



Work-related musculoskeletal disorders: Back to work report



**Work-related musculoskeletal disorders:
Back to work report**

Work-related musculoskeletal disorders: Back to work report

Authors:

European Agency for Safety and Health at Work:

Zinta Podniece

Topic Centre Working Environment:

Andrew Pinder and Liz Yeomans, HSL, United Kingdom

Swenneke van den Heuvel, Birgitte Blatter, TNO, Netherlands

Marthe Verjans, Karen Muylaert, Veronique De Broeck, Lieven Eeckelaert, Prevent, Belgium

Marie-Amélie Buffet, EUROGIP, France

Nina Nevala, Anneli Kaukiainen, FIOH, Finland

In co-operation with:

Julia Lischka, Federal Chamber of Labour, Austria

Ferenc Kudas, FJNCPH/OMFI, Hungary

Miroslav Kosina, CMKOS H&S Centre, Czech Republic

A great deal of additional information on the European Union is available on the Internet, and can be accessed through the Europa server (<http://osha.europa.eu>).

Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 2007

ISBN 978-92-9191-160-8

© European Agency for Safety and Health at Work, 2007

Reproduction is authorised provided the source is acknowledged.

Printed in Belgium

PRINTED ON WHITE CHLORINE-FREE PAPER



TABLE OF CONTENTS

Foreword	5
Executive summary	7
1. Introduction	11
2. Workplace interventions improving return-to-work rates among workers with MSDs	15
2.1. Introduction	16
2.2. The natural course of MSDs	17
2.3. Factors in prognosis	18
2.4. Intervention strategies at work	20
2.4.1. <i>Intervention strategies for back pain</i>	20
2.4.2. <i>Intervention strategies for upper limb pain</i>	25
2.4.3. <i>Intervention strategies for lower limb pain</i>	29
2.5. Discussion, summary and conclusions	31
2.6. References	33
3. Return-to-work policy initiatives regarding workers with MSDs	39
3.1. Introduction	40
3.2. International and Europe-wide initiatives	41
3.3. Austria	44
3.4. Belgium	46
3.5. Cyprus	51
3.6. Finland	53
3.7. Germany	55
3.8. Hungary	61
3.9. Ireland	62
3.10. Italy	65
3.11. Luxembourg	68
3.12. Malta	70
3.13. Netherlands	73
3.14. Portugal	77
3.15. Slovakia	78
3.16. Slovenia	79
3.17. Sweden	83
3.18. United Kingdom	85
3.19. Conclusions	90
3.20. References	92
4. Conclusions	97



FOREWORD

Musculoskeletal disorders (MSDs) are the most common work-related health problem in Europe, affecting millions of workers. Across the EU27, 25% of workers complain of backache and 23% report muscular pains.

MSDs are caused mainly by manual handling, heavy physical work, awkward and static postures, repetition of movements and vibration. The risk of MSDs can increase with the pace of work, low job satisfaction, high job demands, job stress and working in cold environments. MSDs are the biggest cause of absence from work in practically all Member States. In some states, MSDs account for 40% of the costs of workers' compensation, and cause a reduction of up to 1.6% in the gross domestic product (GDP) of the country itself. MSDs reduce companies' profitability and add to the social costs of governments.



Many problems can be prevented or greatly reduced through employers complying with existing safety and health law and following good practice. However, there are specific actions that have to be taken if MSDs are to be tackled effectively.

The Administrative Board of the European Agency for Safety and Health at Work therefore decided to dedicate the 2007 European Campaign for Safety and Health at Work ('Lighten the Load') to work-related musculoskeletal disorders.

Lighten the Load follows-up on the first campaign run by the Agency in 2000, which focused on the same topic. Musculoskeletal disorders are complex work-related health conditions, due to their multi-factorial aetiology, the variety of different risk factors, and combinations of risk factors, involved, and the existence of numerous intervention methods. This makes it difficult to communicate information about them to target audiences in a comprehensive way. In order to succeed in this, there is a need for continued, long-term effort.

The European MSDs Campaign in 2007 seeks to promote an integrated management approach to tackling MSDs, embracing both elements — the prevention of MSDs and the retention, rehabilitation and reintegration of workers who already suffer from them.

This report supports the Campaign by providing information on the second element of this approach — it is aimed at all those who have influence on the secondary and tertiary prevention (back-to-work actions) of work-related MSDs. It evaluates the effectiveness of interventions in the workplace, and gives an overview of policy initiatives in Europe and at international level regarding the retention, reintegration and rehabilitation of workers with MSDs.

I would like to take this opportunity to thank all of our European partners, as well as Agency and Topic Centre Working Environment staff, who have contributed to the compilation of this report.

Jukka Takala
DIRECTOR

European Agency for Safety and Health at Work
October 2007



EXECUTIVE SUMMARY

Work-related musculoskeletal disorders (MSDs) are impairments of the bodily structures, such as muscles, joints, tendons, ligaments, nerves or the localised blood circulation system, which are caused or aggravated primarily by the performance of work and by the effects of the immediate environment in which work is carried out. Most work-related MSDs are cumulative disorders, resulting from repeated exposure to high- or low-intensity loads over a long period of time. The symptoms may vary from discomfort and pain to decreased body function and invalidity. Although it is not clear to what extent MSDs are caused by work, their impact on working life is huge. MSDs can interfere with activities at work, and can cause a reduction in productivity, an increase in sickness absence, and chronic occupational disability. The aim of this report is to evaluate the effectiveness of interventions in the workplace, and to provide an overview of policy initiatives regarding the retention, reintegration and rehabilitation of workers with MSDs.

Workplace interventions

The publication search that was carried out for this report covered scientific literature concerning work-related interventions aimed at the rehabilitation, reintegration and retention of workers with MSDs. These included interventions such as work modifications, exercise therapy, behavioural treatment, psychosocial interventions and multidisciplinary treatment. The main findings with respect to particular body parts were:

Back pain

- there is clear evidence that it is important for patients to stay active and return to ordinary activities as early as possible;
- a combination of optimal clinical management, a rehabilitation programme and workplace interventions is more effective than single elements alone;
- taking a multidisciplinary approach offers the most promising results, but the cost-effectiveness of these treatments needs to be examined;
- temporarily modified work is an effective return-to-work intervention, if it is embedded in good occupational management;
- some evidence supports the effectiveness of exercise therapy, back schools, and behavioural treatment;
- lumbar supports such as back belts and corsets appear to be ineffective in secondary prevention.

Upper limb pain

- a multidisciplinary approach involving a cognitive-behavioural component might be the most effective type of intervention;
- there is limited evidence on the effectiveness of some technical or mechanical interventions and exercise therapy;
- in the scientific literature, sufficient evidence is not available for the effectiveness of psychosocial interventions.

Lower limb pain

- no information on work-related intervention strategies has been found;



- the results of studies concerning lower limb treatment in general indicate that exercise programmes might be effective for hip and knee problems.

Although many studies have been carried out, the evidence for the effectiveness of interventions is somewhat limited — in particular regarding interventions for upper limb symptoms. However, criteria for evidence are derived from the evaluation of medical treatment, and it has been suggested that they are not appropriate, considering the complexity of workplace interventions. In spite of the lack of strong scientific evidence, anecdotally many of these workplace interventions are reported as being effective. **The evaluation of workplace interventions should probably adopt different criteria on which to base its evidence.** These criteria are currently lacking, but **policymakers and employers should not be discouraged from carrying out preventive action simply because there is no 100% proof that it will work.** Moreover, secondary and tertiary prevention should go hand in hand with primary prevention in order to prevent the recurrence of MSD episodes.



Physiotherapy

Policy initiatives

The policy overview in this report gathered information from international and European sources.

International conventions, such as the Convention on the Rights of Persons with Disabilities, Europe-wide initiatives such as the Social Charter, and EU strategies such as the European Employment Strategy all encourage governments to create national policies to facilitate the return to work of people suffering from disabilities. A special focus on rehabilitation and reintegration of workers is part of the new Community strategy for 2007-2012 on health and safety at work. This objective is further reinforced by the Resolution of the Council of the European Union. While musculoskeletal disorders are not specifically mentioned, the strategy and the



Resolution create overarching frameworks that encourage return-to-work policies for people suffering from MSDs.

Information was gathered for this report from selected Member States on national legislation, guidelines, recommendations, action plans, initiatives and programmes. The **legislation and policies on return-to-work still varies from one European Member State to another**. In some countries, rehabilitation is very limited, while in others it includes medical, occupational and social rehabilitation. Although European initiatives encourage governments in this area, and new Member States adapt their policies and programmes to the norms of the Union, this process is further advanced in some countries than in others.

A number of tentative conclusions can be drawn:

- Most of the Member States’ policies focus on integrating into the workforce people with disabilities who are not currently employed, rather than retaining, reintegrating and rehabilitating workers who have developed MSDs at work. There should be an increased awareness regarding the needs of this target group;
- A number of countries have policies that cover the reintegration and rehabilitation of workers after illness or accident. Variations between the countries are large. Examples of the advantages and disadvantages of the existing policies are given below:

Advantages	Disadvantages
Emphasis on early recognition of problems and avoidance of long-term incapacity for work, including returning people with MSDs to work as quickly as possible.	Reintegration and rehabilitation are often offered only to workers who have suffered occupational accidents or have recognised occupational diseases. Providing help only to the severely disabled tends to exclude individuals with less severe MSDs, many of whom could return to work after being given a little help or offered simple adjustments to their jobs.
Provision of comprehensive care including medical, occupational and social rehabilitation. Multidisciplinary approach — enhanced collaboration between the treating physician, the occupational physician and the insurance fund’s medical advisor. This would facilitate better case management and earlier return to work among workers with MSDs.	The Bismarckian social health insurance system (the “dual system”) that exists in many Member States strictly separates work and social insurance, which is not compatible with offering integrated counselling and help to workers with health problems.
The introduction of financial incentives for employers, such as funding for work adaptations and improving workplace conditions or an obligation to pay employees a wage during their sickness, stimulates the employer to provide occupational rehabilitation in order to facilitate the employee’s early return to work.	In countries with adversarial legal systems, employers may be reluctant to reintegrate an employee for fear of aggravating a musculoskeletal condition. Similarly, employees may be reluctant to return to work in case it reduces any compensation for personal injury.

- Due to the high economic and social burden associated with long-term sickness absence, modifications (with subsequent evaluation of success factors) in the reintegration and rehabilitation systems could be appropriate. An example of a German initiative is given overleaf.

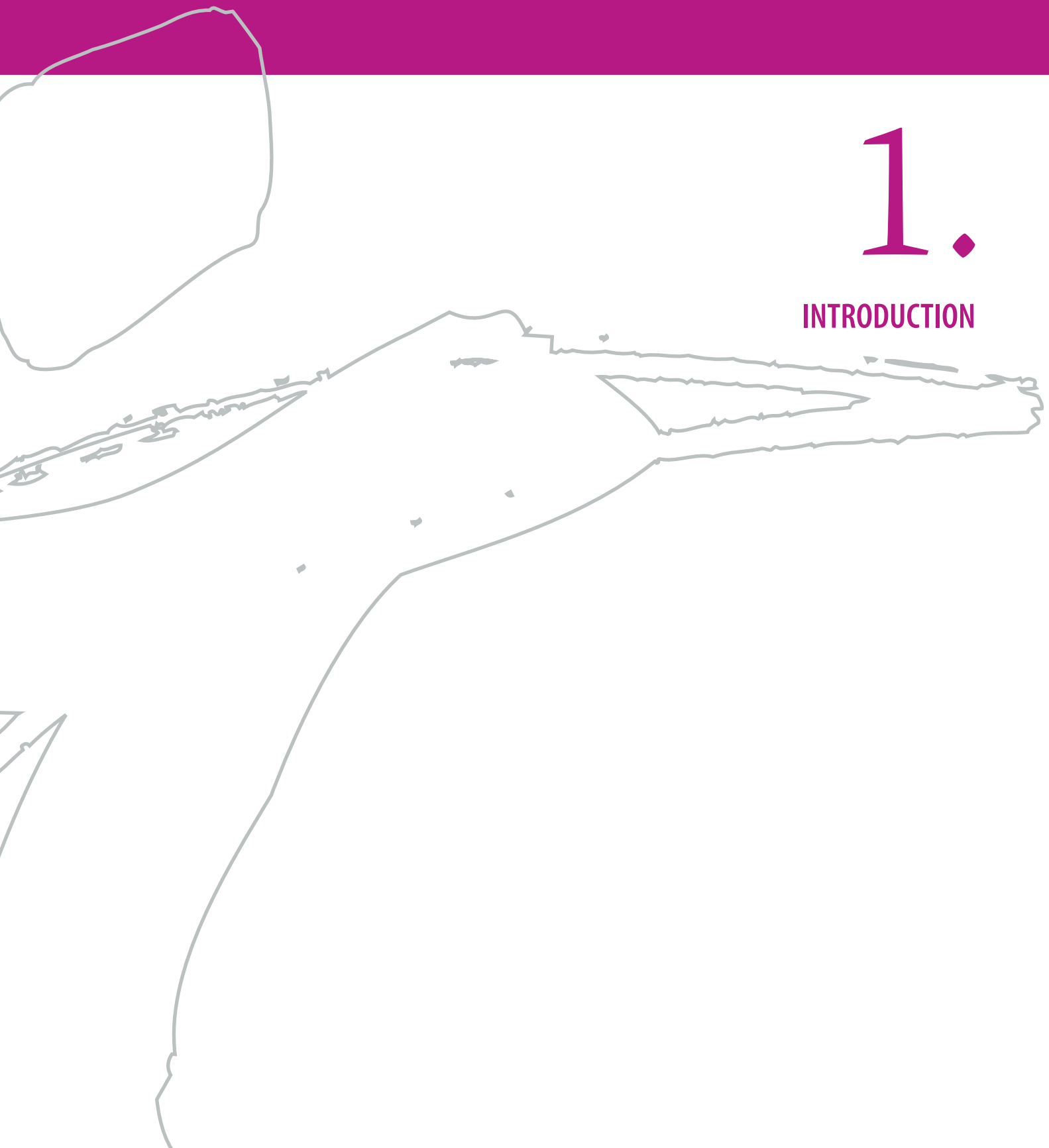


Aiming to tackle the growing problem of MSDs, **the German government** has begun to transfer obligations on the participation of people with disabilities in work from the state and/or social insurance to employers. The focus now is on early recognition and avoidance of long-term incapacity at work. If an employee is unfit for more than six weeks within a year, a meeting between the employer and the member of staff must initially be convened in consultation with the works council, in order for constructive and integrative solutions to be reached with the insurers at the subsequent stage. Disability managers support employers in their new role as “early-warning systems”.



1.

INTRODUCTION





Pain, discomfort and loss of function in the back, neck and extremities are common among working people. These ailments are commonly termed musculoskeletal disorders (MSDs). For the purpose of this report, work-related MSDs are defined as impairments of bodily structures such as muscles, joints, tendons, ligaments, nerves or the localised blood circulation system that are caused or aggravated primarily by the performance of work and by the effects of the immediate environment in which work is carried out.

Most work-related MSDs are cumulative disorders, resulting from repeated exposure to high- or low-intensity loads over a long period of time. However, MSDs can also be acute traumas, such as fractures, that occur during an accident. The symptoms may vary from discomfort and pain to decreased body function and invalidity.

Although it is not clear to what extent MSDs are caused by work, their impact on working life is huge. MSDs can interfere with activities at work, and can result in absence from work and chronic occupational disability. The consequences may include decreased productivity, a financial burden for the worker, for the company concerned and for society, and social disadvantages for the worker.

According to a European survey carried out in 2005, up to 25% of workers in the EU27 reported back pain, and 23% muscular pain related to work. Incapacity varies between short-term sick leave and chronic disability. Differences between countries are huge. For example, in Greece 47% of workers reported work-related back pain and 46% muscular pain, while in the United Kingdom the respective figures were 11% and 9% (¹).

Since 2000 there has been considerable focus on MSDs at work in the European context. MSDs have also been high on the agenda at the European Agency for Safety and Health at Work (the Agency). The Agency's 'Good Practice' website contains a great deal of practical information on preventing MSDs and controlling risks in the workplace (²). 'Turn your back on musculoskeletal disorders' was the theme for the European Week for Safety and Health at Work in 2000. In 2007 the theme is the prevention of MSDs and their consequences.

