Restructurings: workers' health at crisis point
Guide
A classification of methods for assessing and/or preventing the risks of musculoskeletal disorders
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This booklet presents 15 methods for assessing and/or preventing musculoskeletal disorder risks (MSDs) in the workplace. The methods are classified into three categories based on the abilities required to use them: screening – analysis – expertise. The ETUI’s aim with this publication is to help get workers and workers’ reps involved in detecting and preventing MSDs.

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**Newsflash...**

**ETUI Health and Safety Department moves into working conditions**

The European Trade Union Institute's (ETUI) Health and Safety at Work Department is to bring its research and expertise to bear on the huge area of working conditions. It's a natural development for what started out as the Trade Union Technical Bureau (TUTB), turned into the ETUI Health and Safety Department in 2005, and has now become the Working Conditions, Health and Safety Department.

"We have consistently argued right since the TUTB was founded in 1989 that workplace health and safety was not just a technical thing unrelated to changes in working conditions and the labour market", explains Department Director Laurent Vogel.

Broadening the Department’s remit also reflects the changing, more service-oriented world of work, and workers’ new aspirations, especially for the quality of work life. The new focus should also enable the ETUI to better meet the demands of European unions dealing with emerging workplace psychosocial risks (like stress, harassment, and so on).

"Sticking strictly to ‘health and safety’ issues restricted the scope of what we could do to a limited number of industry federations. Branching out into working conditions should enable us to run projects with a bigger number of federations", says Laurent Vogel.

*Source: ETUI*

**Germany continues to import asbestos fibres**

In 2010, Germany imported around 60 tonnes of asbestos fibres on behalf of the companies Dow Chemical and Solvay. These data are contained in a report submitted by the German government to the European Commission. A commercial firm in Hamburg imported 66 tonnes of asbestos on behalf of the Dow Chemical plant based in Stade (Lower Saxony) and a smaller quantity of a few tonnes was imported by the multinational Solvay for its plant in Rheinberg (North Rhineland-Westphalia).

For Laurent Vogel, Director of ETUI’s Department on Working Conditions, Health and Safety, this report confirms that certain Member States are using Annex XVII of the REACH Regulation to continue their asbestos imports. In his opinion, it is the responsibility of the European Commission to react to this situation and to speed up the process that will put an end to this derogation. Laurent Vogel adds that the European Union should clarify its position. It is illogical to support a global prohibition on asbestos while tolerating imports of asbestos fibres.

The text of Annex XVII of REACH, which lays down the restrictions applicable to the manufacture, placing on the market and use of certain dangerous substances, establishes a derogation that allows Member States to authorise the placing on the market and use of diaphragms that contain chrysotile for existing electrolysis installations. This measure does not mention the possibility of authorising the import of fibres. Of the 27 European Union Member States, 23 have not made use of this derogation. The industry has developed alternative technologies that make it possible to manufacture chlorine without using asbestos.

*Source: ETUI*

**The chemical hazards of wind turbines**

Last February, the Danish press reported on workers suffering a range of diseases attributed to exposure to styrene. This chemical is classified as "possibly carcinogenic to humans" by the WHO, but makes up 25 to 50% of the polyester resins used by the Danish company LM Wind Power to produce wind turbine blades.

The ailing workers complain of respiratory problems, especially asthma attacks, as well as memory loss, diarrhoea, headaches and other symptoms like excessive sweating.

A Ministry of Labour report released in March reveals that the Labour Inspectorate “responded” 52 times between 2000 and 2010 on issues with chemicals used in LM Wind Power’s plants and that it received 786 complaints from employees – 323 relating to diseases and 463 to accidents – during the same period.

*Sources: Planet Labor, www.rechargenews.com*
Jeans sandblasting: a book and a call to action

The International Textile, Garment and Leather Workers’ Federation (ITGLWF) issued a call to clothes industry brands and retailers on 26 May to ban sandblasting of jeans, a hazardous industrial process that can cause potentially fatal diseases in workers. Ten international businesses have signed up to the call.

The joint call from ITGLWF and apparel buyers and manufacturers says the process can “be extremely damaging to the health of workers if proper safeguards are not followed, and can lead to a disabling and potentially fatal lung disease called silicosis”.

The ETUI contributed to a recently-published book about the problems of jeans sandblasting. The book – published in English and Italian – examines the tragic deaths of 50-odd workers in Turkey’s jeans factories. The authors argue that silicosis is an extremely widespread occupational risk. In the United States, for example, a million workers are exposed to it, and even today silicosis still causes around 300 deaths a year in the US. In addition to the jeans, construction, industrial glass and ceramics industries, silica is also wrecking the health of workers in firms making dental prostheses and even tatami mats.


Belgium: prevention and inspection service failings

Appearances are deceptive might be the best way to summarize the findings of a study by the Confederation of Christian Trade Unions (CSC) on work accidents in Belgium. While the official figures point to a steady decline in the number and frequency of work accidents, this does not necessarily mean that prevention is improving. In fact, the number of serious accidents leaving victims with a permanent disability is going up. In 2009, 15,891 people were left permanently disabled after a work accident in Belgium – and this is only in the private sector. The study shows that the risk of serious injury to manual workers has increased in the past thirty years. In 2009, there were 9.3 serious or fatal accidents per 1000 workers compared to 7 per 1000 in 1980.

The probability of being seriously or fatally injured is greater in firms with fewer than 50 workers which have no union representation on health and safety. So, 11.8% of fatal accidents occur in firms with between 1 and 4 workers, which actually account for 9.5% of the total workforce.

The study shows that health and safety inspection in Belgium is at crisis point. Despite the different governments’ promises, the number of inspectors has declined over the past twenty years while their tasks have grown in number and complexity.

Source: ETUI

WHO prioritises environmental and occupational cancer risks

“Decreasing, and eventually eliminating the exposure to environmental and occupational carcinogens is the most effective way to prevent a number of cancers”, according to the World Health Organization (WHO) in a press release following a meeting in Asturias, Spain, 17-18 March 2011.

The WHO has put environmental and occupational factors in first place in the primary prevention of cancer as the outcome of this meeting and the launch of the Asturias Pledge.

“Many environmental and occupational factors, including certain chemicals, radiation and airborne particles, can cause cancer”, said the WHO’s Director for Public Health and Environment, Dr Maria Neira.

“These cancers could be prevented and reduced by changes in national and international policy to limit people’s involuntary exposure to these substances.”

Source: WHO
Newsflash 3/3

REACH: France and European Commission at legal loggerheads

The method for calculating concentrations of substances of very high concern in articles recently published in France’s official gazette puts the country at odds with the European Commission. The French method of calculation claims to provide better protection for consumers.

The REACH Regulation requires producers and importers of articles – cars, toys, furniture, etc. – that contain very hazardous chemicals in concentrations above 0.1% to notify the fact to the European Chemicals Agency (ECHA) and consumers who request it.

France has not seen eye to eye with the European Commission on how to interpret the 0.1% threshold for some years. Should it apply to the total weight of the article or the weight of each of its integral components? It makes a big difference to consumers as to whether they get told about the presence of a highly toxic chemical in a car based on its total weight or the weight of the steering wheel, upholstery, door handles, etc.

The European Commission thinks the former, whereas France, backed by six other countries*, favours the latter as being better for consumers and their right to be informed about the toxicity of the things they buy.

On 8 June this year, the French official gazette, Legifrance, published the calculation rule that France will apply, which is not the same as that put out by ECHA in a guidance document last April. Manufacturers will therefore face different REACH implementing rules in France compared to the rest of the European Economic Area. The Commission’s concern is to harmonize market rules, and so is not happy about this, which means that France could find itself up before the European Court of Justice.

* Germany, Austria, Belgium, Denmark, Sweden and Norway

Source: ETUI

UK: government reforms health and safety regulations

Following Lord Young’s recommendations in October 2010 regarding simpler regulations for health and safety at work, which the Prime Minister accepted, the government launched its reform of health and safety at work in March 2011. The main theme is the reduction of unnecessary red tape that businesses have to deal with and support for growth. There are three general desires: first, take the increased health and safety burden away from compliant businesses and concentrate efforts on high-risk locations. Thus, the number of inspections across the country should be reduced by at least one third. “Responsible” employers will no longer face automatic health and safety inspections; inspectors will concentrate their efforts on high-risk locations like major energy facilities, and on rogue employers who are putting the safety of their staff and the public at risk.

The second aspect of the reform is to eliminate “cowboy” health and safety consultants who are unqualified but are responsible for many of Britain’s most inappropriate health and safety recommendations. A new register of qualified consultants will be made available to businesses.

Third key theme – making health and safety regulations simpler. The government is therefore launching a review of all existing health and safety law with a view to scrapping measures that are not needed and put an unnecessary burden on business.

The Unite union condemned a thinning-down of the law which could increase risks for workers. For the Trades Union Congress, the removal of inspections will encourage businesses to be less watchful, increasing the risk of accidents.

Source: Planet Labor

Over 100 million children in dangerous jobs

Over 115 million of the world’s children and young teenagers, or more than 7% of the total, are engaged in dangerous and life-threatening jobs, the International Labour Organisation (ILO) has said. Overall, there are 215 million child labourers worldwide, says the global labour standards body. A new ILO report, “Children in hazardous work: what we know, what we need to do”, cites studies from both industrialised and developing countries indicating that every minute of every day, a child labourer somewhere in the world suffers a work-related injury, illness or psychological trauma.

The report also says that although the overall number of children aged 5 to 17 in hazardous work declined between 2004 and 2008, the number aged 15-17 actually increased by 20% during the same period, from 52 million to 62 million. “Despite important progress over the last decade, the number of children in child labour worldwide – and particularly in hazardous work – remains high”, said ILO director-general Juan Somavia.

Source: ILO
Editorial
2011 – the "Precariam spring"

Laurent Vogel
Director, Working Conditions,
Health and Safety Department, ETUI

Over the last twelve months, the political vocabulary of our societies has added new adjectives, places and names. Who now could not be aware of the indignados of Madrid’s Puerta del Sol, or the aganaktismenoi on the streets of Greece? Tahrir Square has overflowed Cairo’s borders and seems to stretch to Damascus and Tel Aviv. The self-immolation of Mohamed Bouazizi in Sidi Bouzid in Tunisia in December 2010 sparked a wave of uprisings. In the southern Mediterranean, they have already caused huge political turmoil. Concerted action in European countries has been patchier. But their common feature is a new generation bursting onto the political scene with a clear distrust of traditional forms of representation.

Looking beyond the deep-seated differences that characterize developments between countries, there is no ignoring that most of the millions of people who have brought this movement into the world are young and urban. They are what some sociologists are calling the “precariat”, connected by facing increasingly precarious employment prospects in a context of widening social inequalities.

The experience of precarious work is a potential focal point, although work has seldom been a central issue. That in itself is an interesting paradox: precarious employment both contributes to the formation of a social and political identity; yet its precarious – possibly sporadic – nature does not explicitly feature as central to that identity. It embraces a wide range of employment situations with a number of common features.

Nearly 80% of Europe’s workers are employed under permanent contracts. This figure falls to about 50% for employees aged under 25, for whom, the probability of having no employment contract at all is 10.6% (against 5.6% for all employees), that of having a temporary contract is 25% (against 12% for all employees), that of working for a temp agency is 3.8% (against 1.5%). These figures lift only a corner of the veil of precariousness, describing employment in terms of specific legal forms. Other facets of precariousness can be at least as important: the threat of unemployment, deskilling (being overqualified for a first job or a new job after time unemployed), poor collective rights, etc. Experiencing this sort of insecurity impacts on people’s lives in ways that go beyond the material aspects of an insufficient or irregular pay packet.

The current protests scotch the idea that precariousness saps any form of grass-roots expressionism, and inevitably produces apathetic or callously resigned acceptance and a withdrawal into individualism.

The current protests scotch the idea that precariousness saps any form of grass-roots expressionism, and inevitably produces apathetic or callously resigned acceptance and a withdrawal into individualism. They also go to show that traditional forms of organization will be buffeted and must dig deep to renew themselves in order to survive. They challenge the norms of political representation in a society increasingly riven by social inequalities.

It would be rash to second-guess the outcome of these new waves of grassroots action. But it would be fair to say that they will put a new and pressing question mark over working conditions.
Occupational cancer: the main challenge for the new Community Strategy

About 2.5 million new cancer cases are diagnosed each year in the EU. Their distribution in the population is a function of various factors, and working conditions are a big contributor.

Laurent Vogel
Director, Working Conditions, Health and Safety Department, ETUI

Recent epidemiological data point to a raised risk of skin cancer among male farmers and thyroid cancer among women farmers.

Image © Imagebroker
Cancer causes around 1.2 million deaths a year despite advances in treatment. It is second only to cardiovascular diseases as a cause of death, accounting for 29% of male deaths (about 700,000 cases a year) and 23% of female deaths (over 500,000 cases a year). Most cancers reflect big social inequalities. For more than two centuries, most carcinogens have been identified from recorded excess mortality among exposed workers.

There is no EU system for actively investigating occupational cancers. Studies in many countries have in recent years highlighted the key role of working conditions in cancer inequality. They throw into question the traditional view that working conditions play only a borderline role in women’s cancers.

**Consistent new data**

The Nocca (Nordic Occupational Cancer) project processes a common database for the five Nordic countries (Iceland, Norway, Sweden, Finland and Denmark). It is a particularly powerful statistical tool, recording 2.8 million cancer cases in occupations pursued by 15 million people over four decades (from the early 1960s to the late 1990s). In some cases, it further substantiates established links like skin cancer among outdoor working fishermen and farmers, cancers of the nasal cavities among woodworkers, a variety of cancers in the construction industry where workers are exposed to many carcinogens. But the project has also made new findings, identifying, for instance, a higher prevalence of oral and vaginal cancers among women chemical industry workers; skin, breast (both female and male) and ovarian cancers among print-workers; and thyroid cancer among women farm-workers.

