up just over 10% of the whole labour force. In absolute figures, for the EU-15 this meant more than 33 000 accidents for workers aged under 18, and over 650 000 accidents for workers aged 18-24.

The same trend is also found in non-EU industrialised countries [Salminen, 2004]. Fatal and serious accidents (defined by their consequences in terms of work incapacity and invalidity) tend to be more prevalent among older workers.

The many accidents among workers aged under 18 reflect the gap between law and reality. All EU countries have legislation that provides special protection for workers aged under 18 (in some cases rising to age 21). There is even a Community directive dating from 1994[8], but its content is fairly token and does not really contribute to "harmonizing working conditions while maintaining the improvements made".

One way or another, national rules do not allow young workers to be employed in seriously dangerous activities. The authorities tend not to see enforcement of these rules as a priority and workplace labour relations enable many employers to avoid this "regulatory burden". So much is shown by the work accident figures, as well as some data on exposures, especially to carcinogens.

Other health risks

The other health risks are less well-known. The relatively low employment rates of young workers imply that the health selection effect is a bigger factor than in the 25-50 age group. Also, the population aged 15-24 has better general health than older groups, so the immediate impact of working conditions logically results in fewer perceived or diagnosed injuries and disorders. So, the health and safety at work module of the 1999 European *Labour Force Survey* shows a proportion of young workers reporting a work-related injury or disorder below the all-worker averages. But there is a higher prevalence of skin complaints, where young workers account for 16.3% of all reported cases. For three other groups of medical condition – headaches and eyestrain, infectious diseases, and pulmonary disorders – the share of young workers in reported cases is very close to their share of the whole workforce.

Prevalence of cardiovascular diseases and hearing disorders is very low, by contrast. For the two groups of injuries and disorders most common among workers – musculoskeletal disorders along with stress, depression and anxiety – young workers account for

[8] Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work, *OJ* L 216 of 20 August 1994, p. 12–20.

approximately 5% of reported cases despite making up around 10% of the total workforce. The observable pattern, therefore, is that the more a medical condition may be the immediate result of a very short or even a single exposure, the more likely it is to be found among young workers, whereas only a low percentage of young workers report suffering from an injury or disorder that results from prolonged exposure (like most hearing disorders).

Moving from perceived health to recognised occupational diseases, the situation of young workers could not on the face of it be bettered.

In 2001, the incidence rate of recognised occupational diseases among young workers in the Europe of Fifteen was 8.3 cases per 100 000 workers aged 15-17 and 22.7 cases per 100 000 workers aged 18-24 [Karjalanein, 2004]. The all-worker rate was 37 cases per 100 000 workers, with a marked age-specific rise.

An exposure assessment is the only way to get a more accurate measurement of the health impact of working conditions.

The European picture can be gleaned from the data of the Dublin Foundation's survey of working conditions. The 2005 survey data are not yet available, but certain trends can be picked out from the 2000 survey data [Paoli, 2001; Molinié, 2003].

Young workers (aged 15-24) experience above-average exposure to noise and vibrations. Not all differentials are equally great – the gap is much wider in some countries than others. In Belgium, for instance, 11% of young workers are exposed to vibrations all or almost all their working time compared to 7% of all workers. Young workers are also over-exposed to carrying or moving heavy loads at least half the time, as well as accumulated repetitive arm or hand movements, and working at very high speeds. The survey reveals no significant deviation of young workers from the general mean for other risk factors like breathing in vapours, fumes and dust, handling dangerous substances, radiation, work in painful or uncomfortable postures. Where the latter is concerned, it must obviously be borne in mind that the perception of such postures by young workers whose body is not yet worn down by work is probably less acute than that of older workers.

This brings us to a key issue: differential risk perceptions coloured both by objective factors (better general health) and subjective factors (less systematic information, trivializing of work hazards, etc.).

The grey areas of research

While there is fairly abundant data on work accidents among young workers, there is scant research into how work impacts other aspects of their health. Most EU countries lack any robust data. Taking just the figures for recognised occupational diseases, one would have to say that young workers are pretty healthy on the whole.

Such a conclusion overlooks three key things:
1. The long-term effects of occupational exposures: in most cases, an occupational disease only manifests several years (decades for most cancers) after exposure to the risk;
2. Contingent workers mainly fall outside recognition systems;
3. In some cases, workers wait until their employment is at an end before seeking recognition of an occupational disease.

Sickness absence data are also not statistically significant because of the pressure created by generally casualised employment statuses which results in "presenteeism" (coming into work with an illness, instead of resting and treating it) and superficially better general health.

What these findings suggest is that measuring the health impact of work on young workers requires a combination of at least three things:
1. Giving more weight to exposures than medical conditions and, when looking at systems, taking account of the real conditions of prevention. Exposure to carcinogens in the construction industry or cleaning services, for instance, is clearly generally riskier than exposure to carcinogens in the pharmaceutical industry;
2. Having longitudinal studies by which to track the lifecycle impact of working conditions;
3. Collecting systematic data on subjective risk perception, which in many cases is an excellent predictive indicator of the development of medical conditions. This cannot but benefit from set-ups where workers themselves compare and contrast the experiences of different generations.

The problem is that such data are routinely collected only by a minority of EU countries. This illustrates the failings of provision for surveying and researching work-related health damage in most European countries.

Research into social differences in health includes many studies on the linkages between unemployment – especially youth unemployment – and social inequalities in health [Wadsworth, 1999]. But there are few in-depth studies of the linkages between contingent employment and social inequalities in health [Artazcoz, 2005]. There is, for example, robust evidence that social inequalities in mortality are most pronounced among males aged 30-50 [Pensola, 2004], but no research appears to have been done into what role working conditions play in that.

It is important to note here that young workers are less well informed about risks than their older colleagues. In the Dublin Foundation's 2000 survey, 11.8% of young workers reported not being well informed or informed at all about work hazards, against an average of 9.6%.

The most salient feature relates to the difference between perceptions of an immediate health risk and a long-term risk. Proportionally fewer young workers consider that work affects their health, but more consider that they could not or would not want to be doing the same job at age 60.

Various national surveys provide a more detailed, and generally more concerning, picture.

France's 2003 Sumer survey (see article, p. 9) reports a marked over-exposure to carcinogens[9] – 17.1% of workers aged under 25 compared to under 13% in the 40 and over age groups years (13.5% for all employees). Almost 19% of apprentices and young workers on sandwich training contracts are concerned, as well as nearly 15% of temporary agency workers. The fact that the health effects of carcinogens may not manifest for several decades after the period of exposure shows the scale of the health risks inherent in such a practise. The 2003 Sumer survey in France makes the same finding as regards postural constraints and uncomfortable working positions[10]. This shows that workers aged under 25 are most affected by the combination of constraints. Almost 17% combine a tiring working position with an uncomfortable posture (against 11.4% of all workers). The proportions of young workers affected by repetitive movements (25%) and vibration (19%) are also above the all-worker averages of 17% and 11%, respectively [Yilmaz, 2006]. 26% of young workers are exposed to a level of health-damaging noise above 85 dBa at work, compared to the average of 21%.

Table 1 **Day, night and shift work in Spain, by age**

Age	Day work	Night work	Shift work
18-24	81.4 %	1.2 %	17.3 %
25-34	83.0 %	0.5 %	16.4 %
35-44	84.1 %	0.7 %	15.2 %
45-54	87.7 %	0.6 %	11.7 %
55-64	87.9 %	0.5 %	11.6 %
65 and over	90.9 %	0.0 %	9.1 %

Source: 5th working conditions survey, 2003 [Osca Segovia, 2006]

Spain's fifth national working conditions survey[11] revealed a distinct over-representation of young workers in the cluster of workers with a combination of all risk factors. They account for 11.7% of this group, but just 8.2% of all workers. Table 1 shows that the most health-damaging forms of working time organization predominantly affect young workers.

In the Netherlands [Smulders, 2006], an indicator clustering a series of exposures to dangerous physical and chemical agents reveals no particularly significant age group-specific differentials (10% of young workers experience at least one exposure a week against 9% for all workers), whereas certain specific exposures are more widespread among young workers – mainly noise exposure (34% against 29% for all workers). More pronounced differences are observed in work organisation, indicating that young workers are concentrated in low-skilled jobs.

An Italian survey on the working conditions of contingent workers in Bologna, Emilia-Romagna, reports alarming levels of injuries and disorders among contingent workers [Servizio sanitario, 2005]. The prevalence of health damage among young workers (aged 19-26) is only slightly below average. The survey was done by Bologna's department of public health among workers who started work in 2003 on a contingent contract (temporary agency contract, fixed-term contract, job training contract, freelancer's contract). Most responses were received from women (63.8%), and included a very high proportion of upper secondary school and university graduates (76.7%). Most respondents (60.4%) had been in contingent employment for between one and three years. Over 60% of respondents reported being on salaries of 15 000 a year or less. Most of the respondents reported suffering health problems, the most frequently cited being related to chronic stress created or worsened by job insecurity. Workers in the 19-26 age group displayed a very high prevalence of headaches (over 70% of replies), general stress (over 65%), low back pain (nearly 65%), anxiety (nearly 60%), and sleep disorders (just under 40%).

Life insecurity outside work

Insecurity affects the ability to take care of one's health in many ways. It plays directly into exposure to risk factors. Employers tend to use insecurity as a risk management strategy, i.e., foisting the harshest and most dangerous working conditions on the

Table 2 **Selected work characteristics in the Netherlands, by age**

Work characteristics	15-24	25-34	35-44	45-54	55-64
Scope for development	58 %	76 %	79 %	76 %	75 %
Complex work	60 %	77 %	81 %	79 %	79 %
Autonomous work	54 %	75 %	76 %	73 %	75 %
Work under pressure	32 %	43 %	47 %	52 %	48 %

Source: TAS, TNO Work Situation Survey, 2000-2002

[9] Les expositions aux produits cancérogènes, *Premières synthèses, Informations*, no 28.1, July 2005.
[10] Contraintes posturales et articulaires au travail, *Premières synthèses, Informations*, no 11.2, March 2006.
[11] See http://empleo.mtas.es/insht/statistics/5enct_ptp.htm.

Young, working and broke

The "working poor" – workers who earn too little to keep out of poverty – are a spreading phenomenon in Europe [Medialdea, 2005].

The Eurostat statistics agency defines the at-risk-of-poverty population as people living in households with an income (including welfare transfers and after taxes) below 60% of the median income of the country they live in. Based on the data for 2001-2002, up to 14 million people in the EU-25 would seem to be in work but living below the poverty line. The share of in-work poor among all people living in poverty has risen steadily over the past decade.

Various factors play into this situation: the number of dependent children, other household members with earned income, how many months worked in the year, etc. Contingent employment is obviously a big factor. In many cases, it explains why even full-time employed workers may find themselves below the poverty line.

In most countries in the Europe of Fifteen, young workers are more frequently found to be living in poverty than older workers. The general average of poor workers for the EU-15 is 7%, but 10% of young workers live in poverty [Eurostat, 2005]. Some countries buck this trend, however. Greece, Spain, Portugal, Italy and Ireland, for instance, where the high proportion of young workers still living with parents – foregoing independence for a measure of material security – is probably one reason. The widest gaps are in the Netherlands, Sweden, Belgium, Luxembourg and Finland where the at-risk-of-poverty rate for young workers is at least double the all-worker rate. In the Netherlands, for example, 20% of young workers live below the poverty line compared to 8% of all workers.

Poverty risk of workers by different characteristics, EU-15, 2001 (%)

	TOTAL	26-24	25-54	55 and over	Permanent employment contract	Temporary employment contract
BE	4	8	4	5	3	7
DK	3	7	2	3	-	-
DE	4	10	4	5	3	8
EL	13	13	11	21	4	10
ES	10	6	10	10	5	9
FR	8	10	8	8	5	9
IE	7	2	7	13	4	8
IT	10	9	10	14	6	18
LU	8	16	8	5	8	7
NL	8	20	7	3	-	-
AT	6	5	6	8	3	3
PT	12	10	11	21	6	12
FIN	6	15	5	7	3	8
SE	3	6	3	2	-	-
UK	6	11	6	7	4	8
UE-15	7	10	7	9	4	10

Source : Eurostat, 2005

The measure of poverty risk is the share of population with an equivalent income below 60% of the equivalised median income of the country they live in. The equivalent income is defined as the total household income divided by its "equivalent size" (where the first adult counts for one unit, other household members over fourteen years of age have a weighting of 0.5 and children under 14 are attributed a weighting of 0.3).

categories of worker least able to assert their rights and force better working conditions. This tendency is borne out by abundant evidence. But the analysis should not stop at this finding. There is a very strong connection between the growth of insecure working conditions and a more prevalent "social insecurity" [Castel, 2003].