This report focuses on workers who already have MSDs, and specifically how to prevent further sick leave and how to help workers return to work. Another report ('Work-related MSDs: prevention report') discusses the prevention of MSDs. There is no strict cut-off between prevention and rehabilitation, and therefore these two reports complement each other. Both reports aim to give background information to decision-makers at different levels of society, from policymakers and stakeholders to those who act at the workplace level as occupational health and safety (OHS) experts.

(¹) European Foundation for the Improvement of Living and Working Conditions. 4th European Working Conditions Survey, 2007. Available at <http://www.eurofound.europa.eu/pubdocs/2006/98/en/2/ef0698en.pdf>

(²) More information on MSDs and good practice is available at http://osha.europa.eu/good_practice/risks/msd/



Researchers in the field can use the report as a reference. These reports will be complemented by two more produced by the European Risk Observatory: the 'Thematic report on MSDs' and 'Report on occupational exposure to vibration'.

This report consists of two parts. The first evaluates work-related interventions that are aimed at the rehabilitation, reintegration and retention of workers with MSDs. This encompasses a literature review of intervention studies in the workplace, aimed at decreasing symptoms and helping workers return to work. The second part of the report describes policies at the international and European level, and in the individual European Member States. Information was gathered from selected countries on national legislation, guidelines, recommendations, action plans, initiatives and programmes. It complements the Agency's two previous reports concerning research on work-related neck and upper limb musculoskeletal disorders ⁽³⁾ and lower back disorders ⁽⁴⁾.

⁽³⁾ Available at: http://osha.europa.eu/publications/reports/201/index.htm?set_language=en

⁽⁴⁾ Available at: http://osha.europa.eu/publications/reports/204/index.htm?set_language=en



2.

WORKPLACE INTERVENTIONS IMPROVING RETURN-TO-WORK RATES AMONG WORKERS WITH MSDs



2.1. INTRODUCTION



The high prevalence of MSDs among workers, and their considerable impact on working life, make it imperative that action be taken in the workplace. These actions could have various different goals. In the first place, actions can aim to prevent MSDs occurring in the first place. Those interventions aimed at the primary prevention of MSDs are dealt with in a separate literature

review in our 'Work-related MSDs: prevention report'. In the second place, actions can aim to prevent the recurrence of symptoms after the first occurrence, and to prevent workers having to leave the workforce as a result of their symptoms. In the third place, interventions can aim to reduce the progression of the disease and prevent permanent occupational disability due to MSDs, by focusing on the reintegration of workers who have left the workforce due to their symptoms.

The focus of this report is on the latter two types of interventions, aimed at the retention, rehabilitation and reintegration of workers who have suffered from MSDs; in other words, actions to keep workers in work or, if they are out of work, getting them back to work. The report concerns working life, interventions in the workplace and work-related MSDs. However, some MSDs are not often associated with working conditions although they are relevant for work and workers. For these MSDs a broader literature search will be carried out.

The objective of this study is to evaluate work-related interventions aimed at the rehabilitation of workers with MSDs. A literature review was conducted of intervention studies in the workplace aimed at decreasing symptoms and enabling workers to return to work. Reviews on this subject, as well as original studies that were published afterwards, were examined. The literature search was restricted to randomised and non-randomised controlled trials.

The first part of this report describes literature on the **course of MSDs** in terms of recurrence, persistence and recovery. Then it deals with the literature on **factors** that will influence the course and prognosis of MSDs. The literature on **interventions** is then reviewed. Intervention strategies concerning symptoms of back, upper limb and lower limb are dealt with in turn. Finally, the results are summarised and conclusions are drawn.



THE NATURAL COURSE OF MSDs

2.2.

Back

Results from existing studies suggest that low-back pain typically runs a recurrent course characterised by variation and change (Von Korff & Saunders, 1996). According to the results of a review of the prognosis of low back pain, the pain usually diminishes or resolves within one month, and between 68% and 86% of the workers affected return to work. Then, within three months, further but smaller improvements occur, after which pain and disability levels remain almost constant. Nevertheless, most people (66-84%) will have at least one recurrence within 12 months (Pengel et al., 2003).

Upper limb

The prognosis for neck and shoulder pain is less favourable. In a study of 443 patients with neck or shoulder pain, 24% of the patients reported recovery at three months and 32% at 12 months (Bot et al., 2005a). In another study of the general population, neck pain persisted at 12 months in around half of the 1,359 respondents who reported neck pain at the start of the period (Hill et al., 2004). In two studies of shoulder pain in general practice, 59% (Van der Windt et al., 1996) and 21% (Croft et al., 1996) respectively of the patients reported complete recovery.

The prognosis of elbow-, forearm-, and wrist/hand pain was studied in a population of computer users. After one year two thirds of the baseline cases improved to some degree, but only one third experienced substantial improvement (Lassen et al., 2005). These figures are comparable to figures from a study of 181 patients with elbow pain in general practice. Of these patients 13% reported recovery at the three-month follow-up and 34% at twelve months (Bot et al., 2005b).

Lower limb

The course of lower limb pain is studied less frequently than back and upper limb pain. In a study population of 139 patients with hip complaints, 24% reported recovery after three months, increasing to 37% after 12 months (Van der Waal et al., 2006). Knee pain seems to run a similar course. In a study population of 251 patients with a new episode of knee pain, 25% reported recovery after three months, increasing to 44% after 12 months (Van der Waal et al., 2005).



Back pain



2.3. FACTORS IN PROGNOSIS



Neck pain

Most research on prognostic factors for MSDs focuses on clinical characteristics. The results indicate that pain characteristics are important factors for a poor prognosis. Severity of pain and functional impact are significant predictors of low **back** disability after an acute episode of low back pain (Shaw et al., 2001). Pain severity is also an important factor for the prognosis of **neck** pain

(Borghouts et al., 1998). High pain intensity predicts a poorer outcome for **shoulder** pain, and there is moderate evidence that duration and a high disability score are also factors for a poor prognosis of shoulder pain (Kuijpers et al., 2004). Long duration and a high severity of **elbow** pain and concomitant neck pain are associated with a poor outcome of elbow pain at twelve months (Smidt et al., 2006). Among computer workers, pain in other regions was a predictor of persistent **arm** pain (Lassen et al., 2005). A history of **hip** pain, a longer duration or more severe pain is associated with a less favourable prognosis for hip pain (Van der Waal, 2006). Similar factors are associated with a poor prognosis for **knee** pain: a history of knee pain and a longer duration of the current episode (Van der Waal et al., 2005).

To estimate the course of MSDs, the prognostic value of pain characteristics is important, in particular in general practice. However, from a prevention perspective, prognostic factors that can be influenced to produce a better outcome would be more valuable, especially in an occupational setting. Partly, these prognostic factors will correspond to risk factors for the first onset of pain. But many studies do not make a distinction, and examine persistence or recurrence as well as first occurrence. This is inevitable, as MSDs are very common. The exclusion of subjects with a history of MSDs in a working population would be too strict, as it would lead to a selection of subjects with a very high physical capacity. Nevertheless, some studies aimed specifically at risk factors for a poor prognosis, and used outcomes such as recurrence, persistence, return to work and chronic disability in a study population of symptomatic subjects.

Back

A review of early predictions of low back disability concluded that the risk of experiencing back pain may be greater among blue-collar workers, but differences in prognosis for disability due to back pain are non-existent across these occupational types. Construction workers showed a longer duration of disability than other blue-collar workers. The effect of high physical demands was not clear. Other significant work-related factors were the relationship with co-workers and supervisors, psychosocial stress, and the employer's response to injury. The same review concluded that specific beliefs about pain and disability were important prognostic



factors (Shaw et al., 2001). An earlier review dealt specifically with bio-psychosocial determinants of chronic disability through back pain (Truchon & Fillion, 2000). In this review it was concluded that a subjective negative appraisal of one's ability to work and job dissatisfaction are indicators of a poor prognosis of back pain. Another review identified distress, depressive mood and somatisation as predictors of chronic low back pain (Pincus et al., 2002).

Upper limb

In a review of prognostic factors for non-specific neck pain it was concluded that the evidence regarding these factors is very limited. Studies were scarce and their methodological quality was poor (Borghouts et al., 1998). After the publication of this review, more longitudinal studies were carried out. One prospective cohort study in a general population found an association between persistence or recurrence of neck pain after one year, age, and cycling. None of the specific occupational factors relating to physical demands, such as standing, sitting, digging, driving and lifting, were predictive of persistent neck pain. Another prospective cohort study focused on general practice, and examined predictors of outcomes in people with neck and shoulder symptoms. Besides pain characteristics, 'worrying' was consistently associated with poorer outcomes after three and 12 months (Bot et al., 2005a).

A review of prognostic cohort studies on shoulder disorders revealed that no conclusions could be drawn regarding prognostic factors other than pain characteristics, due to a lack of high-quality studies. It has been suggested that there is a relationship between psychosocial factors and the persistence or recurrence of shoulder pain, but there is a need for sound research regarding their prognostic importance (Kuijpers et al., 2004).

Passive coping (worrying) and lack of social support were related to worse prognoses for elbow pain (Bot et al., 2005b).

Lower limb

Studies examining prognostic factors for the course of lower limb pain are scarce. Nevertheless, a recent prognostic cohort study in a primary care population was specifically aimed at finding determinants of the clinical course of MSDs (Van der Waal et al., 2003). The following figures are derived from that study. Results concerning the prognosis of hip pain showed that patients who met the Norm for Healthy Activity had a higher probability of a favourable outcome. Worrying was significantly associated with slower recovery, and changes in functioning after three months (Van der Waal et al., 2006). A high level of distress was associated with a worse prognosis for knee pain (Van der Waal et al., 2005).

In **conclusion**, pain characteristics are significant predictors for the prognosis of MSDs. The effect of other factors is unclear. Some studies identify psychological and psychosocial factors as predictors, but due to inconsistent results the evidence is limited. Physical work-related factors were seldom examined and seldom identified as prognostic factors.

Pain characteristics are significant predictors for the prognosis of MSDs.



2.4. INTERVENTION STRATEGIES AT WORK

2.4.1. Intervention strategies for back pain



Most studies distinguish between acute, sub-acute and chronic back pain. This classification refers to the length of the back pain episode. Usually, acute episodes last less than six weeks (or four in some studies), sub-acute for six (or four) to twelve weeks, and chronic for longer than twelve weeks. This classification will be adopted for the description of the results.

Interventions could be aimed at several outcomes. Clinical intervention is usually aimed at pain reduction or the cure of the underlying pathology. However, it is also useful to improve environmental and personal conditions in order to increase participation in work and society and to control limitations. As the focus in this report is on the rehabilitation of workers, the discussion is limited to those interventions that could be beneficial for the return to work of back patients.

Modified work

The most common intervention for long-term disability due to low back pain (LBP) is to adjust the demands of work to match reduced capacity. When back pain is considered to be the result of an injury caused by adverse biomechanical exposure at the workplace, it is the only remedy for treating back pain (Verbeek, 2001). However, nowadays there is consensus that back pain has a multifactorial origin and is not only caused by physical demands at work. It appears that the magnitude of the effect of these risk factors is less than that of other factors, such as psychosocial factors and individual factors (Waddell & Burton, 2001). Moreover, traditional biomedical interventions appear to be quite ineffective in dealing with non-specific back pain, particularly when it becomes chronic (Waddell & Burton, 2005).

One review concluded that there is substantial evidence that modified duties can reduce time lost per episode of back pain by at least 30%. This conclusion is based on studies with patients in the acute and sub-acute phases. Although in general, interventions in the acute phase are considered less effective, in these studies it was argued that a supportive workplace response to injury needs to start when the pain is first reported. An individualised and accommodative approach to return to work should follow from this (Frank et al., 1998).

On the other hand, the clinical advice to return only to restricted duties may act as a barrier to return to normal work, particularly if no lighter or modified duties are available. It is also dependent on the cooperation of the employer. Furthermore, modified work is not always required. Many patients with back pain return quickly to their normal duties without insurmountable difficulty. Waddell and Burton concluded that modified work is

A combination of optimal clinical management, a rehabilitation programme and organisational interventions is more effective than single elements alone.



an important tool, but good occupational management and rehabilitation depends on more fundamental employment policies and practice (Waddell & Burton, 2005). They state that rehabilitation should address obstacles to recovery and barriers to returning to work, and that a combination of optimal clinical management, a rehabilitation programme and organisational interventions designed to help the worker with LBP to return to work is more effective than single elements alone.

In **conclusion**, temporarily modified work is an effective intervention, but it should be embedded in good occupational management.

Lumbar supports

Lumbar supports such as back belts and corsets are used in the treatment of low back pain, but also to prevent the onset (primary prevention) or recurrences (secondary prevention) of a low back pain episode. The functions of lumbar supports are 1) to correct deformity, 2) to limit spinal motion, 3) to stabilise part of the spine, 4) to reduce mechanical uploading and 5) miscellaneous others: providing massage, heat, and placebo effects (Van Tulder et al., 2006).

One systematic review examined the effectiveness of lumbar supports for secondary prevention. The review concluded that there was no evidence for their effectiveness (Jellema et al., 2001). The use of lumbar support could even have potentially adverse effects such as decreased strength of the trunk musculature, providing a false sense of security, excess heat, skin irritation, skin lesions, gastrointestinal disorders and muscle wasting, higher blood pressure and higher heart rates and general discomfort (Van Tulder et al., 2006).

In **conclusion**, lumbar supports do not seem to be effective in secondary prevention.

Exercise therapy



Physical exercise

Exercise therapy is a widely used treatment for low back pain. Physical exercises are part of most return-to-work interventions in occupational care (Staal et al., 2002). Initially, scientific literature on the effect of exercises focused on the potential risk of future back injuries. When it became clear that staying active is to be preferred over bed rest (Van der Weide et al., 1997; Hagen et al., 2002), the focus shifted to the effectiveness of exercise therapy. It is clear that exercises are safe for individuals with back pain and do not increase the risk for future injuries (Rainville et al., 2004; Staal et al., 2005). Exercise therapy can serve three purposes: 1) improving impaired back function, 2) decreasing

back pain and 3) minimising disability by diminishing excessive fears and concerns about back pain (Rainville et al., 2004).

A systematic review (Van Tulder et al., 2000a) concluded that exercise therapy (e.g. specific back, abdominal, flexion, extension, static, dynamic, strengthening, stretching,

Exercise therapy interventions might be effective for patients with sub-acute or chronic low back pain.



and aerobic exercises) is not more effective for **acute** low back pain (<6 weeks) than inactive or other active treatments. A more recent review (Hayden et al., 2005) confirmed this conclusion for acute low back pain.

Exercise therapy seems to be more effective for patients with **chronic** low back pain. In the earlier review it was concluded that exercise therapy was more effective than usual care from the general practitioner and just as effective as conventional physiotherapy for chronic low back pain (Van Tulder et al., 2000a). According to the more recent review (Hayden et al., 2005), exercise therapy seems to have some effect in decreasing pain and improving function in low back pain patients.

Physical exercise interventions included in these reviews were rather heterogeneous. Since much uncertainty remains regarding the working mechanisms and the optimum content of the intervention, it is hard to draw conclusions on the effectiveness of physical exercise in general. A descriptive literature review concluded that exercise may be more effective in reducing lost work time when based on a less intensive, graded programme, and combined with manual therapy (Staal et al., 2005). Another concluded that graded activity exercise programmes in an occupational setting seemed to be effective with **sub-acute** low back pain (6-12 weeks) (Hayden et al., 2005). However, a recent randomised controlled trial (RCT) could not demonstrate the effectiveness of a graded activity programme (Steenstra et al., 2006; Anema et al., 2007).

Another factor that influences the effectiveness of physical exercise interventions is timing. It has already been established that exercises are not effective for **acute** low back pain (Van Tulder et al., 2000a; Hayden et al., 2005). Another review concluded that the start of an intervention should preferably take place at the transition from the acute to the chronic stage, somewhere between two and three months from the start of the period of absence from work (Staal et al., 2005).