The Occam (Occupational Cancer Monitoring) project was started in 2001 in Italy’s most heavily-industrialized region, Lombardy, and has since been extended to other regions and cities (Umbria, Genoa, Venice). The 35,000-plus cases covered identify companies in which cancer sufferers have worked. A fairly detailed description of actual working conditions can be had. The analysis is immensely valuable for prevention. All cases of cancer in patients between the ages of 35 and 69 are reported by hospitals. Older individuals were excluded due to the problems in getting detailed information about their entire working lives. A statistical comparison can then be made of the frequency of each cancer site in the population of a firm and industries in a province compared to the general population of that region. The Occam project has also reviewed the literature on the cancer-work link to produce working interpretations of the findings. The database provides an overview of more than 900 articles and is prompting active investigation into the occupational origin of cancers by both public health authorities and trade unions. Querying the database for dry cleaning, for example, turns up 25 references to around a dozen cancer sites.

The Giscop 93 project which appeared in 2001 used an original methodology in an industrial département of the Paris suburb of Seine-Saint-Denis. It came about as the result of collaboration between academic researchers and three hospitals, and received strong support from the département local authorities and the trade unions. Querying the database for dry cleaning, for example, turns up 25 references to around a dozen cancer sites.

Giscop peers into the grey areas of work, retracing countless stories of exploitation, denial of rights, and endangerment of health in order to maximize profits.
of exposure conditions and gives a basis to highly critical conclusions about the real state of prevention provision. It pinpoints "black spot" areas like outsourcing, and contingent employment that results in multiple exposures and denies access to effective prevention provision. Giscop peers into the grey areas of work, retracing countless stories of exploitation, denial of rights, and endangerment of health in order to maximize profits.

Looking beyond the "attributable fraction"

One epidemiological approach has been to try and calculate a fraction attributable to working conditions for different cancer sites. It has produced varying estimates. In the past thirty years, the fraction of cancers attributable to working conditions has been regularly revised upwards. The epidemiologists Doll and Peto produced a reductive calculation in 1981 attributing 4% of all cancers in the United States to exposures at work. Doll's financial links to the chemical industry have been widely brought into focus in recent years, leading to a critical re-evaluation of these estimates. Most recent studies consider an estimate of about 8-12% would be more reasonable. This gives an order of magnitude that could range from 100,000 to 150,000 preventable deaths per year in the European Union (EU).

The traditional "attributable fractions" approach must be viewed with caution for several reasons.

The data on women's work is patchy. Epidemiological study has neglected female-dominated occupations and sectors, and the most common female cancers. Breast cancer, the leading cause of cancer death among women, has received far less study in terms of occupational hazards than lung or bladder cancer in male populations.

Many collaborative epidemiological studies have been done with industry in order to access sample populations. A critical review of the literature shows that the partnership between research and industry has often been associated with biases that result in the role of working conditions being underestimated.

The "attributable fraction" concept is based on shaky foundations. Cancers are multi-causal diseases to which different factors may contribute at different times of life. There is no single model that can account for these interactions. In some cases, the synergistic effect comes more from a multiplication than a simple addition of factors. Most epidemiological studies take too little account of multiple exposures throughout working life. The calculation of "attributable fractions" seeks to exclude lifestyle causes. But such causes (smoking, drinking, diet, etc.) are anything but purely individual variables. They may themselves be linked to working conditions. Job insecurity, fear of danger, stress, and night work can influence such behaviours.

The "attributable fraction" approach considers that some populations are exposed to a risk factor while others are not. The reality is often more complex. Industrial pollution tends to spread risks. A detailed analysis of actual work activities shows that they do not fit apparently well-established exposure scenarios. An excess cancer incidence may even be found in the base population presumed not to be at risk of a given exposure. As a result, the relative risk for exposed workers is underestimated.

Calculations of "attributable fractions" therefore can only be approximations. Their effect is to underestimate the role of working conditions in cancers, and they frequently prevent prompt action being taken by public authorities when bringing in new rules has to wait on cost-benefit assessments.

How many workers are exposed in Europe?

The only comprehensive research on the proportion of workers occupationally exposed to carcinogens in the European Union dates from twenty years ago — the Carex (Carcinogen Exposure Database) project, based on estimated percentages of exposed workers in

Many different risks

Cancers are diseases that affect cell reproduction. An uncontrolled growth of abnormal cells eventually destroys the organ in which they are located. They may migrate to other sites (metastasis). A cancer goes through different stages, sometimes over many years. Many factors may be implicated in its development, and the weakening of the immune system. Cancer sites are unequally distributed by occupational group. This underscores the importance of working conditions.

Chemical hazards are the most common. They can result from the use of carcinogens, but can also be associated with the conversion of different substances during production. The European classification of chemicals is lagging behind scientific knowledge. Many carcinogens and mutagens are not correctly classified. Cases in point are crystalline silica and formaldehyde, which affect millions of workers in Europe.

Endocrine disruptors are chemicals that affect the production and action of hormones. They are found in a wide range of industrial production processes: pesticides, plastics, medicines, electronic components, cosmetics, solvents, cleaning products, etc. Endocrine disruptors are plausibly linked to the marked rise in the incidence of breast and prostate cancer over the last twenty years. Generally, they are not classified as carcinogens. Their adverse health effects appear to be relatively independent of the exposure dose. Exposures to very low doses at critical stages can cause serious illnesses.

Among physical risks, ionizing radiation has long been known to possess carcinogenic activity. Ultraviolet radiation, which can result from exposure to sunlight or artificial sources, is another area of concern. Electromagnetic fields are linked to the disruption of melatonin production (a hormone that regulates circadian rhythms). This may explain the excess breast cancers among seamstresses using electric sewing machines that emit electromagnetic fields. In May 2011, the International Agency for Research on Cancer classified extremely low frequency electromagnetic fields as possibly carcinogenic to humans.

The main biological risks are from agents of infectious diseases like the hepatitis virus which are implicated in some cancers. Other risks are work organization-related. Night work in particular disrupts hormone production and contributes to breast cancer.

There is an interactive effect between occupational health and reproductive health. Some children's cancers can be linked to their parents' occupational exposures. A higher incidence of leukaemia has been found among children whose mothers had been exposed to solvents during pregnancy or whose fathers had been exposed to pesticides, for instance.
The lack of overall data for the EU reflects the Community authorities’ failure to address cancers caused by working.

**Working with cancer**

For most people battling cancer – both those undergoing treatment and survivors – the trial of the illness is made worse by losing or suffering a deterioration in the quality of their job. A 2011 survey by the Institute Curie in France found that re-entering the job market is by far the biggest problem for cancer survivors. Half of those who have found jobs have problems from the consequences of the illness (fatigue, pain, anxiety, etc.), but also from disadvantageous working conditions and the stigma of the disease.

The difficulty of adapting working conditions to the situation resulting from the disease causes direct job discrimination. Chemotherapy often involves alternating between periods of extreme fatigue which interfere with work and spells of relative normalcy. Many women operated on for breast cancer find repetitive arm movements acutely painful. This makes it virtually impossible to continue working on an assembly line or shop check-out. Physical challenges are often made worse by prejudices and rejection that can lead to isolation. A former patient says: “The day I started back, when I got in, I was greeted with: What the hell are you doing here?”

The Share European survey (Survey of health, aging and retirement) is looking at the health impact on the employment of workers aged between 50 and 65. The 2004 data contributed by 10 EU countries indicates that cancer reduces men’s employment rate from 63 to 43%, and women’s from 43 to 34%. The percentage of women concerned is higher: 2.8% of the male population in this age group against 4.9% of the female population. The reduction in employment rates differs between countries. This shows that going beyond the objective problems posed by the disease, respect for social/employment rights is a core issue.

A French survey has found that among people aged 57 or under, 83% were in employment when their cancer was diagnosed. Two years later, that rate was down to 59% of men and 56% of women. Cessation due to illness does not explain this difference: it concerned 14% of men and 11% of women. The percentage of registered unemployed had increased by 60% while that of “other causes of economic inactivity” had doubled. Social inequalities are very wide. Two years after being diagnosed with cancer, barely 45% of farmers and 54% of manual workers were still in work compared to 73% of craft-workers and independent retailers and 74% of those in professional posts.

On 7 and 8 September 2011, the Association of European Cancer Leagues held a conference on this issue in the European Parliament building in Brussels. It is calling for EU rules to guarantee the right to a job for cancer patients and to facilitate adjustments to their working conditions. The Finnish estimates were lower than the U.S. estimates because they excluded workers exposed to lower doses. One limitation of Carex was its failure to make gender-differentiated estimates. For each country, experts assessed the distribution of employment across economic sectors, from which they calculated the percentage of workers exposed to different risks. These estimates were based on the American and Finnish databases adjusted for their own assessment of actual conditions in their country. The overall result for the period 1990-1993 was for the fifteen countries in the EU in 1995. The percentage of workers exposed to carcinogens was 23%, ranging from 27% in Greece at the top down to 17% in the Netherlands at the bottom, and representing a total of 32 million workers. After 1995, the Carex project was extended to the three Baltic republics and the Czech Republic, with findings of around 28% of the workers in these countries. The project was never implemented for the other eight EU countries.

The lack of overall data for the EU reflects the Community authorities’ failure to address cancers caused by working. Businesses have been required to collect and communicate data to their national authorities since a 1990 Directive. This legislation notwithstanding, the Commission has never developed the means for collecting and processing EU-wide data. The Commission is stopping knowledge being produced and that is turning into an excuse for not improving the existing legislation. Looked at the other way round, a lack of data simply reflects a lack of prevention, and this means new legislative initiatives are required.

Since Carex, a series of changes have occurred that pull in opposite directions. The percentage of workers exposed to second-hand smoke and asbestos has decreased due to stricter legislation. But the number of known carcinogens has increased. Any update of the estimates would have to extend the 139 carcinogens listed by Carex in Europe – an application of Carex currently underway in Canada is looking at 229 carcinogens. The declining share of industry and agriculture in total employment is probably partly behind the decreased percentage of exposed workers. However, some service sectors (cleaning, health care, transport) may pose cancer risks that have traditionally been ignored. Contingent employment increases the probability of exposure during part of working life and the probability of exposures at different periods. All told, it is unclear whether the percentages calculated twenty years ago should be adjusted up or down.
Five ways forward for the new Community Strategy

1. A strategy to prevent occupational cancers must ensure both that REACH works properly and that workplace prevention is improved. Each of REACH’s three procedural strands can help improve action against occupational cancers. Registration of chemicals must be backed up by the generation of information on the characteristics of each chemical and, from a production volume of 10 tonnes per year, by a chemical safety report containing rules for safe use. The information supplied for registration absolutely must be made widely available to the public. Evaluation serves to control the quality of information supplied by producers. It requires clear priorities to be set, of which occupational health should be a key one. It must be done by competent public agencies that are independent of industrial interests. Authorization must be sought for the most dangerous substances. A candidate list is drawn up at EU level, after which some of these chemicals are subject to authorization and must be withdrawn from the market by the deadline set if industry has not secured the necessary authorizations for the specific uses. Only 53 substances have been put on the candidate list, and just six chemicals have been subjected to authorization since February 2011. The European Trade Union Confederation has published a list of 334 chemicals for the REACH authorization procedure. Authorization should be the exception so as to promote innovation through the development of less hazardous substances.

2. The classification of carcinogens, mutagens and reprotoxins should be speeded up and done on the basis of consistent scientific criteria without interference from industry’s commercial interests.

3. The revision of the directive to protect workers against carcinogens was announced almost ten years ago, and was already programmed into the Community Strategy for 2002-2006. The Directive’s scope must be expanded to include substances toxic to reproduction. A number of chemicals should be expressly included in the Directive. The order of priority of preventive measures must be complied with: replace, avoid all exposure if replacement is not possible by working in closed systems, reduce exposure to levels as low as is technically possible. This is where exposure limit values come in. They must serve to reduce existing exposures and not be construed as “licenses to kill”. Only three limit values have been set in the current Directive. Two other binding limit values (asbestos and lead) have been set in other directives. Revision should improve the existing limit values and set limit values for 22 substances. It should also include health surveillance for workers who have been exposed to carcinogens even after they have left their jobs.

4. The protection of workers from asbestos must be improved. It needs to be ensured that only authorized contractors can strip asbestos from buildings. The limit values set should be revised downwards to allow for short and thin fibres.

5. Better recognition of cancers as occupational diseases must be ensured. Situations vary widely between countries. The vast majority of work-related cancers are not recognized as occupational diseases, and for women, almost none ever are.

With the signal exception of asbestos, there has been no significant progress on replacement of carcinogens. The number of chemicals banned by the EU falls well short of what the scientific evidence and production alternatives would allow. And the historical trend shows the total production volumes of carcinogens growing at a faster rate than overall economic growth. Our economic development model remains dangerously dependent on the production of harmful substances.

REACH – the European chemicals legislation – required producers or importers to register carcinogens or mutagens that reach a threshold of one tonne per year per producer. This goes both for substances that are already correctly classified and those self-classified by the producer on the basis of available information. Some 400 substances classified as carcinogenic, mutagenic or toxic to reproduction are known to have been registered. It is unclear as yet how many other chemicals have been evaluated as carcinogenic by producers. Evaluation of the quality of the information supplied will be decisive for REACH to work properly, but this has yet to be scheduled by the European Chemicals Agency.

While the percentage of workers at risk of occupational cancer cannot be estimated precisely, there is no question about the employment-related structure of exposures. Manual workers are much more exposed than office workers, and top managers come off best.

Prevention missing the boat

The record of prevention practices in companies is mixed. Several trends can be seen. Exposure to carcinogens interacts with broader determinants of occupational health like the labour relations system (collective agreements and workers’ representative bodies) and the prevention set-up. Factors of insecurity tend to increase the risks. For any given activity, it is usually more dangerous to work in a small firm or outsourcing situation.

There is better control of carcinogens identified as such that are used in production processes than carcinogens produced by
conversion processes like combustion of diesel fuel, thermal degradation of oils, or wood and leather dust.