Work has been described as the "great integrator" [Barel, 1990], a role it also played in bringing new generations onto the labour market, when it was a major contributor to forging their social identity. It marked the transition to adult life, independence from parents and added a specific class identity to access to citizenship. Casualisation is at odds with these developments. It shrouds life transitions in uncertainty. It makes it hard for individuals to develop personal plans and, beyond that, collective plans for the society in which they live. Richard Sennett has admirably dissected the connection between contemporary capitalism's enforce flexibility, the undermining of personal life plans and the growing fragmentation of our societies [Sennett, 1998]. Specific surveys have thrown up much corroborating evidence of this.

The Dutch working conditions survey finds a more pronounced disengagement with work among young people. 30% of young workers feel often or always engaged with their work against an average 52% for all workers. This disengagement is itself probably linked to two other things: an immediate one of lower-grade, repetitive and flexible work that is not conducive to personal development; and a longer-term perception of instability that casts a shadow over any future prospects. When asked whether they think themselves more employable than their workmates, 50% to 55% of these workers reply "yes", a percentage that falls to 38% in the 15-24 age group.

Job insecurity has many repercussions on life in society. The main constraint for young people is to stop them growing independent of their parents. There is abundant evidence that a high proportion of young contingent workers partly rely on financial support from their family. Housing is a particularly acute issue in that in almost all European cities, property speculation has resulted in rent and home buying price rises far outstripping pay increases over the last fifteen to twenty years. Job insecurity can also be a big obstacle to getting a mortgage. Generally, it thwarts plans not only through financial restrictions, but also by reducing control of time management. Job insecurity is a factor in women's decisions to defer childbearing.

A Spanish survey points to the gap between formal pronouncements of citizenship and the many ways that insecurity curtails planning for an independent future [Sánchez Moreno, 2004]. It shows that insecurity can be approached from many different angles: insufficient pay, over-qualification for the job, irregular or unpredictable work schedules, abusive conduct by superiors, dead-end jobs, etc. There is a sort of assimilation of insecurity to be seen among the young people of three different workforces who took part in the survey; a sort of resignation to the fact of never having other than a contingent job. There is no reference to a framework of regulation and collective actions or collective representation bodies. This view of work as an individual venture lacking any framework for collective action does not, however, mean that common demands may not potentially emerge.

When questioned about pay, young contingent workers are less concerned with whether it reflects the work done by reference to collectively agreed pay scales, for instance, than with the fact that it is not enough to live on. The most vexed issue is housing. For most, low pay is what stops them getting a place of their own. The same gap between perceived and desired pay appears in other countries' studies. Likewise the inability to refer to a collective framework that regulates working conditions. The reply given by a young French worker temping for a sub-contractor firm in the motor manufacturing industry is telling [Bouquin, 2006]; when asked "Do you think you are treated equally?", he replied "Not equally, but reasonably".

Insecurity gives impetus to social inequalities. Here, the ways in which the younger generation enter or are excluded from the labour market highlight a more general trend in the development of contemporary capitalism. Very short term profit maximization can only be achieved by forcing the pace of competitive work practices. This can be observed between different countries and firms, but also between workers. The yawning chasm that can be found in any western European town between young people on the brink of social exclusion and those poised to join the elite social circles offers a glimpse of the scale of the social inequalities to come.

Granted, there is nothing preordained in it, and labour action today may change matters. The spring 2006 clashes in France over the "first job contracts" scheme also hint at the potential for resistance out there. It is significant that students should have come out in force behind work-related demands. It is both the expression of a "here and now" fact that many students have already experienced exploitation in contingent jobs, and a very acute awareness that the development of social inequalities means that a university degree can no longer be seen as a ticket to a good job. The French spring of 2006 also faces the trade union movement with an enthusing and difficult challenge: finding ways of acting and organising that reflect what the up-and-coming generations want, doing more to entwine immediate work-related demands more closely with an overall vision of society. Health and safety at work shows every sign of being one of the key issues for expanding the traditional trade union approach in this way.

The unedifying history of the Young Workers Directive

The Directive on the health and the safety of young workers is one of the most flawed pieces of Community health and safety legislation.

It was adopted in June 1994, the result of a slew of compromises. The original draft was not particularly groundbreaking. It re-enacted a few general rules already in force in most of the then Member States. It outlawed all work by children under fourteen and night work by young people aged 14-18, for whom it also appropriated a few of the Framework Directive's general provisions (risk assessment, information, health surveillance, etc). It made provision for outlawing the most dangerous activities by including some of the risks already prohibited in most Member States.

In some respects, the Conventions adopted by the ILO were more advanced than the proposal for a Community Directive.

No sooner were the plans for a proposal announced than Britain's Conservative government swung into action against it. It was the only government to oppose the Community rules as a matter of principle, with full-throated 19th century arguments about wrecking the economy and intolerable curbs on liberty. A tub-thumping press campaign was waged around defending Britain's traditional paperboys and papergirls – a campaign that attracted strange bedfellows. The shadow Secretary of State for Employment in the main opposition party (the Labour Party) made personal representations to the European Commission to water the directive down. Step forward Tony Blair, later swept to power as Prime Minister in the May 1997 elections. Mrs Thatcher's deregulation policy is the main reason for the British government's belligerent stance in this debate. In 1988 and 1989, it had successfully relieved industry of two weighty burdens: annual holiday entitlement and the prohibition on night work for young workers aged 16-18. The Tory government had no wish to have to do a U-turn on these measures.

Although broadly supporting the directive, other Member States were quick to pull some of its teeth through derogations. Denmark wanted to keep allowing under-15s to work in family concerns, while France argued that a blanket ban on child work would have damaged Parisian fashion shows.

The European Parliament tried to redress matters by voting through a series of amendments. Some States (chiefly Italy and Spain) pressed to keep the directive internally consistent, but the text finally adopted by the Council was deeply disappointing. The directive lays down thirteen mandatory rules qualified by no less than eleven exceptions and derogations! Three "rules" are couched as simple discretionary recommendations for Member States. The prohibitions on carrying out particularly dangerous activities can be replaced by an obligation to do nothing more than have the young person's work performed under the supervision of a competent person.

Elsewhere, the directive diverges from the Framework Directive and almost all other Community HSW directives by failing to provide for any consultation of workers and their representatives. The only use of the word "representatives" comes in the provision on informing children's legal representatives (usually, their parents) about any hazards connected with their work. This is a typically 19th century paternalist approach that does not see protection for young workers in the same collective representation terms as for adult workers.

Understandably, harmonization has been marginal… In six countries, including the United Kingdom, limited legislative changes have been made, usually by extending the scope of existing provisions to previously-excluded categories (work experience training in Belgium and France, sea transport, fishing in Ireland, etc.). The other six countries simply tinkered at the edges of their laws. In some countries, transposition of the directive was even used as an excuse to force employment standards down. Germany excluded apprentices over 18 from the scope of protective measures that previously covered them. The Netherlands replaced prohibitions on dangerous activities by nothing more than the obligation to work under adult supervision, and cut the length of the weekly rest period for young workers. After fierce debates in Portugal, the government used the opportunities for exemptions offered by the directive to water down the prohibition on night work laid down in a 1991 Act.

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Take-away food, throw-away jobs

Hailed by some as providing good entry-level jobs, the fast food industry certainly gives thousands of young Europeans their first taste of working life. But the work organisation and management practices can take a heavy physical and psychological toll.

Up to ten million people across the globe are thought to have worked for McDonald's since the world's most famous fast food chain started up in March 1955. By 2000, the company had 1.5 million workers in all five continents, by far most under 30 years of age[1]. Little surprise, then, that the fast-food giant spins itself as a "stepping stone" for young people into employment[2]. McDonald's France's latest advertising campaign claims that "80% of its contracts are permanent contracts", skipping the fact that 90% or more of its workers are on part-time and hourly contracts[3]. That makes it hard to see how these "permanent" contracts spell job security, as the industry's characteristically very high staff turnover[4] shows.

The Mac model is now the de facto norm across Europe, and has been copied by the big burger and pizza chains. Part-time as standard, multi-tasking an absolute must, no scope for decision-making, and low pay in almost every case make up a "rite of passage" towards a working life in insecure employment.

Franchise operators and employment laws

A 24 year-old woman, who did not want to be identified because otherwise "the manager would make my life hell", testifies to this painful introduction to working life. Employed for the past two years by Quick, a McDonald's rival operating in Belgium and France, she tells of the unremitting psychological pressure put on staff and the victimization suffered by anyone who doesn't knuckle under: time-off requests turned down, changed work schedules without notice, being talked down to workmates, etc.

"The boss won't let me take orders at the drive-in because she says I've got too strong a local accent. She also says I'm too fat, and she's been rude about me in front of my workmates when I wasn't there", testifies the young woman.

This mother of a young child also says that work schedules are forever being changed, making any form of work-life balance nigh impossible.

But few speak out about these forms of bullying. "Those that complain to the union have usually already left or are working their notice", says Umberto Barone, area officer for the food industry with the Belgian CSC union for the Mons region (Western Belgium). "Our region has very high youth unemployment. Franchise operators exploit that because they know their employees must have that job." As a result, practises that flout Belgian employment laws have gradually become established, especially in non-unionised franchise restaurants[5].

This is why the CSC targeted this category of restaurants with awareness-building campaigns in recent months among customers and employees, in particular condemning practises like clocking-off.

"Employees clock on at 8 a.m. If there's a slack time around 10 a.m., they have to clock off. They stay on-site for two hours, then clock-on again at midday for the lunchtime rush", explains Bertrand Sculier, CSC Youth Officer for the Mons/La Louvière region.

The union official also condemns the abusive use of probationary periods. This consists in getting applicants to work an undeclared two-week probation period paid cash in hand. After this time, suitable applicants sign a proper contract, but with a new two-week probation period. This gives unscrupulous employers a full month's use of cheap labour, which can then be sacked if wanted at no cost.

Accidents going unreported

Transplanting the Taylorist production model into the fast food industry is not done without repercussions on health and safety at work. In a survey of over 700 fast food workers in Paris[6], occupational doctors were surprised to find a high percentage of functional disturbances like fatigue, sleep disorders and musculoskeletal system pains in a population of young adults. In their conclusions, the survey's authors inveigh against "a work organisation dictated by the economic constraint of 80% of turnover generated in four hours a day".

An Australian survey found that most sickness absences at McDonald's were due to back and lower limb pains, usually from falls or slipping during handling operations, and severe burns. Minor burns and cuts are common but seldom reported, the study's authors found[7].

[1] See: T. Royle, *Working for McDonald's in Europe. The unequal struggle?*, Routledge, London-New York, 2000.
[2] See: www.mcdonalds.co.uk.
[3] T. Royle, *op.cit.*, p. 51.
[4] See: *Labour relations in the global fast-food industry*, Routledge, 2002, 224 p.
[5] Tony Royle, who had access to trade union figures, reports union membership levels of under 2% among staff at McDonald's in Ireland, the United Kingdom, France, Spain and Belgium. See: T. Royle, *op cit.*, p. 95.
[6] G. Chautard, F. Cuvillier, I. Grimaud, C. Richoux, *Le travail dans la restauration rapide à Paris. Approche épidémiologique d'une population et incidences sur le suivi médical*, INRS, Documents pour le médecin du travail, no. 73, 1997.
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Young workers : Health at risk !

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McDonalds' workers in Paris demand better treatment at work, February 2001

This under-reporting of work injuries is borne out by the personal testimony of the very few employees who dare break the silence that shrouds this sector.

