



# Work-related stress

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*This report examines the issue of work-related stress in the 27 EU Member States and Norway. Studies capturing data on work-related stress in individual countries differ in terms of their scope, methodology and coverage. The main risk factors for work-related stress include heavy workload, long working hours, lack of control and autonomy at work, poor relationships with colleagues, poor support at work and the impact of organisational change. These factors can be difficult to address, especially if they have resource implications. The main outcomes (individual, organisational and societal) of work-related stress include physical and mental health problems, absence from work, reduced quality of outputs, increased welfare and medical spending, and reduced productivity. Company-level examples of best practice in stress management highlight the need for good quality data on work-related stress, a robust stress policy, the involvement of all relevant actors, good communications, and the importance of buy-in from senior management.*

## **Introduction**

Work-related stress is a growing concern for employees and employers in the European Union. According to the [Fourth European Working Conditions Survey \(6.35Mb PDF\)](#) carried out in 2005, 22% of European workers reported suffering from stress, lower back ache, muscular pain and fatigue. About a quarter of those employed in Europe are exposed to job strain (between 13% in Sweden and 43% in Greece) (Sultan-Taïeb et al, 2010). Work-related stress has been associated with a number of other ill-health outcomes, such as cardiovascular disease (for example, Kivimäki et al, 2002), musculoskeletal disorders, particularly back problems (for example, Hoogendoorn et al, 2000), and neck–shoulder–arm–wrist–hand problems (so-called repetitive strain injuries, RSI); see for example, Ariëns et al, 2001), as well as absence from work (Houtman et al, 1999).

**Stress at work** is also believed to be a major cost to companies and countries in a wider sense, as it affects productivity, notably through absenteeism and presenteeism (that is, the practice of attending work even when employees feel too ill to be able to work effectively). It is difficult to find precise data on the cost, although high and rising absence rates are a key trigger for employers to initiate stress management processes.

In general, stress is a difficult topic to address due to the range of definitions available and the unavoidable subjective element to the perceptions of stress. This report examines some of these issues and how they are being tackled across Europe.

This report has particular relevance at present due to the high levels of organisational change and uncertainty generated by the economic crisis and recession. Stress is therefore likely to remain high on the agenda of the [European social partners](#) in the EU for some time to come.

## **Relevant policy areas**

The issue of work-related stress has already been on the agenda of EU institutions and policymakers and EU social partners for some years. The starting point in terms of legislation is the [Framework Directive 89/391](#), under which all employers have a legal obligation to protect the occupational safety and health of workers, a duty which also applies to problems of work-related stress on the basis of the general principles of prevention:

- avoiding risks;
- evaluating the risks which cannot be avoided;
- combating risks at source;
- adapting the work to the individual;

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- developing a coherent overall prevention policy which covers technology, organisation of work, [working conditions](#), social relationships and the influence of factors related to the [working environment](#).

This was especially acknowledged by the social partners at European level. Following consultation with the European Commission, the EU social partners concluded an [agreement \(77Kb PDF\)](#) in October 2004 aimed at raising awareness of work-related stress among employers, workers and their representatives. The agreement also provides a framework to identify and prevent or manage stress, and sets out employer and worker responsibilities. It states that although the individual is well adapted to cope with short-term exposure to pressure, which can be considered as positive, people have greater difficulty in coping with prolonged exposure to intensive pressure. Moreover, different individuals can react differently to similar situations and the same individual can react differently to similar situations at different times of their life. It states further that stress is not a disease but prolonged exposure to it may reduce effectiveness at work and may cause ill health. The European and national social partners had the responsibility to ensure the implementation of this autonomous agreement ‘in accordance with the procedures and practices of management and labour and the Member States’ by October 2007.

Psychosocial risks and mental health in the workplace are high on the political agenda at EU level and the Community strategy 2007–2012 on health and safety at work calls for conclusions from the assessment of the European social partners’ agreement on stress. The European social partners presented their [joint report \(900Kb PDF\)](#) on the implementation of the agreement on 15 December 2008 ([EU0902019I](#)). This report indicated that the agreement has contributed to improving cooperation between workers and employers in efforts seeking to identify, prevent and manage stress. In terms of disseminating the agreement, the report noted that a variety of methods had been adopted including:

- social partner framework agreements;
- national, sectoral or company collective agreements;
- national legislation;
- tripartite cooperation with public authorities;
- the development of tools for the measurement of stress or training measures.

Furthermore, the report concluded that ‘despite the different challenges and obstacles, implementation of the European framework agreement (...) contribute an important added value in the area of work-related stress and the development of social dialogue’. A conference on stress was held in July 2009 at which delegates discussed the role which social dialogue can play in the EU governance approach and how it can deliver concrete results with regard to tackling work-related stress.

## Relevant research

There has been a significant amount of research carried out into stress at work, sometimes under the framework of psychosocial risks. The [Psychosocial Risk Management: European Framework \(PRIMA-EF\) research project \(1.86Mb PDF\)](#) has produced a range of practical [tools and guidelines](#) on how to prevent and manage stress. Its aim is to develop a European framework for psychosocial risk management with a special focus on work-related stress and workplace violence, including harassment, bullying and [mobbing](#).

The European Agency for Safety and Health at Work ([OHSA](#)) in Bilbao (Spain) focuses on stress as one of the major psychosocial risks at work. Its recent report, [OSH in figures: stress at work – facts and figures \(4Mb PDF\)](#) discusses the prevalence of stress and trends in work-related stress in EU Member States, with a special analysis of those groups particularly exposed to stress according to age, gender, sector, occupation and employment status. OHSA has recently

developed a European survey of enterprises on new and emerging risks ([ESENER](#)), which explores the views of managers and worker representatives on how health and safety risks are managed in their workplaces. This survey places particular emphasis on psychosocial risks, linked to the way work is designed, organised and managed, as well as to the economic and social context of work. The survey asks respondents about measures taken at the workplace, the main drivers for taking action and the most significant obstacles. Questions cover management of health and safety in general, management of psychosocial risks and also the participation of workers.

A 2007 Eurofound report on work-related stress ([TN0502TR01](#)) looks in detail at the issue of stress, noting that:

*Stress occurs in many different circumstances, but is particularly strong when a person's ability to control the demands of work is threatened. Insecurity about successful performance and fear of negative consequences resulting from performance failure may evoke powerful negative emotions of anxiety, anger and irritation. The stressful experience is intensified if no help is available from colleagues or supervisors at work. Therefore, social isolation and lack of cooperation increase the risk of prolonged stress at work. Conversely, work tasks with a high degree of personal control and skill variety, and a work environment with supportive social relationships, contribute to workers' wellbeing and health.*

## **Definitions of stress**

Many definitions of stress exist depending on research disciplines and countries.

Although there may not be an accepted universal definition of stress, there is broad consensus that it involves an imbalance between perceived demands and the resources to cope with them. At European level, the [2004 EU social partners' agreement \(77Kb PDF\)](#) describes stress thus:

*Stress is a state, which is accompanied by physical, psychological or social complaints or dysfunctions and which results from individuals feeling unable to bridge a gap with the requirements or expectations placed on them.*

In the [guidance on work-related Stress \(935Kb PDF\)](#) prepared by the European Commission, stress is defined as:

*the emotional, cognitive, behavioural and psychological reaction to aversive and noxious aspects of work, work environments and work organisations. It is a state characterised by high levels of arousal and distress and often by feelings of not coping.*

The OSHA web page on the [definition and symptoms of stress](#) notes that:

*People experience stress when they perceive that there is an imbalance between the demands made of them and the resources they have available to cope with those demands. Although the experience of stress is psychological, stress also affects people's physical health.*

*Reactions to the same circumstances vary between individuals. Some people can cope better with high demands than others. It is the individual's subjective evaluation of their situation that is important. It is not possible to determine from the situation alone the amount of stress it may cause.*

*Short-term stress – for instance when meeting a deadline – isn't usually a problem: indeed it can help people perform to the best of their ability. Stress becomes a risk to safety and health when it is protracted.*

## **Models for stress**

Various disciplines researching this topic emphasise one or other aspects of stress: stressors (behavioural, emotional, physical and psychological), responses to stress, stress coping mechanisms, etc. In order to manage stress successfully, it is important to ensure that whatever definition of stress is chosen, it is shared. This is useful in order to recognise the effects of exposure to stress, and to understand how and why stress can have an adverse impact on health, performance and well-being as well as how to deal with and prevent it.

While early theories emphasised either external stressors or the body's answers to them, more recent and more consensual approaches consider stress in terms of the dynamic interaction between the individual and their environment.

There are many ways of classifying work-related stressors. More commonly 'demands' may be related to time pressure or the amount of work (quantitative demands), or may refer to the difficulty of the work (cognitive demands) or the empathy required (emotional demands), or even to the inability to show one's emotions at work. Demands may also be physical (that is, high demands in the area of dynamic and static loads).

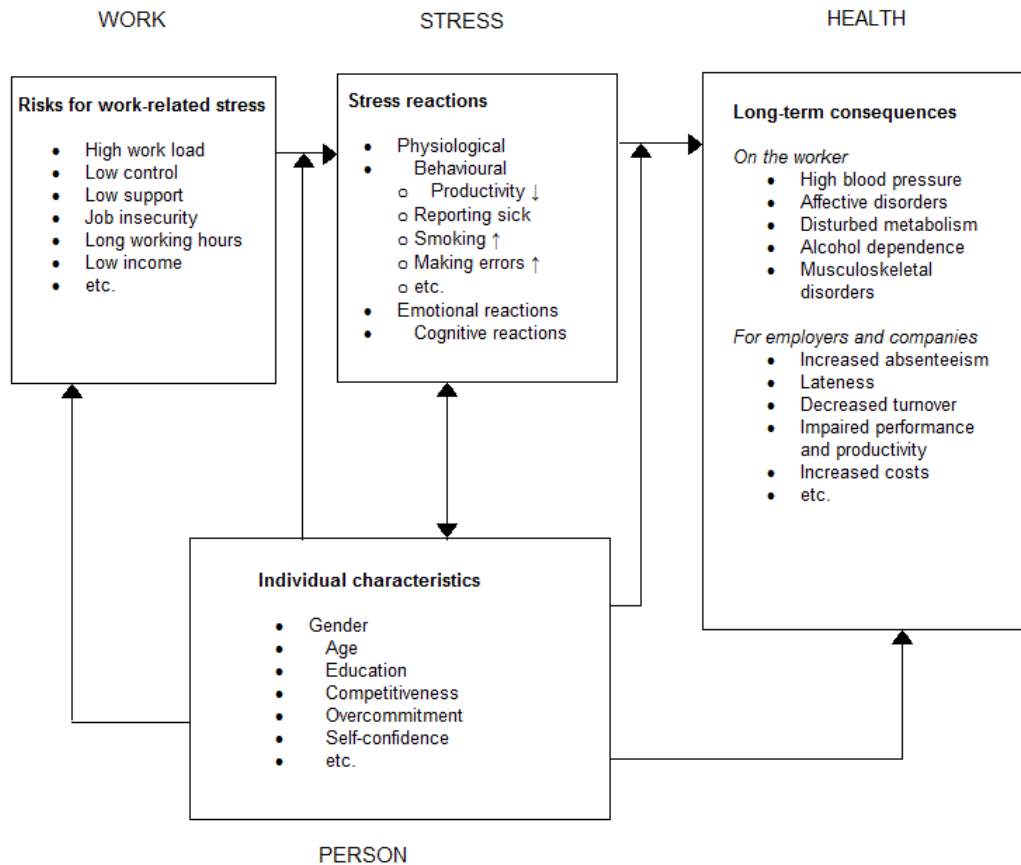
When workers perceive an imbalance between demands placed on them and environmental or personal resources, this can cause a number of possible reactions. These may include:

- physiological responses such as increase in heart rate, blood pressure and hyperventilation;
- emotional responses such as feeling nervous or irritated;
- cognitive responses such as reduced attention and perception, forgetfulness;
- behavioural reactions such as aggressive, impulsive behaviour or making mistakes.

When demands exceed one's abilities and knowledge, but one is able to perceive this as an opportunity to work towards achieving a state of balance, a situation of learning and development may arise.

The stress process can be summarised in a model (Figure 1) that illustrates the causes of stress, (short-term) stress reactions, long-term consequences of stress and individual characteristics, as well as their interrelations.

Figure 1: Model of causes and consequences of work-related stress



**Figure 1: Model of causes and consequences of work-related stress**

Source: Adapted from Kompier and Marcelissen, 1990

As mentioned earlier, stress reactions may result when people are exposed to risk factors at work and may be emotional, cognitive, behavioural and/or physiological in nature. When stress reactions persist over a period of time, they may develop into more permanent, less reversible health outcomes such as chronic fatigue, burnout, musculoskeletal problems or cardiovascular disease.

Individual characteristics such as personality, values, goals, age, gender, level of education and family situation influence one’s ability to cope. These characteristics can either exacerbate or alleviate the effects of risk factors at work. Physical and psychological characteristics, such as physical fitness or a high level of optimism, may not only act as precursors or buffers in the development of stress reactions and mental health problems, but may also be changed by stress. For example, if workers are able to deal with risk factors at work, they will be more experienced and self-confident in overcoming similar situations the next time they have to face them. On the other hand, stress reactions like fatigue and long-term health problems will often reduce a person’s ability to perform well and thus aggravate the experience of stress, which will ultimately result in exhaustion and breakdown.