There is more systematic prevention in the chemical industry, where carcinogens are produced or processed, than user and service industries. More protection is apt to be given to production activities clearly identified as involving exposure to hazardous substances than to what are deemed peripheral activities (cleaning, maintenance, transport, waste processing and recycling, etc.). There is next to no collective prevention in agriculture and little more in the construction industry.

**European policy lagging behind**

EU policy on work-related cancer is one of the weakest links in the health and safety at work strategy. The data on work-related cancer deaths more than warrants it being made a top priority. The links between prevention, production choices and chemicals marketing underscore the added value of an EU policy. An effective policy against occupational cancer cannot easily be run on purely national bases. Having common rules for the EU would enable prompter and more effective action to be taken. Databases on carcinogen replacement could add a big net benefit if created at Community level.

The obstacles are not new, but have been worsened by the policy steer given by Commission President José Manuel Barroso from the start of his first term in July 2004. One factor is the reluctance to develop common social/employment legislation. Most proposed new health at work legislation has been blocked over the last decade. The few directives adopted have been on much less important matters than occupational cancers. The adoption of REACH, however, which regulates the production and marketing of chemicals, is a big opportunity. The most advanced principles of REACH were defined at the end of the 1990s in a more favourable political context. REACH was adopted at the end of 2006, to be gradually implemented over 11 years from 2007 to 2018. In principle, all carcinogenic substances produced or marketed in Europe in production volumes of at least one tonne per year should have been registered by 1 December 2010. The new rules could significantly improve the situation. But there has to be the political will to use them! Two things will be decisive in the coming years: making occupational health a core criterion of REACH implementation; and supplementing REACH with more ambitious health and safety at work legislation.

Where cancers are concerned, the current European Commission’s distaste for proposing new social/employment legislation is compounded by intensive lobbying from the chemical industry which is dead-set against any public or labour oversight of its production choices.

The current European Commission’s distaste for proposing new social/employment legislation is compounded by intensive lobbying from the chemical industry which is dead-set against any public or labour oversight of its production choices.

Further reading


Restructurings: workers' health at crisis point

This special report was coordinated by Fabienne Scandella, ETUI

Business restructurings predate the outbreak of the financial then economic crisis in 2008. But they have certainly increased in number and intensity of late in most European countries either because of real economic difficulties or because the business cycle offered a perfect excuse for shedding jobs. This special report makes no attempt to plumb all the depths of such a shape-shifting phenomenon. Instead, it looks at the consequences for workers' health mainly through three examples: French public hospitals, an industrial giant's German factory, and a Belgian SME glassmaker. Beyond the many forms that restructuring can take, whether or not including job losses, the workers interviewed suffer from similar things: the fear of poverty, feelings of helplessness, lack of recognition and respect for the work done, the worry of deskilling. The unions can offer them much more support than just help with red tape and practicalities.
Philippe Dassomville was restructured out of a job in March 2011. He is finding it hard to come terms with how his firm dropped him, breaking a long family tradition.

Image: © Martine Zunini
Restructurings, working conditions and health

Restructurings amid the crisis have hit private sector workers hard. And retrenchments mean that even civil servants are not immune. The wave of restructurings is taking its toll on the health of both redundant and retained workers. The ripples are spreading beyond the workplace to affect society as a whole, as the already rising rate of suicides in Greece shows.

Laurent Vogel
Director, Working Conditions, Health and Safety Department, ETUI
Wal-Mart decided to shut down its store in Jonquière, Quebec, whose workers had had the temerity to form a union.

Now become common and excused away as an economic Hobson’s choice, restructurings are above all a muscle-flexing exercise reflecting the dominance of the capital owners over labour. Lifetimes of work, a wealth of wide-ranging experience and knowledge possessed by workforces can be written off at a stroke. But they also increasingly reflect how short-term financial gains win out over long-term industrial or commercial plans. Today’s restructurings are not steered by those driven, innovative entrepreneurs described by the early 20th century economist Joseph Schumpeter. Today’s lionised managers are more job-killers-in-chief switching easily from the steel industry to a Department of Education before moving on to an insurance group. Their archetype can be seen in Michael Moore’s documentary Roger and Me about the closure of General Motors’ carmaking plants in Flint, Michigan.

Large numbers of workers feel threatened

The European Working Conditions Survey shows that large numbers of workers have had a very recent experience of restructuring. In 2010, 31% of European workers replied “yes” to the question: “Has substantial restructuring or reorganization been carried out in your current workplace in the last three years?” No statistically significant differences were found between industry and services, or between men and women.

The highest-skilled non-manual staff had more commonly experienced a restructuring within the three years up to the survey (nearly 40%) than manual workers (around 25%). But manual workers’ jobs are much more at risk - 22% of low-skilled manual workers compared to 11% of the highest-skilled non-manual staff thought they might lose their job within the next six months.

Manual workers are also harder hit by losing their job. 32% of European workers answered “yes” to the question: “If you were to lose or quit your current job, would it be easy for you to find a job of similar salary?” For the highest-skilled white collar staff, the percentage nudges 40%. For blue collar workers of all skill levels, the percentage is below 30%.

In Germany, the prospects of finding similar pay conditions are particularly poor: fewer than 20% of manual workers answered “yes”. In Norway, average performance is better, but the gap between categories is striking. 57% of all workers thought they would be able to find a similarly paid-job – but that is about 40% of low-skilled manual workers as against 60% of higher-skilled non-manual staff. In the UK, the risk of taking a pay cut is higher for skilled manual workers (only 33% thought they could find a similarly paid-job). This may reflect the already low pay of lower-skilled workers which could not really go any lower.

"Sacrifices"...

The most obvious health impact of restructurings is on the workers who are let go – or to put it another way, “sacrificed”. The damaging effect unemployment has on health is well-established. Loss of purchasing power has a range of material consequences. But there is also the effect of feeling worthless, desolation, loss of social relationships, loss of self-esteem and the lower regard of others. The destructuring of (work and private) time can have devastating effects if unemployment becomes long-term.

For women, this tends to mean longer spent in home-making. These factors are often compounded by what is called a “selection effect”. Those already in poor health are often the first casualties of restructurings. In some cases, this is a deliberate policy: sickness absences in previous years, a disability, etc. may be selection factors. In other cases, it is the result of job shedding criteria with a greater readiness to sacrifice older workers, the lowest-skilled or what are regarded as non-core activities.

Finding a new job is an obstacle course run as an individual trial because the previous work community has gone and there is scant scope for rebuilding a collective identity based on unemployment. Joblessness is defined at once by a lack and as a temporary situation. Public policies on the unemployed...
ThyssenKrupp: profit minus safety equals seven dead workers

A Turin court gave its verdict on 16 April 2011 in the ThyssenKrupp case, where a steel plant fire in December 2007 resulted in the deaths of seven workers. The criminal investigation would find that the German steelmaker had decided to skimp on safety in its Italian factory which was for the axe.

The chief executive of ThyssenKrupp Group’s Italian branch, Harald Esphenhahn, was handed a sixteen and a half year jail term, while five other top bosses at the Turin plant received stiff prison sentences of between ten and thirteen and a half years. The group will also have to pay victims’ families 3 million euros compensation and shell out big payments to local authorities and victim defence organizations.

The fateful events happened in the night of 6 to 7 December 2007, when fire broke out in line five of the German company’s Turin steel-works. It is a heat treatment shop where rolled steel parts are heated at high temperatures and then cooled in an oil bath. The fire was caused by oil leaking from a pipe. When the fire broke out that night, the shift crew made a failed attempt to douse the flames using extinguishers and water. The liquid hydrogen coming into contact with the cooling oil caused a flashback which engulfed the workers. Fire-fighters would battle until half-past six in the morning to control the blaze. Seven workers, some with 95% burns, were rushed to intensive care units in different Turin hospitals. The first died during the night, the other six in the following weeks. Only one of the workers on shift that night survived. Antonio Bocuzzi had worked for 13 years at the plant, and his testimony would be crucial to the investigation.

The evidence collected from workers and fire-fighters was the first damning indictment of company management – empty fire extinguishers, out-of-order telephones, non-regulation fire-fighting equipment. There was not even a factory first response fire team. This, despite a fire four years previously that fortunately had left no fatalities. Even so, several workers had been injured and it took several days to bring the fire under control. Work organization is also implicated – some of the victims had worked twelve hours straight in a dangerous and tiring job.

The next day saw two diametrically opposed reactions. The metalworkers unions called a general strike that rocked Turin, while ThyssenKrupp blamed the workers, accusing them of negligence. Within days it did a U-turn on its groundless finger-pointing and claimed that the fire was caused by an unfortunate concatenation of circumstances. Throughout the investigation, management’s tone was hostile and arrogant. It accused the judges of political bias. An anonymous internal memo seized on 12 January 2007 contained evidence of management’s agenda of using legal means to gag Antonio Bocuzzi. It accused the workers of “media heroics” and included a list of “unfriendly” names. These included a Turin court judge who had ruled against company management after the previous fire and... the then Italian Minister of Labour and Turin local, Cesare Damiano, considered as too pro-worker. In July 2007, the company announced the imminent closure of the plant. An agreement was negotiated with compensation and redeployment for some of the workers. The Italian metalworkers unions condemned the strong-arming of workers during the closure process to drop any legal claims over the fire if they wanted to keep their benefits.

The trial revealed serious safety failings. One worker gave evidence that production was never stopped when a safety problem was detected. It had to be worked on in difficult conditions while production continued. Scrutiny of the documents seized revealed that responsibility did not stop with local plant management. The Turin factory’s days were numbered in the ThyssenKrupp group’s restructuring. Fire safety was systematically neglected because the plant’s life was rapidly approaching its end. So blatant was management’s neglect that its insurers had increased its fire policy excess from 30 to 100 million euros because the factory lacked automatic fire protection systems like those fitted at another of the German steelmaker’s Italian plants.

All of which explains the stiff sentences imposed by the Turin court. The conviction of the CEO shows how far the group’s general investment policy and restructuring played a decisive role in the deaths of the Turin seven.

Restructurings also affect the working conditions and health of “survivors”, i.e., workers who have kept their jobs despite a restructuring. The most immediate consequence is an intensification of work, where production has to be kept up or increased with fewer workers. There is evidence that work intensification undermines the quality of work and can lead to extreme stress. An identity tied to work based on skills and the ability to do one’s job well falls foul of the new work organization which prevents quality work from being done. The 2007 Dutch working conditions survey found an emotional inability to cope among employees of companies in the throes of restructuring, including where no redundancies were made or jobs threatened. According to the survey, support of other workers ceases to act as a protective factor against burnout in these companies. But two things do play a protective role: workers’ skill discretion and a climate of innovation.

Restructurings undermine confidence in justice at work. Finnish studies have shown that perceived unfair treatment has adverse health impacts. A British study of central government civil servants found that sleep disturbance correlated highly with feelings of injustice at work.

A community impact

Beyond the impact on the workers immediately affected - whether redundant or retained - restructurings can have an area-wide impact through a chain reaction, as has been seen during recessions. A chain reaction is in some ways akin to an avalanche. The fall in male life expectancy at birth observed in Russia between 1988 and 2005 is virtually unknown in the history of public health since reliable records began. Between 1988 and 1994, life expectancy dropped sharply from 65 to 58 years. It improved...
between 1994 and 1997, only to decline again from 1998 until 2002. Between 2003 and 2010, it rose but never returned to the 1987 level, which is expected to happen in 2011. The trend for women has been less drastic, but the sequence is much the same: a fall in life expectancy between 1988 and 1993, followed by a recovery, then a relapse and the signs of an upturn starting in 2004, finally returning to and bettering the 1988 level in 2009. Generally, the only explanation for such a situation is major disasters like wars, uncontrolled epidemics or famine and its length is unprecedented. In the case of Russia, the explanation is the combined effects of an all-embracing crisis that brought drastic economic restructuring, a deteriorating health system and public services, and a significant widening of social inequalities.

On 22 October 2011, the British medical weekly The Lancet sounded an alarm about Greece, overwhelmed by the demands of the Troika (European Commission, International Monetary Fund and European Central Bank). The number of Greeks who did not go to a doctor when ill increased by 15% between 2007 and 2009. Public hospital budgets have been cut by 40%. Under austerity policies, 26,000 jobs are set to go in the public health sector by 2015, including 9,100 doctors. At the same time, hospitals are facing a sharp rise in admissions, with 24% more patients between 2009 and 2010. Suicides rose by 17% between 2007 and 2009, and the rate is accelerating: a 40% rise in the first half of 2011 compared with the same period in 2010.

Using the law

One way of fighting back against restructuring is to use what the law has to offer. EU social law provides only limited help. The directives on collective redundancies and business transfers were drawn up in the 1970s. The odd tweak aside, they have gone substantially unchanged. Both directives provide for information and consultation procedures that come into play only when company management’s decision is all-but a done deal. At best, their time frame enables redundancy plans accompanying the proposed measures to be improved. The number of job losses and practical arrangements for job cuts can be negotiated. Policy decisions on investment, innovation, link-ups and subcontracting cannot easily be challenged at this stage. An unequal balance of available information is another problem. The directives do not allow workers’ representatives to have their own experts and guarantee them access only to limited company information.

Making use of the health at work provisions can give added leverage to the action of workers’ reps. What happened with Areva in France is a recent case in point. This nuclear industry company was forced by a court decision of 5 July 2011 to cancel the outsourcing of one of its La Hague site services. Management had wanted to contract the electricity

The airline industry has gone through several years of business failures and mergers shedding tens of thousands of jobs on the way. Berlin’s Tempelhof airport, finally closed in 2008. Image: © Martine Zunini
Interview

"Short-term workers are most at risk and get least support"

Claude-Emmanuel Triomphe runs the Travail, Emploi, Europe, Société (Astrées) voluntary organization and the metis'europe.eu website. He was involved in writing the Hires European report on the impact of restructuring on workers' health, and disseminated it in the Member States.

What main health problems does the report point to?