"I tripped and sprained my ankle while taking out the restaurant's dustbins. The manager told me: it's not serious, just a little bruise. You put some cream on it and come in tomorrow because we need you; we've got some off", testifies the young Quick employee.

"Managers push for minor accidents not to be reported as work injuries", confirms Abdel Mabrouki, a Pizza Hut deliveryman in the Paris suburbs. In his book, *Génération précaire*[8], this CGT union rep describes the serious risks that some managers make pizza deliverymen run, like encouraging them to flout the highway code or carry jerrycans of petrol on their mopeds.

Workwear is another example of a management practice that is an affront to staff dignity. "Restaurant managers tend to store work clothes and gloves in a cupboard instead of issuing them to staff, just to be in order in case health and safety inspectors drop in", report CSC officials, who have found this both in franchised restaurants and directly-managed outlets. Abdel Mabrouki welcomes the fact that Pizza Hut deliverymen have finally been issued with safety footwear – a right they have won only after years of demands and a rash of strikes.

The obsession with cleanliness and spare time is another characteristic of the fast food industry's managerial culture. When not flipping burgers, Quick and McDonald's employees have to busy themselves washing floors or retrieving the disposable Coke beakers dropped by customers on the drive-in car parks. In the wonderful world of Big Mac, multitasking is not an idle term. A favourite axiom of the MacDonald's system founder, Ray Kroc, says it all: "If you've got time to lean, you've got time to clean"[9]. ■

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[8] A. Mabrouki, *Génération précaire*, ed. le cherche midi, 2004, 164 p.
[9] See T. Royle, *op. cit.*, p. 54.

Learning about risk prevention in Peugeotland

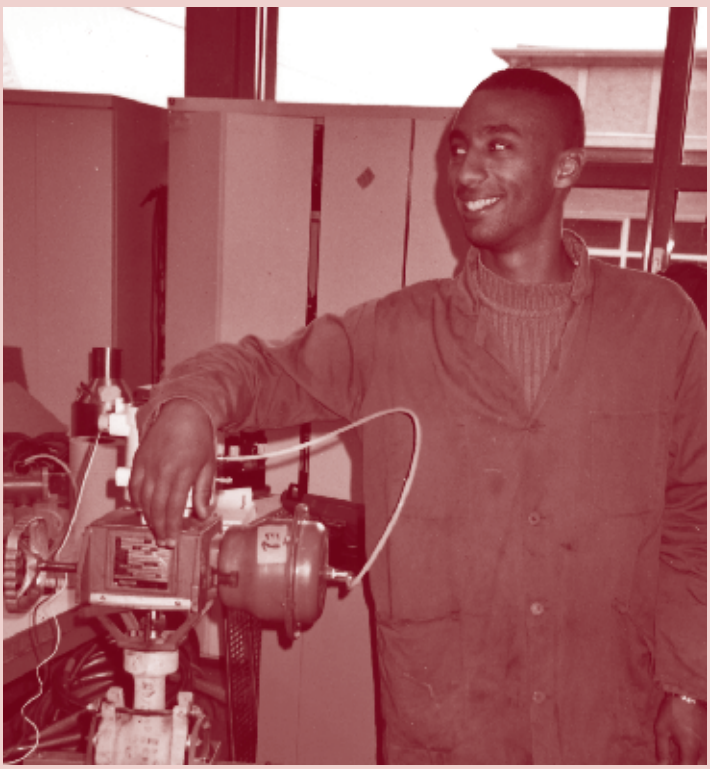
In the town of Montbeliard, deep in the heart of a car industry belt, educators are running an ambitious training project in workplace risk prevention. With the backing of the European Union, they are hoping to spread the word throughout France and fire interest across Europe.

There is nothing in Montbeliard's small mainline station to suggest that passengers have just alighted in one of France's biggest industrial zones. But outside, it is a different story. On the corner of a pedestrian precinct, the frontage of an art deco building bears seven white letters: PEUGEOT. Welcome to "Peugeotland". The Montbeliard hinterland abounds with reminders that the heart of this region in eastern France, not far from Switzerland, has beat for close on a century to the roars of the lion, the symbol of Franche-Comté and the renowned French car manufacturer. The air of sleepy rurality given off by the old town is deceptive. Montbeliard is the hub of a galaxy of factory towns. Sochaux, obviously, which since 1912 has been home to one of France's biggest factories. But also a string of "court" towns – Audincourt, Exincourt, Bethoncourt – where exhaust, bumper, seat and other production plants have developed. It is an area where everyone lives from and for Peugeot.

This industrial landscape where the car is king is where the "Bilbao project", as its originators like to call it, was born. "Three years now I've been beavering away at this project!", enthuses Françoise Lignier, a veritable powerpack of a teacher at the Lycée Jules Viette vocational secondary school and an equally militant CGT trade union activist. In the school, where students learn motor manufacturing trades, Bilbao has become a synonym for safety at work, because the project – named "Promotion of a culture of collective prevention and safety and health at work for future young workers" – is supported by the Bilbao-based European Agency for Safety and Health at Work.

This year, the theme of the Agency's traditional European week for health and safety at work is young workers. They are a particularly high-risk group if the European figures cited in a recent Agency report are anything to go by – 714 000 work accidents resulting in at least three days unfitness for work and 400 fatal accidents among workers aged 18-24 in 2002. If these figures are to be brought down, a prevention and safety culture must be instilled into them before they ever start work. Françoise Lignier has managed to win the Jules Viette's principal,

Montbéliard vocational school students getting to grips with the job



teaching and community health staff – nurse and welfare officer – around to this way of thinking. "Rallying everyone's support for a European-scale project, and getting it going right from the start of the new school year, was a lot of hard work", says the French and history-geography teacher. Especially as she did not exactly choose the soft option. The project covers different streams and age groups, from BEP to BTS[1], and shuns a strictly technical approach to the matter by enlisting input from a philosopher and a psychologist.

Philosophy and psychology on the syllabus

Ginette Francequin and Sidi Ahmed Barkat, respectively an industrial psychologist and philosopher at the national school of engineering and technology in Paris, had their first encounter with the students from Viette and Fernand Léger, the other college in town involved in the project, at the end of September. Starting with a description of a journey as a metaphor for the world of work, and a discussion on the five senses, was to say the very least a strikingly different way of getting the students to think about work-related risks by putting people as sentient beings back at the centre of the production process.

In early October, the psychiatrist, philosopher and teachers joined forces again for a more practical exercise. The Jules Viette students were handed a risk spotting guide, with the instruction to observe their fellow 2nd year BTS car maintenance and product support (MAVA) students, some of whom were busy logging the on-board computer data from a 607, while others were stripping-down a clutch system on a 307. The idea was to identify safety failings, like not wearing safety shoes and the main garage hazards (noise, temperatures, dangerous products, etc.). It looked a pretty straightforward proposition for these 1st year BTS MAVA students, all about twenty-ish. Naturally, they knew what a garage was, and had already learned in their technical and theoretical courses how to guard against the risks of the job. They seemed industrious, but not unduly interested. "I don't see myself getting oily hands", observes one youth sporting a trendy jacket and jeans. Most of these students have upper secondary diplomas in industrial technology and science, rarely in vocational subjects. They see their futures more in suits and ties than dirty overalls. Trained in the most recent motor vehicle technologies, but also schooled in management sciences and the "customer approach", their ambitions lie more in landing a back-room or sales engineer's job with one of the biggest car makers. "80 to 90% will have got a job within a year of graduating", confirms one teacher.

An hour on the dot. Barely a couple of minutes left for the discussion with Ginette Francequin and Sidi Ahmed Barkat. Not enough. The bell goes, bringing the students automatically to their feet. Nothing eats into the hour's break. Next up is the 1st year BEP bodywork class. They are aged about 14 or 15, and even at that tender age have had rocky school careers. "Some actively chose bodywork, but others have just sort of ended up here", admits one member of staff. Ginette Francequin starts off with some seemingly ingenuous questions: "I've had a car accident and my door's got dented. What can you do for me?". Clearly surprised, one youngster has a stab: "You need to sand it down", then "knock the dents out". A question and answer session sets in. "Was it noisy?" "No", the youngster replies, "but I did see one of the students doing an oil change without safety goggles."

Busing Romanians in

Throughout the day, class after class goes through the same exercise, some enthusiastically, some distinctly less so. The 1st year upper secondary diploma class in industrial product design and specification comprises ten students, all around 20 years of age. Things get off to an unpromising start: the students won't be filmed. Part of the Bilbao/Viette project is to make a film for dissemination as a teaching aid throughout the European Union. André Baratta, a veteran of film reports on health and safety at work, has to stow his camera away. The discussion with the psychologist and philosopher goes little better. "What's the point of all that? Nothing to do with me!", proffers a rebellious-looking student sporting a bomber jacket and bleached hair. Another raises the tone: "We're training to be draughtsmen, not brickies". "There's nothing wrong with being a bricklayer. My son's a bricklayer and he's proud to be building nurseries and houses", counters Ginette Francequin. "Well, my brother's a brickie. He's 30 years old and his back's done for", retorts the student.

What should have been a discussion on personal protective equipment ends up as a fraught but illuminating give-and-take on insecurity. "Bosses only care about profits, not safety. Say anything, and they'll just bus in a load of Romanians, and then all you can do is keep your trap shut and accept it", complains one youngster. Another is unsure whether he will stay in Montbeliard as he fears being on too-low a wage to be able to build a house.

Mostly from working-class backgrounds, these youngsters have a disillusioned view of the world of work and their future place in it. It is as if their concerns reflected the fears of their elders, Peugeot's renowned skilled workers, who once formed a proud community with political clout, but who now seem to have lost confidence in collective action.

This gloom is now almost tangible throughout "Peugeotland". In the late 1970s, the Lion Brand carmaker employed over 40 000 workers; now it has barely 17 000. When questioned, many local people feel that although low-profile, the immensely

[1] The BTS (Brevet de Technicien Supérieur) is an advanced vocational training certificate received after two years of higher education on an advanced technicians course (STS). The BEP (Brevet d'Etudes Professionnelles) is a secondary school vocational training certificate. It is a qualification for employment or further study.

powerful Peugeot family remains very much at the helm and will not forsake the region. However, the recent closure of the Coventry plant in the UK and massive investment in Eastern Europe leave the future of the car industry in the Montbeliard region shrouded in uncertainty, and gives a job with Peugeot fresh appeal in the eyes of a growing number of young people. "Ten years ago, young people wouldn't give Peugeot a second thought because it was assembly line work. Now, a lot would jump at the chance of a job in the Sochaux factories if it was offered them", says Françoise Racine, the Viette college welfare officer.

The young woman also tends to the students at Fernand Léger – a 400-student vocational secondary school drawn mainly from a more socially and economically vulnerable community than its bigger neighbour. The clear evidence of this is the overwhelming majority of North African heritage youths who fill the production engineering, mechanical engineering and machining workshops. In Montbeliard as elsewhere, this "ethnic dimension" carries heavy consequences. "It's a lot harder for them to get work experience training", notes the welfare officer.

For those who do get their first taste of working life in the nearby factories, the first brush with industrial reality can be an ordeal. "I did three weeks work experience at Faurecia (car equipment manufacturer – ed.), mainly sweeping floors, putting faulty parts in the crusher, and sticking on thousands of self-adhesive strips. I was shattered and I ached all over", testifies one plastics technology student. "Some of the younger workers tried to show us how the machine presses worked, but the older ones just gave us the rubbish jobs", adds another. Yet another says that while they were issued with protective gloves on the first day, nobody made them wear them afterwards. Such situations may not be the general rule – other students found their work experience more closely matched their expectations and training – but this anecdotal evidence does illustrate the gap that separates vocational training and workplace reality. And there may be an even more fundamental disconnect between the safety rules learned in the classroom and working conditions in many garages and factories, as Françoise Lignier well knows. "It's no coincidence that we decided to tackle 1st year students who are just discovering the world of work and technology. It's so we can follow them right up to their work experience in June. Part of the project is to include a prevention-health-safety aspect in the training period reports. Students will have to identify potential hazard situations and analyse how they work. It's a pretty hard-line exercise, because they will be up against what can be the painful reality of shop-floor working conditions".