Recent stress models, like the [‘effort-reward imbalance’ model](#) of the University of Düsseldorf’s Institute for Medical Sociology, show clearly how individual characteristics can contribute to the effects of stress at work. Commitment to work, for example, is considered to be significant. The

general feeling is that some people are prone to becoming ‘over-committed’ to their work, which has a negative effect on their health. Self-confidence, another core individual characteristic that has been related to the vulnerability of the individual, seems to be highly inversely related to over-commitment ([TN0502TR01](#)). In a work context, rewards are transmitted by three systems:

- financial gratification ( money);
- social–emotional reward ( esteem);
- status control (promotion prospects, career opportunities and job security).

Essentially, according to this model, an imbalance between high efforts and low rewards increases the risk of reduced health (see Siegrist, 1996).

Perceptions of organisational justice can also be a significant stress factor. For example, Kivimäki and colleagues (2004) found that the extent to which people are treated fairly in workplaces seemed to predict their health independently of established stressors at work.

### **Purpose of this report**

Despite the research and guidance outlined above, many questions regarding the topic of work-related stress remain to be answered, particularly from a European comparative perspective. What are the prevalent risk factors? What are the main related outcomes (both at individual and at organisational levels)? And just as importantly, what kinds of interventions are best suited to deal with work-related stress?

For that reason, this comparative analytical report builds on existing information and research about this subject, taking advantage of information from the correspondents making up the Eurofound Network of European Observatories (NEO).

The aim of this report is, therefore, threefold.

- It identifies the most important risk factors influencing work-related stress and looks at whether they are related to demands (quantitative, qualitative or emotional) or to organisational aspects (such as decision latitude, social support, management styles, conflicts of values).
- It looks at the potential and most important outcomes of work-related stress. The focus is not only on the individual level (namely in terms of health-related outcomes such as cardiovascular diseases, musculoskeletal disorders, mental health illnesses, disabilities) but also at organisational level, that is identifying the most important impacts of work-related stress in organisations (impact on, for example, performance, productivity, innovation capacity, job satisfaction and level of commitment). The report also looks at some of the societal outcomes of work-related stress, such as the consequences of absence from work in terms of reduced productivity, and the cost of treating stress-related illness.
- The report gathers and analyses relevant information about interventions devised to tackle work-related stress and their effectiveness.

This CAR highlights the main themes to emerge from answers provided to a questionnaire by national centres in each country. This topic is particularly relevant at present due to the uncertainty generated by the economic crisis, which is likely to increase stress levels around the EU.

## Monitoring work-related stress at national level: high heterogeneity between Member States

Various instruments are in place in EU Member States aimed at monitoring work-related stress at national level. These usually take the form of surveys. Some Member States have more than one survey and are able to provide trend information on stress, though the majority does not have national representative surveys.

### Cohort surveys

Cohort surveys are run in some countries, such as Belgium. Here the Belstress study, a large epidemiological cohort study on stress at work and related health problems, ran from 1996 to 2006. In Sweden, the Swedish Longitudinal Occupational Survey of Health (SLOSH) is a longitudinal cohort study that aims to examine the relationship between work organisations, work environment and health among the same participants over a period of time. These types of surveys are very important as they allow for a deeper understanding of work-related stress. For example, recent analysis of the SLOSH cohort has shown how leadership style can play a role in relation to the development of work-related stress.

### Repeated cross sectional surveys over time

A few European countries conduct national representative surveys to measure stress. This type of methodology is used to identify prevalence and trends, as well as the profile of risk groups.

Only a few of these used 'validated questionnaires', where complex epidemiological studies combining self-reporting, third party data and physiological measurement demonstrate a relationship between stress and some health outcomes. For example, the French SUMER survey in 2003 (repeated in 2009) includes the 'Karasek' questionnaire. This is rather unique in European surveys as it introduces a 'validated questionnaire' into a general survey. Results have highlighted that women are more exposed than men to 'job strain' work situations, with risks for health (cardiovascular diseases, musculoskeletal disorders (MSDs) and mental health problems). Also, clerks are more exposed than legislators or professionals; demands on them are higher and their room for manoeuvre is likely to be less.

Most other surveys would use proxy data for these validated questionnaires. In large-scale longitudinal, epidemiological research, they may also be used to understand causal relationships. These types of surveys can provide valuable data concerning changes and trends relating to work-related stress and can help us understand the relationship between work/employment changes and stress-related issues. Such studies exist for example in Austria (*Arbeitsklimaindex* and *Arbeitsgesundheitsmonitor*), in which data are collected quarterly. In Finland, the Work and Health surveys carried out by the Finnish Institute of Occupational Health ([FIOH](#)) have been carried out every three years since 1997.

The Netherlands Working Conditions Survey ([NEA](#)) is the largest periodic survey on working conditions in the Netherlands and has been conducted six times. This survey includes work-related stress, although the way of measuring some work-related stress factors was changed in 2007.

In Norway, the Level of Living Survey: Working Conditions (*Levekårsundersøkelsen: Arbeidsmiljø*) is conducted every three years and includes questions that measure the subjective evaluation of control and demands of work.

The Survey on Quality of Life in the Workplace in Spain (*Encuesta de Calidad de Vida en el Trabajo*) is carried out each year by the [Spanish Ministry of Labour and Social Affairs](#), giving a



detailed picture of trends concerning stress since 1999. The most recent survey in this series relates to 2008.

The French Working Conditions Survey (*Enquêtes Conditions de Travail*), carried out every seven years, enables researchers to monitor work situations over time.

Labour force surveys are carried out on a regular basis in many countries, but do not normally include much data relevant to the issue of work-related stress. Nevertheless, one ad hoc module on work-related issues allows some mapping over time of one dimension of stress. In Malta, for example, a [labour force survey](#) in 2007 included work-related stress.

## One-off surveys

There are a range of one-off surveys available around the EU, some of which are relatively broad in scope, while others focus more narrowly on psychosocial risks at work. These surveys can provide an interesting snapshot of stress-related issues at a particular point in time. Some one-off surveys focus on specific sectors or occupations that are considered to be at particular risk of work-related stress. For example, in Cyprus, a 2008 study by Kyriacou and Constanti was carried out on call centre operators, focusing on issues such as individual personality, working conditions and workplace environmental conditions. In Hungary a series of sectoral studies have been carried out by [GfK Hungária](#), including in the agricultural sector.

Some one-off surveys focus on a particular issue. For example, in Slovenia in 2008, the Clinical Institute of Occupational, Traffic and Sports Medicine ([Čili za delo](#)) carried out a survey on mobbing, based on interviews carried out in respondents' homes.

There are also a range of large health surveys, in which a limited number of questions are devoted to stress. This is the case with the [Danish National Health and Morbidity Survey 2005 \(in Danish, 4.63Mb PDF\)](#), in which stress was measured by the question 'do you feel stressed in your everyday life?'.

## Survey sponsors

Many of the surveys that examine stress are carried out by national governments. This is the case in Germany, for example, where the Federal Ministry of Labour and Social Affairs ([BMAS](#)) produces an annual report on health and safety at work, and other occasional studies on health at work that include work-related stress. Similarly, the Latvian Ministry of Welfare ([LM](#)) has issued a study on working conditions and risks. In Portugal, the Labour Ministry ([MTSS](#)) carried out a national survey on working conditions in 1999–2000, but it has not been repeated since.

Germany's health insurance organisations also carry out surveys that on occasion include psychosocial risks such as stress. For example, the so-called [Absenteeism Report](#) conducted by [WIdO](#), the scientific research institute of statutory health insurer AOK and the University of Bielefeld, focuses in its 2009 edition on work and psychosocial risks. The report analyses the data on absence rates available from the 9.7 million employed people insured by AOK in 2008.

Social partners also play a role in producing surveys, either conducting them themselves, or commissioning surveys from external bodies. In Greece, the Greek General Confederation of Labour ([GSEE](#)) commissioned a survey on working conditions in 2008 carried out by a private research and consulting organisation. **Trade unions** in other countries have also sponsored research into stress. For example in Luxembourg, the Confederation of Independent Trade Unions ([OGB-L](#)) commissioned a study into work-related stress in 2006, which was carried out by the organisation Stimulus.

Other survey sponsors include research bodies, such as the Economic and Social Research Institute ([ESRI](#)) in Ireland, which conducted a national survey of the work experiences of over 5,000 employees, together with the National Centre for Partnership and Performance ([NCPP](#)). The labour inspectorates in some countries also sponsor research into stress. This is the case in

the Netherlands, for example, where an annual survey is carried out by the country's labour inspectorate, based on a standard questionnaire.

Central statistics offices run surveys in some countries such as Norway, Poland and Romania.

### **Survey infrastructures to measure work-related stress**

A number of European countries make use of a sophisticated range of surveys, which allow for the monitoring and better understanding of work-related stress.

For example, work-related stress and health has been investigated for a long time in Sweden, so there are several sources that investigate stress and health issues in the Swedish labour market. In particular there are three surveys with national coverage which provide information on work-related stress. The first is the Swedish Work Environment Survey (SWES), which has been carried out by Statistics Sweden ([SCB](#)) every other year since 1989. Secondly, SLOSH (Swedish Longitudinal Occupational Survey of Health) is a longitudinal cohort study which followed up on SWES 2003. The aim of the study is to examine the relationship between work organisations, work environment and health. The study includes more questions than SWES, and has the advantage that it studies the same participants over a longer period of time. The survey was commissioned by the Stress Research Institute ([Stressforskningsinstitutet](#)) and was carried out by SCB from March to May 2006. Thirdly, Work Related Disorders is a survey commissioned by the Swedish Work Environment Authority ([AV](#)), which measures new and old work-related disorders as reported by the respondents during one year. Studies on work-related disorders have been conducted since 1991 on the whole population and from 2003 on those in work.

France is another example and can use a range of data coming from surveys carried out by the Ministry of Employment (research and statistical unit: DARES). These include:

- French Working Conditions Survey (*Conditions de Travail*, [CT](#));
- Medical Monitoring of Risks Survey (*Surveillance Médicale des Risques*, [SUMER](#));
- Health and Career Path Survey (*Santé et Itinéraire Professionnel*, [SIP](#));
- Organisational Change and Information Survey (*Changement Organisationnel et Information*, [COI](#));
- the Samotrace programme, a monitoring system for mental health at work launched in 2006 by the French Institute for Health Surveillance ([InVS](#)).

The Netherlands is also an example of a country that carries out numerous surveys on work-related stress. The [NEA](#) is the largest periodic survey on working conditions. Six surveys have been performed to date in 2003, 2005, 2006, 2007, 2008 and 2009. The Employers Working Conditions Survey (WEA) is another national survey, with a sample of at least 5,000 employers, and is conducted every other year. It concentrates on working conditions and employment-related issues regarding policies as well as 'ad hoc' activities regarding working conditions and working relations. The [Dutch Labour Inspectorate](#) carries out another survey (*Werk in Bedrijf*) every year in which labour inspectors query a national sample of more than 2,000 Dutch employers with a standard questionnaire on working conditions and the way they manage these. They also visit the shop floor and ask for relevant reports. Every year a specific set of working conditions is questioned in detail, and in 2007, work-related stress factors were investigated.

It is obvious that this is a complex topic, so it is necessary to increase our knowledge and understanding by analysing information provided by various sources and types of respondents.

From a comparative point of view, it is important to be able to draw and learn from the knowledge and expertise available to develop other survey instruments that can contribute to a better understanding of work-related issues and how to address them.

The Annex gives details of the main national surveys and other monitoring instruments for stress that are in place in individual European countries.

### **Overall level of work-related stress**

Work-related stress is often difficult to evaluate, as it can be quite difficult to define and depends very much on the definitions and methodologies used in research. It also has some subjective elements that depend on the nature of individuals and their own responses to stress factors. In some countries, stress is widely recognised as a work-related issue; elsewhere well-being in the workplace is promoted, while in other countries it does not have such a high profile. According to different surveys, the incidence and trends of stress also tend to vary within countries, as these may use varying methodologies and definitions.

Some parties have argued for the production of one single indicator to measure and monitor stress. However, a group of experts appointed by the French Ministry of Labour, with the task of assessing psychosocial risk in the workplace, argued that given the differences in theoretical models, all indicators cannot be combined. It would be necessary to develop a coherent set of indicators in order to monitor work-related stress in an efficient way.

Trends vary from country to country, with some reporting an increase in stress levels, some reporting a decline and some stating that the trend has been broadly stable over the past five years. But it can be difficult to monitor trends across many countries due to a lack of directly comparable data.

Countries reporting an increase in stress levels over the past five years include Germany, where the WSI Works Council carried out a survey between September 2008 and January 2009, interviewing 1,700 works council members about their establishment's innovative capabilities, working conditions and occupational health. Results showed that 79% of all works council members interviewed stated that the psychological strain for employees at the workplace had risen between 2006 and 2008.

In Denmark, although it is difficult to pinpoint trends, data from the SUSY survey shows that from 1987 to 2005 the share of individuals experiencing stress to a severe degree rose from 5.8% to 8.8%.

In Estonia, data from European Working Condition Surveys show that the share of respondents who associate their work with stress increased from 26% in 2001 to 32% in 2005. However, it is thought that some of this increase could be explained by the increased focus and attention on the issue of stress in recent years.

In Ireland, although there is no definitive survey evidence, lawyers are seeing an increase in bullying and stress claims, according to Aisling Butler, who chairs the Health and Safety Lawyers Association of Ireland ([HSLAI](#)). The trend is manifesting itself in more cases for unfair dismissal coming before the Irish Employment Appeals Tribunal, in which issues of bullying and stress are raised.

In Belgium, the [Flemish Workability Monitor](#) found that around 29% of employees have work-related stress problems (of which 10% have acute problems) and that this has remained broadly stable since 2004. Levels of stress have also been broadly stable in the UK over the past five years. In Sweden, the number of workers indicating that work has caused stress has fallen following a peak in 2003, although it has risen over the 10 years from 1998.