Often a physical exercise intervention is accompanied by other interventions. We have mentioned that exercise may be more effective when combined with manual therapy (Staal et al., 2005). One review examined physical conditioning programmes and exercise programmes. Physical conditioning programmes were defined as either work/function-related physical rehabilitation programmes specifically designed to restore an individual's systemic, neurological, musculoskeletal and/or cardiopulmonary function, or exercise programmes aimed at improvement of work or functional status. It concluded that these programmes were only successful, for patients with **chronic** low back pain, if they included a cognitive-behavioural approach (Schonstein et al., 2002). A similar conclusion was drawn in the descriptive literature review of Staal et al., who concluded that treatment confidence and patient expectations should be taken into account, since these factors might play an important role in treatment outcome (Staal et al., 2005).

In **conclusion**, exercise therapy interventions might be effective for patients with **sub-acute** or **chronic** low back pain, but it is still uncertain what form these interventions should take and what conditions should be met.

Back schools

A traditional form of exercise combined with advice is the 'back school'. This concept was introduced in 1969 and was intended to reduce, and prevent recurrences of, low back pain. The back school included components such as information on the anatomy of the back, biomechanics, optimal posture, ergonomics and back exercises, in four group sessions of 45 minutes. However, nowadays the content and duration of back



schools appears to vary widely (Heymans et al., 2004a). A review showed that for patients with recurrent and **chronic** low back pain, back schools are effective in the short and intermediate term for reducing pain and improving functional status. The most promising interventions were quite intensive (Heymans et al., 2004a). However, high-intensity back schools are associated with higher costs. A randomised controlled trial (RCT) comparing high-intensity and low-intensity back schools to usual care showed that the low-intensity back school is the most cost-effective (Heymans et al., 2004b).

In **conclusion**, back schools might be effective for **chronic** low back pain patients.

Behavioural treatment

The main assumption of a behavioural approach is that pain and pain disability are determined not only by the underlying organic pathology, but also by psychological and social factors. In general three behavioural treatment approaches can be distinguished: **operant**, **cognitive** and **respondent**, respectively focused on three response systems that characterise emotional experiences: behaviour, cognition and physiological reactivity. Operant treatments include positive reinforcement of healthy behaviour and consequent withdrawal of attention towards pain behaviour. Cognitive treatments aim to modify patients' cognition regarding their pain and disability. Respondent treatments aim to modify the physiological response system, for example by means of biofeedback or relaxation (Van Tulder et al., 2006).

A systematic review examined the evidence for the effectiveness of this type of treatment. It showed that there is strong evidence that behavioural treatment has a moderate positive effect on pain intensity, and small positive effects on generic functional status and behavioural outcomes among patients with **chronic** low back pain. It is still unclear which type of behavioural treatment is the most effective, or what type of patients may benefit most from behavioural treatment (Van Tulder et al., 2000b).

Behavioural treatment often includes various components. Furthermore, it is often applied in combination with other therapies, such as medication or exercise (Van Tulder et al., 2006). A review of physical conditioning programmes (see 'Exercise therapy', above) showed that these programmes were only successful in reducing the number of sick days of low back pain patients if they included a cognitive-behavioural aspect (Schonstein et al., 2002). But another review concluded that the addition of a behavioural component to the usual treatment programme for chronic low back pain probably has no positive short-term effect on generic functional status, pain intensity, and behavioural outcomes (Van Tulder et al., 2000b).

In **conclusion**, behavioural treatment seems to be effective for patients with **chronic** low back pain, although the effects are small. Behavioural treatment might be a valuable addition to other treatments.

Multidisciplinary approach

In occupational health care the secondary prevention of low back pain, the so-called return-to-work interventions, are often multifactorial. They include components such as physical exercises, education, behavioural treatment and ergonomic measures (Staal et

Behavioural treatment has a moderate positive effect on pain intensity, and small positive effects on generic functional status and behavioural outcomes among patients with chronic low back pain.



Effective treatment programmes are based on multiple components.

al., 2002). In a review examining return-to-work interventions for patients with non-specific musculoskeletal pain (mostly back pain), it was concluded that all of the effective treatment programmes consisted of multiple components (Meijer et al., 2005). Another review examining occupational rehabilitation of workers with back pain concluded that multidisciplinary treatment is effective in improving rates of return to work for **chronic** back pain patients (Verbeek, 2001). The author recommends that the rehabilitation programme should contain education, reassurance, and advice to stay active, as well as graded exercises and behavioural pain management.

A multidisciplinary approach is often based on the bio-psychosocial model. These interventions consist of physical exercises ('bio'), behavioural treatment ('psycho') and workplace intervention ('social'). Current multidisciplinary bio-psychosocial rehabilitation treats chronic low back pain as resulting from multiple interrelating physical, psychosocial, and social or occupational factors (Guzman et al., 2001).

According to a systematic review, there is evidence that intensive (daily, involving more than 100 hours of therapy) multidisciplinary bio-psychosocial rehabilitation, with functional restoration, reduces pain and improves function in patients with chronic low back pain. Less intensive interventions did not seem to be effective (Guzman et al., 2001). Another review examined effectiveness with **sub-acute** patients. Based on two studies, it was concluded that there is moderate scientific evidence that multidisciplinary rehabilitation is effective for sub-acute low back pain. A multidisciplinary intervention involving a workplace visit or more comprehensive occupational health care intervention helps sub-acute patients to return to work faster. Moreover, it alleviates subjective disability (Karjalainen et al., 2001).

In **conclusion**, a multidisciplinary approach seems to be effective for patients with **sub-acute** or **chronic** low back pain.

Discussion and conclusions

Table 1 shows the summarised conclusions of the literature review on back pain interventions. It appears that several intervention programmes are effective for chronic back pain, whereas interventions for acute back pain are seldom effective. These results seem to be contrary to conventional clinical wisdom, which states that earlier treatment is better. Partly, this phenomenon could be explained by the frequent spontaneous recovery in the early phase of the back pain episode. Treatment effects are hardly demonstrable if the percentage of recovery is also high in a control group. Another explanation is the risk of increased sick-role behaviour among patients undergoing intensive treatment in the acute phase who would do well without any treatment (Frank et al., 1998).

It has been suggested that treatment at the sub-acute stage is the most effective (Waddell & Burton, 2001; Pengel et al., 2003). Effective treatment for sub-acute back pain will prevent the transition to chronic back pain. Once people have been off work for a long time, it is harder to get them back to work. However, the conclusions of this literature review could not confirm this, as it did not show the increased effectiveness of interventions among people with sub-acute pain. This might be due to a lack of studies dealing with sub-acute back pain patients.

It should be noted that the examined effects of the interventions are short or intermediate term. There is no evidence that any of these interventions has a long-term effect on pain and function. It has been demonstrated that back pain runs a recurrent course. Therefore, it is even plausible that back pain episodes will recur, irrespective of successful intervention.

An intensive multidisciplinary bio-psychosocial rehabilitation programme was effective, but the costs of these interventions are higher than other treatments.



Another point that should be considered is the cost-effectiveness of the interventions. Not much is known on this issue. It was concluded that an intensive multidisciplinary bio-psychosocial rehabilitation programme was effective, but the costs of these interventions are higher than other treatments, and it is not clear whether better results compensate for these extra costs. Further research is needed to determine the cost-effectiveness of intensive programmes.

Table 1: Effectiveness of interventions and the level of evidence

Therapy	Acute LBP (<4/6 wks)	Sub-acute LBP (4/6-12 wks)	Chronic LBP (>12 wks)
Modified work	+ reduction of time off work, if embedded in good occupational management	+ reduction of time off work, if embedded in good occupational management	-
Lumbar supports (such as back belts, corsets)	+ no effect	+ no effect	+ no effect
Exercise therapy in general	++ no effect	+/- absenteeism	++ slightly effective in pain reduction and function improvement
Back schools	-	-	+ pain and functional status
Behavioural treatment	-	-	++ moderate effect on pain, small effect on functional status
Multidisciplinary bio-psychosocial rehabilitation	-	+ return to work, subjective disability and functional status	++ <u>Intensive</u> (>100 hrs) therapy improves function and pain
Physical conditioning including a cognitive behavioural approach	-	-	++ reduction of the number of sick days

++ high-quality evidence.

+ moderate quality evidence.

- no studies or inconclusive results.

Table 1 shows that interventions for back pain are more effective if the pain has lasted for more than a month than if they take place at an earlier stage. A multidisciplinary approach offers the most promising results, but the cost-effectiveness of these treatments needs to be examined.

2.4.2. Intervention strategies for upper limb pain

Intervention studies in the area of upper limb pain are less abundant than those on low back pain. Moreover, studies are often of low quality, making it more difficult to





Ultrasound treatment

draw conclusions. As in the section on interventions for back pain above, the focus is on the rehabilitation of workers. Discussion of interventions is limited to those that could be beneficial for return to work.

Technical/mechanical interventions

Technical or mechanical interventions focus on the redesign of tools or of the workstation. These interventions can be classified into three

subgroups: 1) those focused on work environment/workstation adjustments for computer workers; 2) those focused on workstation equipment for computer workers; and 3) those focused on ergonomic equipment for manufacturing workers.

Interventions aimed at adjusting the workstations of computer workers could involve modified lighting, or a new workstation, office layout or software applications. One recent review concluded that there was some evidence for positive health effects following work environment/workstation adjustments among computer workers with neck/upper extremity conditions (Boocock et al., 2007).

Interventions focusing on the workstation equipment of computer workers may involve changes to keyboards or office furniture. The effectiveness of specific keyboards (keyboards with an alternative force-displacement of the keys or an alternative geometry) for patients' upper limb pain is still unclear. Two reviews concluded that there was limited (Verhagen et al., 2007) and moderate (Boocock et al., 2007) evidence for their effectiveness. Some studies have been conducted on the effectiveness of certain mouse types, but the quality of these studies was low and results are unclear. The benefit of other interventions aimed at workstation equipment for computer workers, such as new chairs and desks, could not be demonstrated (Verhagen et al., 2004).

The effectiveness of the introduction of ergonomic equipment (e.g. adjustable chairs, vibration-proof tools) for workers with neck/upper extremity conditions employed in the manufacturing industry could not be demonstrated (Boocock et al., 2007). Three studies have found positive health outcomes, but they were all rated as low quality.

In **conclusion**, there are indications that some technical or mechanical interventions at the workplace might be effective, but the scientific evidence is limited.

Psychosocial interventions

In general, psychosocial interventions are aimed at changing the psychosocial work characteristics or the organisational culture of a company. They may involve team building, adaptation of a work–rest schedule and increased worker participation in problem-solving in relation to workplace production (i.e. participatory ergonomics). They are usually intended as primary prevention interventions. They concern all workers, not only those with pain. However, these interventions could also be used to

Some technical or mechanical interventions at the workplace might be effective.



facilitate return to work among workers with upper limb pain. Identifying the fact that these issues exist for an injured worker is often the first hurdle (Kupper et al., 2004).

Pransky et al. (2002) reviewed the effect of various stress reduction interventions on work-related upper limb disorders. Although a few studies showed a decrease in symptoms after this type of intervention, they were unable to find strong evidence for positive effects on stress (workplace interventions as well as interventions directed toward individuals, such as training programmes in recognising stress and learning how to cope with stress). Boocock et al. (2007) concluded that there was insufficient evidence to support production systems/organisational intervention strategies. They based this conclusion on two studies of low quality that did not find improvements in health outcomes associated with organisational and work task design changes among office workers and manufacturing assembly workers.

In **conclusion**, there is insufficient evidence for the effectiveness of psychosocial interventions.

Exercise therapy



Exercise

Exercise therapy can be aimed at endurance or strength, it can involve a home exercise programme or training under the supervision of a physiotherapist, it can be a single treatment or applied as an add-on treatment to, for example, ergonomic instructions. A recent review concluded that no differences can yet be found between the various kinds of exercises. Furthermore, it concluded that there is limited evidence for the effectiveness of exercises (Verhagen et al., 2007). This finding corresponds with that of another review, that there was some evidence that exercise has positive effects among workers with neck and upper limb pain (Boocock et al., 2007). However, in spite of the lack of strong scientific evidence, anecdotally physiotherapy is reported to be an effective treatment option for sufferers of upper limb disorders (Kupper et al., 2004).

There is limited evidence for the effectiveness of exercise therapy.

In **conclusion**, there is limited evidence for the effectiveness of exercise therapy.

Multidisciplinary treatment

In general it is assumed that neck and upper limb pain has a multifactorial origin. Possible risk factors are of physical, psychosocial or personal origin, and, moreover, can reinforce each other. Therefore, an integrated approach seems the most promising strategy.

According to a systematic review by Meijer et al. (2005), effective treatment programmes appear to contain multiple components, such as knowledge conditioning (e.g. education or information about pain and the human anatomy), psychological conditioning, physical and work conditioning and relaxation exercises.



Multidisciplinary treatment of neck and upper limb pain is promising. However, more high-quality trials in this field are needed.

Possibly, as patients with negative recovery expectations take longer to return to work, the differences between effective and non-effective treatments could be explained by the fact that psychological and educational strategies tackle such negative expectations more successfully (Meijer et al., 2005). This review refers to musculoskeletal pain in general, and most studies concern back pain, but the results may apply to neck and upper limb pain as well.

Karjalainen et al (2003) conducted a Cochrane review to examine the effectiveness of multidisciplinary bio-psychosocial rehabilitation programmes for neck and shoulder pain among working age adults, and found limited evidence for their effectiveness. A multidisciplinary approach of this type consists of a combination of treatment types, including physical, psychological, behavioural and educational interventions. As a consequence, these interventions require a number of different professionals (doctors, physiotherapists, psychologists, etc.) and are often laborious, long and costly. As Karjalainen and colleagues were unable to find strong evidence to support the use of this approach (they only found two relevant, but low-quality papers), they underlined the need for high-quality trials in this field, especially regarding the cost-effectiveness of these programmes.

In **conclusion**, results of studies examining the effectiveness of multidisciplinary treatment are promising, but the scientific evidence is limited.

Discussion and conclusions



Interventions for upper limb pain include technical and mechanical interventions, psychosocial interventions, exercise therapy and multidisciplinary treatment. Concerning their effectiveness, many researchers who reviewed the scientific literature on this topic (Karjalainen et al., 2000, 2003; Verhagen et al., 2007; Meijer et al., 2005; Hagberg, 2005; Breen

et al., 2005) concluded that — in contrast to back pain — there is a marked lack of randomised controlled trials and high quality evidence. In addition, there is no international consensus on effective intervention strategies regarding these disorders. Therefore, the conclusion of most reviews is that more (high quality) research is needed. These findings correspond with the European Agency for Safety and Health at Work's 1999 report, 'Work-related upper limb musculoskeletal disorders', which concluded that there is limited evidence of the potential benefits of workplace (ergonomic) interventions.

Should multidisciplinary interventions be subjected to the same rigour as those used to evaluate the efficacy of mechanical interventions?

Besides the lack of quality research in this field, there is a further problem relating to knowledge of the effectiveness of interventions. In view of the multifactorial aetiology of upper limb pain, rather complex, multidisciplinary interventions might be needed, such as organisational interventions. Generally, a rigorous study design is not fit for demonstrating the effectiveness of this type of intervention, since blinding, randomisation and control groups are not always feasible within a working population. Therefore, studies describing the effectiveness of successful interventions are often not included in a review or are considered of low quality. This



raises the question whether these types of interventions should be subjected to the same rigour as those used to evaluate the efficacy of mechanical interventions, and whether different criteria should be adopted on which to base evidence classification (Boocock et al., 2007).

Another issue concerning multidisciplinary treatment is the higher cost of this type of intervention. Meijer et al. have carried out a study on the cost-effectiveness of a multidisciplinary treatment among office workers with non-specific complaints in the upper extremities. They concluded that there was no significant difference in cost-effectiveness between a multidisciplinary approach and usual care after twelve months. The extra total costs and the extra gains in terms of return to work were not significantly higher for the intervention as compared to usual care after twelve months (Meijer et al., 2006a). However, the multidisciplinary treatment was more effective on the individual level; it significantly reduced physical disability, kinesiophobia and the intensity of complaints, and increased physical functioning more than usual care. Also, the cognitive-behavioural component of the treatment (leading to an increased ability to cope with complaints and an increased self-awareness) was perceived by the patients to be the most useful part (Meijer et al., 2006b).

This corresponds with findings by Crawford and Laiou (2005), who identified two studies which provided some evidence that the use of cognitive-behavioural therapies for the treatment of chronic musculoskeletal pain can improve occupational outcomes and may enable some individuals with chronic pain to return to work.