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Most of the above works can be found at the ETUI-REHS Documentation Centre (www.labourline.org). ■

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Young workers: work-related risks and ergonomics

This is a reprint of the talk entitled "Inducting and integrating young people into work" given by Roland Gauthy to the 60th anniversary conference of the royal association of prevention advisors on 12 October 2006.

There is nothing surprising about the excess work accident frequency rate seen among young workers, and their over-representation in the health and safety statistics. It is a matter of basic maths: the biggest number of accidents and problems from ergonomic failures[1] happen in the jobs most exposed to work-related risk factors, and it is specifically in these accident-prone and health-threatening employment niches that most young people work.

A recent Quebec study[2] reported that these "young worker niches" are found in sectors where there are wide gaps between the 15-24 and older age groups in terms of frequency of exposure to work-related risks:

- 83% more for exposure to solvents;
- 61% more for exposure to the manual handling of heavy loads;
- 53% more for repetitive work;
- 38% more for strain from using tools;
- 40% more for night work.

While all these "ergonomic" conditions are intrinsically harmful, the study's authors also point out that these various constraints combine and add up more in young workers. In other words, the number of young people exposed to a combination of four or more of these constraints is materially greater than for any other age group.

The study also finds that "young people are not as healthy as we might think from their youth". For instance:

- 13% of young female office workers who have never been exposed to physical constraints at work have one or two health problems, including one chronic one. They have high levels of psychological distress;
- 11% of young male skilled or unskilled labourers who handle heavy loads and experiencing strain from using tools have one or two health problems, including one chronic one;
- 14% of young women in middle management, semi-professional or technician posts in the health care sector or social services do not feel in good health, with up to four reported health problems including musculoskeletal injuries;
- 8% of young men report from three to four health problems, including musculoskeletal injuries.

The worst-affected sectors and occupations are in construction, fishing and agriculture, clothing and footwear, the hospitality industry, personal and animal care, industrial assembly-line work, and so on. But, these are the very sectors where youth employment is highest, often in temporary or contingent jobs, and where disorders of the musculoskeletal system are most prevalent.

Another study on the link between time-in-post and work injuries shows a close correlation with inexperience and age[3]. It found that manual workers were the lowest average age group and had the highest percentage of work injuries during the first year, with young males being most at risk.

In a conference paper entitled "New employment, new risks", Elsa Underhill of Monash University's School of Management[4] notes that:

- a high proportion of young workers (in this case group apprentices and trainees) tend to be employed in higher risk occupations;
- young workers have a higher injury rate than older ones;
- group apprentices and trainees have a high rotation which exposes them to the risk of insufficient knowledge of workplace-specific hazards from constant job changes. Moreover, some group apprentices and trainees find themselves put on work that is not done by direct-hire employees and are not skill development tasks, like clean-up duties;
- group apprentices and trainees are more often employed by small businesses whose workers tend to be more vulnerable to injuries, less unionised and less able to assert their rights.

New jobs, including for young graduates, are increasingly contingent, and it is hard to find a good quality first job, as witness last spring's street protests in France over Prime Minister de Villepin's proposed CPE (first job contract). By "quality job", I mean a job that meets the European Commission's Laeken criteria[5]. Meanwhile, some sectors like the hospitality industry are desperately short-staffed ...

The dual challenge of youth and inexperience

These few facts lie behind my approach as an ergonomist to reducing the conflicts that may arise between prescriptive work requirements set in a given framework, and workers' experience of work as it is done in the real world[6]. The fact is that workers tend to compensate for and adapt – at the cost of their health – to operating deficiencies and unforeseeable hazards that could not be factored into job, machinery and task design[7]. The Quebec study mentioned earlier notes that as long ago as 1917, a steelworks was reporting 12 times more injuries among workers with fewer than 30 days' length of service. A consistent body of literature now shows that the dangers attendant on youth combined with

[1] Ergonomics (or human factors) is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance. This is the official definition adopted by the International Ergonomics Association.

[2] M. Gervais *et al., Conditions de travail, de santé et de sécurité des travailleurs du Québec*, IRSST, February 2006. Downloadable on www.irsst.qc.ca/files/documents/PubIRSST/R-449.pdf.

[3] F.C. Breslin, P. Smith, Trial by fire: multivariate examination of the relation between job tenure and work injuries, *Occup Environ Med*, 2006; 63:27 - 32. See: www.bmjjournals.com.

[4] E. Underhill, *New employment, new risks: an exploratory study of workplace injuries amongst Victorian group apprentices*, Annual Conference of Industrial Relations Academics of Australia & New Zealand, Monash University, Melbourne, February 2003.

[5] Job quality (10 dimensions): intrinsic job quality; skills, life-long learning and career development; gender equality; health and safety at work; flexibility and security; inclusion and access to the labour market; work organisation and work-life balance; social dialogue and worker involvement; diversity and non-discrimination; overall work performance. See: *Employment in Europe*, European Commission, 2002.

[6] Ergonomists talk of the conflict between prescribed work and real work, or task and activity.

[7] Technical faults and breakdowns, plant maintenance, miscellaneous disruptions, stock-outs, late deliveries, unplanned emergencies, staff shortages, etc.

inexperience rise where the job is insecure and involves exposure to multiple constraints. Which, as I say, is just basic maths.

Ergonomics alone cannot meet the dual challenge of youth and inexperience, still less so if its field of intervention – which may be reduced to biomechanical factors – disregards that a movement has a content, that it is rationalized, that it varies with perceptions and states of mind, and with cognitive (decisions to be taken according to inflow), sensory and emotional loads.

The real issue for the authorities, "prevention professionals", workers, employers, machinery and work systems designers is to give young job entrants the best possible induction. Giving constructive thought to risk factors should help create a climate for learning the right reflexes and movements, thinking preventatively and being constantly alert to hazards which they or their colleagues are exposed to. Proactive intervention by prevention professionals before workstations are designed or adapted, and their involvement in task and aid design when work tools are implemented, would help cut the toll of work injuries and damage to workers' health.

Occupational health is not something abstract observed by an occupational doctor during a regular check-up by reference to preset exposures, but a dynamic process that runs along a continuum: occupational health is developed, acquired and preserved. Conversely, the harmful effects, on the same continuum, damage health in the form of build-ups that are often perceived only after a certain time and above a certain threshold.

The danger of squandering one's health is all the greater and more serious for young people who are less attentive to the subtle indicators of health damage. I should like to illustrate that with a few thoughts about one of workers' main health complaints that results from exposure to what are called "ergonomic" risks, which, in the narrow view I have just criticised, means the risks of potential damage to the musculoskeletal system, especially when caused by the manual handling of heavy loads.

MSD and organisational factors

A series of recent French studies[8] have found evidence that manual handling work is spreading (rather than declining, as might have been expected after the European regulations came into force), that young manual workers are over-exposed, and uncomfortable postures are still highly prevalent.

In an interview with the *Le Monde* newspaper, Philippe Askénazy[9], a researcher with CNRS, claimed that work in France is dangerous, with occupational diseases and work injuries rising. He argues that we are paying the price of decades of neglect of health and safety at work while French business is now exposed to new challenges: an ageing population, emerging new risks related to technological and organisational changes, productivity and competition.

In the approach of adapting the work to the operator, each of these three issues is a test for the ergonomist's efforts to lessen the conflicts between tasks and activities[10] by increasing the scope for manoeuvre[11].

Company competitiveness demands translate into increased productivity and flexibility, which in turn result in new management styles:
- a core business focus and lean management;
- outsourcing;
- just-in-time and lean production;
- continuous activity monitoring, etc.

These techniques enable production to be fine-tuned, but also rely on reducing the scope for manoeuvre because, paradoxically, reduced market elasticity requires greater flexibility and shorter response times from manufacturing firms, which must be able to "surf" between product runs.

The organisational factors are having appropriately sized and formed workforces to handle the workload, monotony or variety of tasks, autonomy and decision-making, time pressure and emergencies, attention, training, working hours (predictability, consistency, balance between working time and rest periods), job satisfaction, job security, etc. The new work patterns are fixed-term contracts, temporary agency employment, part-time work (sometimes in multiple jobs), non-standard working hours, split shifts[12]. American economists from the University of Massachusetts[13] report a positive, statistically significant correlation between the use of just-in-time production and quality circles and MSD, with impact rates varying from 20 to 65% in the 1848 workplaces studied.

Where the demographic challenge posed by population ageing is concerned, I stressed the part played by work in developing workers' health. But, as can be seen from the Dublin Foundation's surveys[14]:
- 27% of the workers aged 50 to 59 are no longer working;
- 33% of the manual workers are no longer working[15];
- the health of 42% of the older workers has deteriorated to the point where they are unable to work;
- 75% of cases where workers were unfit for work are due to musculoskeletal system disorders.

These findings should give us all cause for concern, because joint problems have an unfortunate tendency to act through cumulative microtraumas which are very much present but have no discernible effect in young people. These cumulative effects will ultimately reach the pain threshold where the

[8] The SUMER study: www.eurofound.eu.int/ewco/surveys/FR0603SR01/FR0603SR01_5.htm. On the Sumer survey, see also article on p. 9.
InVSLoire study: www.invs.sante.fr/publications/2005/mcp_pays_loire/plaquette_mcp.pdf and www.invs.sante.fr/publications/2005/symposium_tms/resumes_tms.pdf.
[9] P. Askénazy, Santé au travail : l'impact des nouvelles formes de pénibilité, *Le Monde*, 19 février 2005 (www.lemonde.fr).
[10] Conflicts between prescribed work and real work as it is actually done (determined by imponderables, etc.).
[11] The worker's scope for manoeuvre in time, space, organisation, tool or assembly-line adjustment (instead of the human operator's pace being dictated by that of the machine).
[12] Two or three hours' work in the morning followed by several hours off and a return to work for two to three hours in the evening. Examples are industrial cleaning of schools and offices, or restaurants with morning and evening services.
[13] See: www.umass.edu/peri/pdfs/WP30.pdf.
[14] See footnote 8 *supra*.
[15] Meaning that they are over-represented in the preceding cohort.

Respondents' replies by sex and age group (%)

Problems	Men		Women	
	16-29	50-64	16-29	50-64
Very heavy physical work	30.5	16.6	28.5	18.0
Feels pain each week in:				
Upper back and neck	23.0	29.6	41.6	44.8
Lower back	23.1	27.8	36.0	34.6
Shoulders or arms	18.5	33.9	32.3	45.5
Wrists or hands	12.6	17.1	16.6	31.4
Hips, legs, knees or feet	18.2	28.8	29.2	40.4

Source: Arbetsmiljöundersökningen, 2005

perception of pain will be a much too belated symptom of already far-advanced damage[16]. The repetition of painful postures, motions and movements will over time bring on functional limitations which will ultimately lead to incapacity for work with its attendant problems.

In this respect, the preliminary statistical processing of the Swedish occupational health surveillance data 2005[17] is extremely telling when a read-across analysis is done of gender exposures and complaints in two age groups – men or women aged under 29, and men or women aged over 50 – who are gradually developing a functional limitation (see table).

It is noteworthy that:
- very strenuous physical work is more prevalent among young people, but conversely, the oldest workers suffer more pain (even though their workload generally tends to lighten);
- strenuous work is more marked among men;
- these pains are more prevalent among women;
- lower limb pains[18] are significant, especially among women.

Supporting young workers

The French SUMER survey pointed out the importance of biomechanical factors that some had claimed were on the way out thanks to the European VDU and manual handling regulations. Recent studies provide consistent, corroborating evidence that the new forms of work organisation are fundamental risk factors, and that job satisfaction plays a major role in the development of musculoskeletal system disorders.

This reinforces the field of intervention of ergonomics – like that of the other preventive health and safety disciplines – in the way it approaches risk situations which it is the job of all the disciplines and skills involved to control, not through risk management[19], but through "proactive prevention".

Young job entrants are a higher risk group than their elders, and the story of their health is yet to be told or made. The world of work, like that of business and technology, is changing rapidly, with new risks emerging, such that situations which were under control at one point may not be the next.