In Norway, surveys have pointed to a decline in work-related stress, although researchers note that the trend should be interpreted with care, as factors that are not related to work could influence the employee's tolerance and subjective experience of work-related stress.

In Finland also, according to a FIOH study in 2003, 12% of wage and salary earners experienced very much or quite a lot stress, with the proportion falling slightly to 10% by 2006. In Romania,

the Living Conditions Surveys (ACOV), carried out annually by the National Institute of Statistics ([INS](#)), showed that the proportion of employees who find their jobs stressful fell from 20.9% in 2002 to 19.2% in 2003 and 2005.

Some studies show that there are differences in stress levels between different age groups. For example in Cyprus, a survey conducted by the Department of Labour Inspection in 2006 showed that:

- those who have worked for over 25 years report the greatest proportion of stress-related problems;
- 5.4% those aged between 40 and 63 reported problems related to stress, compared with just 1% of those aged between 18 and 24.

This is backed up by data from the Czech Republic (from ‘The price of health’ initiative sponsored by the Czech Ministry of Labour and Social Affairs ([MPSV](#)) in 2007), which show that levels of stress at work tend to increase with age. In Germany, surveys show that people aged between 30 and 39 were most affected by stress, listing work-related stress as the main source. Data from Greece show that stress levels fall away sharply after the age of 54 (8% of people up to age 54 said that they suffered from work-related stress, compared with 1.8% of those aged 55 and over). In Spain, individuals in the 45–54 age bracket are shown to suffer from the highest levels of stress, and those aged 16–24 from the lowest.

In Luxembourg, survey data have found that nationality and age correlated statistically with perceptions of stress. Portuguese nationals report higher levels of stress than those from Luxembourg, while the 25–29 age group perceives stress to be slightly higher than those in other age groups.

Stress levels are also reported to vary according to occupation, with a number of occupations classified as comparatively high risk for stress. These occupations include teacher, nurse, doctor, bus driver, traffic warden and police officer. It is interesting to note that some occupations include stressors (for example, doctors and nurses who are likely to be in contact with sick people). These stressors, combined with organisational factors (for instance, whether they have time to deal properly with their patients, whether they have support to help them deal with the emotional impact of working with people who are suffering, ) can result in different work situations leading to more or less stress.

In light of the high health costs linked to stress (increase in cardiovascular diseases, mental health problems and MSDs), some occupations should be monitored carefully with a view to assessing developments. For example, in Slovenia, 84% of teachers surveyed in 2008 said that their profession was very or exceedingly stressful. In Bulgaria, an empirical psychological survey of judges conducted in 2008 by the union of psychologists aimed to define the level of stress faced by judges. Using face-to-face structured interviews, its target population was 474 respondents, representing 8.65% of all judges in the country. This survey found that around half of respondents reported stress, including 24.4% at a low level and 22.0% at a medium level.

Surveys in Denmark have found that among employed workers, senior managers have the highest stress levels. In Italy, surveys have been carried out in the banking sector, showing high levels of stress for workers in this sector, both for those handling money and those not handling money. In the UK, the 2007–2008 Labour Force Survey found that the industry sectors of health and social work, electricity, gas and water supply and public administration and defence had a prevalence of work-related illness that was statistically significantly higher than average.

In terms of type of employment, in Denmark, surveys find that self-employed workers with employees have the highest stress levels (17.3%), whereas unemployed people have the lowest (7.7%).

Regarding skills and competence levels, surveys from Denmark show that employees whose work requires basic level skills have lower stress levels than those in more highly skilled jobs. The Price of Health 2007 survey from the Czech Republic also shows that stress levels rise in accordance with the level of education, ranging from 13% of respondents with basic or no education stating that they suffered frequently from enormous stress, to over 38% for those with a university education.

Educational levels appeared to have an influence on stress in Luxembourg, where surveys found that the higher the educational level, the lower the stress level. By contrast, surveys in Poland and Spain have found that the higher the level of education, the higher the level of stress.

Gender also seems to play a role in some countries. In Luxembourg, for example, 29.4% of women were reported to be under very high levels of stress, compared with 15.2% of men. In Romania, a slightly higher proportion of women than men reported stress at work. In Portugal, study data appear to show that women are more likely to suffer from stress overall than men.

## **Risk factors for work-related stress**

This section looks at the main risk factors for work-related stress, highlighting the main trends to emerge from national data. It examines quantitative demands including workload, working hours, quantity and intensity of work, and finds that workload can be a persistent problem, a major cause of work-related stress and one that is difficult to resolve.

It also examines qualitative demands, such as how an employee feels in a particular role, and work-life balance issues. Occupation can often play a significant part in whether or not qualitative demands are risk factors for stress. Work-life balance can also be a stress factor, although some organisations are taking steps to deal with this.

This section also looks at relations at work, focusing on issues such as relationships with and support from colleagues. It finds that bullying and harassment can be strong stress factors, and while many organisations have policies to deal with this, implementation can be a problem. Autonomy and control over tasks can also be a major stress factor: the nature of many jobs means that employees do not always have as much autonomy in and control over their work as they would like. However, there are indications that autonomy and control levels are increasing and this is also linked to increased levels of training and competence development.

Finally, this section looks at the management of organisational change, which is recognised as a potentially major stressor. Much depends on the way change is managed and communicated by organisations. If employees are not well informed, this leads to anxiety and uncertainty and can increase stress levels.

## **Quantitative demands**

Quantitative demands are mainly related to time pressure or amount of work and therefore include issues such as workload, working hours, quantity and intensity of work. High and persistent workload is often cited in many countries as a significant stress factor, and one that is often difficult for organisations to address due to budgetary constraints. High workload is also often linked to long working hours and work intensity.

Official working time figures are usually not a reflection of actual working time as experienced by those who feel that they are under pressure from high workloads, as these workers tend to work unofficial and unpaid [overtime](#), often at home. In the UK, for example, case study research by the Institute for Employment Studies ([IES](#)) in 2009 found that many white-collar workers and managers often work unpaid and unrecorded overtime. Respondents to surveys in many countries reported not having enough time to take breaks and having to take work home regularly in order to finish it, or having to work at a fast pace during the whole day. For example, 67% of

respondents to a German survey indicated that deadlines and time pressure were the main stress factors at work, and almost half cited workloads that were too high.

Workload is reported to have a gender dimension in some countries. For example, in Poland, women were more likely to report high workloads than men. Data from Luxembourg show that workers in full-time employment were more likely to experience pressures related to workload than part-time employees.

### **Qualitative demands**

Qualitative demands on workers include emotional and cognitive demands at work, such as how an employee relates to the stress of being in a public-facing role. They may also include work–life balance issues (which can be linked to quantitative demands such as high workload and long hours) and complexity of work.

It is clear that some occupations bring particular qualitative stress factors with them. These include roles with a customer-facing element, such as local government workers or bank workers. Organisational factors can exacerbate or compensate this inherent exposure to a stressor; for example, workers in these roles often have specific training that helps them deal with aggression from customers. This does not remove the stressor, but can contribute to better management of the situation. Their experiences can nevertheless be stressful.

Teachers, nurses and doctors also often report high levels of conflict and anxiety and a need to hide emotions. For example, a study of teachers in Cyprus (Billehøj, 2007) found that fear of conflict was a significant stress factor and that managing student behaviour was an issue that contributed greatly to stress.

In some countries, available data highlight a gender dimension. For example, in Norway, emotional demands at work are reported by more women than by men: 31% of women report having to deal with strong emotions from others to a high or very high degree in their work, compared with 12.5% of men. Data from Sweden also indicate that more women than men found their work places them in emotionally disturbing situations (60.9% of women compared with 38.0% of men). By contrast, survey data from Poland show that, in social services roles, men feel more threatened than women, possibly because men and women are involved in different types of roles.

Work–life balance issues are reported to be a significant stressor in many countries. Various national surveys report that employees either work long hours which interfere with their private lives, or are too exhausted upon finishing work to spend the time that they would like with their partner and/or family. Survey data in Ireland from the ESRI/NCPP national employee survey show that employees dealing with pre-school age children experience the most difficulty in reconciling work and family life. One exception is the Czech Republic, where a survey in 2005 on [‘The context of changes in the labour market and forms of private, family and partner life in Czech society’](#) found that 66% of the workforce had no difficulty in combining work and family life. Systems of flexible working where the employee can choose their hours to fit in with the demands of their family can significantly reduce work–life balance difficulties.

In Ireland, flexitime schemes have been found to have a positive impact on work–life balance, although working from home and job sharing can have the opposite impact as this can lead to longer hours being worked. A further survey in Ireland found that work pressure and work–life balance was worse in companies with over 100 employees; this appears to be somewhat counter-intuitive as it is usually smaller companies that have fewer family-friendly policies.

## Autonomy and control

The degree of autonomy and control that employees have over their work can make a great deal of difference to the level of stress that they feel. This can include issues such as freedom to make decisions, control over the pace and order of work, and control over job content. Overall, the lower the degree of autonomy and control, the higher the work-related stress is likely to be. Indeed having skills and expertise, and the possibility of developing in a job, are key dimensions that will help compensate for high demands.

In some countries, surveys indicate that the level of autonomy and control is increasing. This is the case in Finland, where a 2008 survey showed that, after a decrease in control and autonomy since 1990, 70% of respondents felt that they could influence the order of tasks at their work a lot or quite a lot, 65% said they could influence their working methods, and 57% their pace of work.

Some occupations traditionally report less control and autonomy than others. These include workers in call centres, manual workers and clerks.

In Norway, those who report having the least control over the pace of their work are employed in occupations that deal directly with customers, clients or patients such as in hotels and restaurants, health and social work, and education. However, workers in the education sector reported the most control in the way they carry out their job (74% of those responding to a survey). In most instances, men have more autonomy than women. As illustrated for example by data from Norway, 61% of men were found in one survey (Level of Living Survey: Working Conditions, 2006) to be able to determine their pace of work, compared with 45% of women.

Another aspect of this area is whether employees are given opportunities to develop their skills and access training. In some countries, the responses to this aspect were positive. For example, in Estonia, almost 60% of survey respondents in a [study \(in Estonian, 8Mb PDF\)](#) published in January 2010 by the Centre for Applied Research ([CentAR](#)) and [Turu-uuringute AS](#) said they had the opportunity to develop their skills and the same proportion said they had the opportunity to learn new things through work. However, in the Czech Republic, according to the [Quality of Working Life Survey 2006](#), although almost 32% of respondents said they were satisfied with their opportunities for career advancement, 23% said they were not.

Surveys in many countries show that a significant number of workers complain about the degree of monotony in their jobs, the fact that their tasks are sometimes not clearly defined and that they have no control about how they do their job. In France, for example, survey data show that 38% of respondents felt they could not interrupt their work when they wanted. Further, in Germany, a 2009 survey found that 21% of respondents felt they had a lack of control over their work and working conditions.

## Employee involvement in organisational change

Organisational change is recognised as a significant stress factor for employees. For example, the UK Trades Union Congress ([TUC](#)) safety representative survey in 2009 found that organisational change was the third most frequently cited factor contributing to stress (it was identified by 50% of the safety representatives surveyed). One of the characteristics of organisational change appears to be its increasing prevalence, to the point that it is becoming a part of the everyday life of an organisation, rather than a one-off event. In Norway, for example, over 47% of employees in a 2006 survey said they had experienced reorganisation at their workplace within the previous three years.

Some sectors have been more exposed than others to [restructuring](#) and organisational change over the past few years. In Luxembourg, for example, the finance, IT, telecommunications, construction, cleaning and security sectors all report high levels of restructuring.

However, if organisations manage change well, stress can be kept to a minimum. Ways in which organisations can successfully manage change include involving and communicating with the workforce, either via representatives or directly if no representatives exist.

The level to which employees feel they are well-informed of change, both in advance and during the change, varies between countries. For example, in Sweden, over 35% of employees in a survey strongly disagreed that they were informed well in advance about important decisions (compared with almost 12% stating that they strongly agreed). In a 2006 Norwegian survey, over 70% of employees said they had received insufficient information about restructuring and downsizing in their organisation, and/or had experienced no opportunity to participate in the process. In a French survey, 64% of respondents said they were not consulted about change during the planning phase. In Finland, the trend seems to be downward in terms of employee involvement in organisational change: 35% of survey respondents in 2008 said they had received information at the planning stage about work-related changes, compared with 41% in 1997.

By contrast, in Germany, in a survey carried out by WSI, over 70% of works council members said they had been included in their organisation's innovation process since 2006, although in 79% of establishments, conflicts between management and the works council sometimes arose. Estonia also reported positive data, with 80% of employees stating in a 2005 survey that they had sufficient opportunities to ask their supervisors about change and over half agreeing that all work-related issues are discussed with employees: around a quarter believed they were aware of the repercussions of restructuring.

A 'top-down' approach to employee involvement can be a common feature of organisational life. In the Czech Republic, just fewer than 60% of employees surveyed in 2004 believed that their managers kept open lines of communication with their staff. Keeping good communications going, even in times of great difficulty and uncertainty, is likely to have a positive effect on stress levels. If the workforce trusts its management and feels that it is doing its best to communicate with and involve employees, this is likely to result in lower stress levels than in a situation where employees are not kept informed of events or likely events.

## **Relations at work**

Low social support by colleagues and managers can also contribute to stress levels. This encompasses issues such as management style, relationships with colleagues and managers and the social climate in the organisation as a whole.

Support from colleagues and managers is cited in many countries as being vital to the well-being of employees. In Sweden, support for women appears to be unchanged, whereas support for men has decreased over the past two years.