Claude-Emmanuel Triomphe — All the evidence looked at in the Hires project suggests that restructuring — meaning major shake-ups in the structure of private and public companies — has big health impacts. These are mainly psychosocial-type problems like depression, loss of self esteem, absenteeism, mood swings, and so on, but also heart ailments and a rise in work accidents, especially among young people, women and older workers.

Why would restructuring increase the work accident rate?

Job cuts add at least a temporary extra workload to some of those left. Then there are staff replacement issues: changing jobs and tasks, which means establishing new routines. What I would call preventive routines are not really materializing. Also, permanent staff may be replaced by temporary staff who may be less well-trained — and may even be less able — but nevertheless have to be immediately operational.

Did you find any categories of workers more at risk of health problems after a restructuring?

Definitely. Workers made redundant but not offered alternative employment, and among them, low- and unskilled workers suffer more than the others.

Short-term workers (fixed-term, agency staff, casual and irregular workers, etc.) are not only at highest risk but also get least support of all the workers hit by restructuring. The big redundancy mitigation and support plans set up by companies exclude these workers in a number of countries. In fact, there is a sort of consensus on both sides for them to be first out so as to save permanent workers' jobs.

Middle managers are a third risk group. They have plenty of skills but are the "meat in the sandwich" as it were: they take all the flak from employees for giving out the bad news and carrying out the changes, plus pressure from their bosses who have asked them with implementing the restructuring measures.

Are some kinds of restructuring harder for workers to deal with? I'm thinking of things like restructuring that leads to the firm shutting down...

In this particular case, the report certainly shows that the consequences are far-reaching and go beyond the worker as such to cause problems in the family, or even in social relationships and friendships. And there are also serious health consequences in the years following closure as was shown by a large-scale Swedish study which found excess mortality among the population of people affected by a plant closure compared to the population of the rest of the workforce unaffected by closures.

The report challenges the idea that restructuring always result in improved productivity.

That's right — the report cites economists' research to the effect that the benefits of restructuring are anything but automatic. A number of studies, for example, claim that one in two mergers fail to deliver the stated aims. We simply repeated this kind of finding to show that a real problem exists with evaluating restructuring processes. The literature contains hardly any economic or social evaluations of these processes.

The report's recommendations include measures meant to result in a "successful restructuring". It mentions "producing a feeling of ownership of the restructuring among employees". Nowhere does it question whether the restructuring is needed...

Your question doesn't surprise me, and you aren't the first to ask it. But the report doesn't completely duck the issue of whether restructuring is justified. Our recommendations talk about employee “buy-in”, and stress communication with workers. This is important and we don't see it as at all cosmetic. On the other hand, you are right to say that the point of restructuring is not questioned. This is for one main reason: there was a consensus in the expert group that some restructurings are inevitable today in particular because of globalization, the disappearance of certain activities and the advent of new technologies. However, the fact that some restructurings are inevitable does not mean they all are. We were unable to find a consensus within the group on this to come up with a particular recommendation. With no consensus on this issue, we preferred not to address it and accept this as a weakness of the report, but one that does not invalidate all the work done for it.

Interview by Denis Grégoire, Editor

distribution service to an outside firm, which would have had a critical role to play in the event of a breakdown (managing the distribution of water, steam and breathable air) as well as key environmental protection activities (collection and treatment of high-risk wastewater). It was a purely financial choice, aimed at cutting the cost of what was already a properly-service provided. The workers' reps on the Works Council and Health and Safety Committee had objected to the plan. The court's decision to cancel the subcontracting of this activity was based on two findings: the ill-health caused to the workers affected through increased anxiety and stress levels and sleep disorders; and the increased industrial risk worsened by the loss of collective expertise and cooperative analysis of activities.

Successful fightbacks

The toll taken by restructurings is undeniable. On the plus side, they are rarely submitted to without a fight. Workers have banded together to face an apparently lost cause, as at the watchmaker Lip in France in the 1970's. Dozens of "recovered" companies destined for the axe a decade ago are still being run collectively by the workers in Argentina. The Tower Colliery coalmine in Wales had an exceptionally long run. It was shut down in 1994, occupied by the miners, then re-opened and worked continuously by them until early 2008.

These experiences evidence the link between workplace democracy and active political participation. As French economist Thomas Coutrot puts it "democracy cannot be renewed unless individuals are empowered in their daily work: people must be able to influence basic decisions about production, working and pay conditions, employment, labour relations, and so on". These experiences are a marker for what could be a different organization of production: creating linkages between workplace democracy and economic planning so as to take the trauma out of reorganizations.

Further reading

The ticking time-bomb of restructuring at Alstom

Accidents, chronic illnesses, burnout — Alstom-Käfertal Germany’s plant posts a devastating health record even with the economic slowdown and short-time working. The crisis and an unintelligible industrial strategy have undone much of the good that a risk management system implemented just over a decade ago had on the quality of work.

Clotilde de Gastines
Journalist
474 jobs are for the chop. Tension and stress are in the air at Alstom's Mannheim factory in Baden-Württemberg (Germany) where for the time being more than 2100 people still design and manufacture turbines and electromechanical equipment for hydroelectric and nuclear power plants the world over.

For Mannheim-Käfertal's employees, "both their economic livelihoods and mental health are under threat", fumes IG-Metall full-time union official Wolfgang Alles, ushering me into the Ampè re, a hundred-year old squat brick building where the works council meets. This building is as far as I get, as the single-product specialization concerns the company Brown, Boveri & Cie (BBC) (see box), located in the heart of one of the richest regions in Germany and Europe.

Three years on, Alstom was already looking to slash the workforce in half by shutting whole swathes of engineering and production operations. A huge Labour protest in 2003 and again in 2005 achieved a standstill on job cuts until November 2010, extended for another year. So the new "staff adjustment plan" comes as no surprise to anyone.

The most debilitating job is cleaning the turbines by high pressure water or sand blasting. It is dirty and noisy work. The workers, who complain about chronic under-investment and the short-termism of the French group's industrial strategy, say Wolfgang Alles. "Some workers are already pretty battered and bruised by the age of 50", says Egon Mäurer, who joined BBC as an engineer in 1973 and has been a health and safety rep since 1994. "Around 200 people are very often off for over six weeks in a year in total. They come in for three weeks, then fall ill again, either with the same illness or a different one. Their main problems are back pain and other musculoskeletal disorders."

For now, a third of the workforce is employed in production and assembly, the other two-thirds being engineers and admin staff. The axing of 474 jobs pales by the side of the 4700 jobs scrapped over the last 15 years. In 2000, Alstom took over the century-old company Brown, Boveri & Cie (BBC) (see box), located in one of the richest regions in Germany and Europe.

Three years on, Alstom was already looking to slash the workforce in half by shutting whole swathes of engineering and production operations. A huge Labour protest in 2003 and again in 2005 achieved a standstill on job cuts until November 2010, extended for another year. So the new "staff adjustment plan" comes as no surprise to anyone. The standstill was absolutely contingent on reorienting production, so Alstom now makes only one product at Käfertal: massive steam and gas turbines for power plants. This single-product specialization concerns the workers, who complain about chronic under-investment and the short-termism of the French group's industrial strategy. Despite the crisis and subnormal capacity usage, the workers have kept their jobs through federal government-funded short-time working. Workforce size has remained stable because "very little" use has been made of fixed-term, temporary, outsourcing and secondment contracts, says Wolfgang Alles.

Only manual workers and the youngest engineers have gone to escape this delayed action restructuring. The short-time working and standstill measures run out this autumn. The tension has reached breaking point.

Employees' health is suffering

30 people suffering burnout, 50 on sick leave for over a year. The crisis and uncertainty have undermined some of what the measures to improve work quality implemented in 1999 by the GFA risk management system achieved (see box p. 21).

The 700 production workers are most at risk of accidents. "Some workers are already pretty battered and bruised by the age of 50", says Egon Mäurer, who joined BBC as an engineer in 1973 and has been a health and safety rep since 1994. "Around 200 people are very often off for over six weeks in a year in total. They come in for three weeks, then fall ill again, either with the same illness or a different one. Their main problems are back pain and other musculoskeletal disorders."

The most debilitating job is cleaning the turbines by high pressure water or sand blasting. It is dirty and noisy work. The workers’ reps try to counter the risk of deafness by telling workers about protective equipment, but they are unsuited or misused. On the good side, their injuries are a recognized occupational disease, so the exorbitant cost of hearing aids or implants is reimbursed.

Turbine assembly brings a daily accident toll of minor cuts to fingers. It is a tricky operation which involves hand-fixing the very

Psychological distress and mental anguish have increased these last few years. Never-ending reorganizations create a sense of uncertainty, injustice and helplessness.
Risk Management: Alstom imposes its model

The 1996 Occupational Health Act (Arbeits-schutzgesetz) and European directives changed the ways occupational health and stress were seen and taken into account in Germany.

Off the back of these new provisions, the ABB (now Alstom) works council in conjunction with top management set up a risk analysis system (GFA – Gefährdungsanalyse) to prevent and record the physical and psychological risks that employees are exposed to. Questionnaire surveys helped identify 3400 concrete measures against physical risks and more than 400 against psychosocial risks – some concerned with improvements to workstations in production and assembly sections (noise, dust, chemicals, poor ventilation) and the offices (lack of space, lighting, ergonomics). Each employee has documents to prove the risks they may have been exposed to, which can be invaluable in the event of disputes.

The GFA also gave an overview of mental distress (pressure, stress, poor promotion and training opportunities, lack of recognition, fear of job loss). The works council has developed training for foremen and workers on psychosocial risks and conflict management.

Alstom has its own management system, known as EHS (Environment Health & Safety) laying down health and safety standards “parallel to the official regulations, which the works council does not recognize, because it does not add to but outst the statutory obligations”, says Egon Mäurer. There is no full list of EHS requirements. Some are trivial: make sure waste paper baskets are emptied; others are more intrusive: check whether there is beer hanging around in cupboards. This is more about disciplinary management than preventive health and safety at work, argues Egon Mäurer, who wants to focus more on the trade union and statutory recommendations that are regularly distributed to employees. The EHS cannot be used to get compensation for an illness, for example.

sharp turbine screws in the casing. Gloves cannot be worn because the worker knows only from touch and the sound of the hammer on the screw if it is properly fitted and fastened. “Operators have to push with their arms raised, which damages their back, arms and shoulders. So in that job, your health has gone by 40”, continues Egon Mäurer.

The occupational doctor is this year using new methods to examine jobs (ergonomics, painful positions, etc.) and whether those doing them are healthy. “It’s a battle to get equipment to help with carrying heavy loads”, he complains, having long worked on the now-outsourced production planning and organization service. “All the machinery needs overhauling; the operators are constantly calling for it”, he goes on.

Asbestos is another big fear for the workers. The unions reckon that more than 200 current or former Alstom workers have suffered asbestos poisoning. Hundreds of cases of asbestos poisoning have been reported since the 1980s. Other highly toxic substances are causing concern. “Recently, a former colleague died of benzene poisoning” (from exposure to benzene and its derivatives – ed.), Egon Mäurer says. “Blood tests can reveal all the hazardous substances that a human being has been exposed to throughout his life. We traced back his career in the company to get recognition, so his widow now gets a higher survivor’s pension.”

Men at breaking point

Bizarrely, the introduction of short-time working has led to an intensification of production work. “The arrangement is running out”, says Wolfgang Alles who started with BBC as a toolmaker in 1987. “Push comes to shove, it’s better than the dole, except that it has been used as a means of streamlining. The work is more intensive than ever.”

One worker who wishes to remain anonymous says operators go in fear of a teammate being injured or falling ill, because they will have to pick up the slack. “It’s just everyone man for himself”, he adds with some regret for what BBC’s work ethos used to be when youngsters were taken on as apprentices and given lifelong training to keep them working up to retirement.

Alstom’s employees are used to changing jobs, but now they fear losing them. “You don’t get redeployed at 50, engineer or not”, says Wolfgang Alles. The whole region is prey to relocations and plant closures. “We wonder when it’ll be our turn”, adds another worker who preferred not to give his name, dismayed that the question crops up every four or five years, even for those on permanent contracts. “Some of the lads just starting out have ideas of buying a home, starting a family, but live in fear of bad news. It’s hard to find work if you have highly specialized skills. Especially as permanent jobs aren’t easy to come by.”

There’s the rub – metalworkers face a big jobs shortage in the Mannheim employment area, despite it being at the heart of one of Europe’s most prosperous industrial regions.

Egon Mäurer says there have been thirty cases of burnout and several suicide attempts. Twenty-eight of the 30 burnout cases were men, some production operators like...
Hans Müller (see box p. 23) and especially engineers. Two women – both in a delicate psychological condition – had a very hard time coming back from maternity leave in this toxic atmosphere. “It only takes a snappy foreman to push them over the edge”, says Egon Mäurer, who himself was hospitalized in 2009. The rule is for the company to warn the works council about someone who is frequently off or showing signs of instability. In most cases, however, it is the person themselves or colleagues that report problems. “They know we’ll listen, and that has helped avoid acts of desperation”, he adds.

The works council sees to it that returning workers can choose to go back to the same job or not. They ease back into the fray, building up from just three hours a day until they can work several days in a row. If someone wants to leave, the union reps ensure that they have the shortest possible period of unemployment leading to a job or a decent retirement pension.

The engineers also are frustrated with Alstom’s risky single-product specialization. The plant now produces only huge steam turbines, and especially gas turbines. The turbine updating and repair services are working. But the list of innovations considered not profitable enough is long: transformer, diesel differential pressure gauge, electric batteries, solar panels, electric magnet, generator. One of the key products – small turbines generating up to 50MW for the booming district heating market – was sold off to its rival Siemens under pressure from the European Union which wanted to see competition develop in the market.

Even the recent investment in a new boiler-making section set up in 2008 is deceptive. Testimony

"You realize there’s nothing you can change in this mug’s game"

Jürgen Zimmermann controls the quality of large parts made in the Polish foundries.