It falls to us, as prevention professionals, to stress the importance of that point and to support young people as participants in health and safety at work, and in being and staying healthy at and through work. This is a key role that involves creating awareness among the other participants: governments, employers, insurers and voluntary agencies. The trend towards deregulation does not help to construct the solid foundations on which to base a businesslike commitment to tackling the basic problems and new challenges in health and safety at work. Rather the reverse: that trend seems to imply that the prevention professional first has to show that what he is doing will save the company money and market share, and that injuries, physical health problems, unfitness for work, impaired mobility, loss of leisure time and even death in service can be prevented only if prevention costs "half of nothing".

Does this not suggest another challenge to be met: that of the specific "health and safety" characteristic of what we do, focused on workers' health and the relevance of what we do for it rather than the economy or a business strategy? ■

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[16] Carpal tunnel syndrome resulting from inappropriate movements or postures can develop over a period of eight years before manifesting through tingling sensations and pain that will often require surgery.
[17] See: www.av.se/dokument/statistik/officiell_stat/ARBMIL2005_prel.pdf.
[18] These pains and symptoms are seldom considered in MSD, which over-concentrate on the back and upper limbs, which is why I prefer to refer to work-related disorders of the musculoskeletal system.
[19] Which effectively turns the ergonomist into a manager accountable to the user of his skills for whether the risks incurred are there or not.

Working children in Europe

Gianni Paone *

The categories generally used to study child labour in "developing countries" are not sufficient – in fact, not right – for studying the same phenomenon in industrialised countries. The point is that dividing lines between child working and child exploitation, schooling and work, socialization and exclusion by child working, become blurred when looking at the relations that exist between similar categories in African and Asian countries where child labour, sometimes in its most appalling form, is a visible fact that has long been studied, resulting in a large body of statistical and social research facts and figures.

In Europe, however – both in the EU and Eastern Europe – child labour is a signally under-researched and -reported issue. The popular view is that child labour has been rooted out of our Western societies. Not so, however, and it would be instructive to look more closely at the forms it takes in economically advanced countries. Understanding and identifying the similarities and differences between how the different regions approach the state of childhood and adolescence will help lay the foundations of future strategies, policies and action plans to stamp out social inequalities.

The ILO's updated estimates in 2002 pointed to a rise in child labour, suggesting that some 211 million children between the ages of 5 and 14 were affected worldwide (see tables).

Child labour in industrialised countries

Child labour is also a big issue across a very wide range of sectors in industrialised countries. In southern European countries, large numbers of children work for pay in seasonal jobs, street trading and domestic work, for instance. The transition from the planned to the market economy has also brought a resurgence of child labour in Central and Eastern Europe. The CGIL survey of Italy in 2000 estimated that 300 000 boys and girls aged under 15 were in some kind of employment. The NGO Mani Tese estimates that at least 15% of youngsters aged between 11 and 14 in the United Kingdom have some kind of paid job. In the United States, an estimated 5 and a half million young people – 27% of all minors – work, and violations of child labour regulations rose by 250% between 1983 and 1990. These figures are not including the number of 12 year-olds employed in different types of work, like big city garment sweatshops, street trading and seasonal jobs.

The growth of child labour in the United Kingdom was a result of Conservative policy in the 1980s and deregulation of child welfare policies. Children, mostly with immigrant backgrounds, work on market stalls, in restaurants, for cleaning firms, etc. The same trend is found in Portugal, Italy, Greece, Spain and the United States. France has hundreds of children skipping school to work in a range of jobs.

In some cases, then, children work partly from their own choosing. As such, it provides personal satisfaction and a measure of independence. This offers some explanation of the rising number of children in seasonal and temporary jobs. They are working for money to buy consumer goods they want.

Some research has pointed to links between child work and parents' employment status: the share of working children is substantially higher among parents engaged in trade or a craft activity.

Far from disappearing, the worst forms of child labour unfortunately persist. Seemingly, they affect only a small proportion of the population living in marginal situations, which are the reason for the child to be working. Asking questions about child labour means having to consider a wider range of possibilities and understanding, as the context dictates, what kind of child working we are talking about.

Table 1 **Global estimates of child work – 2000**

Age	Total population (1000)	Working population (1000)	% of working population
5-9	600 200	73 100	12.2
10-14	599 200	137 700	23.0
Total	**1 199 400**	**210 800**	**17.6**
15-17	332 100	140 900	42.4
Total	**1 531 100**	**351 700**	**23.0**

Source: ILO/IPEC 2002

Table 2 **Estimates of child labour by geographical area – 2000**

Geographical area	Child Workers aged 5-14 (million)	% working
Developed countries	2.5	2
Transition economies	2.4	4
Asia and Oceania	127.3	19
Latin America and Caribbean	17.4	16
Sub-Saharan Africa	48.0	29
Middle East and North Africa	13.4	15
Total	**211**	**18**

Source: ILO/IPEC 2002

* CGIL National Services System

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Child working in Europe

Portugal

Child labour in Portugal is found mainly in the northern regions of the country (Braga, Porto, Aveiro). Children tend to work in street trading and in unskilled jobs on piece work rates, mostly in the building, tourism and textile industries, but also in agriculture, shops, domestic work and other street-based activities. Many children work punishing hours, up to between 10 and 14 hours a day, mostly illegally. The general labour inspectorate has also discovered children doing home-based work, which makes policing and enforcement of child labour legislation harder.

Generally, rising unemployment is one reason for the increase in child labour. The official statistics have often underestimated the reality of child working in Portugal, leading to a long-running debate on the nature, extent and scale of a trend that affects key sectors of the economy, like the textile, clothing and footwear industries. In 1989, the official statistics reported 11 486 workers aged under 18 in all these three sectors. By 1991, there were 24 719, plus 3 834 aged between 12 and 14 "self-employed". In the same year, an ILO study reported 63 000 children aged between 12 and 14 in the labour force.

Table 3 **Economic activities involving children aged 6-15 in Portugal**

Sector	% of workforce aged 6-15	% working 5 days a week or more	% working 4 hours a day or more
Agriculture	55.7	57	34
Manufacturing	12	80	72
Catering	10.5		
Retail	9.9		
Construction	6.4	70	84
Other	5.5		

Source: Ministry for Employment and Solidarity. Anti-Child Labour Programme, 2000

The Portuguese labour inspectorate has unofficially acknowledged that 40 000 young people fit this profile, and another 160 000 children have a long experience of work. Trade unions, the Church and independent researchers claim that as many as 200 000 children are working, but employers are reluctant to disclose more detailed figures on the size of the problem. Inspectors have uncovered the odd breach of Labour Code provisions in the textile and clothing industry in the north of the country, involving child workers from poverty-stricken families.

The Portuguese Ministry for Employment and Solidarity's employment and vocational training statistics department surveyed 26 000 families to measure the scale of child employment below the legal working age of 16. It found that 4% of young people in this age bracket had worked in the survey week, and 7.1% had worked during the school year. In many cases, these were unpaid jobs, helping family members, relatives or other adults in selling activities. As there are over a million Portuguese children in this age bracket, it can be inferred from the survey that approximately 43 077 young people worked in the survey week, and 77 465 during the year, in breach of child labour laws. Whilst these figures are lower than those put forward by non-governmental organisations, it is clear that the Employment Ministry figures are still not to be lightly dismissed, since they reflect only the average for the different age brackets. Calculating the percentages for 15 year-olds gives figures between 3 and 4 times higher.

While no precise conclusions can be drawn from the survey figures, it can be said that many more schoolchildren are working than remain in education. The official analyses of the survey offer no explanation as to why, but it may be more to do with education's lack of appeal than a real need or desire to work. 56.2% of early school leavers give as their main reason for entering the world of work that they "don't like school", compared to just 13.4% who positively wanted to work. Low family incomes are another big reason for the decision to work. This shows that, in the case of Portugal, what is usually called the "child labour trap" and forsaking education in favour of early labour market entry may be linked to low household incomes.

Italy

Italy is the one European Union country to have studied child working most extensively, supported by CGIL, private researchers and, more recently, the National Statistical Institute (ISTAT). Many children with North-African, Filipino, Albanian and also Chinese immigrant backgrounds work. According to a survey of these families done from 1987 to 1991 by ISTAT, more than 500 000 children aged 6-13 were doing some kind of paid or unpaid work for a family concern. The CGIL survey done in Italy in 2000 found that something like 350 000 were working (G. Paone, A. Teselli, *Lavoro e lavori minorili*, Ediesse, 2000), 80 000 of whom were 11-14 year-olds being exploited (G. Paone, *Ad ovest di Iqbal*, Ediesse, 2004). Half these adolescents work in bars or restaurants, and about 10% on building sites. The studies show that a high percentage of youngsters of Chinese immigrant descent in southern Italy hold down paid jobs. Like their Portuguese counterparts, child workers in Italy tend to have failed educational backgrounds.

Over half the children work more than 8 hours a day for a pittance. A 2002 survey by ISTAT found 145 000 children in paid jobs, over 30 000 of them being exploited. ISTAT believes these figures underestimate the problem, not least because they do not include children whose origins lie in immigration. More about child labour in Italy can be found in the studies done for CGIL.

United Kingdom

A study by the TUC estimates that up to 2 million children work during the school year. School children holding jobs outside school hours remains common in Great Britain. Research over the past fifteen years has showed that child labour remains a fact of life in several sectors of the labour market. Countless studies over the past ten years have concluded that 40% of 13 to 15 year-olds were working in undeclared part-time jobs, and in most cases illegally. Between a third and a half of school children are carrying out paid work. In absolute figures, that means between 1.1 and 1.7 million school children have some form of employment. The conclusion is that working is the longest experience that children have, and that paid work is part and parcel of adolescent life. UNICEF believes that the growth of the service sector and the demand for labour flexibility have contributed to the increase in underage working in England. In 1997, the Council of Europe reported that 50% of UK children aged 13-15 had some form of employment, were often uninsured and exploited. The contribution of the child's income in poor families partly explains the situation. Previous studies show that up to 2 million school age children in the United Kingdom have some form of employment. Child labour is now a big part of the low-wage economy in Britain. Although legislation prohibits children under the age of 13 from working, a survey commissioned by the Trades Union Congress, called "Working Classes", found that nearly one-quarter of all 11 and 12 year olds were working illegally.

One in 4 under-16s works. More than a quarter of children who work during the school year report being too tired to do their homework. Many work

A paperboy in Britain

before 7 a.m. or after 7 p.m. Some work throughout the week, and often over three hours a day. During the holidays a small number work a full-time working week (31 to 40 hours a week), with a further 3 per cent working over 40 hours. According to the Low Pay Unit, children are increasingly being exploited as cheap labour in the northeast of England. Its "Fair Play for Working Children" survey shows the scale of child labour and the conditions under which children work. While 10% of 10 year olds have a job, this rises to 35% among 15 year olds. Of those children working, 25% are under legal working age (13 years), and others are working up to 29 hours a week. Up to 44% of working children have suffered a work-related accident; in one in ten cases, a very serious one. In 1997-1998, the Health and Safety Executive reported that 46 school-age children had suffered serious injuries at work, but this is underreported because they were illegally employed. One factor common to under-age working in Britain and other European countries is the changes under way in the sectors that use child labour – chiefly the catering industry, shops and street trading. Children are also found to be doing jobs shunned by adult men and women: kitchen work, shop counter sales, home and shop cleaning.

Netherlands

A Social Affairs Ministry survey of 20 schools in 1987 found that three quarters of 13-17 year olds had a paid job, and that three-quarters of them were working illegally. On average, they were working 17.5 hours a week. The information on the extent of illegal work was supplied by the National Federation of Christian Trade Unions.

Germany

Youth employment in Germany is relatively low, although the number of children working who are not caught by the official statistics and census is not known. A study of 2 500 Thuringian secondary school pupils, for example, showed that 37% had some form of employment, and that 24% were employed below the legal working age. It is worth noting that this recent survey was done in the agricultural sector and in the former GDR, where little analysis has been done of the labour market. The recent Bundestag report claims that the figures on working children are unreliable, but gives no specific numbers. Four studies commissioned by the regional governments of Nordrhein-Westphalia, Hesse, Brandenburg and Berlin in 1989, 1993 and 1994, respectively, on a sample of 12-17 year-olds representative of the population in this age bracket (especially the 13-15 age group) found that a significant share of adolescents start working from the age of 12-14, mainly in order to earn money (66% to 72% of respondents, according to the survey) to buy what their parents refuse or cannot afford to buy them, or to put aside, not as "rainy day" savings, but for a specifically-priced purchase like a computer, music centre, mountain bike, etc.