## **Bullying and violence at work**

Bullying is an issue commonly cited in many countries as a significant stress factor. This is a particularly difficult issue for organisations to deal with, as it involves proactive measures and challenging the alleged bullying, which can often come from a supervisor or manager. Many organisations have anti-bullying policies in place, although good implementation of those policies is the only way to deal effectively with the issue. In the UK, bullying at work was the fourth most commonly cited risk factor in a survey carried out in 2008 by the TUC (identified by 40% of interviewees). In Lithuania, a survey among nurses in one hospital in 2007–2008 found that 65% had experienced verbal abuse and 39% bullying over the previous 12 months.

Fear of actual violence at work appears to be more common in some sectors and occupations than others. In Norway, for example, threats of violence are most commonly reported in the health and social work sector.



Sexual harassment at work is also commonly cited as a stress factor by surveys in some countries. Survey data for Slovakia show that more than 18% of respondents had experienced sexual harassment in the workplace (twice as many women as men). In Poland, the main problem in this area for men was violence at work, whereas for women it was sexual harassment.

Bullying, harassment and sexual harassment have declined in the Netherlands since 2005, a development that is attributed by researchers to targeted actions on the part of organisations to reduce or eradicate the problem.

### **Role of the employee and conflicts of value**

The view that employees hold of themselves and their role in an organisation can have an important effect on stress levels. If their role is not clear or they feel that their values do not fit with those of their organisation, this can cause significant levels of stress.

Overall, employees often report that they are clear about their role and what is expected of them in their job. This was the main finding from case study research in the UK, where interviewees were generally very clear about their role, and said it was only blurred in times of organisational change. Research in Estonia has shown similar results, finding that over 90% of survey respondents believed their work had clear goals and they were sure about their responsibilities and what was expected of them. A survey in Norway found that eight out of 10 employees felt their line manager treated them fairly and impartially.

As emphasised in Siegrist's model (Siegrist, 1996), reward also plays a part in determining stress levels and is linked to issues of organisational justice: if reward policy is not clear or properly linked to an employee's role, this can increase stress. In Bulgaria, low remuneration was one of the most frequently cited causes of stress, cited by three-quarters of respondents to a 2008 survey. In the Czech Republic, pay and fair reward were reported by over 95% and over 92% respectively, of respondents to the Quality of Working Life Survey 2006 as being definitely important or important aspects of working life. Asked whether they were satisfied with these aspects of their working life, almost 40% said they were very satisfied or satisfied with pay, and just over 40% were very satisfied or satisfied with what they saw as fair reward for their work. However, just over 31% were very dissatisfied or dissatisfied with pay and almost 28% were very dissatisfied or dissatisfied with reward for their work. In Germany, only 24% of respondents to a BMAS survey on corporate culture felt that they received a fair share of their organisation's profits, although 38% believed that wages and promotion were commensurate with their efforts. The SLOSH study in Sweden shows that 13.5% of respondents agreed with the statement that they did not receive the acknowledgement they thought they deserved at work.

In Italy, a number of studies in the banking sector (Balestro et al, 2005; Ambrosi et al, 2006; Giaccone and Puglia, forthcoming) report that financial product promoters and sellers report the highest levels of stress among those working in this sector because of the perceived poor quality of the products and tight control on target achievement set by senior management. On the other hand, Pappone (2006) reported higher levels of serious anxiety among bank clerks working in the back office (33.9%) than those handling money in the front office (29%) and selling financial products (26.4%).

### **Job insecurity**

There is evidence from around Europe that job insecurity contributes to high stress levels. Studies from Ireland, for example, show that workers in insecure and casual forms of employment are more likely to suffer from stress at work. A study carried out between 1997 and 2001 in the German region of Pomerania found that precarious work had a detrimental effect on the health of employees, leading more frequently to drug and alcohol abuse, depression and stress, compared with employees in more secure forms of work.

By contrast, studies such as the one by Eiken and Saksvik (2009) have found that, although temporary employees have lower levels of control over their jobs, they also report lower levels of stress, as a lower level of demands appears to compensate for the lack of control. In Luxembourg, the Statec Survey reported that 21% of employees on an open-ended contract said they felt a high level of stress, compared with 9% of those on a fixed-term contract. In Italy, studies have found lower levels of stress among employees on fixed term contracts, although this might in part be due to the younger age of these individuals compared with those on open-ended contracts, and the fact that younger employees have fewer domestic responsibilities. It is also not clear whether these individuals have chosen to work on fixed contracts or not. In Scandinavia, studies have not revealed any major differences in stress levels between permanent and temporary employees.

## Outcomes of work-related stress

This section examines the outcomes of work-related stress. Individual outcomes can range from relatively minor complaints to more serious and long-term mental and physical health complaints. Indeed various epidemiological studies have highlighted how work-related stress is associated with an excess risk of coronary heart disease, mental health and MSDs, which are major challenges in public health.

This section also looks at whether certain groups of workers or occupations are exposed to higher risks of stress, and finds that job role and organisation can play a part in exposure to stress. The main organisational outcome of stress is absence from work. While it is often difficult to attribute the contribution of stress to absence levels in a precise way, stress is generally held to be a major contributory factor to long-term absence. Finally, the societal outcomes of stress include lost productivity and increased costs for national medical and welfare systems.

## Individual outcomes of stress

There is a wide range of studies around Europe that show the individual outcomes that can result from work-related stress. These range from minor depression and anxiety through to long-term mental health problems as well as cardiovascular diseases and MSDs.

There are many reasons why it is often difficult to establish a direct link between stress and physical problems. Surveys on work are not generally linked with health-related data or do not gather information on the topic, health problems can appear over a period of time and may not be related to the current work situation, those in frail(er) health may have left the labour market, etc. The healthy worker effect is the illustration of this selection process. In addition, differences may appear due to different methods of diagnosing disease, or from differences in the methods and quality of recording health outcomes between two populations being compared.

Still, national surveys do identify numerous areas of evidence of the negative impact of work-related stress. In Portugal, Tavares (2005) concludes there is a statistical association between a positive perception of health and not feeling the need to reduce stress levels.

The [Austrian Employee Health Monitor survey](#) in 2009 by the Chamber of Labour of the province of Upper Austria ([AK OÖ](#)) and the Austrian Institute for Empirical Social Studies ([IFES](#)) found that employees who are stressed at work tend to have more health-related problems (including back pain, digestive problems and high blood pressure) than colleagues who are not stressed.

In the UK, a TUC publication, [Hazards at work: Organising for safe and healthy workplaces](#), noted that prolonged exposure to stress can result in a range of physical symptoms such as headaches and weight loss or gain, anxiety, depression, hostility and aggression.

Lack of sleep is often a direct result of work-related stress, and a factor that can lead to exhaustion. A Swedish study looked at the incidence of sleep, finding that only two-thirds of the survey population reported having adequate time to rest. Surveys in Spain have also found that

symptoms of stress include continuous tiredness, headaches, a lack of concentration, a lack of energy and digestive problems. A survey in Luxembourg showed that 6.9% of the sample occasionally or regularly used sleeping pills to cope with the lack of sleep brought on by high stress levels.

There is not a great deal of information on the gender dimension of individual stress outcomes, although a study in Belgium found that women in stressful jobs were more likely to be exposed to psychological health problems, while men were more likely to report physical health problems. This may be explained to some extent by labour market segregation.

In addition to general surveys, occupational and sectoral surveys have been carried out in some countries. In Slovenia, for example, a survey in the education sector identified stress-related problems among teachers including a lack of concentration and general burnout. There have also been a range of occupational surveys carried out in Lithuania: in 2005–2006, research was carried out on nurses, showing that stress caused a range of symptoms such as depression and other negative emotional responses. In Italy, according to a 2007 [study \(in Italian, 2.11Mb PDF\)](#) that investigated risk factors and health in call centres, 69.2% of men and 77.9% of women reported insomnia, anxiety and depression and 27.7% of men and 35% of women said they had needed medical intervention. Further, 77% of employees reported a worsening of those symptoms after working in the call centre, and 11% reported being absent in the previous four weeks for an average of six days. In Cyprus, a study in the fast food industry found that work-related stress can have a significant impact on employee behaviours such as increased drinking and smoking (Michailidi and Elwkai, 2003).

An overview of the key studies on individual outcomes of stress in selected countries is provided by Table 1.

**Table 1: Key studies on individual outcomes of stress in selected countries**

Country	Study	Stress outcomes
<b>AT</b>	Working Health Monitor 2009	Employees under stress at work suffer more often from back pain, digestive problems and high blood pressure than those who are not under stress.
<b>BE</b>	Psychosocial job stress in relation to health (Clays et al, 2007)	Work-related stress is more likely to result in the reporting of psychological problems for women and in physical health problems for men.
<b>BG</b>	ISTUR survey	General fatigue, inability to switch off from work, headaches, eyesight problems, back pain, irritability, insomnia, muscle and joint pain.
<b>DK</b>	Copenhagen City Heart Study, a cohort study launched in 1976	This study indicates that stressed men have a 30% increased risk of premature death.
<b>EL</b>	Velonakis and Lambropoulos (1999)	Sleeping difficulties, anxiety, mood swings, chest tightness, pressure on back or neck or head, libido problems, overacting, fatigue, increased smoking, increased alcohol consumption
<b>ES</b>	Survey on Working Conditions,	Lack of sleep, continuous tiredness,

Country	Study	Stress outcomes
	National Observatory of Working Conditions	headaches, lack of concentration, poor memory, irritability, lack of energy, digestive problems, vision problems
<b>FI</b>	Finnish Quality of Working Life Survey 2008	Sleep difficulties, fatigue, apathy, lack of energy, headaches
<b>IT</b>	Gilardi et al (2007)	Insomnia, anxiety and depression among call centre workers
<b>LU</b>	Stimulus Survey	Use of sleeping pills and of other drugs to combat stress levels
<b>NO</b>	Level of Living Survey: Working Conditions 2006	Physical exhaustion on returning home from work
<b>RO</b>	Second quarter 2007 survey on health and safety at the workplace	Depression, anxiety
<b>SE</b>	SLOSH 2006 survey	Musculoskeletal problems, reduced sleep, exhaustion
<b>SI</b>	2008 SVIZ survey	Survey of teachers: lack of concentration, loss of interest in everyday activities, burnout
<b>UK</b>	TUC publication, <i>Hazards at work: Organising for safe and healthy workplaces</i>	Headaches, eczema, weight loss or gain, anxiety, depression, hostility, aggression, heart and digestive complaints, reduced immune system, long-term mental health complaints

Source: EWCO

### Individual outcomes of stress: focusing on certain groups of workers

A range of factors are acknowledged as contributing to stress levels for particular groups of workers. These have mostly been discussed in the section above on risk factors for work-related stress. There is, however, some additional information available from surveys that looks at opinions of the workforce on the outcomes of work-related stress.

In some countries, such as Germany, Lithuania and the UK, specific sectors are acknowledged as being high risk for stress, due to the specific nature of the jobs involved. These include sectors such as education, health, social care and other public-facing roles. In the UK, for example, workers in banks and local authorities often find themselves in customer-facing roles, which can involve dealing with angry members of the public. In Germany, reports from health insurers and other studies point to the fact that certain groups of workers, such as shift-workers, executives and hospital staff, are more exposed to work-related stress. In Lithuania, research carried out on nurses showed that this occupation is particularly vulnerable to stress and burnout.

Sectors with low-paid jobs are also acknowledged as possibly being high risk for stress, as low pay can have an impact on motivation and feelings of individual worth. Low-paid jobs may also be associated with high levels of demands and lower levels of decision-making.

Organisation of work can also play a major factor in stress levels. In Belgium, a recent study (Delarue, 2009) carried out in the Flemish metalworking sector examines the connection between organisational design and quality of working life. The study, carried out among blue-collar

metalworkers, shows that working in a team has only a limited impact on a worker's stress levels. Assembly line work remains the determining negative factor ([BE0904039I](#)).

In Luxembourg, survey data has found that nationality is statistically correlated with perceptions of stress. In terms of nationality, 39.8% of the French workers in the survey perceived their work-related stress as very low or low, compared with only 17.7% of the Portuguese workers, 25.9% of those from Luxembourg and 29.8% of the Belgian workers.

In Germany, studies have shown that the workers most susceptible to stress are shift workers, executives and hospital staff. In the case of shift workers, they were reported to be less often able to control their work, and claim to be under greater strain from volume of work than non-shift workers. Executives cite unscheduled interruptions as a major contributory factor to stress levels, which makes it difficult for them to achieve their goals.

A study in Finland found that female entrepreneurs experienced stress more often than employed women due to financial responsibility, time pressure and volume of work.

### **Organisational outcomes of stress**

The main organisational outcome of stress is absence from work. As this is a significant cost to the employer (due to funding sick pay and covering the work of the absent employee), this is the main trigger in terms of employer action to combat stress in the workplace. Absence from work due to stress is also one of the easiest indicators to monitor, provided data are collected. There are therefore a range of surveys available with data on absence, of which stress is often a major cause.

In Bulgaria, for example, the Institute for Social and Trade Union Research (ISTUR) survey revealed that absence due to stress is causing serious disruption in the health and education sectors.

Other organisational outcomes, which are perhaps harder to measure with any certainty, include:

- reduced productivity;
- reduced employee engagement and motivation;
- reduced quality of products and services.

In addition, absence from work can have an impact on organisational performance and innovation capacity, through both the reduced performance of existing employees and higher staff turnover.

There are many examples of organisations that have made an effort to tackle work-related stress and thereby reduce sickness absence due to stress (see later in this CAR for a number of case studies). While investing in stress management and reduction is a long-term issue that requires organisational commitment, it can repay the time and money invested in it many times over.