My working conditions have changed a lot. I’m exhausted, more than before. It used to be that I’d get home dropping with physical fatigue; now, I’m mentally washed-out, too. Short-time working isn’t good in the long run. You worry. You realize there’s nothing you can do, nothing you can change in this mug’s game. It’s disorganization, programmed destruction.

And yet I love my job; it’s well paid. I’ve learned a lot of specialist skills with the firm. From being apprenticed at BBC here at Käfertal I worked on the high voltage power line plants, then transformer production. After that, I worked on manufacturing generators. When the section became just an assembly operation, I went to logistics. Then that shut down. For four years, I’ve been controlling the large parts arriving from Poland where Alstom has a foundry.

Other smaller parts are made in India and China. Some of them come in defective because they’re made at lower cost. So they have to be done again, and in the end that costs more! It’s beyond me why they should relocate when “made in Germany” quality is recognized worldwide. Scrapping jobs that require skills like ours can only be bad for productivity and quality.

The unions reckon that more than 200 current or former Alstom workers have suffered asbestos poisoning.
for over a decade to develop new products and go out and get market share. It’s a matter of survival”, cautions Egon Mäurer, who joined BBC in 1972 when it had 11,000 employees working on the site.

Most of the middle management are highly critical and even join in the demonstrations. "They are as affected as us", says Jürgen Zimmermann. "The directives come out of Paris, and they have no say." The foremen are caught between a rock and a hard place, managers no longer have time to bother about "the well-being of employees because they are under constant pressure from the board room and shareholders", fumes Wolfgang Alles. The shareholders want “increasingly more short-term profit, which is why they are investing so little”, he adds.

"What new machines there are, are those that were ordered several years ago. They have no long-term vision.”

And yet there is no shortage of markets for state-of-the-art electromechanical equipment. The phase-out of nuclear power by 2020 in Germany could drive a big demand to make up the 40,000 MW previously provided by nuclear power plants – the equivalent of 60 electricity generating plants. Thermal power plants across Europe also need to be updated.

The works council fears that Alstom is scrimping on investment to force a closure. The workers suspect there are plans to relocate operations – and transfer the technology and know-how – to Mexico, China and India. "We know what's happening around us", cautions one worker. "Alstom’s newsletter gives the official version; it's open about the huge investments in India, China and Chattanooga (USA). We get information back from the fitter-riggers who go round the sites worldwide. They meet people from Alstom and other rival firms. We know about the calls for tenders, relocations and closures.” Clued up, then.

There is a palpable sense of bitterness, but not total resignation. And the odd small victory helps lift that stay-of-execution feeling. Faced with the threat of 700 job losses at an Alstom Transport tram plant in Salzgitter (Lower Saxony), the Mannheim workers came out in solidarity. The unions won guarantees that the jobs would stay until 2016 and the proposed relocation to Poland be dropped. Only 160 to 250 jobs will go by natural attrition by that date.

I slip quietly away, leaving behind me the symbol of an industrial adventure intended to last – the BBC name carved in stone on the porch of the historic entrance.

"We’ve been asking Alstom for over a decade to develop new products and go out and get market share. It’s a matter of survival”.

since it too is threatened by the forthcoming restructuring. The unions had won the investment in this 30 person unit in exchange for agreeing to other production segments being shut down. "These are lethal decisions; that’s how they come over to all the workers”, says Wolfgang Alles. "Workers are up in arms because they have never stopped fighting for this plant, to preserve their know-how with top-quality products.”

Suspicion and bitterness

The engineers have put forward proposals to avoid this industrial one-trick-ponyism. "They are ready to create, but they’re not being given the means. We’ve been asking Alstom..."
The effects of public hospital restructuring in France

The Secafi occupational health consultancy has reported on the shake-up in French public hospitals for a European study on the health impacts of restructuring on public service workers. The facts are clear: hospital restructurings are seriously harming patient care workers' health.

Michel Agostini, Francis Lavril, Jean-Claude Vaslet
Secafi, occupational health, safety and working conditions consultants, France
A hospital line manager faced with making major redeployments breaks down in tears. “It’s so tough, huge and beyond reason that I’ll never manage it!” A nurse at the same hospital is distraught, “I just can’t go on! We’re told to do more with less... We have to rush things, and it’s not good for patients. My professional ethics and sense of public service count for nothing”.

There are countless such stories, and they say more than any demonstration about the ill-being created by public hospital restructuring in health care professionals on every rung of the ladder – one by having to push through reforms she doesn’t believe in, the other by changes in how she does her job and its meaning.

Secaf, a consultancy specializing in working conditions, has over the past two years done 40 analytical studies commissioned by staff representatives on the health, safety and working conditions committees (HSWC) of French public hospitals in the throes of restructuring. A summary of their assessments was produced for the European “Hires Plus” project which is looking at the health impacts of reorganizations on public service workers.

In all these assignments, we had to deal with a wide range of situations related to the hospital’s size (from 200 to several thousand people), nature (teaching hospitals, regional and local hospitals, public care/nursing homes, psychiatric hospitals), and location (all regions, urban and rural areas). That diversity was also reflected in the reorganization plans, which can range from physical relocation through organizational changes to the introduction of new technology or support services. But behind these different circumstances, we saw in every hospital the same effects of politically-imposed budget restraint like job cuts, shake-ups in working hours and more broadly, working conditions.

There is no doubt that plans to get public hospitals’ budgets to balance raise similar restructuring and reorganization issues as for private business. The concepts involved are telling: resource syndication, flexibility, concentration, outsourcing, restructuring and, through “lean” processes, flow control, added value in processes, cutting not only waste but any act deemed “non productive”, standardization, etc.

The consequences for working conditions therefore must be analysed in the same terms as in other sectors of activity, with two added variables: the "emotional baggage" that any patient-facing employee carries, and the civic-minded belief that health delivery is a “public service”.

**Little staff consultation**

Public hospital employees in France have civil servant status and so are subject to the principle of authority, meaning that they must abide by and apply the decisions of their superior. The key decisions are taken by the national policy authority. This leaves little scope for bargaining, and commensurately little leeway for hospitals that must implement these decisions to modify the plans by factoring in the outcomes of social dialogue.

There are no regular bargaining procedures for informing and consulting employee representatives. Overall projects are broken down into sub-projects. Where such procedures are actually carried out, they address individual sub-projects and rarely give an overall picture of the reorganizations under way.

Projects are progressed at a rate that prevents either staff reps or the implementing management officials from taking ownership of them and leaves them no real options. Staff representatives’ views, therefore, count for little and their opinion is only seldom taken into account. Social dialogue which is already ordinarily limited is then further reduced. The positive aspects of the consultation procedure are not leveraged. Participative management with working groups can also only do so much.

The staff feel that these working groups are used by management more to pass on decisions than to find ways with workers and their representatives for enhancing the quality of work. Far from strengthening their confidence in the hospital, they often find that this participation backfires on them through standardized and impersonal solutions. The dominant feeling is then one of having been manipulated.

These findings hold good for almost all the situations studied. However, in some hospitals, a strong union coupled with the expert’s support have enabled good progress to be made on limiting job insecurity, mitigating the worst organizational aspects of reorganization, and a collaborative development of preventive and follow-up provision.

**The context of hospital reorganisations in France**

The status of employees: public hospital staff are civil servants. In France, the civil service is governed by a set of laws and regulations that determine the nature of the employment relationship between any individual and the public sector employer, be it central government, sub-national authorities or public hospitals. There are two main types of contract:

- tenured civil servants, selected by competition, who have a guaranteed job and career progression;
- non-tenured contract employees having none of the above guarantees.

The political context of reorganisations: a reorganization of the French public health system has been under way since 1991 to reform all policies: funding, governance, health care provision, etc. The main changes include:

- MPs set hospitals’ expenditure estimates annually;
- since 2005, hospitals have had to apply private sector management standards and the fee-for-services system;
- governance is entirely within the hospital chief executive’s discretion;
- plans to balance budgets include job cuts. The National Statistics Institute (INSEE) reports 10,000 jobs shed between 2007 and 2009.
The bureaucratic definition of "unnecessary actions" also calls into question team handover times and time spent with patients and their families.

New organizational arrangements and working conditions

The new organizational arrangements make big changes to the working conditions of all staff. Hospitals are being invaded by management-speak, with terms like "resource optimization", "rationalization", "added value in processes", "process safety" intruding into clinical discussions. "Management by cost control", i.e., cutting waste, is becoming the mantra. This new "management dynamic" produces standardization of practices involving the introduction of procedures and cutting out or reducing any action judged unnecessary.

Medical procedures that are often essential are designed for working in completely stable conditions with fixed numbers of trained staff. A reorganization unsettles environments and staff, so they do not always meet the procedures' requirements. This creates differences between "prescribed work" and "actual work" that are borne by staff at the cost of a state of permanent stress. "The rules say I have to wash an infirm patient in five minutes and I also have to fill in quality forms. They then find their jobs changing into tasks that turn nursing into drudgery."

For health workers, quality is defined by service to the patient based on giving appropriate care and personal attention. It is about all patient care workers providing coordinated care of the whole person to the patient. Managers, by contrast, see quality as a process made up of an aggregate of abstract, measurable processes. Managers' aim for it is to guard against the risk of the hospital being sued by enabling them to deal with incidents by proving that proper procedures were followed. It is the whole system of assessment and the criteria is based on that are at issue. More than resistance to change, it must be seen as a lack of a meeting of minds over a concept seen as fundamental in professions that are based on providing care and assistance to patients. A debate focused purely on quality is a key feature of the reorganization projects examined.

Another aspect related to organizational arrangements also impacts working conditions: increased form-filling and reporting requirements (accountability reports). Where there is a wave of reorganizations and legal, financial and safety constraints, red tape increases and eats into health workers' activities. They then find their jobs changing into tasks that they do not consider part of what their work is all about: "The reporting system leaves me a lot less time to spend with my patients. I have to make choices without even physically seeing them... That is particularly stressful", testifies one nurse. The various administrative reorganizations with a syndication of resources leaves administrative staff and their supervisors feeling that they are on a hamster wheel between increasingly exacting procedural requirements and reduced abilities to respond to increasingly numerous demands.

A hospital culture undermined

Any reorganization, even a partial one, has implications for all activities. For example, reorganization of operating theatres has implications for the nursing, sterilization, portering, cleaning and other departments. Here, the division of projects into sub-projects as part of a customer-supplier relationship approach may disregard the impact on indirectly affected departments. And these consequences – new tasks, work schedule changes, work peaks throughout the day, etc. – are often under-estimated.

Also, many reorganizations result in services being outsourced. This usually affects support services (cleaning, catering, laundry, etc.), but also things like sterilization units and path labs. This undermines a hospital culture that traditionally provides a full continuum of patient care with staff who have developed work units around that common care provision. Making big changes to that care provision creates a culture shock which is particularly strong in that the staff see this "industrialized" approach as taking away the personal relationship around the patient. Over and above its impact on staff and statuses, outsourcing also raises the issue of redistributing tasks on workers in other departments, with a direct impact on workloads and an undermining of workforces.

Every reorganization, however small or large, brings a change in the management of working time. In a system working to the combined constraints of staff levels pared to the bone and daily patient-facing time requirements, work schedule management is first in line for organizational adjustment. Longer daily working hours – often found, acknowledged and seen to be potentially increasing

The seven things that turn nursing into drudgery

1. Loss of time for talking to patients: quality of care suffers.
2. Being regarded as an operative.
4. The emotional drain of health care work.
5. Too few staff to provide quality care.
6. Arrangements not designed to cope with patients' dependency.
7. Lack of recognition.

Taken from the book by Madeleine Estyn-Behar, Santé et satisfaction des soignants au travail (2008, Presses de l'école des hautes études en santé publique) building on the European Nurses' Early Exit Study.
fatigue and risk – are also seen as a general worsening of working conditions. Reorganisations increasingly result in working hours that are illegal under French and European law. Thirteen hour days are commonplace, and rest periods increasingly flouted. Bizarrely, this clashes with growing staff demands for working days to be lengthened. This stems from the squeeze put on family time, especially by time spent commuting, but also reflects a desire to spend as few days as possible at work, which speaks volumes about the general feelings of dissatisfaction with work.

Reorganisations also threaten job numbers. In France, national health employees are protected from redundancy by their civil service status, so downsizing takes place through attrition and the use of contingent employment. Objectives based on accounting criteria leave no room for a reality-check against actual work and the conditions of doing it. The affected employees find that only measurable tasks are taken into account. Face times (both with patients and other members of a work team) are reduced if not disregarded. Multitasking, held up as a sure-fire solution, creates feelings that special skills are going unacknowledged and fears of job downgrading.

Reorganisations, physical strain and ill-being at work

Musculoskeletal disorders and partial or total work incapacities from the manual handling of heavy loads are not a new by-product of reorganisations. These health problems were already well-known to staff working in geriatric wards, surgical units, cleaning and portering services. But while reorganisations are not solely to blame for these ills, they clearly help to make them worse. The evidence of declining occupational health among national health employees in recent years can be correlated to the faster pace of reorganisation, the most direct consequence of which is to add to the hardships of work. Taken by the main factors of poor physical working conditions for nurses identified by occupational health doctor Madeleine Estryn-Behar (see Box p. 26), reorganisations do add to the hardships of work. A first indicator of these worse working conditions is being seen today: the recruitment of foreign doctors, evidencing the difficulty of retaining nurses and a sharp decline in the appeal of public hospital work to the medical profession. High absenteeism rates (over 20%) are another significant indicator. These are becoming critical issues and the failure (or sometimes refusal) to address poor physical working conditions in reorganisations is seriously undermining both the quality of care and employees’ health.

There is a clear direct link between the sharp rise in psychosocial risks and the context created by the reorganisation period. Increased stresses and strains combine with an undermining of the resources that keep employees going: the meaningfulness of work, recognition, a supportive work community. The loss of meaning in work and quality of service goes against the basic ethical principles of national health service workers and the specific bond with patients. Treating care as a saleable commodity is a key determinant of ill-being at work.