It is also important to examine the conditions that are necessary to make an intervention successful. Hagberg (2005) underlines the importance of starting rehabilitation early, because long periods of sick leave appear to be generally counterproductive. Disputed workers' compensation claims and an adverse work setting are also likely to impede successful rehabilitation.

Summarising the results, it can be concluded that the scientific evidence for successful interventions for upper limb pain is limited. Until such evidence is available, a multidisciplinary approach, containing a cognitive-behavioural component might be the most effective type of intervention.

2.4.3. Intervention strategies for lower limb pain

Work-related lower limb pain has been reported considerably less than back or upper limb pain. There is also less knowledge of work-related risk factors relating to lower limb pain, and of the course of lower limb pain. In fact, no literature exists on the effectiveness of work-related interventions in the rehabilitation of workers with lower limb disorders. Therefore, the search was extended to non-occupational interventions and research among the general population. First, we present some findings on work-related risk factors for lower limb pain.

Work-related risk factors

Established risk factors for knee osteoarthritis include increased body weight, knee injury and aspects of occupational activity (McAlindon, 1999), but a literature review concerning risk factors for lower limb pain concluded that better exposure assessment is needed to examine the causal pathway between occupational factors and MSDs (D'Souza et al., 2005).

For some exposures the risks are clear. Farming is a physically arduous occupation that places farm workers at potential risk of osteoarthritis (OA) of the hip and knee (Walker-

No information on work-related interventions regarding lower limb pain has been found.





Exercise programmes might be effective for hip and knee problems.

Bone & Palmer, 2002). Moreover, in a study of 1,706 farmers in the USA, it was found that milking was associated with knee trouble (Gomez et al., 2003). Prolonged standing at work is associated with discomfort in the lower limb (Roelofs & Straker, 2002) and with the development of diseases of varicose veins (V) (Tuchsen et al., 2005).

Exercise

Exercise is a commonly-described intervention for lower limb osteoarthritis (Roddy et al., 2005a), and it is considered effective. One RCT showed that supplementing a home-based exercise programme with an eight-week class-based exercise programme led to better rates of improvement. These differential improvements were still evident at review twelve months after treatment

had ceased (McCarthy et al., 2004). However, another review concluded that both home and group exercise was effective and no clear evidence exists of the superiority of one over the other (Roddy et al., 2005a). Another review compared the effectiveness of strengthening exercises with aerobic walking. The conclusion was that both were effective in reducing pain and disability from knee osteoarthritis but no difference was found (Roddy et al., 2005b). It should be noted that all these studies examined clinical outcomes, so it is unclear if these improvements had an effect on return to work.

One particular form of exercise is water-based therapy or hydrotherapy. One study concluded that group-based exercise in water over one year can produce significant reduction in pain, and improvement in physical function among older adults with lower limb osteoarthritis (Cochrane et al., 2005). Another study compared water-based therapy with land-based therapy and concluded they were both effective (Foley et al., 2003).

Some studies have examined the cost-effectiveness of exercise treatments. McCarthy et al. (2004) suggested that class-based exercises added to a home-based exercise programme are cost-effective, although there was uncertainty about the estimate. Cochrane et al. (2005) concluded that a water exercise programme produced a favourable cost-benefit outcome. The cost-effectiveness of a two-year home exercise programme for the treatment of knee pain was assessed by Thomas et al. (2005). Exercise therapy was associated with improvements in knee pain, but the cost of delivering the exercise programme is unlikely to be offset by any reduction in medical resource use.

Other lower limb interventions

The evaluation of the effectiveness of commercially available magnetic bracelets for pain control in osteoarthritis of the hip and knee showed that pain decreased when wearing magnetic bracelets. However, it was uncertain whether this response is due to specific or non-specific (placebo) effects (Harlow et al., 2004).



A study group described evidence-based clinical practical guidelines about rehabilitation interventions for knee pain. They concluded that there is a lack of evidence at present on whether to include or exclude the use of thermotherapy, therapeutic massage, EMG biofeedback, therapeutic ultrasound, electrical stimulation, and combined rehabilitation interventions in the daily practice of physical rehabilitation for knee pain (Philadelphia Panel, 2001).

Conclusions

No literature exists on the effectiveness of work-related interventions and the rehabilitation of workers with lower limb disorders. Results of studies concerning lower limb treatment in general indicate that exercise programmes might be effective for hip and knee problems.



DISCUSSION, SUMMARY AND CONCLUSIONS 2.5.

Although there are marked differences in the rates of MSDs in the various EU countries, MSDs are very common in Europe. In some cases they lead to sickness absence and even long-term disability. Usually MSDs run a course that is characterised by recurrence, variation and change. Although most episodes of pain will diminish after some time, the prognosis for complete recovery is poor.

Various intervention strategies have been developed for **back pain**, and many studies have examined their success. Clear evidence has been found that it is important for patients to stay active and return to ordinary activities as soon as possible. A combination of optimal clinical management, a rehabilitation programme and



A multidisciplinary approach seems to be the most promising return-to-work intervention.

organisational interventions is more effective than single elements alone. A multidisciplinary approach offers the most promising results, but the cost-effectiveness of these treatments needs to be examined. Temporarily modified work is an effective return-to-work intervention, if it is embedded in good occupational management. Some evidence from high- and moderate-quality studies supports the effectiveness of exercise therapy, back schools and behavioural treatment. Lumbar supports such as back belts and corsets are not effective.

It appears that several intervention programmes are effective for chronic back pain (lasting more than twelve weeks), whereas interventions for acute back pain (lasting less than four or six weeks) are seldom more effective than no treatment, or usual care. Treatment at the sub-acute stage is probably the most effective, as it will prevent the transition to chronic back pain. It should be noted that the examined effects of the interventions are short- or intermediate-term. There is no evidence that any of these interventions have long-term effects on pain and function.

The evaluation of complex workplace interventions probably should adopt different criteria on which to base evidence.

Compared to back pain, fewer studies have been carried out on intervention strategies for **upper limb pain**. There is a lack of randomised controlled trials and high-quality evidence. Interventions for upper limb pain include technical and mechanical interventions in the workplace, psychosocial interventions, exercise therapy and multidisciplinary treatment. It can be concluded that the scientific evidence for successful interventions for upper limb pain is limited. Until such evidence is available, a multidisciplinary approach involving a cognitive-behavioural component might be the most effective type of intervention.

No intervention strategies have been found for **lower limb pain** in the workplace. Results of studies on lower limb treatment in general indicate that exercise programmes might be effective for hip and knee problems.

Although many studies have been carried out, the evidence for the effectiveness of interventions is limited, in particular regarding interventions aimed at upper limb symptoms. It has been suggested that criteria for the quality of the studies and for evidence used in scientific studies are not fit for the complexity of workplace interventions. For example, blinding and randomization often are not feasible. Therefore, studies of successful interventions may not be included in a review or are considered of low quality. In spite of the lack of strong scientific evidence, anecdotally many of the above work-related interventions are reported as being effective. This raises the question as to whether these types of interventions should be subjected to the same rigour as those used to evaluate medical treatment. **The evaluation of workplace interventions probably should adopt different criteria on which to base evidence classification.** Until now, these criteria are still lacking. Therefore, it is important that **policymakers and employers should not be reluctant to carry out preventive actions because of a lack of 100% proof.** Moreover, secondary and tertiary prevention should be supported by primary prevention in order to prevent the recurrence of MSD episodes.



2.6.

REFERENCES

Anema JR, Steenstra IA, Bongers PM, de Vet HC, Knol DL, Loisel P, van Mechelen W. 'Multidisciplinary rehabilitation for subacute low back pain: graded activity or workplace intervention or both?: a randomized controlled trial', *Spine* 2007; 32(3): 291-298.

Boocock MG, McNair PJ, Larmer PJ, Armstrong B, Collier J, Simmonds M, Garrett N. 'Interventions for the prevention and management of neck/upper extremity musculoskeletal conditions: a systematic review', *Occup Environ Med* 2007; 64:291-303

Borghouts JA, Koes BW, Bouter LM. 'The clinical course and prognostic factors of non-specific neck pain: a systematic review', *Pain* 1998; 77(1): 1-13.

Bot SD, van der Waal JM, Terwee CB, van der Windt DA, Scholten RJ, Bouter LM, Dekker J. 'Predictors of outcome in neck and shoulder symptoms: a cohort study in general practice', *Spine* 2005a; 30(16): E459-470.

Bot SD, van der Waal JM, Terwee CB, van der Windt DA, Bouter LM, Dekker J. 'Course and prognosis of elbow complaints: a cohort study in general practice', *Ann Rheum Dis* 2005; 64(9): 1331-1336. [Epub 11 Feb 2005b].

Breen A, Langworthy J, Bagust J. *Improved early pain management for musculoskeletal disorders*. Health and Safety Executive, 2005, Research Report 399, 92 pp.

Cochrane T, Davey RC, Matthes Edwards SM. 'Randomised controlled trial of the cost-effectiveness of water-based therapy for lower limb osteoarthritis', *Health Technol Assess* 2005; 9(31): iii-iv, ix-xi, 1-114.

Crawford JO, Laiou E. *Effective management of upper limb disorders by general practitioners and trainee occupational physicians*. Health and Safety Executive, 2005, Research Report 380, 189 pp.

Croft P, Pope D, Silman A. 'The clinical course of shoulder pain: prospective cohort study in primary care', *BMJ* 1996 Sept 7; 313(7057): 601-602.

D'Souza JC, Franzblau A, Werner RA. 'Review of epidemiologic studies on occupational factors and lower extremity musculoskeletal and vascular disorders and symptoms', *J Occup Rehabil* 2005; 15(2): 129-165.

European Agency for Safety and Health at Work. *Work-related upper limb musculoskeletal disorders*. Bilbao, 1999, 117 pp.

Foley A, Halbert J, Hewitt T, Crotty M. 'Does hydrotherapy improve strength and physical function in patients with osteoarthritis? — a randomised controlled trial comparing a gym based and a hydrotherapy based strengthening programme', *Ann Rheum Dis* 2003; 62(12): 1162-1167.

Frank J, Sinclair S, Hogg-Johnson S, Shannon H, Bombardier C, Beaton D, Cole D. 'Preventing disability from work-related low-back pain. New evidence gives new hope — if we can just get all the players onside', *CMAJ* 1998; 158(12): 1625-1631.

Gomez MI, Hwang S, Stark AD, May JJ, Hallman EM, Pantea CI. 'An analysis of self-reported joint pain among New York farmers', *J Agric Saf Health* 2003; 9(2): 143-157.



Guzman J, Esmail R, Karjalainen K, Malmivaara A, Irvin E, Bombardier C. 'Multidisciplinary rehabilitation for chronic low back pain: systematic review', *BMJ* 2001; 322: 1511-1516.

Hagberg M. 'Clinical assessment, prognosis and return to work with reference to work related neck and upper limb disorders', *Ital Med Lav Ergon* 2005; 27(1): 51-57.

Hagen KB, Hilde G, Jamtvedt G, Winnem MF. The Cochrane review of advice to stay active as a single treatment for low back pain and sciatica', *Spine* 2002; 27:1736-1741.

Harlow T, Greaves C, White A, Brown L, Hart A, Ernst E. 'Randomised controlled trial of magnetic bracelets for relieving pain in osteoarthritis of the hip and knee', *BMJ* 2004; 329(7480): 1450-1454.

Hayden JA, van Tulder MW, Malmivaara AV, Koes BW. 'Meta-analysis: Exercise therapy for non-specific low back pain', *Ann Intern Med* 2005; 142: 765-775.

Heymans MW, van Tulder MW, Esmail R, Bombardier C, Koes BW. 'Back schools for non-specific low-back pain', *Cochrane Database Syst Rev* 2004a, Issue 4. Art. No.: CD000261. DOI: 10.1002/14651858.CD000261.pub2.

Heymans MW, van Tulder MW, de Vet HCW, Bongers PM, Koes BW, Van Mechelen W. 'The cost-effectiveness and cost-utility of high intensity versus low intensity back schools in occupational care: a randomized controlled trial and economic evaluation with 12 months follow-up', In: Heymans MW. *The cost-effectiveness of back schools in occupational care, the BOC study* [PhD thesis]. Amsterdam: Vrije Universiteit; 2004b.

Hill J, Lewis M, Papageorgiou AC, Dziedzic K, Croft P. 'Predicting persistent neck pain: a 1-year follow-up of a population cohort', *Spine* 2004; 29(15): 1648-1654.

Jellema P, van Tulder MW, van Poppel MNM, Nachemson AL, Bouter LM. 'Lumbar supports for prevention and treatment of low back pain: a systematic review within the framework of the Cochrane Back Review Group. *Spine* 2001; 26(4): 377-386.

Karjalainen KA, Malmivaara AO, van Tulder MW, Roine RP, Jauhiainen S, Hurri HO et al. 'Bio psychosocial rehabilitation for repetitive strain injuries among working age adults', *Scan J Work Environ Health* 2000; 26(5): 373-381.

Karjalainen K, Malmivaara A, van Tulder M, Roine R, Jauhiainen M, Hurri H, Koes B. 'Multidisciplinary biopsychosocial rehabilitation for neck and shoulder pain among working age adults: a systematic review within the framework of the Cochrane Collaboration Back Review Group', *Spine* 2001 (Jan 15); 26(2): 174-181.

Karjalainen K, Malmivaara AO, van Tulder M, Roine R, Jauhiainen M, Hurri H, Koes B. 'Multidisciplinary biopsychosocial rehabilitation for neck and shoulder pain among working age adults', *Cochrane Database Syst Rev* 2003, Issue 2.

Kuijpers T, van der Windt DA, van der Heijden GJ, Bouter LM. 'Systematic review of prognostic cohort studies on shoulder disorders', *Pain* 2004; 109(3): 420-431.

Kupper A, Mackenzie S and Heasman T. *The challenge of managing upper limb disorders — how can health professionals become more effective?* Health and Safety Executive, 2004, Research Report 215, 176 pp.

Lassen CF, Mikkelsen S, Kryger AI, Andersen JH. 'Risk factors for persistent elbow, forearm and hand pain among computer workers', *Scand J Work Environ Health*, 2005; 31(2):122-131.

McAlindon. 'The knee', *Baillieres Best Pract Res Clin Rheumatol* 1999; 13(2): 329-344.



McCarthy CJ, Mills PM, Pullen R, Richardson G, Hawkins N, Roberts CR, Silman AJ, Oldham JA. 'Supplementation of a home-based exercise programme with a class-based programme for people with osteoarthritis of the knees: a randomised controlled trial and health economic analysis', *Health Technol Assess* 2004; 8(46): iii-iv, 1-61.

Meijer EM, Sluiter JK, Frings-Dresen MHW. 'Evaluation of effective return-to-work treatment programmes for sick-listed patients with non-specific musculoskeletal complaints: a systematic review', *Int Arch Occup Environ health* 2005; 78: 523-532.

Meijer EM, Sluiter JK, Heyma A, Sadiraj K, Frings-Dresen MHW. 'Cost effectiveness of multidisciplinary treatment in sick-listed patients with upper extremity musculoskeletal disorders: a randomised, controlled trial with one-year follow-up', *Int Arch Occup Environ Health* 2006a; 79(8): 654-664.

Meijer EM, Hugenholtz NIR, Sluiter JK, Frings-Dresen MHW. 'What do sick-listed patients with upper extremity complaints expect of a multidisciplinary treatment and what is the perceived value?' In: Meijer EM. *Work-related complaints in the upper extremity* [PhD thesis]. Amsterdam: University of Amsterdam, Department: Coronel Institute of Occupational Health, 2006b.

Pengel LH, Herbert RD, Mager CG, Refshauge KM. 'Acute low back pain: systematic review of its prognosis', *BMJ* 2003; 327: 323.

Philadelphia Panel. 'Philadelphia Panel evidence-based clinical practice guidelines on selected rehabilitation interventions for knee pain', *Phys Ther* 2001; 81(10): 1675-1700.

Pincus T, Burton AK, Vogel S, Field AP. 'A systematic review of psychological factors as predictors of chronicity/disability in prospective cohorts of low back pain', *Spine* 2002; 27(5): E109-E120.