### **Societal outcomes**

There are many societal and labour market outcomes from work-related stress. The absence from work that it causes leads to a significant number of days lost per year, which is measured in all countries, although it is sometimes difficult to isolate stress as the particular cause of absence. Nevertheless, many sets of absence statistics contain a category of 'stress, anxiety and depression'.

Absence from work entails costs to employers (see above) and to sickness insurance funds. If workers become unable to work on a long-term basis, this in turn places an extra burden on social security systems such as disability, incapacity and unemployment benefit systems. In Ireland, it is noted that significantly more working days per year are lost through absence due to work-related stress than to industrial action, a fact that is reported to be frequently overlooked. In Austria, it is reported that work-related stress often leads to early retirement – psychosocial disorders are

reported to be the main reason why white-collar workers retire early, causing over 42% of all early retirements among this category of workers.

In addition to the likely costs to society of absence from work, in terms of lost productivity, there are also costs relating to the medical treatment and rehabilitation of workers on long-term sick leave due to stress. In Germany, for example, costs for the treatment of psychological and behavioural disorders were estimated by the Federal Statistical Office to be nearly €26.7 million in 2006, up by €3.3 million compared with 2002. In Sweden, the National Board of Health and Welfare ([Socialstyrelsen](#)) reports the estimated costs for work-related stress to be in the range of 5–10% of gross domestic product (GDP). Denmark has also measured the estimated loss of productivity. On the basis of the job strain model developed by Karasek in 1979, the National Institute of Public Health ([SIF](#)) has estimated a range of societal level outcomes and costs due to the prevalence of quantitative demands and job strain ([Risikofaktorer og folkesundhed i Danmark \(in Danish, 1.67Mb PDF\)](#)). According to this study, based on the SUSY data, the total cost of healthcare for employees exposed to job strain is calculated to be approximately €114.9 million each year (DKK 855 million as in 2005). Regarding the loss of productivity due to job strain, the report estimates the annual cost to be around €1,876.3 million (DKK 13,959.5 million) by the human capital method and €237.5 million (DKK 1,767.3 million) by the friction-cost method. Further, in Denmark, SIF estimates that around 1,400 deaths a year (2.5% of all deaths) are attributable to work-related stress, in addition to 6.8% of hospitalisations, 3.1% of doctor consultations and 18.9% of early retirements.

## **Work-related stress management interventions**

This section examines the main interventions that take place to help organisations prevent and manage work-related stress. A framework for stress management is provided by the EU-level cross-sector social partners' agreement on work-related stress (European Social Partners, 2004). It also looks at how these initiatives are promoted and communicated, and the level at which this takes place. Examples of some instruments and tools that are used to test for stress at organisational level are also explored. It is worth mentioning that many correspondents argue that the prevention of work-related stress develops very slowly, in a context of often strained social debate.

### **Main interventions to prevent and manage stress**

There are a range of initiatives in place in European countries designed to help prevent and manage work-related stress. All Member States are required to implement the EU cross-sector social partners' agreement on work-related stress and this therefore serves as a framework for stress management in many countries. In the majority of countries, this agreement has been implemented either by social partner agreement or with the specific involvement of social partners. Initiatives designed to prevent and manage stress are promoted at a range of levels.

#### *National level: role of the legal system, national actors and interventions carried out by national bodies*

In a number of countries, usually those with a tradition of legal regulation, the law plays a significant role in the prevention and management of stress. For example, in Belgium, private sector employers are required by law to tackle the issue of work-related stress. This law is backed by consensus between the social partners. Employers are obliged to appoint a psychosocial prevention adviser, who is responsible for the prevention of violence, harassment and sexual harassment in the workplace.

In Portugal, there is a national strategy for health and safety at work, which runs from 2008 to 2012, covering among other things the promotion of well-being at work. Additionally, the

national plan for mental health 2007–2016 aims to promote mental health in workplaces, to reduce and manage work-related stress factors, and to reduce absence due to mental illness.

A range of joint initiatives between employer and employee organisations also exist. These typically cover specific sectors, which are exposed to specific stress risks. Such initiatives include the [Prevent](#) organisation in Sweden, which is the result of cooperation between employers and unions at national level and which focuses on developing methods and support for improving the working environment.

In the Czech Republic, the Czech–Moravian Confederation of Trade Unions ([ČMKOS](#)) together with [M&J Consulting](#) participated in 2004–2006 in an international project, Stress Prevention Activities, as part of the Leonardo da Vinci Programme funded by the European Commission.

In Germany, social partners at national level have developed a variety of initiatives designed to raise awareness of and combat stress. These include leaflets, courses and the development of indices to measure quality of work.

In some cases, targeted sectoral initiatives are in place: for example in the UK, the Health and Safety Executive ([HSE](#)) has carried out research looking at stress in call centres (HSE, 2003). This found a variety of practices relating to working conditions, but also that there are intrinsic job characteristics inherent in the role of call handler that are difficult to change. Nevertheless, there are some elements of these jobs that can be redesigned to make them less stressful and more satisfying. More examples are presented in Table 2: these represent a selection of examples included in all 28 national contributions. Readers are invited to refer to each national contribution for a more exhaustive presentation of good practice examples.

**Table 2: Selected good practice examples of stress management: national and sectoral examples**

Country	Sector/organisation	Description
<b>BE</b>	National intersectoral collective agreement	In 1999 Belgian social partners reached an intersectoral national agreement on the management and prevention of work-related stress (Collective Agreement no. 72 of the National Labour Council).
<b>FI</b>	National well-being at work programme 2000–2003	This programme was implemented by the Ministry of Labour in conjunction with various other ministries and labour market organisations. The programme comprised the provision of information and dissemination of good practice in areas such as the working environment and ensuring that skills are kept up to date. The focus was on issues such as individual control over work, work organisation and work-life balance.
<b>NL</b>	Work and health covenant in the hotel and restaurant sector	This covenant was put into place by the social partners in this sector, within the framework of a government initiative to encourage covenants as a voluntary sectoral approach to risk management. Covenants take the form of voluntary agreements between employer and employee representatives in a sector, backed by advice from the government. They decide on which risks to

Country	Sector/organisation	Description
		tackle, on the approach to take and the specific goals to be reached.
<b>NO</b>	In 2002 the Norwegian Labour Inspection Authority launched a nationwide campaign to improve the work environment in the home health services sector.	This campaign, Straight Home, aimed to reduce sickness absence due to time pressure or other stress factors, focusing on trying to reduce time pressure among employees in this sector.

Source: EWCO

### *The role of national institutions*

In many European countries such as Bulgaria, Hungary, Latvia, Slovakia, Slovenia, Spain and the UK, the main work-related stress management interventions are designed and managed by government-affiliated health executive bodies or government departments.

The UK is a good example of this, as it has a comparatively well-developed framework relating to awareness of stress and actions to try to prevent and reduce it (see the box below on the Stress Management Standards developed by HSE).

In Spain, one of the main organisations promoting the management of work-related stress is the Spanish National Institute of Safety and Hygiene in the Workplace ([INSHT](#)). The Institute is a specialised scientific and technical public institution, and is a subsidiary of the Spanish Ministry of Labour and Immigration ([MTIN](#)). Its main aim is to analyse and study health and safety conditions in the workplace, as well as to promote their improvement. INSHT publishes a great number of studies, reports and news on the issue of work-related stress, where these materials analyse the concept of work-related stress, its main causes and consequences, and offer techniques for its evaluation and prevention in organisations. INSHT also offers training courses aimed at psychosociology experts to explain the issue and the existing techniques for managing it successfully.

In Hungary, the Hungarian Labour Inspectorate ([OMMF](#)) publishes guidance on stress, which is available on its website. Every year in the Netherlands, the Dutch Labour Inspectorate monitors a sample of about 2,000 organisations on a selection of specific working circumstances. In 2007 organisations were monitored on work-related stress, checking whether work-related stress was examined as a risk in their annual [risk assessment](#) reports.

The Bulgarian labour inspectorate also recently (in March 2009) included stress in its company inspections, asking questions such as whether employees work to tight deadlines, experienced time pressure, bullying or harassment, or lack autonomy. Employers are subject to fines if stress levels are found to be high.

In Slovenia, the Clinical Institute of Occupational, Traffic and Sports Medicine has launched a programme to promote health in the workplace, and to raise employee and employer awareness of this issue. The programme includes a whole module dedicated to work-related stress management skills. The programme began with research and analysis in 2005. The second and third phases of the programme involved devising programmes and training advisers who then went into companies and worked with them on stress prevention and management.

In Latvia, the state labour inspectorate publishes annual reports on working conditions and health and safety issues in Latvian companies.

In Slovakia, the Public Health Authority ([ÚVZ SR](#)) and its regional offices have, since 2008, carried out a range of activities aimed at reducing stress at work. These include registering professions and jobs with a relatively high risk of stress. ÚVZ SR also monitors development



trends in the mental health of the workforce in Slovakia and provides guidance for employers, as well as for employees, aimed at preventing and reducing stress at work.

The box below details one framework on psychosocial risks, that of the Management Standards for Work-Related Stress developed by HSE in the UK, which provide a robust framework for organisations wishing to prevent and manage stress.

## **HSE Management Standards**

The HSE Management Standards for Work-Related Stress are designed to help organisations manage stress in their workforce. The standards are voluntary and are based on six stress factors:

- demand (the types of demands made on workers in areas such as workload and work pressure);
- control (the control employees can exert over their working day, which encompasses areas such as being able to control the pace of work, take adequate breaks, and control the organisation of working time);
- support (the support that is available to employees to help them to do their job, including support from line managers and from the organisation in general);
- relationship (ensuring that the relationship between employees is appropriate, that dignity at work is respected and that anti-bullying, anti-harassment and diversity and equality policies are in place);
- role (whether employees are clear about their role in the organisation and what they are expected to do);
- change (whether change is adequately managed within an organisation).

The standards are based on a cycle of action involving:

- appointing a stress champion (senior manager in an organisation);
- appointing a stress project manager;
- setting up a stress committee;
- carrying out a stress survey of the workforce;
- holding focus groups to examine the survey's results;
- formulating action plans to target problem areas or stress hotspots;
- re-running the survey to track progress.

### *Workplace-level initiatives*

At the level of the workplace, systems are in place in a number of countries to try to deal with stress. A distinction in this report is made between general initiatives (such as not explicitly designed to tackle work-related stress but which nevertheless provide a framework that may be conducive to dealing with it) and those which provide instruments for companies to measure concerns over work-related stress and interventions specifically aimed at tackling work-related stress.

### **General initiatives**

Examples of general initiatives include one in Sweden where safety representatives work on issues relating to health and safety among the workforce, including stress-related issues. In Belgium, as noted above, employers are obliged by law to appoint a psychosocial prevention adviser. In Germany companies employing 10 or more people are required by law to document the results of risk assessments, measures taken to reduce risk and the results of follow-up

assessments, which include data on stress. In Estonia, companies with 10 or more employees must appoint a working environment representative and, in companies of 50 or more employees, a working environment council.

### Instruments available to companies to measure concerns over work-related stress

Table 3 describes the instruments and tools available to measure work-related stress at organisational level. Not all countries have developed such instruments, which is why the table covers selected countries only. Many of these tools are either questionnaire-based, or describe a set procedure or cycle through which an organisation must pass. These types of processes tend to be medium- or long-term, as tackling stress in an organisation will usually entail tackling the organisational culture, which is often a slow-moving process.

**Table 3: Common instruments to measure stress at organisational level in selected countries**

Country	Instrument	Comments
AT	IMPULS Test	This test offers an analysis of the working conditions of either an entire company or individual workplaces. It is designed to detect stress factors and to optimise the resources needed to alleviate them. The test consists of 26 questions including 11 thematic aspects encompassing room to manoeuvre, variety of tasks, ability to perform tasks in their entirety, social support, cooperation, appropriate job profile, appropriate workflow, appropriate workload, appropriate working environment, possibilities for development, information processes and participation.
	‘StRESS.Moderator’ programme	This programme aims to reduce stress by improving communication within companies. The method is used to analyse psychosocial requirements and develop future action. The process starts with an agreement with managers who have been made familiar with the procedure and content of the programme. In workshops, a facilitator locates problems and develops possible solutions together with specific groups of employees. The moderator then presents the results of the workshops to the management, which can then decide how to implement solutions. After 6–12 months, a second round of workshops is held to evaluate the changes and readjust them if this is thought to be necessary. This programme is offered by the Austrian Social Insurance for Occupational Risks and is implemented at a national level.
BE	WOCCQ	This method of collective diagnosis of the psychosocial risks linked to work was set up by the Work Psychology Department of the University of Liege with the support of the <a href="#">Federal Science Policy Office</a> . Its distribution has been supported since 2001 by the <a href="#">Federal Public Service of Employment and Social Dialogue</a> and the <a href="#">European Social Fund</a> .