Stress is closely linked to discontinuity of work paces and the weakening of collective support from the undermining of team work. People have to deal with their fatigue, fear of making mistakes, disappointment at not doing quality work and loss of self-esteem alone.

Eroding chains of command, stressful new forms of work organization and non-recognition increase tension that eats away at mental wellbeing and adversely affects physical health. Disrupted sleep, anxiety, feelings of failure and depression are early warning signs that public health services must take on board.

A typology of restructuring

The reorganisations dealt with can be classified into three types:

1. Reorganisations from a complete overhaul of the facility development plan akin to a restructuring in any sector of the economy. These can affect all facilities of any size. They involve a reassignment of care and support activities, or without consolidation, usually accompanied by downsizing. Syndication of resources and multitasking always feature prominently and spatial redevelopment (renovations or new builds) are generally projected. Such reorganisations may involve an overhaul of legal structures through mergers of originally public and private facilities with changes in the employment statuses of staff.

2. Reorganisations accompanying the opening of a new building: while such changes involving buildings often result from Type 1 reorganisations, they are the starting point around which the hospital stakeholders come together institutionally in project management. The new building therefore symbolises a new era that pugnately heralds more organizational efficiency than in the sometimes run-down old premises. But beyond the more attractive physical conditions also loom the consequences of architectural choices that may not be fully in grip and reorganisations run to economic imperatives in which working conditions are a product rather than a driver of efficiency-seeking.

3. Reorganisation of departments: initially focussed on only part of the hospital, but always as part of a broader move to reorganize other departments also. For example, reorganization of operating theatres cannot be looked at without bringing in the care, sterilization, portering and cleaning departments involved before, after or during the surgery itself.

As we have seen, successive, near-continuous reorganisations in public hospitals run real risks of worsening employees’ working conditions. Ill-being is reflected in feelings of indifference about a job for which they have a strong vocation, high absenteeism, a narrowly-focused individualisation of what is essentially a collective profession, and a fear of not doing a proper job. The progress that could be made in the institutions examined arguably requires a deep-reaching change in employer-employee relations and for the actual work done to be factored into reorganisation decisions.

The institutions where the risks of deteriorating working conditions are discussed are those in which trade unions stick to their guns in a challenging environment to ensure recognition for the quality and meaningfulness of work, trying to get work schedules that take into account biological rhythms and the tempo of life, working out times and places that will strengthen workforces, and integrating occupational health issues into a preventive and curative approach.
Redeployment units: a union alternative to outplacement

Unemployment is often talked of as a "trial" like a serious illness or bereavement. A tribulation you have to cope with alone. But for over 30 years, a joint job search scheme has been running in Wallonia with trade unions and public agencies helping victims of restructuring and business failure to meet the challenge.

Denis Grégoire
Editor

Twenty years working in the same firm makes it a hard to "move on" from the old job. Because they too have gone through the pain, the union support workers in redeployment units are better placed than anyone to help redundant workers.

Image: © Martine Zunini
The worst thing is that I live right opposite Val Saint-Lambert crystal works. I worked there, my dad too. He practically died with his blowpipe in hand”, says Philip, a man and boy in my family. “We've been crystal glassblowers since 1826 and the reputation of its skilled glassblowers long spread beyond the narrow confines of Wallonia. At its inter-war peak, the company had over 5000 workers. Now, after yet another restructuring – the third with redundancies in 20 years – fewer than 60 people work in the factory, located in the Liège industrial suburb of Seraing (eastern Belgium).

Philip is among the last batch of 15 workers let go. "The union official gave us the news in the morning of 29 March; the boss didn't see fit to come and tell us in person. We all thought we'd work the day out, but they just said, 'Get your things, you've no more business here'," recalls the worker. "They just got us to sign something. We couldn't even argue the toss", he laments.

This failure to explain why has left the four former Val Saint-Lambert workers gathered together on a dull July morning in a Liège city centre building feeling bewildered and badly treated. Philippe, Giuseppa, Alessandro and Michel are attending a scheme in one of the 55 redeployment units operating during summer 2011 across the Wallon Region. Behind each of these units lie pretty much the same stories and sufferings – those of workers in a business that is going under, restructuring, or relocating activities following a board decision.

On the programme today is how to write a good CV and persuasive cover letter. "We try to dispel some of the myths about losing a job, give reassurance and build confidence. Fear of the unknown is the most common feeling," says Jean-Luc Perisse who is running this morning’s training session. "So we have to give reassurance to redundant workers whose self-esteem declines to see job hunting as an essentially individual process. "It was the time of the trade union university" when intellectuals joined the workers’ fight and took to the factory floor”, muses a somewhat nostalgic Anny Poncin, a civil servant who for nearly 30 years oversaw the creation of dozens of redeployment units. Athus and the steel industry were followed by Glaverbel and glassworks, then the closure of the Michelin plant in Brussels – where workers back from the holiday shutdown were greeted by locked gates – and in 2001, the headline-grabbing collapse of Belgium’s national carrier, Sabena. Belgium is a federal state where employment and training are regional responsibilities. Redundant workers from Flanders and Brussels were referred to outplacement, while those living in Wallonia were taken in hand by the union-inspired redeployment units.

In 2004, the Wallon Region gave statutory recognition to redeployment units, making them a joint Forem/trade union responsibility. In any restructuring involving job losses or a business failure in Wallonia, the unions can apply to the Forem’s regional board of governors for a redeployment unit to be set up, but not in Brussels and Flanders.
A very fragile crystal palace

Val Saint-Lambert crystalware was prized by Russian tsars and decorated Maharajas’ palace ceilings. In the post-war boom decades, the company sold to a wider market for prestige goods. Val Saint-Lambert stemware became a must-have item on wedding lists. But the 1990s saw the market collapse.

The declining popularity of marriage, families’ more practical priorities, recession, changing tastes and fashions – the list of reasons why people shunned crystal goes on. Other crystal works – Baccarat to name only the most prestigious – were also affected. The business cycle is not the whole story, say some workers. For Michel, 48, the current ownership – Belgian money earned from Bordeaux vineyards – also bears some responsibility. “When the takeover happened in 2008, I really thought that combining the wine and crystal industries was a good idea. But apart from a few old recycled items as gifts for participants in a few prestige events, they haven’t developed it”, says the former head shipper. “I don’t see the business going anywhere now. They’ve put a marketing man who doesn’t know the glass industry in charge of production”, he sighs.

Michel could talk forever about his old company. Although no longer with it, the slow decline of the venerable Belgian crystal works – which he calls “the Old Lady” – pains him. “You get very attached to it; especially as I put a lot of myself into it. I was in charge of reorganizing the shipping department, and involved in its computerization”, says the former employee bitterly. A succession of new owners and the drafting-in of managers mostly unconnected with the glass industry and its craft roots produced a loss of interest that no-one even tried to hide. “In the last few months, when I’d go to say hello to colleagues on the production side, they’d give me a reverse V-sign. Not ‘V for victory’, but ‘only two hours to go’ – they were on the 6-to-2 shift.”
"Those who are still there feel lonely and isolated. They're depressed, feeling that they're the last ones..."

2. A travelling crane operator’s job is to lift and move often very heavy and bulky loads from one point to another using an overhead crane.

3. Dyes, finishing products and stabilizers are also often added. These include toxic chemicals like chromium, cobalt and nickel.

The social support workers readily admit that they are not psychologists and their skills are mainly administrative and legal. Likewise, their Forem colleagues are neither psychologists nor social workers. But again, the units’ collective approach enables serious problems to be identified. Each redeployment unit has a monitoring committee which meets fortnightly to review each worker’s progress. "It lets us swap thoughts, identify serious problems like deep depression. If the situation is beyond what we can do, we suggest specific support by outside professionals, psychologists or addiction specialists, for example. We never force, we only suggest. If we see that some members of a unit have a drink problem, we offer to arrange an information session for them with a specialized voluntary group", says the social support workers.

"When do I have to sign on as registered unemployed? How much will I get? How much notice do I get?" Each group session starts by going around the table. Jean-Luc Perisse’s quick-fire replies seem almost too much about procedures and paperwork to an outside eye. But it’s what those attending want. Both the Forem advisers and their trade union colleagues find the same thing: the practicalities are very much redundant workers’ main concern. The loss of income is a source of endless anxiety for them: How am I going to meet my mortgage payments? Where will I get the money for the kids’ schooling?, and so on.

These are particularly acute concerns in the redeployment units of failed businesses where workers are put straight on the dole, whereas restructuring companies have often negotiated redundancy packages with the unions that buy them at least a few months’ financial security. The support of a trade union offers reassurance and guidance for workers negotiating Belgium’s particularly complex maze of institutions and bureaucracies. "In virtually every case we have to correct wrongly filled-in paperwork", says the Val Saint-Lambert unit social support workers.

Only once attendees’ minds are at rest about making ends meet can redeployment units set calmly about helping them find pathways back into work. 32-year-old Alessandro is quietly confident – he has an interview this afternoon with the boss of a company that makes steel products for the building industry. But he still plans to combine this likely new job with a four-day travelling-crane operator course fully paid for by the redeployment unit. 51-year-old Giuseppa – 21 years worked at Val-St-Lambert – has no such job interview in sight. Even the suggestion that businesses are reluctant to take on middle-aged women doesn’t faze her. Native French-speaker or not, she remains hopeful and is thinking about going in for office systems training. The worst thing for her is no longer seeing her former workmates. "It’s a wrench when you stop seeing people you’ve worked with for years. I go back quite often because my husband is still there. Those who are still there feel lonely and isolated. They’re depressed, feeling that they’re the last ones...", says Giuseppa.

It’s their workmates they miss, not the firm. Crystal manufacture still today relies on age-old techniques that fall well short of current safety standards, especially in Val Saint-Lambert, whose successive bosses, former employees claim, have never shown much interest in improving working conditions. Permanent dust, no fresh air make up systems, no fresh air make up systems even though called for by the occupational health service and labour inspectorate, toilet blocks unused because filthy, and the list goes on. Worst of all is the minimum (lead oxide) which along with crystalline silica and potash is a basic constituent of crystal. A higher percentage of lead oxide produces crystal with greater brightness, brilliance and clarity. The workers who mix these basic components are heavily exposed to lead, as are most of the production workers, who breathe in toxic lead fumes.

Very many colleagues had little time to enjoy their pension, say redeployment unit members. "Since I stopped, my throat isn’t as dry and I can breathe better," says Philip. While there’s little likelihood of him putting his former employer completely out of his mind – he lives opposite the factory – the thirty-year-old is looking forward to his new life – he is shortly due to start training as a healthcare assistant.

Crisis: "The bosses used it as an excuse for a cull"

While Belgium may not have been among the worst-hit European countries, the crisis still left its mark, going by the redeployment unit figures. Pre-2008, the placement rate was 74%, by 2010, it was down to 66%. And while the Forem was averaging a bare score of requests to set up redeployment units before the crisis, that had risen to 40 by 2009 and 42 in 2010.

These figures confirm the impressions of the staff social support workers running redeployment units for the Liège region. "The crisis has had a visible impact. The number of units has risen sharply, and more business failures are on the cards. But some bosses have also used the crisis as an excuse for a cull...", says the CSC’s Richard Van De Ghinste.

With the crisis, some restraints have also gone. Some participants don’t hold back. They want someone to blame, and say what they think of former bosses in no uncertain terms. We’ve had to have a word with some", says his FGTB colleague Patrice Mozin, regretting that racist remarks have become fairly commonplace.
Austria: fight against "bad apple" call centres starting to pay off

Since 2006, Austria's private sector employees' union GPA-djp has been fighting sweatshop work paces, continual monitoring of staff and bogus self-employment in call centres. Five years and two union campaigns later, working conditions are on the up.

Thomas Schnee
Journalist, Planet Labor Agency
Tearful employees near breaking point, oppressive, non-stop computer management of work organization allowing or forbidding breaks according to the flow of calls, and a deeply distasteful trend to evade employment law by the wholesale use of bogus self-employed! A horror story of normal working conditions in a big Viennese call centre reported in the Der Standard daily newspaper in the summer of 2010 sparked a scandalised public debate and a huge readers postbag. Austria’s private sector employees’ union GPA-djp has long been keeping first-hand and very close tabs on the call centre sector. In 2006, it launched a large-scale labour action campaign to improve employment and working conditions, but finding that too little progress had been made, a second onslaught followed in spring 2010.

“We reckon that Austria has about 300 call centre firms, close on a dozen of which are in the big league. In all, the sector employs 30 000 people, 80% of them women”, says Andrea Schober, head of GPA-djp’s contingent jobs unit. “It’s a still-emerging, poorly organised sector well known for its repeated breaches of labour law. There are several employers’ associations that don’t necessarily see eye to eye, and that makes social dialogue harder. They tend to be staffed by students and low-skilled workers. Working conditions are highly oppressive and pay on the low side at between 1000 and 1500 euros net for a full-timer. So not many call centre agents stick it out for more than two or three years. One result is that it is very poorly unionised, 5% of employees at best”, she says.

Eight minutes from Vienna’s historic centre, on the left bank of the Danube, and a stone’s throw from the UN buildings lies the upmarket business district of DonauCity, home to economic heavyweights like IBM, Sanofi-Aventis, Tele 2 and Strabag. It is here that the German firm Walter Services, one of the top three call centre operators in Europe, has its Viennese central offices. After one or two weeks’ cursory training in using the workstation and “call handling techniques” – topped up by a day or two’s specific training if needed – the new employees are thrown into the fray with work schedules that can stretch from 7 to 20 hours and more a day, weekdays and weekends alike. “Our call centre staff take and make from 100 to 150 calls a day. That’s huge. Sometimes, it will be for competitor entrants, so contacts are quite friendly. Mostly, though, it’s complaints and torrents of abuse. So we have to put up with fast-paced work plus callers in a bad mood. Stress levels are high and we have a rate of absenteeism 2 to 3% above the national average. It’s not appalling, but it does speak volumes”, says Jürgen Leister, chairman of the central works council at Walter Services Austria, which employs over 3000 people at two sites. "The problem with our industry is firms that will do whatever it takes to win contracts, which can include using bogus self-employed – which is illegal – so as not to have to pay their holiday pay or health insurance. They undercut prices on tenders. It’s cutthroat competition”, he says. Fixed on their operating results and profit margins, bosses in this still-emerging industry use every possible means to squeeze out maximum productivity for the minimum employee costs.