Pransky G, Robertson MM, Moon SD. 'Stress and work-related upper extremity disorders: implications for prevention and management', *Am J Ind Med* 2002; 41: 443-455.

Rainville J, Hartigan C, Martinez E, Limke J, Jouve C, Finno M. 'Exercise as a treatment for chronic low back pain', *The Spine Journal* 2004; 106-115.

Roddy E, Zhang W, Doherty M, Arden NK, Barlow J, Birrell F, Carr A, Chakravarty K, Dickson J, Hay E, Hosie G, Hurley M, Jordan KM, McCarthy C, McMurdo M, Mockett S, O'Reilly S, Peat G, Pendleton A, Richards S. 'Evidence-based recommendations for the role of exercise in the management of osteoarthritis of the hip or knee—the MOVE consensus', *Rheumatology* (Oxford) 2005a; 44(1): 67-73.

Roddy E, Zhang W, Doherty M. 'Aerobic walking or strengthening exercise for osteoarthritis of the knee? A systematic review', *Ann Rheum Dis* 2005b; 64(4): 544-548.

Roelofs A, Straker L. 'The experience of musculoskeletal discomfort amongst bank tellers who just sit, just stand or sit and stand at work', *Ergonomics SA* 2002; 14(2): 11-29.

Schonstein E, Kenny DT, Keating J, Koes BW. 'Work conditioning, work hardening and functional restoration for workers with back and neck pain', *Cochrane Database Syst Rev* 2002, Issue 4. Art. No.:CD001822. DOI:10.1002/14651858.CD001822.

Shaw WS, Pransky G, Fitzgerald TE. 'Early prognosis for low back disability: intervention strategies for health care providers', *Disabil Rehabil* 2001; 23: 815-828.

Sheikh K. 'Return to work following limb injuries', *Soc Occup Med* 1985; 35(4): 114-117.

Smidt N, Lewis M, van der Windt DA, Hay EM, Bouter LM, Croft P. 'Lateral epicondylitis in general practice: course and prognostic indicators of outcome', *J Rheumatol* 2006; 33(10): 2053-59. [Epub Aug 1 2006].



Staal JB, Hlobil H, van Tulder MW, Köke AJA, Smid T, van Mechelen W. 'Return-to-work interventions for low back pain: a descriptive review of contents and concepts of working mechanisms', *Sports Med* 2002; 32: 251-267.

Staal JB, Rainville J, Fritz J, van Mechelen W. 'Physical exercise interventions to improve disability and return to work in low back pain: current insights and opportunities for improvement', *J Occup Rehab* 2005; 4: 491-505.

Steenstra IA, Anema JR, Bongers PM, de Vet HC, Knol DL, van Mechelen W. 'The effectiveness of graded activity for low back pain in occupational healthcare', *Occup Environ Med* 2006; 63(11): 718-725.

Thomas KS, Miller P, Doherty M, Muir KR, Jones AC, O'Reilly SC. 'Cost effectiveness of a two-year home exercise programme for the treatment of knee pain', *Arthritis Rheum* 2005; 53(3): 388-394.

Truchon M, Fillion L. 'Bio psychosocial determinants of chronic disability and low back pain: a review', *J Occup Rehabil* 2000; 10: 117-142.

Tuchsen F, Hannerz H, Burr H, Krause N. 'Prolonged standing at work and hospitalisation due to varicose veins: a 12-year prospective study of the Danish population', *Occup Environ Med* 2005; 62(12): 847-850.

Van der Waal JM, Bot SD, Terwee CB, van der Windt DA, Bouter LM, Dekker J. 'Determinants of the clinical course of musculoskeletal complaints in general practice: design of a cohort study', *BMC Musculoskelet Disord* 2003 (Feb 24); 4: 3 [Epub Feb 24 2003].

Van der Waal JM, Bot SD, Terwee CB, van der Windt DA, Scholten RJ, Bouter LM, Dekker J. 'Course and prognosis of knee complaints in general practice', *Arthritis Rheum* 2005; 53(6): 920-930.

Van der Waal JM, Bot SD, Terwee CB, van der Windt DA, Bouter LM, Dekker J. 'The course and prognosis of hip complaints in general practice', *Ann Behav Med* 2006; 31(3): 297-308.

Van der Weide WE, Verbeek JHAM, van Tulder MW. 'Vocational outcome of intervention for low-back pain (review)', *Scand J Work Environ Health* 1997; 23: 165-178.

Van der Windt DA, Koes BW, Boeke AJ, Deville W, de Jong BA, Bouter LM. 'Shoulder disorders in general practice: prognostic indicators of outcome', *Br J Gen Pract* 1996; 46(410): 519-523.

Van Tulder M, Malmivaara A, Esmail R, Koes B. 'Exercise therapy for low back pain', *Spine* 2000a; 25(21): 2784-2796.

Van Tulder MW, Ostelo R, Vlaeyen JWS, Linton SJ, Morley SJ, Assendelft WJJ. 'Behavioral treatment for chronic low back pain', *Spine* 2000b; 26(3): 270-281.

Van Tulder MW, Koes B, Malmivaara A. 'Outcome of non-invasive treatment modalities on back pain: an evidence-based review', *Eur Spine J* 2006; 15 Suppl 1: S64-81.

Verbeek JH. 'Vocational rehabilitation of workers with back pain', *Scand J Work Environ Health* 2001; 27(5): 346-352.

Verhagen AP, Bierma-Zeinstra SMA, Karelis C, Feleus A, Dahaghin S, Nauta AP, Burdorf A, Koes BW. 'Ergonomic and physiotherapeutic interventions for treating upper extremity work related disorders in adults', *Cochrane Database Syst Rev* 2004, Issue 1.



Verhagen AP, Karels C, Bierma-Zeinstra SM, Feleus A, Dahaghin S, Burdorf A, Koes BW. 'Exercise proves effective in a systematic review of work-related complaints of the arm, neck, or shoulder', *J Clin Epidemiol* 2007; 60:110-117.

Von Korff M, Saunders K. 'The course of back pain in primary care', *Spine* 1996; 21: 2833-2839.

Waddell G, Burton AK. 'Occupational health guidelines for the management of low back pain at work: evidence review', *Occup Med* 2001; 51(2): 124-135.

Waddell G, Burton AK. 'Concepts of rehabilitation for the management of low back pain', *Best Pract Res Clin Rh* 2005; 19(4): 655-670.

Walker-Bone K, Palmer KT. 'Musculoskeletal disorders in farmers and farm workers', *Occup Med (Lond)* 2002; 52(8): 441-450.



3.

RETURN-TO-WORK POLICY INITIATIVES REGARDING WORKERS WITH MSDs



3.1. INTRODUCTION

Many employees are leaving the labour market due to longstanding health problems such as musculoskeletal disorders (MSDs) and disabilities, causing considerable financial and social hardship. This could be avoided by effective reintegration. It has been demonstrated that timely, appropriate reintegration strategies increase the likelihood of return to work after illness or an accident.

At present, the focus of general policy is mainly on the integration into the labour market of people with existing long-term disabilities, by providing individual guidance in order to help them find a job. A concrete reintegration policy is also needed for individuals who have been injured or who have become chronically ill while at work. This needs to be implemented at a business level.

This part of the report provides an overview of policy initiatives regarding the retention, reintegration and rehabilitation of workers with MSDs. The focus of the policy initiatives should be on maximising the employability of workers with MSDs, which includes retaining them at work and reintegrating them back into work with their previous or a different employer, following a period of time off (long- or short-term sick leave). The overview covers strategies, solutions, guides, and actions across the EU at local, regional, sector, national and supranational level by governments and social partners.

The information collected focuses on policies concerned with managing the return of workers (occupational rehabilitation) who have experienced MSDs because of their work. Rehabilitation is considered in its wider sense of facilitating the restoration of physical, psychological and social functions.

The policy overviews are in the format of short summaries that consider the following aspects of the management of the return-to-work process for workers with MSDs in the country in question:

- Authorities and legislation:
 - Legislation concerning rehabilitation of workers.
 - Authorities responsible for facilitating and monitoring policies concerning worker rehabilitation.
- Guidelines and recommendations:
 - Institutions issuing advice, guidelines and recommendations on rehabilitation of workers.
- Action plans, initiatives and programmes:
 - Current action plans, initiatives and programmes.
 - Who are the providers of rehabilitation services for return-to-work schemes (e.g. state healthcare system, private healthcare provision)?
 - How are the costs of rehabilitation met (e.g. centrally through general taxation, or through private sector funding from employers, insurers, individuals, or public/private partnerships)?
 - Are there limitations on the effectiveness of these occupational rehabilitation plans, initiatives and programmes (e.g. medical, administrative or legal obstacles to early return-to-work interventions)?
 - Methods used to evaluate the efficiency and effectiveness of these schemes to enable workers with MSDs to return to work.



A number of factors acted to limit the availability of comprehensive information from all (at the time of information collection) 25 EU countries. These included the difficulty of finding information for some countries without the assistance of country representatives. While the governments of some countries have extensive websites that provide information on legislation and policies and may include information in more than one language, other countries have more limited websites.

INTERNATIONAL AND EUROPE-WIDE INITIATIVES

3.2.

Overview

International conventions such as the Convention on the Rights of Persons with Disabilities, Europe-wide initiatives such as the Social Charter and EU strategies such as the European Employment Strategy all encourage governments to create national policies to facilitate the return to work of people suffering from disabilities. A special focus on rehabilitation and reintegration of workers is a feature of the new Community strategy 2007-2012 on health and safety at work. This objective is further reinforced by the Resolution of the Council of the European Union. While musculoskeletal disorders are not specifically mentioned in either the strategy or the Resolution, they create overarching frameworks that encourage return-to-work policies for people suffering from MSDs.

While MSDs are not specifically mentioned in international and European policies, they create overarching frameworks that encourage return-to-work policies for people suffering from MSDs.

Convention on the Rights of Persons with Disabilities

The European Community has recently signed a new UN treaty on disability rights (United Nations, 2007). The Convention, which covers the rights of people with disabilities, aims to ensure that people with disabilities enjoy human rights and fundamental freedoms on an equal basis with everyone else. It will provide protection for 50 million EU citizens and 650 million people with disabilities worldwide.

Concerning work and employment it recognises the right of persons with disabilities to work, on an equal basis with others. This includes the right to the opportunity to gain a living by work freely chosen or accepted in a labour market, and a work environment that is open, inclusive and accessible to persons with disabilities. Within this context, States shall safeguard and promote the realisation of the right to work, including for those who acquire a disability during the course of employment, by taking appropriate steps, including through legislation, to, inter alia:

- Prohibit discrimination on the basis of disability with regard to all matters concerning all forms of employment, including conditions of recruitment, hiring and employment, continuance of employment, career advancement and safe and healthy working conditions;
- Protect the rights of persons with disabilities, on an equal basis with others, to just and favourable conditions of work, including equal opportunities and equal remuneration for work of equal value, safe and healthy working conditions, including protection from harassment, and the redress of grievances;



- Enable persons with disabilities to have effective access to general technical and vocational guidance programmes, placement services and occupational and continuing training;
- Promote employment opportunities and career advancement for persons with disabilities in the labour market, as well as assistance in finding, obtaining, maintaining and returning to employment;
- Promote occupational rehabilitation, job retention and return-to-work programmes for persons with disabilities.

The Convention needs 20 countries to ratify it to enter into force.

The European Social Charter

Article 15 of the European Social Charter (revised) (Council of Europe, 1996) declares

'The right of persons with disabilities to independence, social integration and participation in the life of the community'

With a view to ensuring for persons with disabilities, irrespective of age and the nature and origin of their disabilities, the effective exercise of the right to independence, social integration and participation in the life of the community, the Parties undertake, in particular:

- To take the necessary measures to provide persons with disabilities with guidance, education and vocational training in the framework of general schemes wherever possible or, where this is not possible, through specialised bodies, public or private;
- To promote their access to employment through all measures tending to encourage employers to hire and keep in employment persons with disabilities in the ordinary working environment and to adjust the working conditions to the needs of the disabled or, where this is not possible by reason of the disability, by arranging for or creating sheltered employment according to the level of disability. In certain cases, such measures may require recourse to specialised placement and support services ...'

Of the 25 countries that were members of the European Union at the end of 2006, i.e. before the accession of Romania and Bulgaria, 23 have signed the Revised Social Charter (Council of Europe, 2005) ⁽⁵⁾ and twelve have both ratified and brought the charter into force. Of these twelve states, ten have entered Declarations concerning the Charter and one has entered a Reservation. Of the remaining 11 states that signed the Charter, one has entered a Declaration and one has entered a Reservation ⁽⁶⁾.

⁽⁵⁾ Note that the charter is open for signature by the member States of the Council of Europe, which has a wider membership than the European Union.

⁽⁶⁾ <http://conventions.coe.int/Treaty/EN/v3Glossary.asp> defines terms in the Social Charter as follows
Declaration: A declaration is a notification by which a State clarifies the meaning or the scope it gives to a treaty or to a provision, or by which a State sets down the reasons for becoming a Party.
Ratification: Ratification is an act by which the State expresses its definitive consent to be bound by the treaty. Then, the State Party must respect the provisions of the treaty and implement it.
Reservations: A reservation is 'a unilateral statement, however phrased or named, made by a State, when signing, ratifying, accepting, approving or acceding to a treaty, whereby it purports to exclude or to modify the legal effect of certain provisions of the treaty in their application to that State' (See Article 2 of the Vienna Convention).
Signature: Signature of a treaty is an act by which the State expresses its interest to the treaty and its intention to become a Party. The State is not bound by the signature. However, it has the obligation not to defeat the object and purpose of the treaty until it has made its intention clear not to become a Party to the treaty (See Article 18 of the Vienna Convention).



The European Employment Strategy

The European Employment Strategy (EES) (European Commission, 2006) was created with the aim of orientating and coordinating the employment policy priorities of Member States of the European Union. In 1997, Member States committed themselves to establishing common objectives and targets for employment policy and to monitoring them annually. The EES is an important tool in reaching the Lisbon Strategy objective of creating 'more and better jobs'. It uses the European Social Fund to support the Member States in the implementation of the agreed employment policies.

The following employment priorities and guidelines for 2005-2008 were adopted in July 2005 as part of a set of integrated guidelines (Council of the European Union, 2005):

- To implement employment policies aimed at achieving full employment, improving quality and productivity at work, and strengthening social and territorial cohesion.
- To promote a lifecycle approach to work.
- To ensure inclusive labour markets, enhance work attractiveness and make work pay for job-seekers, including disadvantaged people, and the inactive.
- To improve matching of labour market needs.
- To promote flexibility combined with employment security and reduce labour market segmentation, having due regard to the role of social partners.
- To ensure employment-friendly labour cost developments and wage-setting mechanisms
- To expand and improve investment in human capital.
- To adapt education and training systems in response to new competence requirements.

Community strategy 2007-2012 on health and safety at work

The Commission in its new strategy on health and safety at work (European Commission, 2007) has placed a special focus on the rehabilitation and reintegration of workers. Under the objective on promoting the development and implementation of national strategies, the Member States are encouraged to incorporate into their national strategies specific measures to improve the rehabilitation and reintegration of workers excluded from the workplace for a long period of time because of an accident at work, occupational illness or disability. Such measures can include financial assistance, training tailored to individual needs etc.

This initiative is further reinforced by the Council Resolution (Council of the European Union, 2007), which stresses the need to enhance awareness among those concerned of the need for rehabilitation and reintegration of workers.



3.3. AUSTRIA



Overview

The objectives of rehabilitation in the Austrian system are:

- restoring or improving health;
- integration / reintegration into society with a special emphasis on occupational integration;
- enabling people with disabilities to assume adequate positions in society.

The aim of this range of measures is to enable the person affected to return to their former job or to pursue a different occupation after an occupational accident or an occupational disease. The services and benefits comprise:

- medical rehabilitation;
- retraining and vocational training;
- subsidies to employers and employees;
- adaptations at work and/or at home to suit the needs of the individual.

Based on data from 2001 (Lang et al., 2003), the main causes of disability, work incapacity and earning incapacity were: musculoskeletal disorders (8,500 people), psychiatric illness (5,000 people) and diseases of the circulation system (3,000 people). Disability pensions are paid from pension insurance funds. Disability is defined as health impairment with respect to the most commonly performed activity (in the last 15 years). In 2001, 36% of all new pensions were due to disability (46% among men and 24% among women). The most important conditions cited were musculoskeletal disorders (35%), mental and psychiatric illness (21%) and coronary heart disease (13%).