Country	Instrument	Comments
	SOBANE	A health and safety risk management methodology created by a team at the Catholic University of Louvain and promoted by the Ministry of Employment, Labour and Social Dialogue. It involves the active participation of staff in screening for potential safety risks (including psychosocial risks) and finding solutions. The basic approach of this strategy is that, with the help of participative methods and screening lists, health and safety problems are tackled in a process comprising four possible steps. At the start, these stages mainly involve the workers and their internal coach. By the end they move on to detailed research and investigation by external experts.
	S-ISW: Short Inventory on Stress and Well-being	This is a compact questionnaire tool to identify psychosocial and organisational risk factors quickly and efficiently, and to check up on their effect on well-being, motivation and unpleasant conduct. S-ISW Online is completed online and processed automatically.
	Short Inventory to Monitor Psychosocial Hazards (SIMPH)	This is a 39-item questionnaire developed to adapt research of psychosocial hazards in the workplace to the needs of the risk control cycle (Notelaers et al, 2007). When completed by all or a significant number of employees in an organisation, SIMPH makes it possible to identify and estimate the extent of exposure to psychosocial hazards at the individual level, and also at departmental and organisational levels.
<b>DE</b>	START procedure	This procedure describes the complete cycle to be followed to carry out a successful risk assessment for mental stress, and also includes instruments for measuring stress at the organisational level. Data are collected via voluntary employee questionnaires. It is recommended that the evaluation starts with an assessment of the overall situation determining the mental stress risk for all participants. As a second step, there should be detailed analysis of stress risks in single departments or areas of work.
<b>DK</b>	Copenhagen Psychosocial Questionnaire ( <a href="#">COPSOQ, 303Kb PDF</a> )	This questionnaire has been developed by the National Research Centre for the Working Environment ( <a href="#">NFA</a> ). It is made up of three questionnaires: a short version to be used by workplaces, a medium length questionnaire to be used by working environment professionals, and a long questionnaire for research use.
<b>FI</b>	Web-based questionnaire and Psfyrix-method	The web-based questionnaire can be accessed on the website of the Centre for Occupational Safety ( <a href="#">TKK</a> ), and can be used as a self-assessment method for assessing work-related stress. The Psfyrix method can be used to assess and prevent psychosocial and physical health risks caused by work. Both these methods have been developed

Country	Instrument	Comments
		by Kyösti Waris at the Finnish Ministry of Social Affairs and Health.
<b>IE</b>	Work Positive	This is a national state-sponsored risk management process, operated by the Health and Safety Authority ( <a href="#">HSA</a> ), incorporating a risk assessment covering the major causal factors associated with workplace stress. It involves a 35-item questionnaire based on six risk areas (demand, control, support, relationships, role and change).
<b>NO</b>	Resource Centre for Psychological and Social Factors set up by the State Work Environment Institute ( <a href="#">STAMI</a> )	This instrument helps enterprises to chart psychological, social and organisational conditions. It is a net-based system for the proper management of questionnaires and a database for data on psychological, social and organisational conditions in work environments. It also contains semi-automatic feedback to the enterprises concerned, which provides them with data for development.
<b>PL</b>	Questionnaire on psychosocial working conditions ( <a href="#">PWP</a> )	This was developed and piloted in 2007 by the Central Institute of Labour Protection ( <a href="#">CIOP</a> ) as a means of supporting workers suffering from the negative consequences of work-related stress.
<b>SW</b>	QPS Nordic	This questionnaire was developed by researchers from four different Nordic countries as part of a project for the Nordic Council of Ministers. Its aim is to measure psychological, social and organisational working conditions in the Nordic countries. It consists of two different versions: a long version with 129 questions and a short version with 34 questions. The short version can be used to measure stress at an organisational level. Both versions can be used for organisational development and interventions, and for studies on the relationship between work and health. This survey has a scientific basis and can thus be difficult to use without assistance. However, with expert help, it can provide insight into the psychosocial, social and working conditions within an organisation.
<b>UK</b>	Management Standards for Work-Related Stress	Devised and implemented by HSE, this is a process to help organisations to manage stress. It includes an indicator tool of 35 questions, used to determine stress levels in a range of areas.

Source: EWCO

### Good practice examples of stress management at company level

A wide range of good practice examples of stress prevention, management and reduction has been identified by research in countries across Europe. Selected examples of these case studies at company level are presented in Table 4. For more details on individual case studies and information about some additional case studies, please refer to the individual country responses.

Interventions can address the three stages of work-related stress:

- the causes (primary stage);
- actions to help individuals cope with stress (secondary stage);
- actions on the consequences of stress, for example rehabilitating employees (tertiary).

In reality, actions often cover more than one stage and presently most approaches are geared towards the secondary and tertiary stages.

**Table 4: Selected good practice examples of stress management at company level**

Country	Sector/organisation	Description	Comments/lessons learned
AT	Franz Haas Waffel- und Keksanlagen-Industrie GmbH (manufacturer of machines to make waffles and biscuits)	This company carried out the IMPULS process for stress management (see Table 3 for details). A survey was conducted to determine the current situation and this was compared with targets. A process was devised by managers and the works council, focusing on issues such as information and communication.	The IMPULS process is available to organisations throughout Austria and can be completed online.
BG	KCM (non-ferrous manufacturing company)	A programme entitled 'Working on Stress' was introduced in 2005 as part of the company's policy on health and safety and the promotion of health in the workplace. It aimed to increase awareness among employees of work-related stress and its outcomes. It also aimed to introduce appropriate techniques for coping with stressors at work, at both individual and team level.	No formal assessment of the programme was made, although it was reported that the company subsequently suffered few accidents and that absence rates fell.
CY	Marfin Laiki Bank	The bank held a seminar in November 2009 entitled 'Psychosocial risks in the workplace' to make employers and workers more aware of issues relating to psychosocial risk factors at work. This seminar was held in the context of a campaign week on safety and health.	The banking sector is considered to be a particularly high risk sector for stress in Cyprus and many organisations in this sector organise training seminars.
CZ	Olho-Technik Czech	This company has put into	

Country	Sector/organisation	Description	Comments/lessons learned
	(automotive components manufacturer)	place a range of measures designed to reduce stress and promote well-being among its workforce. These include the provision of wall bars in manufacturing workshops to allow employees to stretch out, issuing vitamins and wellness vouchers, and organising health days and medical examinations.	
<b>DE</b>	Sheltered workshop for the disabled in Hoffnungstal	Stress factors at this organisation included time pressure, lack of communication between the staff and management, and conflicts among non-disabled and disabled co-workers. The programme took the form of a training course on how to handle difficult situations, how to communicate more effectively, time management, work organisation and confidence training.	An impact survey conducted two years after the training programme found that the communication style and job satisfaction of all survey participants had improved. More than half of the respondents said that conflicts with disabled co-workers had diminished and one-third said that fewer conflicts arose among all staff.
<b>EL</b>	Piraeus Bank Group	In collaboration with Hellas Employee Assistance Programmes ( <a href="#">Hellas EAP</a> ), the bank group provides a programme to support and actively manage workers' health and well-being. The programme provides information and support on preventive measures and traumatic event management, with an emphasis on prevention as well as support in cases such as bank robberies and critical family and work-related events. It also offers guidance and support for workers on issues of career advancement, aimed at realising the full potential of workers' skills.	This is one example of companies in Greece that tackle stress within the context of corporate social responsibility initiatives.
<b>ES</b>	Ferrovial (rail company)	This organisation offers its employees a 'balancing plan'	Ferrovial was awarded the Madrid Flexible

Country	Sector/organisation	Description	Comments/lessons learned
		to help combat stress. This includes training to help manage work-related stress more efficiently. The company is also committed to promoting flexible working practices in order to increase work-life balance.	Company Award for large companies in 2006.
<b>FR</b>	Steelcase (office furniture manufacturer)	The company put into place stress prevention initiatives at its Wisches factory in 2004, covering 200 workers. A stress assessment was carried out using a diagnostic tool, which found that stress was mainly linked to work demands such as contradictory requirements and role ambiguity, and fear of the future. An action plan was devised to address issues, such as improving communication about the company's situation and implementing worker suggestions on process improvement.	Three years after the prevention action, the resulting improvements in communications and work organisation have resulted in improvements in stress levels at the site.
<b>HU</b>	MOL Group (oil and gas company)	This company introduced a programme called 'STEP – Take one step for your health'. It ran in 2008 and 2009, and consisted of a screening programme as well as smoking cessation, nutrition and health and training and exercise programmes. Assessing and managing workplace stress were also included.	
<b>IE</b>	Adelaide and Meath National Children's Hospital (AMNCH)	The hospital used the Work Positive process (see Table 3 for a description) to tackle absence and to improve control measures of known workplace hazards in its theatre. The process consisted of distributing a questionnaire to staff to identify the main stress risks, feeding back the findings, devising actions to	The main challenge was getting staff to participate in the project, but this was achieved and the project had a positive impact on the workforce, although this would be difficult to measure in any concrete way.

Country	Sector/organisation	Description	Comments/lessons learned
		address the main issues and implementing these actions.	
<b>IT</b>	Corneliani (a medium-size clothing manufacturing plant based in Mantua)	This organisation needed to address higher absence rates following a reorganisation that led to widespread stress due to increased demands and loss of control. The reorganisation had increased time pressure on employees and their job content now involved highly repetitive tasks. The organisation involved its workforce in addressing this by tailoring the pace of work, providing training and improving social support.	These actions resulted in more sustainable working conditions and reduced absence. The degree of worker involvement in putting into place this new system was thought to be key.
<b>PT</b>	MSFT Microsoft Portugal (software company)	This organisation offered free psychological support for workers, free massage during work, instruments to measure and objectify concerns over work-related stress during working hours, co-financing of a health club and sports club (extended to family members), and provision of gym facilities at the company.	Questionnaire responses from the workforce showed that employees felt that the pace of their work was more manageable, there was less pressure at work, they could manage their time better and they had a better work–life balance. The company noted an increase in productivity and workforce performance.
<b>SE</b>	Gevalia Kaffe (subsidiary of Kraft Foods manufacturer)	Employees at this company were surveyed on their individual stressors before taking part in a major stress intervention by the parent company, Kraft Foods, designed to reduce sickness absence. Employees were given individual advice on how to manage their stress levels. Those who had a high level of stress were offered medical and psychological help, and participation in a stress management programme. Other activities included lectures and	Evaluation of this intervention showed that stress levels and absence fell in comparison with another Kraft facility that had not benefited from this intervention. It was concluded that, for an intervention to have the maximum effect, it has to be comprehensive.



Country	Sector/organisation	Description	Comments/lessons learned
		information sessions.	
<b>SI</b>	Termed Radenci (spa resort)	The resort ran a project entitled 'Healthy, satisfied and motivated co-worker – the most important company asset'. The project included a number of workshops dedicated to work-related stress. The company also hoped to improve the health and well-being of employees, and to reduce absence from work.	The workshop approach was deemed to be successful – absence levels fell by 64% for those employees who had taken part in project workshops.
<b>SK</b>	Slovnaft (part of the MOL Group) (oil refinery)	The company established its own psychological unit to help prevent stress at work, workplace accidents and occupational diseases. The unit focused on matching job descriptions to applicants' abilities, eliminating stressors as far as possible and providing individual consultation to employees experiencing stress.	Stress-related workplace services were found to be useful and used by other companies in Slovakia.
<b>UK</b>	United Biscuits (food manufacturer)	This company applied HSE's management standards for work-related stress. It needed to address rising levels of stress in the organisation, reduce potential litigation and improve the well-being of the workforce. A stress policy was developed, stress hotspots were identified and action plans developed to address them.	Senior management had acknowledged that stress was an issue that needed addressing. Senior management buy-in is crucial to the success of any measures designed to combat stress. The process would have been smoother if trade unions had been involved in the stress policy's development of from the beginning.

Source: EWCO

### Issues and lessons learned from the good practice examples

The examples of good practice in stress management listed in Table 4 raise some interesting questions about the nature of stress management. At national level, examples from Belgium and Finland show that it is possible to put into place an overarching framework, either based on a national collective agreement in the case of Belgium, or in the form of a national programme in the case of Finland, which can encourage a systematic and coordinated approach to stress management. National programmes also have the advantage of being able to reach large numbers

of employers and employees (if disseminated well), thus increasing awareness of stress. Awareness and a willingness to engage with the issue are seen by stress management programmes as the first step on the way to the successful management of stress.

National programmes can also focus on specific issues (such as depression in Finland) if they are deemed to be a general problem. If backed by governments, there are usually adequate funds available to ensure that the programmes are disseminated as widely as possible.

Sectoral schemes to improve stress management can be even more targeted, as they tend to bring together the main actors in a specific sector who have a good overview of the main issues that need addressing. In the Netherlands, for example, it is common practice to put into place covenants in particular sectors, which are schemes agreed on a voluntary basis by the sectoral social partners within the framework of a government initiative to encourage covenants. One such covenant in the hotels and restaurants sector has proved particularly successful in reducing stress. It has also paved the way for future cooperation between the social partners in this sector, who have stated their willingness to continue their joint work on stress.

Another successful example of a campaign to reduce stress at sectoral level comes from Norway, where it was estimated that one in three employees had been absent from work during the last two years due to illness caused by time pressure or other stress factors. The government therefore ran a targeted campaign that focused in particular on the employer's responsibility to ensure that potential stress risks are minimised as much as possible in the work environment. This targeted approach by the government has borne fruit: an assessment relating to the first half of 2004 showed that the number of people who experienced time pressure and other stress factors was significantly reduced, and that more people were working systematically with measures for reducing stress factors. This shows that results can be achieved if enough time and resources are dedicated to targeted campaigns.

Although national and sectoral initiatives and frameworks can provide good underpinning and support to employers, it is at the workplace that good stress management is crucial. This study highlights many good practice examples of stress management at workplace level.

One of the main triggers for initiating a stress management programme is high absence rates: managers are often under pressure to reduce absence and, as stress is usually a major cause of long-term absence, stress management programmes are seen as a way to tackle this. Absence is also an indicator that can, if the data are collected in the right way, be measured in order to show progress and to provide a business case for absence management. At Corneliani in Italy, for example, absence was reduced significantly when the organisation introduced stress management, targeting a number of hotspots.

A key issue in stress management is collecting the right data. If an organisation does not know where it is in terms of key indicators such as absence statistics at the outset of a stress management programme, it will be unable to measure progress and this will undermine any business case for stress management work. Robust data collection is therefore essential, and there are many tools available that help organisations with this, including the IMPULS survey tool in Austria and a stress management indicator tool developed by HSE in the UK.