A major union campaign

In 2006, GPA launched its first major campaign for better working conditions and to halt evasion of labour laws and collective agreements. "At the time, we got so many calls for help and complaints that we had to create a position specially for the call centre industry”, recalls Irene Holzbauer, chief legal officer of the Vienna labour federation (Arbeitskammer), a specifically Austrian organization parallel to the unions that provides help and representation for Austria’s workers. Even Milosh Godina, boss of the Telez call centre who is behind several initiatives to improve the sector’s image, admits after a fashion that something is not right. "We mustn’t forget that our employees have to work under enormous pressure. It’s a huge enterprise, a service factory, that demands not just technical knowledge but also a lot of personal involvement and patience”, he says in reply to the Der Standard article. The union campaigns are specifically focussing on the psychological pressures on call centre staff whose every activity is monitored on the pretext of compiling figures for itemised customer charging. "Everything employees do is tracked to the minute from the time they log on at the workstation – the length and number of calls, breaks, outcome of calls, the lot - all put into a statistical database. The hard thing is to control who goes into it and how the data are used for monitoring. We can only do that by cross-referencing with the employees concerned”, says Jürgen Leister.
Time and again GPA President Wolfgang Katzian points the finger at cheating by contract. The 5 to 6000 call centre agents working even up to a year ago as “self-employed” are usually nothing of the sort, because independent contractors are normally free to choose where they work, and when and how they do the work ordered. Pay is often fixed and may not allow for overtime or night work. Working hours agreements are also widely flouted. Katzian also argues that “real” call centre employees are routinely undergraded so as to keep pay low. The sector collective agreement provides for six categories of employees and pay defined by criteria that include the level of difficulty of the information to be conveyed (“simple”, “complex”, etc.). Where the employee stands in this scale determines their pay and prospects. GPA estimates that a third of employees may be undergraded.

The union argues that these practices not only violate labour law, but also seriously short-change the social security system. “Contrary to popular opinion, call centre employees are covered by a collective agreement, but it’s the general business one (Kolletivvertrag für das Allgemeine Gewerbe – Ed.). The coming months will find us calling on health insurance organizations and regional labour inspectorates to carry out general checks”, Wolfgang Katzian announced in spring 2010. At the same time, the union stepped up its information and support to employees, set up a telephone hotline and an Internet forum to swap advice and strategies on setting up elections for works councils. “We also obviously backed court cases by a number of self-employed workers claiming and getting employee status”, says Andrea Schober.

**More works councils**

Five years and two campaigns have obviously not solved all problems, but things have got much better. Ms Schober reports that the number of works councils has risen from 18 to 70%, while bogus self-employment is down two-thirds, from 9000 people in 2006 to about 3000 today. Progress on working conditions, work paces, pay and classification is less significant. “The collective agreement for general business applies to jobs that could not be classified in other sectors. So it’s very much a rag-bag with little binding force. At the same time, it’s a collective agreement that is very hard to change because the jobs covered differ so widely that when it comes to renegotiating or adding new provisions, you rarely get a compromise across sectors”, says Andrea Schober, who argues that with a workforce of 30 000, the call centre industry has long since earned the right to its own collective agreement. This is a view shared only by the workers and trade unionists. “But given the low union membership in the sector, I am not expecting changes to this in the next ten years”, says Jürgen Leister. And there is still a big job to do on preventive health and reducing the hardships of work. “Walter Services is a business that abides by the rules and has taken on no bogus self-employed since 2007. And in 2004, management did not oppose the election of a works council as some companies did”, says Jürgen Leister. By contrast, the importance of getting rid of gruelling work paces and stress seems not to have percolated up to the boardroom. The chairman of Walter Services works council points to the lack of preventive health care, antistress programmes or facilities and places for winding down.

The union campaigns are specifically focussing on the psychological pressures on call centre staff whose every activity is monitored on the pretext of compiling figures for itemised customer charging.
Back to Fukushima

Much has been heard from nuclear industry experts since March 2011, but much less from those affected by the tragedy at first hand. I talked to a "liquidator" from the Fukushima clean-up squad and local residents. Their accounts are a chilling echo of those given by Tepco's workers ten years earlier in a survey on subcontracting in the Japanese nuclear industry.¹

Paul Jobin
Sociologist, Director of CEFC Taipei (French Centre for Research on Contemporary China, Taipei office) and a lecturer at the University of Paris Diderot, Department of East Asian Languages and Civilizations

¹ Tepco took on temporary workers from poor neighbourhoods to carry out emergency work, Tomioka (Fukushima Prefecture), 18 April 2011. Image: © ZUMAPRESS
On 19 June 2011, Kimura Shinzō1, a special-ised radiation protection researcher, gave a public talk in the town of Iwaki (30 km south of Fukushima Daiichi) on the state of radioactivity in the region, specifically to pinpoint the “hot spots” to avoid and report his experience with Chernobyl.

After the first explosion on 12 March, and with a decade’s research experience behind him in a semi-public agency (National Institute of Radiological Sciences), Mr Kimura sought and was denied permission to go and take radiation level readings in the area. He therefore resigned and went with a group of academic colleagues to take a series of readings from 15 March which they passed on to those most at risk, bringing their specialty – radiation protection – back closer to its original purpose: protecting from the consequences of radioactivity to the extent possible.

A keenly-attentive audience of over 900 people packed the room to hear his talk and ask questions: a young father wanted to know “How long can I let my kids play outside?”, a power company manager, and some subcontract workers. He fears more for those hired for a few days’ work and then abandoned to their fate are highly unlikely to ever get a WBC check. The official at the 26 July meeting (a different and distinctly less empathic one) went so far as to say that in any event, many workers were willing to be exposed to high doses if it meant having work. The activists’ furious response was, “So what use are you if you just ignore the Labour Code? What’s the point in having a Depart-ment of Health and Labour?” The last meet-ing in August made no more progress on the issue. So effectively, the exceptional permitted levels of 250 mSv per year are settling in as the norm over time.

Exceptional levels becoming permanent

On 15 April 2011, the Japanese Ministry of Labour and Health agreed to enter into negotia-tions with activist groups in contact with the trade unions on the working conditions and radiation exposure of personnel working at the Fukushima nuclear plant. The activ-ists were outraged by the Ministry’s 14 March decision to raise the annual exposure limits from 20 to 250 mSv, citing the state of emer-gency in Fukushima. Looked at this way, is radiation protection still protection, or more a way to legalize death or limit foreseeable compensation claims? During negotiation sessions which I attended in June and July, a Ministry official vouchsafed that the deci-sion in fact came from Tepco and NISA, the Japanese Nuclear Safety Authority under the Ministry of Economy (METI). The same of-ficial also confessed that he was unable to re-call the situation locally as he had so far been refused leave to go there. He pinpointed the intrinsic contradictions of radiation pro-tection standards, not just in a crisis but also in normal times. Following the recommen-dations of the International Commission on Radiological Protection (ICRP), the maxi-mum exposure limit is set at 100 mSv over five years, or 20 mSv per year. But in Japan, exposure to 5 mSv a year is enough to ground a claim for a recognized occupational disease. It should be said that this recommended ex-posure level for nuclear workers is twenty times that recommended for the general pub-lic (1 mSv per year), and that these levels have steadily been revised downwards without the appropriate measures having been taken for previously “overexposed” workers.

According to figures released by Tepco, 565 of the power generator’s own employees and 3,760 employees from partner compa-nies (subcontractors or temporary workers) – 4,325 workers in all – were engaged in radia-tion work between 12 March and 30 April. On 18 June, of the 3,514 workers examined by a Whole Body Counter (WBC) – a scanner-like device that measures the radiation absorbed by the body – 549 were found to have an in-ternal body burden above 20 mSv (see Table 2) which is already a big concern for these people. But what of the uncontrolled casual workers hired through newspaper small ads or in day labourer districts? As the Ministry of Health official intimated, all these odd-jobbers hired for a few days’ work and then abandoned to their fate are highly unlikely to ever get a WBC check. The official at the 26 July meeting (a different and distinctly less empathic one) went so far as to say that in any event, many workers were willing to be exposed to high doses if it meant having work. The activists’ furious response was, “So what use are you if you just ignore the Labour Code? What’s the point in having a Depart-ment of Health and Labour?” The last meet-ing in August made no more progress on the issue. So effectively, the exceptional permitted levels of 250 mSv per year are settling in as the norm over time.

Research interrupted

While at Tokyo’s Hitotsubashi University in 2002, I undertook research on maintenance in the Japanese nuclear industry which took me to the Fukushima, Hamaoka (south of Tokyo) and Shimane (which supplies electric-ity to the Hiroshima region) power plants to interview safety and radiation protection managers, and some subcontract workers. Now, the disaster of 11 March 2011 requires another look at the nuclear industry’s black hole. What follows is my attempted, and apt-ly-named, initial post-mortem summary.

I had been first started off on this line of research by what since 11 March 2011 has become a near-mundane recurring question: How could the country that suffered Hiro-shima and Nagasaki and is so prone to earth-quakes build so many nuclear reactors (51 then, 54 now)? The flagging Japanese anti-nuclear

1. This is an abridged version of an article to be published in Annie Thébaud-Mony, Paul Jobin, Véronique Daubas-Letoumeau, Nathalie Frigui, Santé au travail, de quoi parlons-nous ?, La Découverte, Paris, 2011.
2. Japanese convention – surname first, given name last – is followed throughout.
3. The seviet is the unit used to measure the radiation to which the general population, workers or patients are exposed – usually of the order of a few millisieverts (mSv) a year.
4. Until 1959, the recommendations were 5 mSv per year for the general population. For workers, they were set at 460 mSv/year until 1950, coming down to 150 mSv/year between 1950 and 1955, and 50 mSv/year until 1990.

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movement partly answers the question about nuclear industry growth. The 1960s and 1970s had been marked by an intense wave of anti-nuclear protests, which then receded along with the fortunes of its main political mainstays, Japan’s socialist and communist parties. U.S. President Eisenhower’s 1953 slogan “Atoms for Peace” triumphed over the anti-nuclear and peace movement headed primarily by two organizations, Gensuikyo and Gensuikin, with Communist Party and Socialist Party links respectively.

I was asked by the latter to act as guide and interpreter for a delegation of victims of French nuclear testing in the Algerian Sahara and at Mururoa, in ceremonies held on 6 August 2002 to commemorate the dropping of the atom bomb on Hiroshima. While Gensuikin was still able to organize an event of this scale, saving the abiding memory of the first “nuclear tests” of Hiroshima and Nagasaki in Japanese public opinion, it confirmed the disconnect between opposition to nuclear power plants and opposition to “atomic energy” symbolizing the bomb and nuclear weapons whose manufacture or use Japan had officially foresworn. Organizations like the Citizens’ Nuclear Information Centre (CNIC) strove with some difficulty to halt the spread of nuclear power by bringing citizen oversight to bear. With the media turning a largely deaf ear to their message, these activists constantly ramped up their vigilance and technical analysis in readiness to meet media requests for information to bring balance to industry and state propaganda. Cases in point were the criticality accident at the Tokaimura nuclear power plant in 1999 where three workers were heavily irradiated, two of whom suffered an agonising death within months, and at Mihama in 2004 claiming the lives of five workers, all subcontractors.

### Cover-ups, uncertain safety and market liberalization

The Japanese nuclear industry — Tepco in the lead — has been rocked by scandal for several years. In late August 2002, General Electric engineers reported fraudulent alterations and cover-ups which the nuclear safety authority, placed under the control of the Ministry of Economy, Trade and Industry (METI), finally acknowledged. The headline-grabbing revelations came amidst the slow-to-materialize liberalization of the electricity market urged by METI since the early 1990s. The Japan Atomic Industrial Forum (JAIF) was lined up behind the idea, calling on power companies to show commitment to liberalization, streamline their workforces and work towards greater transparency, following the nuclear industry that had won back public confidence in that way. The JAIF claimed that Japanese power plants were employing twice as many workers as U.S. ones size-for-size. Multi-tier subcontracting in Japan was condemned as unnecessarily pushing up maintenance and repair times, and hence costs. The revelations by the General Electric engineers channelled by the METI therefore played into a “virtuous revolution” called for by the nuclear industry in the belief that liberalization would bring transparency of safety with lower operating costs.

The way this two-month media storm unfolded was as if what is after all the inevitable, normal wear and tear of reactor components and the labyrinth of pipework running through nuclear plants had had to be hidden from public gaze. And yet there has been no such a cover-up for conventional power plants, which need the same kind of repairs. Once again, the crux of the problem was clearly radiation and what it does to people and equipment.

While NISA publishes annual figures showing that most of the collective dose is absorbed by outside workers, the figures give no details for the power company subcontractors.

And yet for all these outside workers, their position in the tier of subcontractors is precisely what determines the dose they will inevitably be “doused with” (external radiation) or probably “swallowed” (internal contamination with an even greater long-term risk). Skilled workers are mid-way up the tier, but still at frequent risk as evidenced by the post-mortem demands for recognition of a work accident. Right at the bottom stand the workers who carry out primary decontamination to limit the dose of more skilled workers, the “radiation fodder”, some of whom in Japan are recruited from the most poverty-stricken groups like the urban homeless. But this does not mean that middle-level personnel—technicians and team leaders—escape scot-free. At this level, the complex web of micro-subcontractors means that a large part of the collective dose can be hidden away to reduce the cost of nuclear power to workers and society.