A greater emphasis on primary prevention is needed, but funds tend to be allocated to rehabilitation instead.

A greater emphasis on primary prevention is needed, but funds tend to be allocated to rehabilitation instead. Proposals to spend more on prevention, and thereby in the long run to save money that would otherwise be spent on rehabilitation, are not put into practice.

Authorities and legislation

Legislation concerning rehabilitation of workers

The Austrian social security system is complex but comprehensive. The **General Social Insurance Act (ASVG)** of 9 September 1955 is the key piece of legislation. It regulates health insurance, industrial injuries insurance and pensions insurance for manual workers and white-collar workers. Social insurance is compulsory and the system consists of 24 social insurance institutions based on occupational groups and region. The **Federal Disability Act** coordinates measures of medical, occupational and social rehabilitation from the different competent bodies (Vilmos, 2005).

Occupational insurance is provided for the general workforce by the **Austrian Social Insurance for Occupational Risks (AUVA)**, which covers approximately 3 million employed people and 1.3 million schoolchildren and students. There are separate bodies covering farmers (the SVB), public sector employees (the BVA) and rail workers (the VAEB).



Among the legal duties of the Social Insurance Funds are:

- occupational medical care, prevention of occupational accidents and diseases, and research;
- first aid for occupational accidents, post-traumatic treatment, and rehabilitation;
- compensation.

Both occupational accidents and occupational diseases are covered under the ASVG. The primary objective is to restore a person's health and capacity for work — rehabilitation — according to the principle 'rehabilitation, rather than pensions'. If this is not possible, a pension may be paid. Rehabilitation also means research, medical and social measures and measures at the workplace to rehabilitate the injured person in their previous job, or if this is not possible, to retrain them for a new occupation.

The **Act on Employment of Persons with Disabilities** requires companies with more than 25 employees to employ at least one disabled person per 25 employees or pay the Compensation Fund (in 2003 companies with more than 25 employees had to pay EUR196 for each unfilled post for disabled persons per month). However, only 65% of these posts had disabled people in them in 2001 (Lang et al., 2003). Protection from dismissal is provided to people with a degree of disability of more than 50%.

Authorities responsible for facilitating and monitoring policies on worker rehabilitation

In Austria the main authorities responsible for worker rehabilitation policies are the **Federal Ministry of Economics and Labour**, and the **Social Accident Insurance Institutions**, such as the:

- General Social Insurance for Occupational Risks (AUVA)
- Insurance Institution for Rail and Mine Workers (VAEB)
- Social Insurance Institution for Farmers (SVB)
- Insurance Institution of Public Sector employees (BVA).

Guidelines and recommendations

Institutions issuing advice, guidelines and recommendations on rehabilitation of workers

- The Social Accident Insurance Institutions (AUVA, VAEB, SVB, BVA)
- Companies, paid by the labour market survey ('National Employment Agency').

Action plans, initiatives and programmes

Current action plans, initiatives and programmes

These services/benefits provided by the social insurance funds to the insured and their dependants cover medical, occupational and social rehabilitation. Medical rehabilitation measures include the provision of:

- medical care;
- accommodation in institutions specialising predominantly in rehabilitation;
- prostheses, orthopaedic appliances, pharmaceutical products and therapeutic appliances.

Providers of rehabilitation services for return-to-work schemes

The accident insurance agencies provide medical rehabilitation in their own hospitals and centres for rehabilitation (ASVG), whereas the pension insurance



agencies have their own rehabilitation centres specialising in the most frequent causes of disability.

Funding of rehabilitation costs

The nine Länder (federal states) provide integration support within the framework of social assistance and schemes for people with disabilities.

- The social insurance funds provide services/benefits to persons covered by social insurance (the insured and their dependants).
- **Expenditure on health insurance is covered by contributions paid both by the insured and by employers. Contributions for industrial injuries insurance are paid entirely by the employer.**
- Each worker pays a percentage of their income towards social security and the employer contributes for each worker. This money goes to the appropriate health insurance fund and accident insurance sickness fund.
- Additionally, anyone can buy private health insurance, which is quite expensive. This enables people to get immediate rehabilitation privately rather than wait within the state system.

Obstacles, barriers or conflicts limiting the effectiveness of these schemes

- Patients have to wait too long to enter rehabilitation, which reduces the success of rehabilitation measures.
- It is difficult to get all the necessary information, and to complete the administrative work required.

Methods used to evaluate the efficiency and effectiveness of these schemes to enable workers with MSDs to return to work

An overall rehabilitation plan is prepared jointly with the person affected, containing all necessary elements and guaranteeing efficient links between the different rehabilitation measures. Regulations covering competences, benefits and finance help to maintain high standards and prevent unequal treatment.

3.4. BELGIUM



Overview

The Belgian social health insurance system requires comprehensive provision of occupational health services by employers with an emphasis on return-to-work measures. It also requires risk prevention and associated medical surveillance. The recent extension of the law to cover a wider range of musculoskeletal disorders, and current initiatives such as Intro_DM, will increase the emphasis on rehabilitation / return to work for people suffering from MSDs.



Authorities and legislation

Legislation concerning rehabilitation of workers

All employees, including domestic staff, are covered against occupational accidents and accidents on the way to and from work. People who are self-employed are not insured against occupational accidents, but there is a scheme that provides sickness and disability allowances for the self-employed. Civil servants have a specific regulation in this regard. Every employer must take out insurance coverage against occupational accidents from an accredited insurance company or an accredited mutual fund. The Industrial Accidents Fund (FAT-FAO) exercises control over insurers. An occupational accident is defined in the **Law on occupational accidents** of 10 April 1971 as an accident that occurs during, and is related to work, and results in a given bodily injury.

The Law on occupational accidents foresees back-to-work measures after an occupational accident: the occupational insurance can formulate possibilities for a return to work (for example: undertaking light duties, making changes to the job, transferring to a different occupation, etc.) in co-operation with the employee, the employer and the occupational physician.

The law of 4 August 1996 on the 'well-being of workers when carrying out their work', and additional royal decrees, implement Council Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work. The employer is responsible for implementing a policy of wellbeing in the workplace as well as a planned and structured approach to prevention. He has to provide the services of a prevention adviser/ occupational physician who is responsible for three interrelated tasks:

- collaboration in research on occupational diseases;
- participation in workplace risk analysis and prevention;
- medical surveillance of workers' health (pre-employment, periodically during work, and at the moment of return to work after a period of incapacity due to sickness). The role of the occupational physician is 'to promote employment opportunities, inter-alia by proposing to the employer adapted working methods, the fitting-out of the workstation, and the search for adapted work, including for workers whose ability is limited' (**Royal Decree of 28 May 2003** on the monitoring of workers' health).

The occupational physician must combine the results of the medical examinations he/she performs with the study of the workstation that the individual worker is occupying or might occupy.

When carrying out a medical examination under the same decree, the occupational physician must seek to identify any contra-indications to the employment of the individual and must indicate whether the worker:

- may be employed in the activity concerned;
- may be employed provided that certain accommodations are made;
- may be employed in a position other than the one initially envisaged, for the performance of which the worker is not fit;
- is 'definitively unfit'.

In addition, the royal decree seeks to protect the worker who is subjected to a medical examination from any discrimination that could result from medical data being communicated to the employer.

In addition to the existing regulation, a recent adaptation of the law allows the worker to be examined by the occupational physician during a sick leave period (if this lasts



more than 28 days), but at his own request. In this 'Pre-Return To Work examination', the occupational physician will discuss the prospect of return to usual work activities, the time needed to reach this objective, and temporary measures that can be taken in the workplace to help the worker in resuming work.

Return to work after an (occupational) accident or (occupational) disease can at this moment result in loss or a reduction of income. A **Law of 13 July 2006** creates a framework to stimulate professional reintegration by maintenance of income during early return to work. Royal decrees need to be developed to implement the law.

Authorities responsible for facilitating and monitoring policies on rehabilitation

There is already a Belgian prevention policy for MSDs, but it is limited to certain chronic conditions. The law recently revised the conditions covered by this policy and proposed new approaches for dealing with them. The royal decrees of 16 July 2004 and 22 June 2006 enabled the Occupational Diseases Fund to start a trial project on 1 March 2005, intended to reduce the impact of back complaints caused by professional work.

Guidelines and recommendations

Institutions issuing advice, guidelines and recommendations on rehabilitation of workers

The **Federal Knowledge Centre for Health Care** in Belgium recently published a study on 'Chronic low back pain' (CLBP) (Mazina et al., 2006). This study offers practical recommendations based on the available evidence to diagnose and treat CLBP patients. The study assessed the consequences of CLBP in occupational health and described relevant interventions to prevent and/or manage CLBP in Belgian work settings. This information will allow the formulation of recommendations applicable to the Belgian situation for preventing the transition of sub-acute low back pain to chronic pain and for promoting better management of CLBP workers in companies. The study highlighted the potentially crucial roles of occupational physicians and the medical advisers of insurance funds. It recommended that their roles should be analysed and possibly redefined if decision-makers want to tackle the CLBP problem and the economic consequences of the related sick leave. Greater collaboration between treating physicians, occupational physicians and medical advisers seems mandatory.

Greater collaboration between treating physicians, occupational physicians and medical advisers seems mandatory.

Action plans, initiatives and programmes

Current action plans, initiatives and programmes

In Belgium, a pilot study entitled 'Prevention of low back pain in the hospital sector' seeks to test the feasibility of a programme aimed at the secondary prevention of low back pain in the hospital sector (hospitals, psychiatric hospitals, rest homes and care homes). The aim is to increase and accelerate the return to work of employees who are unfit for work because of back complaints, through a rehabilitation programme, whose efficiency has been demonstrated in the scientific literature. The project encourages hospital-sector employees with low back pain to register for a multidisciplinary back rehabilitation programme lasting up to six months. The programme prescribes close collaboration between the treating doctor, the



rehabilitation centre and the occupational physician (prevention department). An ergonomic analysis aimed at improving the working conditions of the participant can be part of the programme.

An EQUAL project, 'Intro_DM — Introduction in Disability Management' has been running in Belgium since June 2005 ⁽⁷⁾. The focus of the project is on optimising employment policy for employees with acquired disabilities or longstanding health problems (LSHP), including musculoskeletal disorders. These employees are often in danger of dropping out of the labour market and of relying on long-term payments such as unemployment benefits and disability insurance.

In order to address this issue, the project aims to encourage and support businesses in optimising their reintegration policy by:

- developing a successful model of reintegration and job retention for employees in danger of leaving the workplace due to an LSHP or a disability, by introducing Disability Management in Belgium and adapting the methodology to the Belgian context.
- promoting the Disability Management model through a supporting website ⁽⁸⁾, a service point and leaflets and a database of case examples and posters.

This includes programmes for Disability Managers and for Disability Case Managers:

- several representatives of the business were trained as Disability Managers, who would steer the introduction and implementation of a reintegration policy within their business.
- several intermediaries were trained as Disability Case Managers, who steer people through the particular reintegration pathways. The Disability Case Manager oversees the co-ordination between the parties involved, the available support services and the relevant legislation.

The project will also formulate recommendations based on the results of national and trans-national work at the level of governments, employers, trade unions and important intermediaries.

The Experience Fund, Federal Ministry of Labour, promotes initiatives and projects by companies that invest in the improvement of the working conditions of older workers. The objectives are:

- to improve the working conditions of older workers in order to prevent them dropping out of the labour market and to keep them longer in the job to profit from their experience and knowledge;
- to improve the employability rate of the Belgian labour market and to offer a response to the demographic changes brought about by an ageing workforce.

The projects funded are:

- initiatives to adapt working conditions and the work organisation, e.g. training for older workers so that they can function as coaches, teleworking, and greater flexibility;
- preliminary studies that analyse the possibilities for adapting the working conditions and the work organisation, e.g. stress analysis, and specific risk analysis.

In order to encourage companies to set up projects, there will be collaboration with specific industrial sectors.

⁽⁷⁾ Prevent, Institute for Occupational Health and Safety, in Brussels, is the co-ordinator of the project and has formed a core group with UCBO — University of Ghent. <http://www.prevent.be>

⁽⁸⁾ <http://www.introdm.be/>



Providers of rehabilitation services for return-to-work schemes

The medical advisers of the sickness insurance funds have an important legal role in the assessment of working capacity and in medical rehabilitation measures for employees whose ability to work is diminished for health reasons. These measures are laid down in the sickness and disability legislation.

The medical adviser is entitled to call for a medical examination of any worker who is absent from work, and who has produced a medical certificate issued by the treating physician. This examination occurs when the social insurance pays sickness benefits, and so most do not occur before six to eight weeks of sick leave. For the reintegration at work of the patient with MSDs, the system places explicit responsibilities on the general practitioner and sickness fund medical adviser who may both decide to stop the sickness period. The occupational physician is then in charge of assessing the fitness for work of the patient and to find, if needed, provisional work adaptations to allow an effective resumption of work activities. The medical adviser can also suggest 'progressive employment' (for example working part-time) or vocational retraining (for example from construction worker to office worker) (Mazina et al., 2006).

Rehabilitation services in the pilot study in the health sector are provided through the Occupational Diseases Fund.

Funding of rehabilitation costs

The Occupational Diseases Fund pays the costs of the pilot study in the health sector.

The Intro_DM project is funded by the European Social Fund.

Initiatives and projects aiming at the retention and reintegration of older workers with MSDs can be funded by the Experience Fund.

Obstacles, barriers or conflicts limiting the effectiveness of these schemes

In the Bismarckian social security system that exists in Belgium and in many other European states, there is a strict separation between the world of work and the world of social insurance. Either a person is at work and occupational health care workers guide his health, or he is unable to work and social insurance authorities evaluate his condition. The logic behind this separation is not compatible with integrated counselling or with helping workers with health problems (Donceel & Mortelmans, 2005).

Occupational physicians have knowledge of the practical situation in companies with regard to the possibilities for job modification, work accommodation, and the possibility of the worker switching to alternative tasks. These and other company-related factors can be very helpful for early reintegration and prevention of long-term work incapacity. Insurance physicians receive detailed information about the medical situation of a sick-listed employee in order to assess his functional capacities. Furthermore, they are acquainted with the legal criteria and procedures for partial or progressive return to work, and can consult with the treating physician regarding optimal medical treatment and rehabilitation. If all information about practical possibilities at the workplace is combined with data from the medical functional assessment and treatment, this could theoretically result in an improved and early reintegration.

Information on a worker's health status and treatment completed, together with data on practical possibilities to return to work, could result in an improved and early reintegration.



Methods used to evaluate the efficiency and effectiveness of these schemes to enable workers with MSDs to return to work

The pilot project in the health sector will be evaluated to see if rehabilitation services were effective in facilitating return to work.

The Intro_DM project will report on problems experienced through monitoring and analysis of 50 businesses where the DM methodology is put into practice, enabling optimal reintegration processes to be drawn up to serve as model processes for future cases.

Case studies of good practice from projects funded by the Experience Fund will be collected to provide examples for other companies.

CYPRUS**3.5.****Overview**

With Cyprus joining the European Union, employment policies and programmes have been adapted to the European Employment Strategy and guidelines. Cyprus has produced a national Plan for Employment and is participating in a number of European Social Fund projects.

Occupational rehabilitation of people with disabilities focuses on those not currently employed, rather than on rehabilitating employees who have suffered illness or impairment, and enabling them to remain in work. Also, there are no formal procedures for assessing the vocational skills and abilities of people who are physically disabled; the focus here is mainly on people with cognitive or mental health impairments for whom there are multi-disciplinary teams within the occupational rehabilitation organisations.

Authorities and legislation***Legislation concerning rehabilitation of workers***

The **Law providing for Persons with Disabilities (No L127 (I) 2000)** provides generally for the protection of disabled people, including the safeguarding of equal rights and equal opportunities and the promotion of social and economic integration. In the area of employment, the law covers recruitment, promotion and occupational rehabilitation. The law also provides for the establishment of a **Rehabilitation Council** and fund, aimed at social and occupational rehabilitation.