Developing a good stress policy is also a vital starting point for companies; this policy should ideally underpin all the company's actions in terms of stress. Under HSE's stress management standards, for example, organisations are encouraged to develop a policy as a point of departure. Ideally, the development of a stress policy should involve all relevant actors. At United Biscuits in the UK, for example, one of the main lessons learned was that it would have made the process a lot smoother to have involved trade unions in the development of the organisation's stress policy at the outset.

As mentioned above, raising awareness of stress in an organisation is vital if that organisation is serious about stress management. This is partly due to the fact that stress is a complex issue: it

means different things to different people, as what might be considered stressful to some employees might be accepted as a necessary and stimulating part of the job by others. In addition, there can be a stigma around admitting to being stressed, with employees not wanting to show what they feel may be perceived as weakness, fearing that this may put them at a disadvantage in the workplace. If an organisation develops a culture in which stress can be talked about openly and freely, the management of stress is likely to be a lot easier. There are a number of examples in this study of companies that have run awareness campaigns which seem to have been successful in reducing accidents and absence. This is the case at KCM in Bulgaria and at Marfin Laiki Bank in Cyprus.

Awareness on the part of the organisation of the main stress factors is also a vital component of stress management. If an organisation is aware of the main issues and problems (ideally through having run a survey or undergone a process that identifies stress hotspots), it can put into place targeted measures that address these issues. In some cases, this can be a relatively simple and practical exercise. For example, in the Czech Republic, Olho-Technik Czech put into place a range of stress-reducing measures such as the provision of wall bars in manufacturing shops in order to enable employees to stretch out. After conducting an assessment of its workers, Steelcase in France put into place measures to improve communications and to implement worker suggestions on process improvement. In Portugal, the software company Microsoft put into place counselling for staff, in addition to a range of well-being measures such as free massage and the offer of reduced health club membership.

Stress management is a medium- or even long-term process, requiring a significant degree of commitment on the part of an organisation. It also requires buy-in from the organisation at senior management level, which can be difficult to maintain, as a range of issues compete for management attention. One way of securing stress management initiatives on the company's agenda is to place them within a specific programme, either a general health and well-being programme, or as in the case of the Piraeus Bank Group in Greece, support and stress management for the workforce is carried out within the context of corporate social responsibility initiatives.

Even where there is buy-in from the management of an organisation, there can be problems in generating buy-in from the workforce, which may be cynical about management initiatives, or struggling with issues that are hard to resolve, such as heavy workloads. In Ireland, at the Adelaide and Meath National Children's Hospital, the organisation felt that the main challenge was to get the workforce to participate in an absence management and stress reduction process. However, good communication and a commitment to making the project work on the part of the organisation resulted in participation among staff, and once the staff could see that the project was taking place, this had a positive effect on the organisation.

## Public debate on managing stress caused by restructuring

The stress that organisational restructuring can cause has been a prominent topic of debate for the past 18 months, due to the financial crisis and subsequent recession that the majority of European countries have experienced. A number of reasons might lead us to expect an increase of psychosocial risks. These include:

- increase of job insecurity (directly through the risk of own job loss or indirectly through the impact of other members of the household or company losing their job);
- rise in work intensity hence in demands (as had happened during the previous recession);
- role ambiguity which can happen as a result of reorganisation (either temporary or not).

Social support may decrease as people feel more isolated and at risk in their work. Careful monitoring is therefore needed to assess the impact of the financial crisis on people's quality of work and employment. The results of the fifth European Working Conditions Survey (EWCS), which took place during the first semester of 2010, shed light on these.

In Belgium, there have been a number of projects relating to the stress caused by restructuring and employment insecurity. The first is a study from the Catholic University of Leuven looking at the effects of job security on workers. The study found that job insecurity was one of the most stressful aspects of employment. A further report focused on job insecurity during restructuring, looking at subjective and objective job insecurity concerns. The study found that there was no clear relationship between subjective concerns (perceptions of uncertainty) and objective job uncertainty, where individuals are already part of a restructuring event. Finally in Belgium, a conference was organised in May 2009, partly by the government, on restructuring and the health of workers. The debates centred on issues such as early retirement, which has been a prominent feature of restructuring in Belgium in recent years, and how organisations cope with the loss of this senior talent and expertise.

In Germany, the issue of work-related stress has received special attention in recent months, due to the recession and the high levels of restructuring that this has caused. In other countries, such as Malta, specific interventions have been made to try and mitigate the effects of restructuring in individual organisations. For example, government support was available to workers affected by the restructuring and privatisation of the Malta dockyards and the government also intervened on numerous occasions in 2009 to help companies facing economic difficulties.

In other countries, work-related stress is a relatively new topic for public discussion. Many of these are new Member States (NMS) such as Slovakia, where it is reported that stress is not yet a main topic for public debate. By contrast, in Slovenia, an international roundtable and seminar on company restructuring and employee health was organised in April 2009. It focused on issues such as the subsequent poor health of workers who have been exposed to restructuring, and the wider effect that restructuring can have on the families of those workers and the wider community. In the Czech Republic, stress is a key theme of public debate, with HR specialists and companies publishing handbooks on how to deal with stress. However, it is not yet a topic for discussion at the level of national decision-making institutions.

Some of the instruments already in place in some countries deal specifically with stress caused by organisational change. These include the UK HSE's Management Standards for work-related stress (see box above), which focuses on organisational change as one of six key potential stress factors. The standards state that:

- organisations should try to ensure that they engage their employees frequently when undergoing an organisational change;
- systems are in place locally to respond to any individual concerns.

## Commentary

This report examines the issue of work-related stress and how it is perceived and managed in individual European countries. Overall, stress is identified as a serious problem in most European countries, being among the major causes of absence from work.

It is clear that there are wide differences in the perception and management of stress around Europe, although it is also clear that countries are dealing with very similar themes. These include:

- defining and measuring stress;
- identifying the main stress factors;
- ensuring that organisations and individuals get the support they need to prevent and minimise the negative effects of stress, but also how to ensure that, once support is in place, it is maintained.

The EU-level cross-sector social partners' agreement on work-related stress sets a common framework for the management of stress in European countries, and its implementation has mostly involved the social partners in individual Member States (European Social Partners, 2008).

However, in terms of overall levels of stress in Europe, according to the fourth European Working Conditions Survey (Eurofound, 2007), the prevalence of stress in NMS is higher, at 30% on average, than in the EU15, at 20%. In Bulgaria, for example, it is reported that work-related stress tends to be particularly prominent during the transition from a centralised economy to a market economy (a transition which the NMS have undergone). For example, in Romania, it is estimated that more than four million permanent jobs have been lost over the past 20 years, which no doubt has had a significant effect on the country's workforce.

Nevertheless, the public debate on stress is arguably further advanced in some EU15 countries than in some NMS. In the Netherlands, for example, stress has been under public discussion for around four decades. In Sweden, stress has also been a part of the public debate for some decades, although the debate there has centred more on the connection with long-term absence from work in the context of social insurance reforms. In Finland, the debate on stress has been subsumed more into a general debate on well-being at work, and the idea that healthy living and well-being measures can serve to prevent stress from occurring.

In contrast, the prominence of stress-related issues in the public debate is relatively low in countries such as Latvia, Lithuania and Poland, though there are exceptions. In the Czech Republic, for example, stress has gained a relatively high profile in public debate, although this has arguably not yet been translated into policy action. Furthermore, although there is no tradition of debate on stress in Estonia, there are plans to raise awareness of this issue during the next four years, and new survey data on stress will be collected in Slovenia over the coming two years.

There is significant evidence from the majority of countries that organisations and companies are grappling with the issue of work-related stress and putting into place measures and initiatives to try to prevent and minimise it. These include:

- addressing 'hotspot' issues for stress such as a lack of control over work pace and organisation, intensity of work and long working hours;
- putting into place healthy living and sports campaigns;
- offering dedicated support to those suffering from stress.

The ultimate goal for organisations is to reduce sickness absence related to stress and to increase the general well-being of the workforce, as this will guard against stress in the future and brings attendant benefits such as increased morale, reduced employee turnover and increased

productivity. The section of this report on best practice examples highlights a number of interesting points and lessons learned. They include issues such as:

- good data collection;
- the importance of a robust stress policy and of involving all relevant actors (particularly employee representatives) in the development of this policy;
- ensuring senior management buy-in to the stress management process;
- developing good communications;
- identifying the key issues in order to be in a position to put into place targeted measures to address them.

Many argue, however, that there is more to be done to combat stress. This is no doubt linked to the fact that stress is a complex and difficult issue to deal with: it is hard to define and harder to manage, as individual perceptions and resilience play a significant role in stress levels. Often, organisations need to see a strong business case before they will take preventative action on stress, which makes it difficult to build an organisational culture that is comfortable dealing with stress. Maintaining momentum in implementing stress initiatives can also be a problem, as this requires dedication and continued financial commitment on the part of organisations. In addition, new approaches may be needed. For example, in Denmark, the promotion of well-being and positive factors is seen as a way to also tackle work-related stress.

One issue highlighted by some countries is a lack of robust survey data. This is reported to be the case in Norway and Portugal, where it is felt that the availability of better survey data would make a significant difference to the management of work-related stress.

It is clear that work-related stress is an issue that will continue to dominate public debates around occupational health for some time to come. Stress levels due to restructuring have, in all probability, risen over the past 18 months due to the recession and the company restructuring that has resulted from this. It is therefore important that efforts on the part of governments, policymakers, representative bodies and organisations to prevent and manage work-related stress continue into the future.

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## Annex: Main national surveys/studies on work-related stress

Country	Name of survey/study	Methodology/main features	Other comments
AT	Austrian Labour Force Survey	Information on employment relationships, working time, job search and training. The 2007 survey included a module that had questions on psychosocial risk factors and outcomes.	
	Austrian Working Climate Survey ( <i>Arbeitsklimaindex</i> )	Based on a representative sample of 900–1,000 respondents, collected four times a year.	Focused on job satisfaction – 26 thematic indicators are collected and combined into four sub-indices, of which work is one.
	Austrian Working Health Monitor ( <i>Arbeitsgesundheitsmonitor</i> )	Data collection on a quarterly basis, with approximately 1,000 respondents for each survey.	Focus on the subjective health perception of workers.
BE	STV Innovation and Work (STV <i>Innovatie en Arbeid</i> )	Scientifically validated indicator on workability. Written questionnaire sent to 20,000 individuals, with response rates of 60.6% in 2004 and 53.3% in 2007.	The first survey was conducted in 2004 and subsequent surveys in 2007 and 2010.
	Belstress	Large epidemiological cohort study on stress at work and related health problems, running from 1996 to 2006. The first phase covered 21,419 respondents in 25 organisations across Belgium with data gathered through self-administered questionnaires and bio-clinical examinations. The second phase covered nine of the original 25 organisations. The third phase covered seven companies.	The third phase of the study focuses more narrowly on the risk factors of sickness absence, the causes of sickness absence and cause-specific sickness absence.
	DIOVA database	This database collects data from organisations all over Belgium and has been operating since 1999. It consists of a non-	

Country	Name of survey/study	Methodology/main features	Other comments
		representative national database of 32,016 employees	
<b>BG</b>	Survey on work stress in the context of transition. A case study of three public sector organisations in Bulgaria.	This was carried out in 2002 by the Institute for Social and Trade Union Research at the Confederation of Independent Trade Unions in Bulgaria (CITUB) and based on a random clustered sample of 1,026 respondents in 45 cities. Data were gathered by means of interview.	There are no national surveys on stress in Bulgaria, but a range of sectoral and occupational surveys have been carried out in recent years.
	Survey on employee turnover, working conditions and motivation of civil servants, carried out by the Ministry of State Administration in 2008.	Data were collected from a representative random sample of 4,000 civil servants, using face-to-face interviews.	
	Empirical psychological survey of judges in Bulgaria ('Stress and coping with stress')	Conducted in 2008 by the Union of Psychologists. Data collected using face-to-face structured interviews from 474 individuals, representing 8.65% of all judges in Bulgaria.	
	General Labour Inspectorate survey on stress (2003)	This was a questionnaire-based survey of 196 employees in professions deemed to be at high risk of stress such as nurses, doctors, bus drivers, bar workers and social workers.	
<b>CY</b>	Kyriacou and Constanti (2008): 'Investigating job stress: Comparing the influence of hardiness to other stress factors', focusing on call centre operators.	This study collected data from 64 individuals, based on a paper questionnaire, focusing on the personality of the individual, working conditions and workplace environmental conditions.	A range of occupation- and sector-specific surveys on stress have been carried out. A selection is presented here.
	Fani and Markidou, Stress experienced by nurses in intensive care units and ways of dealing with it, Lefkosia, Cyprus School of Nursing, 2006.	Data were collected via a written questionnaire, completed by 430 nurses across the country. Qualitative data were also collected via semi-structured interviews with 20 nurses.	
	Constantinos, K.M., 'Job	Data were collected from 447	

