

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

## Handling of heavy loads: mechanisation no magic solution

Four in ten workers handle heavy loads in their job, and three out of ten do so for at least two hours a week. Building workers are most concerned: half of them handle heavy loads for at least two hours a week and 20% for at least 20 hours. Factory

workers (45%) and farm labourers (43%) are also highly exposed, while in the service industry, shop and health care workers are most affected.

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

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### More details:

[www.travail.gouv.fr/etudes-recherche-statistiques/statistiques/sante-au-travail/87.html](http://www.travail.gouv.fr/etudes-recherche-statistiques/statistiques/sante-au-travail/87.html)

## SURVEY

# Non-standard hazards on the rise

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

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

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

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

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

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

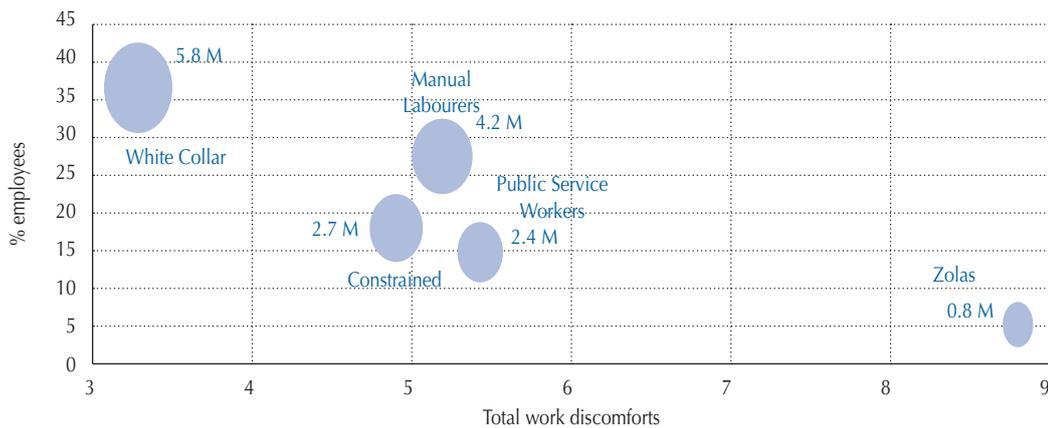
At-risk workers tended to be in denial about situations that were harmful but thought to be natural or "part of the job". Lorry drivers are a case in point: a large share of them used to report that they were not at risk of road traffic accidents. Because that proportion is decreasing, the risk is becoming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

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

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

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

## Cluster analysis by type of physical discomfort \*



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

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

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

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

#### Who are the "Zolas"?

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

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

Women are over-represented among those "serving the public", i.e., highly public-facing occupations like health care and shopwork. Women working in these jobs have to deal with psychological

### Cluster analysis of groups

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

constraints stemming from conflicting demands: they have to carry out and complete an uninterrupted task to a set deadline while also responding to demands from the public that interrupt the work being done. The main hallmark of women's employment is that it is often undervalued, which is particularly evident in the lack of social support and scope for making decisions.

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

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

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<sup>2</sup> National institute for health and medical research.