Spain

Child workers are mainly employed in the footwear industry and family-run concerns (shops, bars, farmwork, street markets). More than half (51%) work to supplement the family income. In 14.4% of cases, they are prompted to work by family members. Many start working before the age of 10, and up to a third are between 11 and 14. Seasonal work is very widespread, and between 300 000 and 500 000 children under 14 are estimated to work in the informal economy.

France

There are no figures on under-15s who work. Adult unemployment has been accompanied by a sharp rise in child labour in the informal economy, street trading, distributing advertising leaflets. The CFDT reports that domestic work is unregulated, and that children can work on farms under parental supervision from the age of 12. Official statistics are produced by the national institute of statistics and economic research (INSEE). In 1998, there were 129 155 under-18s in paid employment, equal to 0.65% of the entire labour force. This figure seems well below the real economic activity rate, but a clearer picture can be gained from the distribution by sector.

Table 4 **Share of working children under 18 in the total French labour force**

Sector	Relative share (%)
Agrifood	4.3
Construction	2.8
Car sales and repairs	4.3
Hospitality industry	3.6

Source: Ministry for Employment and Solidarity, France, 1998

INSEE also reports 120 000 children, mostly between the ages of 15 and 16, in apprenticeships and something like 11 000 in pre-apprenticeships. Up to 10 000 young people worked for between a few days and over a month in agriculture over summer 1997. One interesting feature of the INSEE report is the information given on work permits issued to young people working in the entertainment and fashion industries. Such jobs exist everywhere in the world, but few countries apart from France record and quantify them. In 1998, Paris had 15 booking agencies for adolescents in search of a modelling career. Up to 13 500 young people were employed in the field, but only 20% legally. In 1998, 5 268 work permits for the entertainment industry were issued to young people living in the Paris region, and several hundred to youngsters from other French regions. These data uniquely published by France make it a valuable observatory for any future research on the situation of young people in particular working in the sector.

Scandinavia

Denmark tops the OECD list for working children. A study done in 1993 by the Danish national institute

for social research reports a high level of under-age labour.

The total participation rate of 40% is for all 10-17 year-olds. As in Great Britain and the United States, most young people start working from age 15; 35% of the sample of young people questioned for the survey had a steady job. Most work between 1 and 10 hours a week. But over a third of 15-17 year-olds have already experienced long working weeks. Conversely, figures published in 1999 for Norway show that 49% of 16-19 year-olds questioned in the last survey (1998) were listed in the labour force statistics.

Table 5 **Children as a proportion of the total labour force in Denmark, 1993**

Age bracket	% working
10	7
12	18
14	43
15	59
16-17 (vocational training)	44
16-17 (lower secondary school)	64
16-17 (upper secondary school)	70
Total	**40**

Source: Frederiksen, 1999

Greece

Child labour legislation is widely flouted. The 1991 census reported only 1.3% of children aged 10 to 14 having a paid job. It is likely that in Greece, as elsewhere, most children work illegally. The sectoral distribution of under-age working in Greece is similar to that recorded in developing countries.

Agriculture and manufacturing industry are the main child work sectors, while the building industry employs a large share of older children. A 1996 study by the Greek National Foundation for Social Security found that on average, children employed in building trades worked between 40 (13 year-olds) and 70 (17 year-olds) days a year. Like Portugal, this early labour market attachment reflected unsuccessful secondary school completion. Another study found that a quarter of the total school population was not completing compulsory schooling because they would rather work, whether paid or not.

The new EU Member States

There are no figures on child labour in the new EU Member States. Few children work in Hungary's formal economy; begging and urban prostitution are more common. Child prostitution is a big concern for these countries. In Latvia, for instance, it is estimated that more than 15% of sex workers are between 8 and 18 years of age.

Romania

Romania has compulsory education, but not all children attend school. Primary school enrolments fell from 97.3% in 1989 to 94.4% in 1998, while secondary school attendance rates dropped from 91.1% in 1989 to 61.6% in 1998. Street children have particularly harsh lives. A NACPA (National Agency for Child Protection and Adoption) study estimated that there were 2 500 to 3 000 street children in 2000, 62.7% of whom were failed school completers. The National Study on the Situation of Street Children in 1999 pointed to a causal link between street work (60% of children) and poverty, disputes, violence and family breakdown.

Bulgaria

In 2000, the ILO estimated that 14% of children aged 5-15 had paid employment outside the home, in the retail or service sectors, transport, communications, building or agriculture. Some children also work unpaid in family concerns, while others perform heavy and health-damaging work. 10% of prostitutes are children.

Turkey

The child labour problem is directly related to the country's demographic structure, education system, and level of economic and social development. In 2000, the ILO reported that 7.8% of children in the 10 to 14 age group were working in agriculture, car repair garages, carpentry, the textile industry, tanneries and domestic services. According to a 1999 study, 4.2% of children (511 000) between the ages of 6 and 14 are economically active, while 27.6% (3 329 000) are home workers. About 80% of working children are still in school. Street children also remain an issue for Turkey, which is a centre of the child sex trade.

Table 6 **Child labour in Greece by sector (all child work, %)**

	Females age 14	Males age 14	Females age 15-19	Males age 15-19	Total age 14	Total age 15-19
Agriculture	81.7	39.4	26.7	27.1	48.0	27
Manufacturing industry	10.2	26.2	15.7	15.9	23.0	15.8
Construction	0.0	7.2	0.7	15.8	5.7	9.7
Retail	0.0	17.6	25.1	22.4	14.1	23.5
Hospitality industry	0.0	6.2	9.8	9.6	5.0	9.6
Total	**91.9**	**96.6**	**78**	**90.8**	**95.8**	**85**

Source: National statistical institute, Greece, 1998

Child labour and schools

Working children tend to be anti-school. In many cases, the rejection can be traced back to the family's disregard for earning formal qualifications. Knowledge learning is seen as unnecessary, paper qualifications as pointless, while growing up too soon makes it hard for children to relate to their peers, with whom all they ultimately have in common is their birth year. These children go through their own school lives with little or no awareness of the relationship between learning and socialization. If socialization is the product of learning, language acquisition, exposure to the new and speculative, the school is the enabling environment for the experience. But the two functions are seen or presented as completely separate: on one hand, the unpalatable grind of learning, and on other, the school as a poor place for socialization running a poor second to out-of-school activities. This is a destabilizing experience for children. Just at the age when they need to forge an identity, a complete disengagement occurs between the three environments in which they interact – work and the neighbourhood, family, school – which are meant to provide constant bearings for development in their teenage years. The danger then is that children will construct their own reality around substitute values – a football team, a pop star, the local "crew", etc. – lose touch with the core values, and be drawn into a worrying process of exclusion.

Child labour: possible ways forward

Child labour fills the interstices of a fragmented labour market, and is especially prevalent in various sectors of the informal economy. Less than employment proper, it tends to take the form of odd jobs, disparate tasks that can be performed by children prompted for a variety of reasons to enter the labour market at a very early age.

But it would be wrong as some do to see every situation where a child works independently or with adult assistance as exploitation. Not all work situations are exploitative per se, but then nor is all work either useful or instructive. If we place child labour on an axis, bounded on one side by exploitative work and on the other work that does not necessarily stunt the child's development or interfere with their education, a vast intermediate area is revealed of many jobs that combine good and bad points lying between the two extremes: not all work done in family businesses is necessarily good, any more than that done for non-family employers is bad by definition. Child labour raises issues about the condition of children and pre-teens, but also about the hypocrisy of some governments which may fund child and adolescent welfare campaigns, yet fail to introduce any serious prevention policies or effective action plans. As recent analyses have shown, child working cannot be taken out of its social context: school, family, the labour market, low incomes, the new issues raised by a complex environment, growth, training needs, the work "culture", the community and quality of life. Changes in training provision, labour and consumer markets, cultural models that lead to social and area stratification, necessarily shape patterns of under-age labour and the prospect of a development at odds with itself in an advanced industrial society containing both old and new forms of poverty, old and new needs, needing to be addressed in different ways (Patrizia Fulcinetti, *La fiaba non c'è, Valore scuola*, No. 8, May 2004). It is clear that in such a context, we are set to see a rise in children being turned off by school, absenteeism and failed school completion. If competition and "family choice" become the be-all and end-all of the school experience, the fate of thousands of children and adolescents looks already sealed. ■

Recently adopted measures

Directive 2006/25/EC on Physical Agents (artificial optical radiation)	
Legal basis	Article 137 of the Treaty, to implement improvements of the working environment to protect workers' health and safety.
Background	• Negotiations finished in October 2004 and political agreement was reached at the Council of Ministers in December 2004. The proposed Directive had its debate and vote on amendment by the EP in early September 2005. The main amendment was to remove the provisions on natural radiation. • At the Conciliation Committee meeting on 6 December 2005 it was agreed that the Directive would only cover optical radiation from artificial sources. • The Directive 2006/25/EC was published in the *Official Journal* of the EU on 27 April 2006. Member States have four years to bring it into practice. This Directive is the last in a series of four aimed at protecting workers from the dangers of various "physical agents" (the three others are on exposure to noise, to vibrations and to electromagnetic fields).
Key provisions	The new proposal introduces provisions on risk assessment, control of exposure, health surveillance and information, instruction and training. The Directive is based on the limit values incorporated in the guidelines issued by the International Commission on Non-Ionising Radiation Protection (ICNIRP).
The union approach	The ETUC had warned MEPs and the Council that these amendments will undermine the scope of the directive by putting natural UV radiation outside it. The Directive will now cover only damage to eyesight from artificial radiation and lasers, leaving the damaging effects of sunshine (cancer, eye and skin diseases) completely uncovered. Exposure to sunshine can be lethally damaging to the health of workers in many sectors (building, fishing, farming, tourism, etc.), as the European and WHO statistics on skin cancer mortality show.
More details	http://hesa.etui-rehs.org > Main topics > Solar radiation ETUI-REHS contact: Roland Gauthy, rgauthy@etui-rehs.org

Directive 2006/42/EC on Machinery	
Legal basis	Article 95 of the Treaty, to facilitate the free movement of goods or services between Member States by removing technical barriers to trade.
Background	• Proposals for a Third Amendment to the Machinery Directive were published in the *Official Journal* of the EU on 26 January 2001, and broadly consisted of improvements designed to simplify and clarify the existing Directive. • On 24 September 2004, the Competitiveness Council reached a political agreement on the third amendment proposal. • The Directive has been approved and was published in the Official journal on 9 June 2006. The Directive came into force on 29 June 2006. • From 29 June 2006, Member States have two years to transpose the Directive into their domestic legislation. It will be applicable from 29th December 2009. Until that date, the current Machinery Directive 98/37/EC will continue to apply.
Key provisions	The definition of machinery has been revised to provide certainty in the law for users, by introducing the concept of "partly-completed machinery" into the new text. The Directive also emphasizes the key part played by risk assessment in safe machinery design, and tightens up the requirements on the contents of instruction handbooks.
The union approach	The ETUC response to the Commission sent in March 2004 makes a series of recommendations for integrating workers' experience into machinery design and on the definition of technical standards.
More details	ETUI-REHS contact: Stefano Boy, sboy@etui-rehs.org

Measures in the pipeline

EU Occupational Safety and Health Strategy 2007-2012	
Legal basis	Article 138 of the Treaty, which provides for the Commission to consult the social partners on the possible direction of Community action before putting forward social policy proposals.
Background	By the end of 2006, the Commission will publish its proposal for a new European Occupational Safety and Health Strategy to run from 2007-2012. This will succeed the current strategy *Adapting to change in work and society: new Community strategy on health and safety at work 2002-2006.*
Developments	This Strategy is currently being developed by a dedicated working group of the EC's tripartite Advisory Committee for Safety and Health at Work (ACSH) and health experts.
The union approach	The ACSH Workers Group spelled out its demands in June 2006 in the ETUI-REHS publication entitled *New scope for the Community health and safety at work strategy 2007-2012*. These demands focus on two key hazards: musculoskeletal disorders (MSD) and chemicals. Trade unions are against any "break from introducing new legislation" and are calling for European legislation to be beefed up at a time when a revision of key directives is under way. Another key plank of union demands is the right to collective representation in health and safety for all workers.
More details	http://hesa.etui-rehs.org > Main topics > Community strategy ETUI-REHS contact: Laurent Vogel, lvogel@etui-rehs.org