Country	Name of survey/study	Methodology/main features	Other comments
	stressors, personality and burnout in primary school teachers', <i>British Journal of Educational Psychology</i> , Vol. 77, 2005, pp. 229–243.	primary school teachers via a questionnaire. The focus was on the association between burnout, personality characteristics and job stressors in primary school teachers in Cyprus.	
<b>CZ</b>	'Workplace stress – prevention opportunities 2008–2009', Department of Human Resource Development of the Ministry of the Interior of the Czech Republic, Trade Union of Public Authorities and Organisations, Occupational Safety Research Institute	This survey gathered data from 150 public administration employees. The project team also carried out a representative survey on stress among 836 employees aged 18–65, and carried out semi-structured interviews with labour inspectors.	There is no regular monitoring of stress at work in the Czech Republic. There are, however, a range of surveys that deal with, or have information on, stress. The survey with the greatest focus on stress is listed here.
<b>DE</b>	Federal Ministry of Labour and Social Affairs (BMAS) produces an annual national report on the development of health and safety at work in Germany. The 2005 report focuses, among other things, on work-related stress.		Other surveys are carried out by health insurance organisations.
	Study published by BMAS in February 2008, <i>Organisational culture, quality of work and employee commitment in companies in Germany</i>	A total of 68,151 employees in 314 companies were asked to complete a standardised questionnaire as part of an employee survey. A total of 37,151 complied, a response rate of 58%. In addition, a senior executive or a department manager in each of the same companies was interviewed to provide a management survey ( <a href="#">DE0804019I</a> ).	
<b>DK</b>	National Health and Morbidity Surveys (SUSY) conducted by the National Institute of Public Health (SIF)	Sample size was 14,566 in 2005. Stress measured by a single question: 'Do you feel stressed in your everyday life?'	National survey
	2005 survey of psychosocial health in specific jobs based on	Sample size was 3,517 in 2005. Stress measured by four-	National survey

Country	Name of survey/study	Methodology/main features	Other comments
	the Copenhagen Psychosocial Questionnaire (COPSOQ) undertaken by the National Research Centre for the Working Environment (NFA).	item scales for behavioural somatic and cognitive stress.	
EE	Study on work-related stress carried out in January 2010 by the Centre for Applied Research (CentAR) and the research company Turu-uuringute AS on the distribution of psychosocial risks among salaried workers in Estonia ( <i>Psühhosotsiaalsete riskide levik Eestis</i> ). The study was commissioned by the Labour Inspectorate ( <i>Tööinspeksioon</i> ).	Face-to-face interviews based on two international work-related stress questionnaires that were adapted for the study – the UK HSE management standards indicator tool and the Copenhagen psychosocial questionnaire (COPSOQ II). The sample was 1,200 respondents aged 15–74.	Not many national surveys on stress exist, although there are some occupational surveys for groups such as teachers.
EL	A survey carried out by the National Statistical Service of Greece ( <a href="#">ESYE</a> ), ‘Special survey on workplace accidents and work-related health problems’, looks among other things at stress.	The survey was conducted during the second quarter of 2007 based on a questionnaire method to which 49,299 people aged 15 and older responded.	
	‘Working conditions in Greece’ by the company V-Project Research Consulting (VPRC). This is a quantitative survey commissioned by the Greek General Confederation of Labour ( <a href="#">GSEE</a> ).	This survey was conducted between 14 June and 10 July 2008. Individual face-to-face interviews were carried out, using a structured questionnaire, based on a sample of 1,300 employed and unemployed people aged over 18.	
ES	Survey on Quality of Life in the Workplace ( <i>Encuesta de Calidad de Vida en el Trabajo</i> ), aimed to assess the situation of workers in the workplace by providing data on the activities they carry out and their relations at work, along with workers’ own perceptions.	Interviewees are asked to measure their level of stress linked to their current working place from 0 (no stress) to 10 (extreme stress).	This survey has been carried out on an annual basis by the Spanish Ministry of Labour and Immigration since 1999 (except in 2005). The most recent issue available corresponds to 2008.
FI	Quality of Work Life Survey (FQWLS)	Data collected by personal face-to-face interviews using a standardised questionnaire.	Survey looks at time pressure and the effects of this, rather

Country	Name of survey/study	Methodology/main features	Other comments
		Between 3,000 and 6,500 people have been interviewed in each survey round (since 1977).	than examining stress directly.
	2006 Work and Health Surveys carried out by the Finnish Institute of Occupational Health.	Telephone interviews with around 3,000 respondents.	Study carried out every three years since 1997.
<b>FR</b>	No surveys in place, although the Minister of Labour has appointed an expert group to monitor psychosocial risks at work, which presented an interim report on provisional indicators to assess psychosocial risk factors at the workplace in October 2009.		
<b>HU</b>	Survey carried out by GfK Hungária in April 2008	The survey covered 1,000 employees in April 2008. Respondents were asked to assess statements using a 1–5 scale (1: fully disagree, 2: agree in a very small degree, 3: moderately agree, 4: more or less agree, 5: fully agree; 0: no opinion).	
	Hungarostudy 2006 survey	Questionnaire-based survey which focused on time pressure, interruption, distraction and increase of effort during work. Questions relate to the rewards of work, promotion possibilities, workplace security and unfavourable changes at the workplace. Respondents are asked to assess statements using a 1–5 scale. Should the value of the index be 1 or more, it indicates high workplace stress.	
<b>IE</b>	A national survey (‘The changing workplace: a survey of employees’ views and experiences’) of over 5,000 employees’ work experiences was published in 2003 by the Economic and Social Research	The fieldwork for the survey was carried out between June and early September 2003 using a telephone methodology. Overall 5,198 responses were obtained. The sample was selected on a	

Country	Name of survey/study	Methodology/main features	Other comments
	Institute (ESRI) and the National Centre for Partnership and Performance (NCPP). The survey contains data on employees' experience of workplace stress.	random basis from a total of 300 sampling points throughout Ireland.	
<b>IT</b>	The 2005 publication, <i>Il lavoro che cambia</i> [Changing work], edited by Carrieri, Damiano and Ugolini, summarises the results of a survey launched in 2002 by <i>Democratici di Sinistra</i> (DS), the main centre-left Italian political party.	More than 22,000 completed questionnaires were collected through various channels: most from workplaces, while more than 3,000 were filled in online. The survey design did not follow a formal survey sampling methodology: the centre-north of Italy, employees, the public sector and manufacturing are over-represented, corresponding to the constituency of DS. A section of the questionnaire was devoted to quality of work issues such as job satisfaction, pay and job security, while wider scope was given to labour market and political issues.	According to this survey, stress is the most reported risk factor, mentioned by 45.7% of respondents: it decreases as responsibilities decrease, from 60% among managers to 27.3% among blue-collar workers)
<b>LT</b>	The Occupational Medicine Centre of the Institute of Hygiene ( <a href="#">HIDMC</a> ) has been carrying out surveys and research programmes aimed at analysing work-related stress and the effects of work-related stress on occupational health since 1994.	Surveys include: - work-related stress and the functional state of the cardiovascular system (1994–1997); - ability for work and psychosocial stressors at work (1998–1999); - identification of psychosocial stressors at work causing more frequent stress reactions among (trolleybus and bus) drivers (2000–2001); - effects of psychosocial factors at work on the development of depression and depressive symptoms (2002–2004); - incidence, forms of manifestation and risk factors of psychological violence in	There is no regular work-related stress monitoring in place in Lithuania.

Country	Name of survey/study	Methodology/main features	Other comments
		the workplace (2008–2010).	
	Working Life Barometer	Face-to-face structured interviews. Sample of 904 individuals aged between 16 and 64.	Study looks at overtime working, stress factors and conflict.
<b>LU</b>	Survey of work-related stress carried out in 2006 by the organisation, Stimulus, at the request of the trade union confederation, OGBL, and the Luxembourg League for Mental Hygiene.	Sample of 1,230 Luxembourg residents and Belgian and French cross-border commuters. Data collected by telephone questionnaire.	
<b>MT</b>	In 2007, the National Statistics Office ( <a href="#">NSO</a> ) conducted an ad hoc Labour Force Survey (LFS) on accidents at work and work-related health problems which among other things, touched upon the issue of work-related stress.	The Labour Force Survey is based on interviews with households on a continuous basis.	
<b>NL</b>	Netherlands Working Conditions Survey ( <a href="#">NEA</a> )	This is the largest periodic survey on working conditions in the Netherlands. Six surveys have been performed thus far in 2003, 2005, 2006, 2007, 2008 and 2009. The surveys involve around 24,000 employees per year (except the 2003 survey, which involved around 10,000). Respondents receive a written questionnaire, but can also complete the questionnaire online.	The way of measuring a number of work-related stress factors was changed in 2007.
	Employers Working Conditions Survey (WEA)	This is a national survey among a sample of at least 5,000 employers held every other year and which concentrates on working conditions and employment related issues regarding policies as well as 'ad hoc' activities regarding working conditions and working relations.	The WEA was held in 2008 for the first time. The questionnaire is completed by the director/owner or the human resources manager of the company interviewed.
	Working Companies ( <i>Werk in Bedrijf</i> ) survey	This survey is held annually by the Dutch Labour Inspectorate.	Every year a specific set of working



Country	Name of survey/study	Methodology/main features	Other comments
		Every year labour inspectors investigate a national sample of more than 2,000 Dutch employers with a standard questionnaire on working conditions and the way they manage these. They also visit the shopfloor and ask for relevant reports.	conditions is questioned in detail; in 2007 these were work stress related factors.
<b>NO</b>	The Level of Living Survey: Working Conditions ( <i>Samordnet levekårsundersøkelse: Arbeidsmiljø</i> ) is conducted by Statistics Norway ( <a href="#">SSB</a> ) every third year.	Based on telephone interviews with almost 10,000 workers, representing a response rate in 2006 of 67%.	Questions measure subjective evaluation of control and demands of work, as well as any adverse physical, psychological or social complaints possibly related to lack of balance between demands and resources.
<b>PL</b>	The Central Institute of Labour Protection (CIOP) produces a Social Diagnosis ( <a href="#">Diagnoza Społeczna</a> ) survey, a cyclical survey conducted at national level (in 2000, 2003, 2005, 2007 and 2009) and which concerns living conditions and the quality of life of Polish citizens. It contains seven questions diagnosing aspects of work-related stress.	In 2009, 12,381 households were surveyed. It is a questionnaire-based survey of households, conducted by face-to-face interviewers.	There is no national instrument to monitor work-related stress. Various sectoral studies exist.
	The Central Statistical Office ( <a href="#">GUS</a> ) conducts a national level survey, <a href="#">Accidents at work and work-related health problems</a> (available in English and Polish). The most recent data relate to 2007 and examine health problems connected with work, workload, time pressure, mobbing and violence at work.	The survey was conducted in households on a representative sample of 31,338,000 people aged 15 and older.	
<b>PT</b>	Evaluation Survey of the Working Conditions of Workers, December 1999 – January 2000 ( <i>Inquérito de</i>	National representative sample of about 5,000 persons in different sectors of activity.	Other sectoral and occupational studies also exist in Portugal.

Country	Name of survey/study	Methodology/main features	Other comments
	<i>Avaliação das Condições de Trabalho dos Trabalhadores, Dezembro 1999 – Janeiro 2000</i> conducted by the Department of Statistics of Labour, Employment and Professional Training of the Ministry of Labour and Social Solidarity ( <i>Departamento de Estatística do Trabalho, Emprego e Formação Profissional do Ministério do Trabalho e da Solidariedade Social</i> ).		
RO	The ‘Living Conditions Survey’ (ACOV) is conducted annually by the National Institute of Statistics (INS) and included, until 2006, a section devoted to and titled ‘working conditions’.	Sample of 10,920 households all over the country. The data are collected by face-to-face interviews at the respondents’ homes, in mid-June. The questions regarding work cover the week prior to the interview, and the questions related to health cover the previous six months.	The working conditions chapter of this survey was discontinued in 2007.
	INS conducted an inquiry into ‘Health and Safety at the Workplace’ ( <a href="#">RO0804019I</a> ), as a complementary module to the ‘Household Labour Force Survey’ (AMIGO) in the second quarter of 2007.	The survey collected data on health issues related to occupational activities and to the risk factors to which the respondents are exposed at their current workplace, and which may affect their mental and physical health.	
SE	The Swedish Work Environment Survey (SWES) has been carried out by Statistics Sweden (SCB) every other year since 1989.	SWES was conducted using a set of supplementary questions in connection with SCB’s regular Labour Force Survey (AKU). The sample size was 12,500, of whom slightly more than 10,500 answered the telephone interview and slightly less than 8,000 answered the questionnaire.	The 2007 survey was commissioned by the Swedish Work Environment Authority ( <a href="#">AV</a> ) and aims to describe the work environment of the population in employment aged between 16 and 64.
	SLOSH (Swedish Longitudinal Occupational Survey of Health) is a longitudinal cohort study which follows up on SWES 2003.	This study has additional questions compared with SWES, and also has the advantage that it studies the same participants over a longer period of time. The survey was	The aim of this study is to examine the relationship between work organisations, work environment and

Country	Name of survey/study	Methodology/main features	Other comments
		commissioned by the Stress Research Institute ( <a href="#">Stressforskningsinstitutet</a> ) and was carried out by SCB from March to May 2006.	health.
<b>SI</b>	In 2008, the Clinical Institute of Clinical Occupational, Traffic and Sports Medicine (KIMDPŠ) carried out a survey on the extent of mobbing in Slovenia.	Survey questionnaire was responded to by 1,366 individuals. The questions referred mostly to the six months preceding the survey and the interviews were carried out in the respondents' homes.	
<b>SK</b>	No specialised stress surveys available.		
<b>UK</b>	The UK's Labour Force Survey (LFS) collects some data on the incidence of work-related stress in the UK in its workplace accident and self-reported illness modules (HSE, 2009).	The data in these modules are based on self-reported data.	The survey notes that while this method does not give an exact measurement of the true extent of work-related illness, it is held to be a reasonable indicator.
	Annual Psychosocial Working Conditions (PWC) Survey, produced by HSE	This survey is based on a series of questions sponsored by HSE in two ONS omnibus surveys. The omnibus surveys are based on a random probability sample, using face-to-face interviews.	Survey has been running since 2004.

Source: EWCO

EF/10/75/EN