Law No L127 (I) 2000 was amended by **Law 57 (I) 2004** to harmonise with the provisions of the European Directive for non-discrimination in the employment and occupation of persons with disabilities. Law **L103 (I) 2000** provides for the establishment of a special fund for occupational rehabilitation and the employment of people with disabilities.



Authorities responsible for facilitating and monitoring policies on worker rehabilitation

The **Department of Labour of the Ministry of Labour and Social Insurance** ⁽⁹⁾ is responsible for promoting and implementing government policy in the areas of employment and the care of people with disabilities. The department aims to promote full employment by encouraging participation and providing placement services and vocational guidance.

The Department of Labour operates **Services for the Care and Rehabilitation of Disabled Persons** (SCRD) which aims to address, implement and coordinate services for people with disabilities. This organisation provides:

- vocational guidance/training;
- financial assistance for people with disabilities to become self-employed, as well as financial assistance to help people with disabilities to have access to assistive equipment for personal or work use;
- incentive schemes for private-sector employers to employ people with disabilities.

The Department for Labour has set up the **Pancyprian Council for Persons with Disabilities** (PCPD), which is the central coordinating and consultative body aiming to contribute towards policy issues relating to people with disabilities. The PCPD monitors the **Centre for the Vocational Rehabilitation of the Disabled**. The centre focuses on vocational training to facilitate the placement of people with disabilities in employment. The PCPD also operates a Special Fund for the rehabilitation of people with disabilities.

Action plans, initiatives and programmes

Current action plans, initiatives and programmes

The **Services for the Care and Rehabilitation of Disabled Persons** (SCRD) provides several schemes aimed mainly at getting people with disabilities into work rather than at rehabilitating workers who have become incapacitated with conditions such as MSDs, with the aim of getting them back to work. Services provided include:

- vocational guidance/training;
- the **Self-Employment Scheme**, which provides financial assistance for people with disabilities to set up their own businesses;
- financial assistance for people with disabilities to access assistive equipment for personal or work use;
- the **Supported Employment Scheme**, which provides job-coach support to facilitate and support the placement of people with multiple disabilities in the private sector. These programmes are generally implemented by voluntary organisations but financed by the government;
- schemes for private-sector employers to employ previously unemployed people with disabilities by providing incentives for the first year. Grants are available under two schemes to enable the employer to cover expenses incurred in making ergonomic and access adjustments to the working environment, and for the costs of both the disabled person's and the employer's social insurance contribution. These schemes are co-financed with the European Social Fund. Neither scheme is available to help retain existing employees who have become disabled or ill.

⁽⁹⁾ <http://www.mlsi.gov.cy>



Funding of rehabilitation costs

There is no general health service in Cyprus but the state does provide medical care free of charge or at a reduced rate to residents with a yearly income below a certain level, or people on benefits. There is a large private medical sector providing primary and secondary medical care in private hospitals, clinics and surgeries. Most employers provide their workers with medical insurance packages that cover a large percentage of any treatment costs.

Occupational rehabilitation schemes are directed towards people with disabilities who are unemployed. These are funded by the Government and the European Social Fund.

FINLAND



3.6.

Overview

In Finland, rehabilitation is organised to cover the entire workforce. However, the lack of evidence-based research means that resources need to be allocated to controlled studies of occupational rehabilitation. Only a few studies have been published on the effects of rehabilitation programmes on workers' work techniques. Commonly-used outcome variables have been physical and psychosocial capacity, perceived health and work ability, musculoskeletal symptoms, sick leave and disability pensions.

The lack of evidence-based research means that resources need to be allocated to controlled studies of occupational rehabilitation.

Authorities and legislation

Legislation concerning rehabilitation of workers

The laws which govern occupational rehabilitation are the **Rehabilitation Act** 566/2005, the **Sickness Insurance Act** 1224/2004, the **Employee Pensions Act** 395/1961, the **Occupational Health Care Act** 1383/2001, the **Labour Protection Act** 752/2002 and the **Act on the Public Employment Service** 1295/2002.

The Rehabilitation Act assigns the organisation of rehabilitation and payment of compensation to the Social Insurance Institution, which has to secure the livelihood of the individual being rehabilitated. Occupational rehabilitation can include vocational education and training, and training to maintain and improve work ability. The goal is to allow the individual to continue in work or training, taking into account sickness, defects and handicaps relevant to the occupation.

Authorities responsible for facilitating and monitoring policies on worker rehabilitation

The Ministry of Social Affairs and Health has overall responsibility for the actors involved in workers' rehabilitation. The Social Insurance Institution, Pension Funds and Insurance Rehabilitation Association of Occupational Accident, Motor Liability and Earnings Related Pension Insurance facilitate and monitor policies.



Guidelines and recommendations

Institutions issuing advice, guidelines and recommendations on rehabilitation of workers

The Social Insurance Institution and Employment Institutions give information, identify opportunities for rehabilitation and organise programmes. Occupational health care units are obliged to sustain the health, work and functional capacity of the worker in every phase of their working career. Labour offices have to organise occupational rehabilitation for workers with impairments. Rehabilitation consultants in university hospitals try to find suitable rehabilitation after sickness for patients of working age.

People with decreased functional status can receive job coaching. The rehabilitation can also be geared to the requirements of a particular occupation ('VOMR® rehabilitation' — Vocationally Oriented Medical Rehabilitation). Adaptation training is aimed at improving the psychological, physical and social skills that have been impacted by an illness or handicap. Psychotherapy and neuropsychological rehabilitation are aimed at restoring the patient's ability to work or study.

Action plans, initiatives and programmes

Current action plans, initiatives and programmes

Rehabilitation with the aim of improving the participant's work capacity and functioning is tailored to the needs of the client in co-operation with institutions offering rehabilitation services, the health care sector, the labour office, schools and employers. Treatment takes place in a rehabilitation centre or on courses arranged by rehabilitation centres or other institutions. Adaptation training courses designed by various special organisations representing persons with disabilities are organised at rehabilitation centres.

Providers of rehabilitation services for return-to-work schemes

Rehabilitation services are provided by the Insurance Rehabilitation Association, the Social Insurance Institution, insurance companies, labour force bureaux, rehabilitation centres, vocational institutes and workplaces with apprenticeship contracts.

Funding of rehabilitation costs

The Social Insurance Institution, Pension Funds and Insurance companies meet the costs.

Obstacles, barriers or conflicts limiting the effectiveness of these schemes

The lack of coordination between interested parties, sometimes uncoordinated organisation, and shortage of information on evidence-based interventions appear to be significant problems.

Methods used to evaluate the efficiency and effectiveness of schemes to enable workers with MSDs to return to work

Controlled trials are difficult in this sector and there is a lack of evidence-based research covering all occupations, types of rehabilitation and sectors.



GERMANY



3.7.

Overview

In Germany, back pain causes major individual and societal health problems and, with its associated costs, has placed a strain not only on health care systems but also on the economy as a whole. In total, the estimated annual costs caused by back pain range between EUR16 and 22 billion (Schmidt & Kohlmann, 2005).

The German system is a 'dual' system in that legislation has two groups in mind: the general population with disabilities, and those who become ill or injured at work. For the latter, there is a distinction between occupational and non-occupational illness and injuries. In consultation with national disability organisations and through the Social Code amendment, the German government has begun to transfer obligations on the participation of people with disabilities in work from state and/or social insurance to employers. In the revised text SGB IX, the legislator applies pressure directly within companies: the principle is now that of early recognition and avoidance of long-term incapacity for work. This move does not seek to decrease public resources for integration and social inclusion, as the government and social security agencies must still provide counselling, planning and assistance. The change is primarily concerned with who has to start the process and who is responsible for coordinating necessary action (Wynne & McAnaney, 2004).

The German government has begun to transfer obligations on the participation of people with disabilities in work from state and/or social insurance to employers.

In Germany, there is a specific and independent rehabilitation system that provides a broad spectrum of rehabilitative measures, including medical, occupational and social rehabilitation. Rehabilitation aims not only at reducing the consequences of an existing illness but also at preventing one from occurring. Rehabilitation includes preventive and rehabilitative aspects.

'Back to Work' is an important aspect of rehabilitation in Germany, as the main purpose of rehabilitation services is the recovery or substantial improvement of functionality, with a view to ensuring the broadest possible participation in life and society for people who are disabled or threatened with disability. Medical, occupational and rehabilitation interventions are important pillars of retention, and financial supports and services are available to individuals at risk of unemployment because of a health condition. Support for employers, such as funding for work adaptations and improving workplace conditions, is also available.

Authorities and legislation

Legislation concerning rehabilitation of workers

The **Social Security Act (SGB)** is the basis for all rehabilitation law, within the joint system of social security in Germany ⁽¹⁰⁾. In accordance with SGB Book IX, 'Integration

⁽¹⁰⁾ <http://www.bmas.bund.de/Englisch/Navigation/root.html>



and Rehabilitation of Disabled People' (Federal Ministry of Work and Social Affairs, 2001), the aim with regard to workers' rehabilitation is to provide services to:

- avert, remove or reduce the disability, or prevent or restrict its deterioration or the consequences thereof;
- prevent, overcome, lessen or attenuate either reductions in employment or the need for care;
- ensure lasting participation in working life.

The **services for participation in work** specified in SGB IX are intended to maintain for as long as possible the earnings of people with handicaps or potential handicaps, by restoring or improving their ability to carry out paid work. They include:

- assistance to keep or obtain a job, including advice and placement, training and mobility assistance;
- preparation for professional life, including basic training that is needed because of the disability;
- refresher courses, vocational training, further training, or any school-level qualifications required for admission to such courses;
- other assistance measures to promote participation in work, to enable people who are disabled to find and retain adequate and suitable employment or self-employment.

Employers assume the crucial role as observers, sources of ideas, and prime movers. Disability managers with an internationally recognised certificate in social business consultancy act as liaisons between the parties involved. In the revised text of SGB IX, the legislator applies pressure directly to companies: the principle is now that of early recognition and avoidance of long-term incapacity for work. If an employee is unfit for work either repeatedly or continuously for more than six weeks within a year, a meeting between the employer and the member of staff must initially be convened in consultation with the works council, in order for constructive and integrative solutions to be reached with the insurers at the subsequent stage. Disability managers support employers in their new role as 'early-warning systems', and guide all the parties in the process of vocational reintegration and long-term safeguarding of employees' capacity for work.

In Germany there is also special protection in the workplace for the severely handicapped (those with a disability level of at least 50%) or persons of equivalent status (SGB IX). The core elements of this set of measures include:

- a system of mandatory job provision and compensatory tax (a requirement for employers with at least 20 employees to employ severely handicapped people in at least 5% of all jobs);
- accompanying assistance in working and professional life (personal and financial assistance);
- special dismissal protection (dismissal only with the consent of the Integration Services);
- measures to ameliorate disadvantages such as tax benefits, additional holiday, and travel fare reductions.

Authorities responsible for facilitating and monitoring policies on worker rehabilitation

An elaborate system of rehabilitation exists in Germany with a number of service providers. In accordance with SGB IX these are:

- the statutory health insurance funds;
- the statutory pension schemes;
- the institutions for statutory accident insurance and prevention (BGs);



- the Federal Employment Agency;
- providers of care or welfare for war victims;
- providers of public youth support services;
- providers of social services.

For the benefit of people requiring advice and assistance in matters relating to rehabilitation and participation, joint rehabilitation provider service points were set up by the end of 2002 in all administrative districts and towns. The statutory pension scheme, in agreement with the other rehabilitation providers, has undertaken the coordinator's role for these service points. These services are specially intended to support participation in working life.

Under the terms of SGB IX, German companies are also under a direct legal obligation to introduce 'Business reintegration management measures' for employees who have been incapable of working for more than six weeks, either uninterruptedly or through repeated absences, within one year. The aim is to help the employee overcome their unfitness for work, prevent future incapacity for work and retain their job.

Guidelines and recommendations

Institutions issuing advice, guidelines and recommendations on rehabilitation of workers

All relevant organisations in the field of rehabilitation are members of the **Federal rehabilitation working group** (BAR) ⁽¹¹⁾. The aim of the working group is to support and coordinate all services in the fields of medical, occupational, social and educational services rehabilitation.

BAR has published many documents, guidelines, recommendations and consensus papers on its website relating to important projects and actions in the field of occupational rehabilitation. In the section 'Participation in working life', BAR has published recommendations for enterprises in the introduction of workplace reintegration management.

REHADAT ⁽¹²⁾ is an internet-based information system that supports the vocational integration of people with disabilities. Detailed information about various aspects of occupational rehabilitation is available from eight databases. The system is subsidised by the Federal Ministry of Work and Social Affairs and run by the German Business Institute in Cologne ⁽¹³⁾.

The Good Practice database describes examples of successful occupational rehabilitation of disabled people, such as the reconfiguration of workplaces and retraining of people with back problems. The Research database provides information on research and model projects in the field of occupational rehabilitation. The Law database contains the key legislation, regulations and rulings on the theme of disability and occupational rehabilitation. The Workshops database contains information on workshops for people with disabilities.

In addition to the databases, there is also the REHADAT-Energy programme, which supports employers in completing their compensation tax returns, and REHADAT-

⁽¹¹⁾ <http://www.bar-frankfurt.de>

⁽¹²⁾ <http://db1.rehadat.de/rehadat/Reha.KHS>

⁽¹³⁾ <http://www.iwkoeln.de/>



BuRe, the booking system for occupational rehabilitation services. The REHADAT talentplus information portal ⁽¹⁴⁾ provides information for employers and employees on occupational rehabilitation and back-to-work programmes.

Action plans, initiatives and programmes

Current action plans, initiatives and programmes

Musculoskeletal disorders are the leading cause of disability, sick leave, rehabilitation treatment and early retirement in Germany. A number of initiatives involving medical and occupational rehabilitation are being developed to reduce the rates of these disorders.

The **'Jobs Without Barriers'** ⁽¹⁵⁾ initiative coordinated by the Federal Ministry of Health and Social Security was launched to help disabled and severely disabled people to take better advantage of opportunities to participate in working life. Its aims were to promote workplace training of disabled young people, to improve the employment chances of severely disabled people, and to promote prevention activities in the workplace to maintain employees' health and working capacity.

Recent **BAR** projects in the field of 'Back to work' include:

- model project REGINE: 'Regional Network for occupational rehabilitation of disabled young people with learning difficulties';
- model project 'Case-management for maintenance of apprenticeship and employment of disabled people'.

The New Quality of Work Initiative (**INQA**) ⁽¹⁶⁾ is a joint project of the Federal Government, the Länder, social insurance institutions and the social partners seeking to improve the quality of work. It provides a framework within which projects are carried out in the area of occupational rehabilitation in the construction sector (RehaBau) where severe physical strain is involved, to prevent MSDs.

An ergonomically-supported rehabilitation programme for older employees in skilled trades has been implemented following the example of the construction industry (**RehaBau**). The aim of the project is to assure the earning capacity and improve the occupational performance of employees in manual trades in the construction sector after impairments of their musculoskeletal system have been medically confirmed. These individuals are usually between 35 and 50 years old and are not suffering from an acute organic disorder, but still suffer from occasional work incapacity.

'Return to work' is a research project of the Research Institute of Balneology and Kurortwissenschaft Bad Elster ⁽¹⁷⁾ Patients with back pain presenting to the Vogtland clinic in Bad Elster receive additional job-related services as part of their medical rehabilitation, focused on model workplaces for diagnosis and training in ergonomic aspects of different occupations.

This multi-modal programme also includes:

- general ergonomic training structured to match the needs of everyday life and the world of work;

⁽¹⁴⁾ <http://www.talentplus.de/>

⁽¹⁵⁾ <http://www.bmas.bund.de/BMAS/Navigation/Teilhabe-behinderter-Menschen/jobs-ohne-barrieren.html>

⁽¹⁶⁾ <http://www.inqa.de/Inqa/Navigation/initiative.html>

⁽¹⁷⁾ <http://www.cochrane.de/de/brockow.htm>



- training to overcome defects in motor skills required for typical processes and movements at work; and
- occupational psychology modules, including motivation, coping with stress, relaxation, coping with pain, conflict resolution behaviour and social competencies.

A randomised study in a rehabilitation clinic has been set up by the German statutory pension insurance, to evaluate whether restoration programmes are feasible and effective in the German rehabilitation system (Faller, 2002). The study is part of the **Bavarian Research Network**, one of eight regional networks of the 'Rehabilitation Science' programme funded by both the German Statutory Pension Insurance and the German Federal Ministry of Education and Research.