EU Chemicals Strategy: REACH	
Legal basis	Articles 94 and 95 of the Treaty on the establishment and functioning of the internal market.
Background	The EC adopted its proposal for the new scheme, REACH (Registration, Evaluation and Authorisation of Chemicals), to manage the manufacture, importation and supply of chemicals in Europe on 29 October 2003. The proposal was forwarded to the EP and EU's Council of Ministers for adoption under the co-decision procedure.
Developments	• In December 2005, Member States achieved political agreement on REACH. This paves the way for the Council and the EP to adopt the Regulation. • On 27 June 2006, the European Council formally adopted its common position. On the most controversial point in this legislation, the authorisation procedure for the most hazardous substances – the Council decided to authorise the extended use of these substances as long as they are subject to "adequate controls" and that replacing these most worrying substances is encouraged through the use of less harmful solutions. • The second reading at the EP is planned for November 2006. • The Commission anticipates that REACH will come into force in 2007, with the European Chemical Agency being up and running in 2008.
The union approach	On authorisation, the ETUC backs the principle of compulsory substitution for substances of high concern (carcinogenic, mutagenic, toxic, persistent and bioaccumulative). This position is in keeping with better health protection and is consistent with European legislation on the protection of workers against carcinogenic substances.
More details	http://hesa.etui-rehs.org > Main topics > Chemicals ETUI-REHS contact: Tony Musu, tmusu@etui-rehs.org

	Revision of the Working Time Directive (amending Directive 93/104/EC)
Legal basis	Article 137, to implement improvements of the working environment to protect workers' health and safety.
Background	The Commission published proposals to amend the Working Time Directive on 22 September 2004, and revised proposals on 31 May 2005 (following the First Reading from the Parliament). The proposals must be agreed by Council and Parliament in co-decision.
Developments	• In first reading, the EP had voted to end the use of the opt out from the maximum 48 hour working week. A number of Member States, led by the UK, insist however to maintain national derogations from the principle. • The November 2006 Employment Council was unable to achieve a compromise. The main points on which deep divisions remain are preservation of national opt outs from and methods of calculating the maximum weekly working time (per contract or per worker).
The union approach	The ETUC's positions on the main points at issue: • scrap the opt out clause; • on-call duty must be treated as working time in line with ECJ rulings; • the four month reference period must be kept for calculating the maximum weekly working time.
More details	www.etuc.org/a/1839 ETUI-REHS contact: Laurent Vogel, lvogel@etui-rehs.org

	Revision of the Carcinogens Directive (amending Directive 90/394/EEC)
Legal basis	Article 137, to implement improvements of the working environment to protect workers' health and safety.
Background	In its communication *Adapting to change in work and society: a new Community strategy on health and safety at work 2002-2006*, the Commission announced its intention to propose extending the scope of the Directive on carcinogenic agents. The Commission pointed out the need of adapting existing directives to changes in scientific knowledge, technical progress and the world of work.
Developments	The Commission launched the first phase of social partner consultations in March 2004, inviting them to answer four questions: 1. Should the scope be extended to include substances that are toxic to reproduction? 2. Should the existing exposure limits (benzene, vinyl chloride monomer and inhalable hardwood dust) be revised? 3. Should exposure limits be set for other toxic substances and carcinogens? 4. Should indicative exposure limits be established to make the process simpler and more adaptable to technical progress? The second phase, long-awaited by the social partners, has still not been launched by the Commission.
The union approach	In its response to the Commission, the ETUC calls for: • the directive to be extended to include reprotoxins; • the "occupational exposure limits" (OELV) fixed for the three carcinogens already covered by the Directive to be reviewed regularly to take account of the latest technical and health-related data; • OELVs should be adopted for other substances than those already included in the current Directive; • an accelerated adoption of indicative exposure limits, considering the high number of substances already classified as carcinogens by EU Member States.
More details	http://hesa.etui-rehs.org > Main topics > Chemicals ETUI-REHS contact: Tony Musu, tmusu@etui-rehs.org

	Social partner consultation on protecting workers from MSD
Legal basis	Article 138 of the Treaty, which provides for the Commission to consult the social partners on the possible direction of Community action before putting forward social policy proposals.
Background	The Community obligations on protecting workers from musculoskeletal disorders (MSD) are fulfilled at present through the general requirements of the 1989 Framework Directive plus a string of individual directives (workplaces, work equipment, manual handling of loads, VDU and vibrations). A Community initiative on preventing MSD was provided for in the health and safety strategy 2002-2006.
Developments	The European Commission launched a consultation of the European social partners on 12 November 2004 for their opinion on a possible specific Community initiative on work-related MSD. The Commission plans to start phase two of the consultations before the end of 2006.
The union approach	In its reply to the Commission in March 2005, the ETUC called for an MSD Directive based on a whole-body (rather than areas of the anatomy), multidisciplinary and participatory approach to the problem.
More details	http://hesa.etui-rehs.org > Main topics > MSD ETUI-REHS contact: Roland Gauthy, rgauthy@etui-rehs.org

Forthcoming

	European Commission's proposal for a Globally Harmonized System of Classification and Labelling of Chemicals
Background	The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) is a United Nations scheme designed to make sure that across the world, the same criteria are used to come up with classifications of harmful effects of chemicals and that they are labelled in the same way.
Developments	The GHS would provide: • harmonized criteria for classifying substances and mixtures according to their health, environmental and physical hazards; • harmonized hazard communication elements, including requirements for labelling and safety sheets. On 21 August, the Commission put forward a proposal for a Regulation which would introduce the GHS criteria into Community law. The consultation procedure closed on 21 October 2006.
More details	ETUI-REHS contact: Tony Musu, tmusu@etui-rehs.org

	Draft directive to simplify and rationalise the national implementation reports on the 1989 Framework Directive
Legal basis	Article 137 (2) of the Treaty.
Background	The 1989 Framework Directive on Health and Safety and its daughter Directives contain provisions requiring Member States to report to the Commission on the practical implementation of a number of occupational safety and health Directives at either four or five yearly intervals. This proposal is the first occupational safety and health proposal to come from the EC's simplification plan from their Communication, *Implementing the Community Lisbon programme: A strategy for the simplification of the regulatory environment* published in October 2005. The proposal has completed two stages of social partner consultation, at the European level, in 2005. The European Commission's Advisory Committee on Safety and Health at Work has also approved the proposal earlier this year.

Developments	The proposal seeks to simplify and rationalise the reporting process by: • aligning reporting cycles from four to five years so reports will have to be submitted less frequently; • synchronising reporting cycles so that all reports will be due at one time; • developing a standard reporting structure with two parts consisting of a general and specific section. The proposal will extend the reporting obligations to include Directives 2000/54/EC and 2004/37/EC on biological agents and carcinogens respectively. Council negotiations are expected to commence during the Finnish Presidency.
The union approach	In its response sent to the European Commission on 25 May 2005, the ETUC stresses that "the current system is inadequate" because it provides for publication of reports at different intervals and does not allow the interaction between the directives to be taken into account. The trade union body hopes that having a single report will enable an in-depth evaluation to be done of each Member State's overall health and safety at work strategy. But the ETUC will not accept a rationalisation that rolls back European OSH legislation. Its response takes a firm stand against any attempt to simplify or unpick the 1989 Framework Directive on promoting workers' safety and health at work.
More details	http://hesa.etui-rehs.org/uk/newsevents/files/Consultation-SS-CES-EN.pdf ETUI-REHS contact: Laurent Vogel, lvogel@etui-rehs.org

New scope for the Community health and safety at work strategy 2007-2012

Laurent Vogel, Researcher,
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Pascal Paoli,
Health and Safety at Work Specialist

The European Commission will unveil its new health and safety at work strategy for 2007-2012 in the coming months. Europe's trade unions mean to help inform the debate on it. Through their input to a document drawn up in the "Workers Group" of the Advisory Committee on Safety and Health at Work, they spelled out what unions expect from the future Community strategy. That document has been published by the ETUI-REHS Health and Safety Department.

The brochure reviews the failings of the strategy pursued from 2002 to 2006 to recommend a new strategy built around practical initiatives and a definite timetable. The publication makes the union case against any "break from introducing new legislation". The Community agenda must put a central focus on two key risks: musculoskeletal disorders (MSD), the main cause of illness related to a pressurized work organisation, and chemicals, a major cause of work-related health problems, where the regulatory framework is in the midst of a far-reaching overhaul.

The right of all workers to collective representation in health and safety is another focus of trade union demands. The measures needed to address the daunting challenges of EU enlargement also attract the unions' attention.

The second part of the brochure gives a capsule view of the surveys done on the health impact of working conditions in the EU.

2006, 48 pages, 21 x 29.5 cm, ISBN : 2-87452-033-0

Also published in French as: *Nouvelles perspectives pour la stratégie communautaire de santé au travail 2007-2012*
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The English and French versions can be ordered at the ETUI-REHS: ghofmann@etui-rehs.org or http://hesa.etui-rehs.org > Publications

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Crime and non-punishment

How the justice system failed the Marcinelle dead

Tutti Cadaveri,
Le procès de la catastrophe
du Bois du Cazier à Marcinelle
(The Bois du Cazier mine disaster trial)
by *Marie Louise De Roeck,*
Julie Urbain and Paul Lootens,
Editions Aden, collection EPO,
Brussels, 2006, 280 pages

There are few enough books on the history of workplace health and safety, and almost none on what happens when matters come to trial. And yet, questions have to be asked about what makes the justice system so purblind and enfeebled when some human beings are killed in others' drive for profits.

Tutti Cadaveri examines the trial that followed the Marcinelle mining disaster in Belgium. On 8 August 1956, fire swept through the Bois du Cazier coal mine, killing 262 miners. Only 13 escaped alive. In the resulting prosecution, the trial court acquitted all the accused on 1 October 1959. An appeal was lodged, and on 30 January 1961, the court gave the mine manager a gentle slap on the wrist (6 month suspended jail sentence and a 2000 Belgian franc[1] fine), and let all the other accused off scot-free.

The great value of this book is that it is less an outraged chronology of the facts than an analysis of what it was that enabled those responsible for the deaths of 262 miners to go all-but unpunished. Its explanations go beyond the specific trial to give greater insights into why the administration of justice has failed in many other cases.

Among the various factors in play in this case were:

- The management of mine safety was overseen by a public inspection agency – the Mines Inspectorate – which was part of the Ministry for Economic Affairs. Its remit was couched in ambiguous terms: to ensure safety while promoting the profitable operation of mines. The agency's role was muddied by the conflicting pressures of profit and safety. Especially as in 1956, the industry was in decline and mines were struggling to stay afloat.

- There was a mutual professional protectionism between the mining engineers working for the public inspection agency and the engineers working for the mine owners, which had been prompted by past prosecutions, and led to the forming of professional associations, one of whose aims was to avoid any criminal liability from attaching to mining engineers.

- The court's trial of fact was based on technical expert evidence (mostly informed by the mines inspectorate's accident investigation report). A narrowly technical approach precluded any discussion of organisational and economic factors, or labour relations. The entire trial was focused on identifying direct responsibility for technical decisions that produced the disaster. Raising production targets in increasingly unsafe conditions, the lack of proper training for miners, the irresponsibility of managers who consistently put profit before safety – all these factors were sidelined from the legal debate. A very narrow legal conception of what constitutes manslaughter and a grossly exaggerated purely technical approach worked in concert to the same end.