### Radiation protection as a management method

Work sociologist Annie Thébault-Mony has shown that subcontracting in France was used to counter the rising labour costs of maintenance while ensuring that exposure limits were not exceeded. What she describes as “job management by dose” consists in spreading the collective dose over a large number of casual workers, so diluting it to the point of making it socially invisible. As power plants age, they become “leakier”, requiring more workers to perform maintenance tasks. And despite the claims of many experts, the testimony of workers suggests that radioactivity does...
The exceptional permitted levels of 250 mSv per year are settling in as the norm over time.

Contribute significantly to wear and tear on the facilities. It is then down to maintenance workers operating in a (radioactive) controlled area to manage this immense contradiction between the requirement for workers to be safe and protected and the economic imperatives of cost management. In June 2002, I visited the Fukushima Daiichi power plant. Tepco executives gave me a polite welcome, but a request for their subcontractor list to allow me to conduct systematic interviews with the workers who actually did the bulk of the maintenance work met with an embarrassed refusal. I was nevertheless able to interview a technician employed by a Kobe subcontractor working for the big three Japanese manufacturers (Hitachi, Toshiba and Mitsubishi) who was responsible for checking and repairing the pumps that are a key part of the cooling system. He told me that some nuclear power plants, including Fukushima Daiichi, now needed twice as many workers as ten years earlier to do the same repairs. He said that for the past two years, the aimed-at unit outage time had been cut to 45 days, following the example of France. This meant more maintenance workers in a shorter time period. The permissible doses of radiation (maximum of 0.1 mSv per day per worker) means that cutting unit outage times forced workers either to skip certain repairs which are essential to the safety of nuclear installations or carry on working at the cost of their health. This leaves it up to each worker to "manage" his radiation protection armed with his dosimeter and dose passbook.

This risk individualization partly explains the initial contradiction in the legislation establishing a total dose of 5 mSv as sufficient to ground an application for recognition, while the maximum exposure limit is 100 mSv in "ordinary circumstances" or 20 mSv per year over 5 years. And it is true that NISA figures show very few workers exceeding 20 mSv per year (see Table 2). But broken down by plant, these statistics do not give the real picture for all the casualties who go from one plant to the next. And the fact of not having their own dose passbook makes it harder for workers to "manage" their dose.

### Representative cases of recognition

Information published by the Ministry of Labour and Health reports only fourteen cases of recognised occupational diseases among nuclear power workers in the history of the Japanese nuclear industry. The first is the posthumous case of M.K. in 1991, who died of leukaemia at age 31, after absorbing a total body burden of 40 mSv for work at Fukushima Daiichi between November 1978 and September 1980; the disease had onset in 1982. His family lodged a claim for recognition as an occupational disease after his death in 1988.

The best documented cases are those that resulted in a public battle, some ending in victory. The first recognized and publicized case, whose name was released by the family, is that of Shimahashi Nobuyuki, who died of leukaemia at age 29 having worked from 1981 to 1988 for a subcontractor for the Chubu electricity company which owns the Hamaoka power plant, south of Tokyo. Assigned to the reactor building when periodic checks were done on the three reactors, he had absorbed a body burden of 50 mSv. The company offered his parents three million yen by way of consolation and pay-off. Appalled and wracked with guilt at having urged their son to carry on working despite his evident fatigue, his parents applied for recognition. They subsequently discovered that on the very day of his death, the company had falsified his dose passbook. When the company tried to dissuade the parents from applying on the grounds that they would be used by the antinuclear movement, his mother replied, "No, we’ll use them!" The Shizunai labour bureau found in their favour in 1991.

In 2004, Nagao Mitsuaki was granted recognition for myeloma, the first non-leukaemia case (barring the three severely irradiated Tokaimura workers); but he too achieved that result only with large-scale direct action and a nationwide petition of support.

But some cases are off the radar due to family fears of attracting company or community opprobrium and the shame of being the parent of an irradiated child. In 2000, for instance, the Tomioka office also recognized the case of E.T. who had worked for a Tepco subcontractor as a welder at the Fukushima I and II power plants since 1988, and died of leukaemia at age 46 in November 1999. His family said he had been exposed to a total of 75 mSv. In two other cases, according to documents shown to me by a Tomioka labour bureau employee, "the total radiation dose was below the protection standards" but with no mention as to how reliable the dosimeter levels were or reference to any impact of low doses.

During my investigation, I met Mr. Yokota, the head of a small firm handling radiation protection for subcontract workers for General Electric, Hitachi, Toshiba, Mitsubishi (Japan’s four nuclear reactor manufacturers). Mr. Yokota had cancer, and was now out of work because of it. So disgusted was he by Tepco’s attitude that he explained to me in detail how he had been complicit in systematic falsification that no-one, least of all Tepco, really believed. He showed me the fake "NAD" (no abnormality detected) stamp he used to falsify the radiation pass-books of workers under his responsibility, for example, after the regulation annual medical check-up if the doctor had found

<table>
<thead>
<tr>
<th>Number of maintenance sites</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>&gt;6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dose in millisieverts (mSv)</td>
<td>54 666</td>
<td>11 028</td>
<td>3 386</td>
<td>1 039</td>
<td>358</td>
<td>137</td>
</tr>
<tr>
<td>Total workers</td>
<td>50 614</td>
<td>11 028</td>
<td>3 386</td>
<td>1 039</td>
<td>358</td>
<td>137</td>
</tr>
</tbody>
</table>

### Table 3: Number of workers per site (nuclear power plants and other nuclear industry facilities) and average radiation amounts (in 2009)

Source: Cenric from the National dose registry for radiation workers (Hôshasen jûjisha chûô toroku sentâ)
disturbances in blood composition indicating a risk of leukaemia.

But what is the basic strategy of those in charge of the nuclear power installations: turning a blind eye to falsification in order to limit the official amount of radiation to which these workers are officially exposed? Or actually trying to maximize the doses really received to blinker the public perception of the danger of "low doses"? The answer is probably a judicious blend of the two.

Epidemiology led astray

Radiation protection developed out of studies of the Hiroshima and Nagasaki victims has over the last forty years become the cornerstone of a sophisticated system which, unable to truly protect, is apt to minimize the effects of ionizing radiation on human health through a framework of standards that has been continuously revised downward since its creation, or, by playing down the complexity of carcinogenicity. The workers are the first casualties of this. And others have followed, as witness the tearful resignation on 29 April 2011 of Prime Minister Kan Naoto’s adviser on radiation protection Prof. Kosako Toshio for failing to talk the Department of Education out of considering 20 mSv per year as a maximum possible exposure for the children of Fukushima. He was anything but an opponent of nuclear power, but presumably the intrinsic contradiction of radiation protection hit him that day with full force.

Alongside radiation protection, epidemiology can also be led astray from its original purpose to be added to the armoury of means for playing down the effects of radiation on human health. In March 2010, the Japanese Radiation Effects Association handed the Ministry of Science an epidemiological study based on an impressive cohort of 212,000 people from a total of 277,000 people who worked in the nuclear industry between 1990 and 1999. The study found a significant increase in mortality for one type of leukaemia, but considered that for other cancers, there was no difference with the rest of the population. As noted by CNIC activist Watanabe Mikiko, the big problem with this study, like its predecessors, was to look only at mortality and ignore morbidity, i.e., people who already had cancer but were still alive at the survey date. Since April 2011, initiatives have already taken shape in Fukushima around local parent-teacher associations, as well as the measurements taken by Kimura Shinzō’s team, as well as foreign organizations like Greenpeace and the Commission for Independent Research and Information on Radioactivity (CRIIRAD). These measurements are already being used by local residents to dismiss government and nuclear safety authority reassurances and protect themselves as best they can from contamination hazards. In the future, they could also provide a starting point for a citizens’ epidemiological study to identify victims of the disaster.

At a loss how to deal with the scale of the disaster, the governor of Fukushima Province, Yuhei Sato, meditates before a makeshift altar. Namie (Fukushima Prefecture), 15 May 2011. Image © MAXPPP

Looked at this way, is radiation protection still protection, or more a way to legalize death or limit foreseeable compensation claims?


Read more

Sick from work, sick to death...
The social invisibility of work cancers

There are not many books about occupational cancers for the general reader. And yet they are part of the wider debate about health at work. Laura Boujasson’s book tells of her experience as a surveyor with the Giscop work-related cancers research body. Since 2002, Giscop has reconstructed the work histories of over 900 lung cancer patients in the Seine-Saint-Denis département (Paris region) where there is a significant excess incidence of cancer mortality.

A word about the area’s history might not go amiss: the first batch of factories (chemical, textile, metalworking) was set up there in the 1860s to open up central Paris and give it “breathing space”. The area’s economic growth continued until after the Second World War. In the 1960s, the French government’s drive to decentralize industrial employment through business relocation grants brought significant job losses. In 1968, administrative reforms turned the area into a département; the ruling Gaullist party’s aim with local elections coming up was to ring-fence inside it the French Communist Party – a big influence since the 1930s and still the main opposition at the time. The economic crises of the 1970s and ‘80s accelerated the loss of all the département’s major industries. But while it is now abuzz with new service and R&D businesses, the scars of the past remain: high unemployment, poor housing, lower educational levels than neighbouring départements, etc.

But where do the patients’ personal accounts and work histories collected in face-to-face interviews by the Giscop investigators take us? A collective and multidisciplinary expertise is brought to bear on the information gleaned which stacks up patients’ experiences (work as it is) with those of experts from different disciplines (toxicologists, doctors, safety engineers, health and safety committee reps). The result is an inventory of work activities than can be exposed to carcinogens or carcinogenic processes.

The author presents a concise but highly detailed selection of cancer sufferers’ work histories – ordinary people for whom the importance of work (structuring of social relations, material issues, forging an identity, etc.) plays into their self-definition. She describes what the outcomes of the scientific process these recently diagnosed workers agreed to take part in meant to them. The survey brought home to them how their past working conditions had impacted their present state of health, when they had previously seen their illness as most often the result of poor lifestyle choices (especially smoking) and therefore blamed themselves for their failing health, says the interviewer. She waxes even more indignant when talking of the added social injustice of the obstacle course that follows the classification of their cancer as work-related, namely the demand for recognition as an occupational disease and the possibility of getting compensation.

Off the back of this, Laura Boujasson voices her feelings about social and health inequalities, the havoc wrought by casual hire-and-fire and how hard it is for our social protection system to recognise cancer as work-related. What surprises her most may be, as she herself says, “realising how very common cancer risks are in the workplace”. Most of them are reported in the scientific literature but, as often in health at work matters, the advancement of knowledge is no guarantee that effective prevention policies will necessarily follow!

The analysis moves up a level in the second part of the book where Laura Boujasson looks at industry and employers’ denial of carcinogenic properties so as to avoid restrictive regulations. The effectiveness of this was seen with asbestos, even if that denial was eventually rebuffed after many years of struggle and legal battle by victims’ groups which help those affected break out of their isolation.

The book closes with Laura Boujasson’s assertion that both more science and more politics must be brought to bear on occupational cancers, but even more so, assessment of workplace risks and solutions to reduce them. The introduction of mandatory post-occupational medical monitoring of certain categories of workers and a strengthening of occupational health services could also help.

— Marianne De Troyer


For more information on Giscop’s work:
www.univ-paris13.fr/giscop
How the "sons of toil" invented science

The history of science as we know it is what we have learned from schoolbooks: how Archimedes discovered the principles of fluid mechanics in his bath; how Galileo proved that the Earth is not the centre of the universe; how Newton discovered gravity from seeing an apple fall. Official written histories are the record of a few great men having that "Eureka" moment that ushered in technological and material advances.

In his *A people's history of science*, American historian Clifford D. Conner attempts to show that in fact, science has always been a collective endeavour. This myth-busting book uncovers the contribution made to knowledge by those considered unknowable: hunter-gatherers, peasant farmers, sailors, miners, blacksmiths, carpenters and many others who worked with their hands. In eight broad chapters, from the "First Peoples" to the American teens of the 1970s laying the foundations of computing for Everyman, the book looks at the timeline of human history, paying tribute to the contribution made by "people of the common sort" to scientific progress.

The book's basic premise is that the different "scientific revolutions" could never have happened without the knowledge and practical techniques patiently built up, handed down and improved by thousands of unknowns. Clifford D. Conner, who himself did a miscellany of jobs before coming late to academic study, profusely illustrates his thesis. He shows how Galileo's regular discussions with workers at Venice's weapons factory (the Arsenal) enabled him to develop his theories on ballistics, how much anatomy is indebted to the anonymous anatomical artists – whom Vesalius failed to credit! – of the 420 illustrations of his *De Humanis Corporis Fabrica*, how much Tycho Brahe's astronomical discoveries owed to the telescopes produced by eyeglass manufacturers, etc.

This dissident historian's work is less a lavish exercise in rehabilitation than a denunciation of the use of science as a means for domination. Conner piles example on example. Among the most compelling is that of quinine. He notes that quinine was a traditional remedy of the Quechua Indians of Peru. Once under the control of colonists, cultivating the cinchona tree enabled the white man to eradicate malaria in Europe... and to make incursions into the African continent with no further health fears.

But he argues that the systematic exploitation of science for the powerful (against the people) is a relatively recent phenomenon, dating from the 19th century through what Conner calls a "union of capital and science" culminating in today's "scientific-industrial complex". He inveighs against the culture of science and technology dominated by experts and obsessed with efficiency, rationalization, and profit accumulation. "Almost all scientific research is the work of professional scientists either directly employed or indirectly funded by capitalist corporations and governments", he observes.

The boundaries between public, industrial and academic research have become blurred. "The upshot is that public dollars pay universities to produce knowledge that becomes the private property of corporations," he argues.

While the author's persistently strict divide (the elite vs. the people) can grate, his *A People's History of Science* to its great credit does throw a light on those whom history with a capital H has airbrushed away and the social conditions of that disregard. Trade unions can draw conclusions from this, such as the need for these "artisans of knowledge" to be involved in formulating the standards and policies for risk prevention in the workplace – spheres that are still today the private preserve of experts and technocrats.

— Denis Grégoire
HesaMag #05

Working time

www.etui.org