  One example speaks volumes. One of the things that caused the fire was the use of oil as a means of fluid power. The oil line ran between the power cables. All the defence's engineer expert witnesses told the court that this was not known to be a danger when the accident happened, and the court uncritically accepted this claim. The ECSC experts took the same line. When questioned by the presiding judge, a prosecution witness said "It has been known for 55 years that split oil is ignited by a spark. The diesel engine is proof of that". The presiding judge pressed on: "Yes, but was it known that oil burned before le Cazier?". The witness' reply was as scathing as it was unavailing: "Your Honour, I have just come back from Greece, where I saw oil lamps that were over 4000 years old!". The trial court's decision to acquit makes express mention of the mutual professional protectionism between the engineers, whom it places beyond criticism "having found that scientifically knowledgeable and skilled engineers would have acted as did the accused".

- The victims' families pressing a civil claim in the case took the opposite tack by trying to put the disaster in context. Their lawyers called witnesses to give evidence of work intensification, the lack of training, the hopelessly muddled passing-on of information, management authoritarianism and arrogance, the failings of the inspection services, past accidents from which no lessons had been learned. All to no avail. This unwonted intrusion of miners' advocacy in court did not suit the machinery of justice. The facts they produced were held inadmissible.

- The miners' strategy itself was undermined by the lukewarm attitude of a section of the trade union movement. The authors point out that the trade union press carried little coverage of the trial. There was no all-out protest action. There are two reasons why. The miners who died in Marcinelle were of twelve different nationalities, mostly Italian. Belgian workers had been shunning coal-face work since the end of World War Two. Rather than improve pit safety and working conditions, the government launched an immigration drive.

[1] Equivalent to about €50. Allowing for inflation, it is worth a little less than €300 in purchasing power terms in 2006.

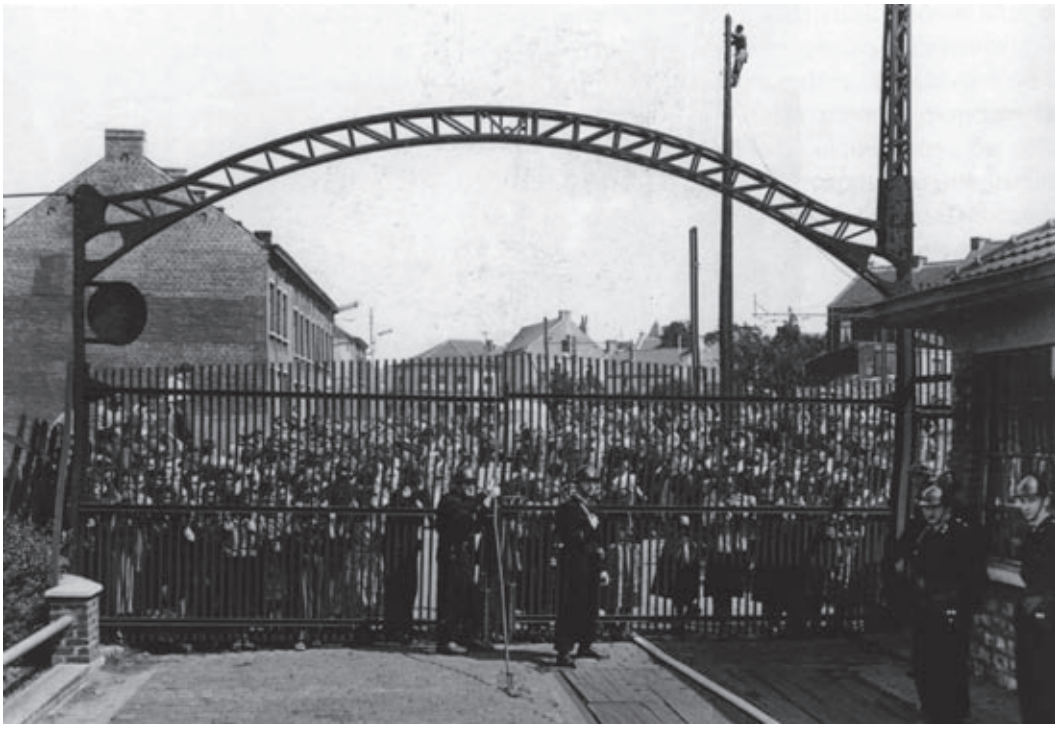

Photo : Camille Detraux

Families at the Cazier gates, 8 August 1956

Immigrant workers tended to have little representation in trade union policy bodies. Joint action with employers to keep pits open often took precedence over miners' demands for better working conditions. A divided union movement also played its part. The initiative to set up a group of lawyers for the miners came from a communist group whose roots lay in the anti-Nazi resistance. It won support from Italian Christian trade unionists (ACLI) but, in the cold war era, there was no common strategy with the majority socialist trade union, and the Belgian Christian trade union did not intervene in the trial.

Is this just a historical chronicle that opens a door onto the past? The wildcat strike that rocked the Cockerill (Arcelor group) plants in the Liège region in September 2004 shows a little bit of history repeating. Following a fatal accident, a court handed down suspended prison sentences to two workers, while letting all the management and supervisory staff off scot-free. Despite the legislative reforms, we still face the same disregard from the justice system, the same narrowly technical approach to the causes of accidents and, in the final analysis, the same old-boy net between those holding the reins of power.

Belgium recently commemorated the 50th anniversary of the Marcinelle mining disaster. Moving public tributes were paid. This book's conclusions do a creditable job of setting the record straight. They point out that under Belgian law, workers who suffer a work accident or occupational disease cannot sue for compensation on the basis of their employer's civil liability. Belgium is now the only European Union country to deprive workers of the benefit of ordinary law. A situation like that holds back prevention. It has been regularly challenged, not least by asbestos victims. As Paul Lootens, one of the book's authors and a trade union official, puts it, an overhaul of the century-old Work Accidents Act would be "the greatest justice that could be done for the Bois du Cazier dead today".

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Quick picks

Europe is the main focus of the latest issue of *New Solutions*, the occupational health policy journal put out by the University of Massachusetts at Lowell (USA). The issue was produced in collaboration with our Department, and features four articles reviewing recent developments in health and safety in Europe.

More information: www.baywood.com/journals/PreviewJournals.asp?Id=1048-2911

Asbestos lobby wins again

The asbestos lobby has won another victory. Chrysotile, the fibre that accounts for 94% of the world asbestos market, will not be added to the Rotterdam Convention's "watch list" of hazardous substances. The United Nations Environment Programme (UNEP) has decided to put off a decision until the parties' next meeting in 2008 due to the opposition of the main chrysotile producing countries. Canada's case based on "domestic policy concerns" received backing from India, Russia and Kyrgyzstan.

The idea of the Rotterdam Convention, promoted by the UNEP, is that hazardous chemical exporters must inform importing States about the toxicity of their products and get their consent prior to import. This gives developing countries in particular the power to decide which potentially hazardous chemicals or pesticides they want to receive and to refuse those they cannot manage safely.

This has led chrysotile producing countries to consistently oppose adding the fibre to the list, which already contains 39 industrial chemicals, pesticides and pesticide preparations, all of them extremely hazardous and subject to the "prior informed consent procedure" – along with the other four asbestos fibres...

The Canadian asbestos industry is triumphant. "This is good news", pronounced Clément Godbout, President of the Chrysotile Institute, a body that links together Quebec trade unions and producers. "Adding chrysotile to the list would have amounted to a ban, which is not necessary because we use it in a safe manner."

Earlier this year, however, the International Labour Organisation (ILO) adopted a resolution calling for the elimination of chrysotile asbestos in all its forms. A resolution that reflects the concerns of the WHO: chrysotile kills tens of thousands of people in the world each year from lung cancer or pleural mesothelioma.

In February, the panel of experts on whose opinions the Rotterdam Convention Member States rely had also concluded that chrysotile asbestos met the criteria for inclusion on the red list – some thirty countries worldwide have seen fit to ban it.

Ban Asbestos, an international association working for a worldwide ban on asbestos, sees the extra two years' delay won on Friday in Geneva by the asbestos lobby as "a right to kill in the cause of free trade". Laurie Kazan Allen of the International Ban Asbestos Secretariat said that "at least 200,000 workers will be killed by asbestos disease before the proposal [to add chrysotile to the Rotterdam Convention list] can be tabled again in 2008". ■

REACH must give workers better health protection

The European Trade Union Confederation (ETUC) hosted a conference on 19 September 2006 on how REACH ties in with European health and safety at work legislation. With scrutiny of the draft regulation coming up at the second reading, set for mid-November, the ETUC reminded Parliament and Council that REACH must hang together with existing Community laws if it is to protect workers.

Under REACH, authorisations can be granted to use substances of very high concern like carcinogens. But the European Carcinogens Directive says employers must replace these substances by safer alternatives. Are we heading for a clash between these two sets of laws?

This kind of issue on how REACH links up with Community health and safety at work legislation loomed large in the discussions between the 160-plus attendees, who included representatives from the European Parliament, Council, Commission, industry and NGOs.

The ETUC argued that REACH must deliver real synergies with existing Community directives that are meant to protect workers who are exposed to chemicals. The ETUC has consistently backed Parliament's approach on how the substitution principle fits into REACH. "Authorisation for a substance of very high concern must always be refused where a safer alternative is available", argued John Monks, ETUC General Secretary, in his closing speech. The ETUC also believes that, properly applied, the substitution principle will promote innovation and employment in the European chemical industry, and make it more internationally competitive. Speaking to the officials of the European institutions, John Monks added: "REACH must not take away from the Member States' ability to impose more stringent health and safety at work measures at the national level than those laid down at Community level. That would be an unacceptable step back for Europe's workers." ■

Working time: UK guidelines infringe Community law

Under the Working Time Directive, Member States are required to take the measures necessary to ensure that every worker is entitled to a minimum daily rest period of 11 consecutive hours per 24-hour period and a minimum uninterrupted rest period of 24 hours plus the 11 hours' daily rest in each seven-day period.

The Directive was transposed in the United Kingdom by a statutory instrument, Working Time Regulations 1998 (WTR). In order to help people understand the WTR, the Department of Trade and Industry published a set of guidelines. According to those guidelines, "employers must make sure that workers can take their rest, but are not required to make sure they do take their rest".

As it took the view that the guidelines endorse and encourage a practice of non-compliance with the requirements of the Directive, the Commission initiated proceedings before the European Court of Justice.

The Court first pointed out that the purpose of the Directive is to lay down minimum requirements to improve the living and working conditions of workers by ensuring that they are entitled to minimum rest periods. Those principles constitute particularly important rules of Community social law from which every worker must benefit as a minimum requirement necessary to ensure protection of his safety and health.

In order to ensure that the rights conferred on workers are fully effective, Member States are under an obligation to guarantee that the right to benefit from effective rest is observed. A Member State which indicates that an employer is nevertheless not required to ensure that workers actually exercise such rights does not guarantee compliance with either the Directive's minimum requirements or its essential objective.

By providing that employers must merely give workers the opportunity to take the minimum rest periods provided for, without obliging them to ensure that those periods are actually taken, the guidelines are clearly liable to render the rights enshrined in the Directive meaningless and are incompatible with its objective. The Court therefore ruled that the United Kingdom has failed to fulfil its obligations under the Working Time Directive. ■

Sweden: new right-wing government scraps National Institute for Working Life

Ignorance, they say, is bliss. History tells of governments that have engaged in book-burning. Sweden's new right-wing coalition government brought to power in the September 2006 elections has announced that the National Institute for Working Life (Arbetslivsinstitutet) is to be shut down. The Institute does an irreplaceable job of monitoring and analysing working conditions, and spreading knowledge on how to improve them. It is also a key participant in international co-operation programmes both in the European Union and with other partners.

The Government is spinning the closure as part of general spending cuts. The reason behind this bolt from the blue is opposition among a large section of Swedish employers to independent research being done into working conditions. The new government's social programme is all about deregulating working conditions, extending contingent employment, and enforced flexibility directed against workers. Unemployment benefits will be cut to force the spread of contingent employment, while the ruling classes will enjoy rising incomes: wealth tax and any form of land tax will be phased out. This kind of policy heralds much darker days for working conditions.

Effectively, the new government which took up office at the start of October has decided to smash the thermometer rather than diagnose the sickness. The disbanding of one of the main working conditions research institutes is a bleak situation. Those of our readers who want to protest against this measure can find details of who to write to in the News section of our website. ■

HESA NEWSLETTER

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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