Providers of rehabilitation services for return-to-work schemes

In Germany the rehabilitation providers include:

- legal health insurance companies;
- the federal agency for work;
- legal accident insurance providers;
- legal pension insurance providers;
- pension providers for farmers;
- benefit providers for victims of war;
- public youth welfare providers;
- social security providers.

A range of facilities provide rehabilitation training:

- vocational youth training centres,
- vocational retraining centres;
- vocational training centres;
- occupational rehabilitation clinics;
- sheltered workshops.

The Federal agency for work provides occupational rehabilitation and workplace support mainly for the unemployed or economically inactive, while the pension funds provide a pension. These statutory funds operate at federal level for white-collar workers and at sectoral level for blue-collar workers. The pension funds offer occupational and social rehabilitation to those who have made sufficient contributions. Otherwise, the Federal agency for work becomes involved (Wynne & McAnaney, 2004).

Medical rehabilitation services are provided on an office-based or mobile basis through quality-assured rehabilitation establishments.

In the case of **occupational accidents, commuting accidents and occupational diseases**, the institutions ⁽¹⁸⁾ of the **German Social Accident Insurance (DGUV)**, are responsible for the provision of all rehabilitation services after industrial accidents, road traffic accidents and occupational diseases. They coordinate medical rehabilitation, reintegration into professional life (occupational rehabilitation) and into the social environment (social rehabilitation). In order to guarantee a basic standard of living during the period of rehabilitation, injury benefits or temporary allowances are granted by the insurance executives.

⁽¹⁸⁾ German Berufsgenossenschaften and Local and Federal statutory accident insurance executives



The insurance executives have developed a system capable of providing the insured person with suitable medical rehabilitation services depending on the nature and severity of the damage. The principle of 'rehabilitation before pension' applies, meaning that the focus of all efforts is on giving the insured the best medical attention possible and providing all that is necessary for his occupational and social rehabilitation. The insured is thus not paid a pension until all suitable and reasonable rehabilitation options have been exhausted.

The **Federal Pension Insurance Fund (DRV)** ⁽¹⁹⁾ accompanies employees throughout their career, from their first steps into professional life until retirement. DRV is a service provider, commissioned by the State and its citizens.

The range of services extends from individual advice on all pension-related questions to medical or occupational rehabilitation and payment of pensions to insured individuals or their dependents. DRV works with a network of more than 1,000 advice centres throughout Germany.

RehaBau (Professional Association for the Construction Industry Hamburg: Learning to lift and move correctly — job-specific rehabilitation) is a service for construction workers whose ability to work has already been limited. Its aim is to enable construction workers to learn different ways of moving that will allow them to stay fit and healthy for longer in their own job.

Funding of rehabilitation costs

Patients receive 100% reimbursement of their full salary from the first day of reported work incapacity. After six weeks the reimbursement is reduced to 80%. Health insurance covers the majority of the costs of examinations and treatments. A smaller share, including a portion of the costs of medication, is paid by the patient. Back pain patients can be referred to a special back rehabilitation programme. The costs of rehabilitation programmes are covered by health insurance or by special pension funds (Bloch & Prins, 2001).

The most common way for the German Social Accident Insurance to provide support with a view to maintaining or finding employment is to give financial support to employers. The granting of such an allowance may depend on certain requirements and conditions being fulfilled. In individual cases, the insurance executives bear the cost of a fixed-term, trial employment of up to three months. This allows the employer to check whether an injured person is able to perform a certain task without substantial expenses being incurred at that stage. Another way of helping to maintain or gain employment may be for the insurance executives to bear the cost of technical modifications in the workplace.

Obstacles, barriers or conflicts limiting the effectiveness of these schemes

For the German system of in-patient rehabilitation of chronic back pain sufferers, the available evidence is not conclusive, due to a lack of randomised controlled studies. Comparison of meta-analyses of German and international studies indicates areas of similarity (e.g. in changes in pain intensity), but also discrepancies (e.g. in functional ability in daily activities). In-patient rehabilitation treatment for low back pain in Germany appears to be of low to moderate efficacy (Huppe & Raspe, 2003).

⁽¹⁹⁾ <http://www.deutsche-rentenversicherung.de/>



Methods used to evaluate the efficiency and effectiveness of schemes to enable workers with MSDs to return to work

The German pension insurance system operates a quality assurance programme that covers all rehabilitation establishments that it owns. The aim is to achieve a patient-oriented improvement in the quality of medical rehabilitation.

The BGs agreed with the Canadian National Institute of Disability Management and Research (NIDMAR) to implement a comprehensive approach to disability management involving in-company standards, an audit system, and accreditation of disability managers and return-to-work coordinators.

HUNGARY**3.8.****Overview**

In recent years, Hungarian regulations on occupational rehabilitation have been reviewed; this has shown that current practices are not up-to-date and new legislation is needed.

Hungary has a system of occupational health that seeks to rehabilitate disabled workers. However, no specific information has been found on the rehabilitation of workers with musculoskeletal disorders.

Hungarian regulations on occupational rehabilitation have been reviewed, and this has shown that current practices are not up-to-date.

Authorities and legislation***Legislation concerning rehabilitation of workers***

In Hungary, the following legislation has relevance to the rehabilitation of workers:

- Joint Decree No. 8 of the Ministers of Health and of Finance in 1983 on the employment and social care of workers with altered working ability;
- Act No. 4 in 1991 on the promotion of employment and on the care of the unemployed;
- Decree No. 27 in 1995 of the Minister of Welfare on the provision of occupational health services;
- Act No. 154 in 1997 on Health policy;
- Act No. 26 in 1998 on the rights of disabled people and on the provision of equal opportunities to them;
- Decree No. 11 of the Labour Minister on occupational rehabilitation processes in labour centres, and on certain subsidies promoting the employment of unemployed persons with altered working ability;
- Communiqué of the Ministers of Health and Labour on occupational consultations in the occupational rehabilitation of unemployed;
- Decree No. 33 of the Minister of Welfare in 1998 on fitness-for-job, professional and personal hygienic medical examinations;
- Government order No. 176 in 2005 on the accreditation of employers employing people with altered working ability and on the supervision of accredited employers;



- Government order No. 177 in 2005 on the state subsidies available for the employment of employees with altered working ability;
- Decree No. 14 in 2005 of the Minister of Employment Policy and Labour in 2005 on regulations governing the rehabilitation accreditation process and criteria;
- Decree No. 15 in 2005 of the Minister of Employment Policy and Labour in 2005 on the detailed regulation of the assessment of eligible state subsidies for the employment of persons with altered work ability;
- Decree No. 27 of 1995, and Decree No. 33 of 1998 of the Minister of Welfare;
- Joint Decree No. 3 of the Minister of Social and Family Affairs and the Minister of Health of 2002 on minimum safety and health requirements in workplaces.

Action plans, initiatives and programmes

Current action plans, initiatives and programmes

Resolution No. 20/2001 of the Parliament on the **National Programme of Occupational Safety and Health** sets out the goals of solving present occupational safety and health problems and preventing future problems. Among the actions listed as necessary to meet these goals is the creation of a complex and efficient system of occupational rehabilitation to utilise the remaining working capacity of employees and to foster co-operation between occupational health services and public employment services.

Since 2002, the **National Institute of Occupational Health** has taken part in the work of the **Metropolitan Expert Committee of Rehabilitation**. The committee is responsible for (1) the welfare of people admitted, or waiting for admittance, to homes and rehabilitation institutes caring for people with disabilities, and (2) determining the eligibility for workplace-related rehabilitation of people living in social care institutes.

Providers of rehabilitation services for return-to-work schemes

According to the decree on the employment and social care of workers with altered working ability, after the medical rehabilitation process has taken place, occupational health services take part in primary-level occupational rehabilitation.

The amended decree No. 27 of 1995, and decree No. 33 in 1998 of the Minister of Welfare define the tasks of occupational health consultations (secondary level) as giving expert opinion on the working ability of unemployed persons.

3.9. IRELAND



Overview

In Ireland, most occupational rehabilitation schemes focus on people with disabilities who are unemployed. The legal system has an impact on reintegration in Ireland, in that it makes employers reluctant to reintegrate an employee for fear of aggravating



his/her condition, and makes employees reluctant to return to work in case it reduces their personal injuries compensation. Some initiatives have focused on early return to work in the case of occupational injuries and for low back pain.

Authorities and legislation

Legislation concerning rehabilitation of workers

Details of Irish legislation are available from the website of the National Parliament ⁽²⁰⁾.

The **Employment Equality Act** 1998 outlaws discrimination on the grounds of disability in relation to a broad range of employment-related activities and situations. However, the act allows employers to discriminate against people with a disability if the costs that they would incur in accommodating the needs of the disabled person are more than 'nominal costs'. There is no legal obligation on employers to pay employees while they are on sick leave. However, in practice most employers operate a sick leave pay scheme, usually full pay for three months and half pay for a further three months.

The **Disability Act** 2005 is designed to advance the participation of people with disabilities in society and is a key element in the **National Disability Strategy**. It provides for sectoral plans for the Department of Enterprise, Trade and Employment ⁽²¹⁾ (DETE), and other key departments, to ensure that access for people with disabilities becomes integral to service planning and provision. It continues the 3% quota target for the employment of people with disabilities in the public services. The **DETE Sectoral Plan Under the Disability Act 2005**:

- develops a Comprehensive Employment Strategy for people with disabilities;
- enhances the principle of mainstreaming;
- focuses on provision of accessible services;
- establishes a Consultative Forum on Employment Strategy to enhance collaboration with stakeholders.

Authorities responsible for facilitating and monitoring policies on worker rehabilitation

The **National Disability Authority** (NDA) monitors the employment quota of people with disabilities in the public sector. The **Equality Authority** works to eliminate discrimination, promote equality of opportunity and enforce the Employment Equality Act. The **National Training and Employment Authority** (FÁS) ⁽²²⁾ is responsible for the implementation of labour policies and for vocational work, training and employment.

Guidelines and recommendations

Institutions issuing advice, guidelines and recommendations on rehabilitation of workers

The FÁS publishes guidelines, including **Workway Disability and Employment Guidelines**, that cover guidance both for employing people with disabilities and for retaining in work existing employees who have become ill or disabled. The NDA is the

⁽²⁰⁾ <http://www.oireachtas.ie/>

⁽²¹⁾ <http://www.entemp.ie>

⁽²²⁾ <http://www.fas.ie>



statutory body that advises on issues relating to disabilities. Its remit covers research, advice on standards and drafting codes of practice.

The **Workplace Safety Code** launched by the DETE in June 2006 is a voluntary code which sets out guidelines for employers and employees to work together to prevent workplace accidents, provide medical intervention should injuries occur due to accidents, and provide follow-up support to help the worker return to work.

The Department of Social and Family Affairs (DSFA) publishes the '**Back Book**' (Leech, 2004), which contains guidelines for best management of low back pain based on the European guidelines.

Action plans, initiatives and programmes

Current action plans, initiatives and programmes

From 2006-2009, the FÁS is focusing on eight high priority goals set out in its **Building on our Vision** statement of strategy (FÁS, 2006). Two are relevant to rehabilitation. The first is **Goal 1: Entry to the Labour Market**, where the intention is to help individuals to enter/re-enter the active labour market. The other is **Goal 6: Social Inclusion, Equality and Diversity** which seeks to ensure access to programmes, services and employment for individuals and groups experiencing exclusion, discrimination and labour-market disadvantage.

The FÁS provides a number of services and grants to support disabled people in getting and retaining employment. These include:

- the **Workplace Equipment /Adaptation Grant** (WEAG), which is available to the employer or employee to adapt the working environment or provide equipment;
- the **Wage Subsidy Scheme** (WSS), which provides financial incentives to private sector employers to employ people with disabilities who are not able to reach the usual productivity or work performance level for a job;
- the **Employee Retention Grant Scheme** (ERGS), which aims to encourage employers to retain employees who have acquired an illness or impairment which impacts on their ability to carry out their job. It offers 90% funding of costs to the employer in developing and implementing a retention strategy for the employee;
- the **Disability Awareness Training Support Scheme**, which aims to promote the employment of people with disabilities by raising awareness among employees and employers;
- the **Supported Employment Programme**, which provides job coaching to help unemployed disabled people get work, and supports them in the initial stages of working.

Workway is a joint initiative between the Irish Congress of Trade Unions (ICTU) and the Irish Business and Employers Federation, which aims to promote the employment of people with disabilities in the private sector. A website ⁽²³⁾ has been developed, providing a wide range of practical materials and advice for people with disabilities, trade union representatives and employers.

Providers of rehabilitation services for return-to-work schemes

The healthcare system in Ireland is a mixture of public and private systems. Health insurance is available for employees whose earnings are above a certain level. Free

⁽²³⁾ <http://www.workway.ie/>



healthcare is provided by the General Medical Services Scheme (medical card) for those earning below a certain level and for those over 70 years old. Most providers of rehabilitation and other health care services are private organisations.

Funding of rehabilitation costs

Pay-related social insurance and general taxation fund all benefit payments and rehabilitation grants. Payment of medical treatment and rehabilitation costs by employers for employees with work-related injuries is encouraged on a voluntary basis through the **Workplace Safety Initiative**.

Obstacles, barriers or conflicts limiting the effectiveness of these schemes

The Irish legal system is fault-based, with employees required to take legal action against employers for work-related illness or injury. This discourages the employer from paying for treatment or rehabilitation on the basis that this may imply an admission of liability (Wynne & McAnaney, 2004).

Methods used to evaluate the efficiency and effectiveness of schemes to enable workers with MSDs to return to work

In its Building on our Vision statement of strategy, FÁS has committed itself to agreed, goal-specific Performance Measurement Indicators to drive implementation of the strategy, which will be monitored by its Executive Board.

ITALY



3.10.

Overview

No information has been found that specifically focuses on the retention, rehabilitation and/or reintegration of workers with MSDs in Italy. The information that was found addresses the integration, rehabilitation and reintegration of disabled people in a more general way.

The legislation focuses mainly on the integration and reintegration of disabled people in the sense of external (re)deployment. When analysing the different pieces of legislation that apply to workers with a disability, it becomes clear that not all workers with MSDs are covered by them. For example, Law 68/99 only applies to workers with a disability of more than 33% certified by INAIL (which means that it has to be a consequence of an accident at work or an occupational disease). Obviously, not all workers with MSDs will be covered under this legislation. Law 144/99 focuses on unemployed people with disabilities and does not consider workers with MSDs who are still employed.

One example of an excellent programme to encourage companies to recruit and retain employees with disabilities is the Don Calabria Centre employment guidance service. This service does include a focus on the retention of workers with disabilities (including workers with MSDs).

Not all workers with MSDs are covered by the legislation in terms of reintegration.



Authorities and legislation

Legislation concerning rehabilitation of workers

The Italian Constitution guarantees to all citizens the right to healthy conditions in the workplace, as well as the right to adequate support in case of personal damage due to an accident at work or an occupational disease. The law makes insurance mandatory in case of physical damage and economic loss suffered by workers because of accidents and diseases caused by their work.

The law is based on the **Accidents at Work and Occupational Diseases Regulations** 1965 and subsequent legislation and court decisions (Labropoulou & Soumeli, 2001; Wynne & McAnaney, 2004).

Law 426/68, partly modified by **Law 68/99**, provides for an employment quota system in the private and public sectors.

Law 68/99 on the right to work of disabled people affects recruitment of people with disabilities but not reintegration of injured workers. It only applies to disabled workers having a disability of more than 33% certified by INAIL ⁽²⁴⁾ (National Institute for Industrial Accident Insurance, a state-run public body), the visually impaired, the war disabled, orphans and spouses and victims of terrorist acts (European Commission, 2003). Thus, this law does not apply to all workers with MSDs because not all of them will have a disability of more than 33%.

Law 144/99, on professional retraining for people injured at work. INAIL is responsible for rehabilitation, vocational training and reintegration. Employment Services for People with Disabilities tries to find work for all unemployed people with disabilities.

Law 38/00, on post-injury total care and reintegration.

Laws No. 549/95 and 662/96 enable INAIL to invest in the health sector, and above all in rehabilitation, in accordance with the programmes of the Department of Health.

The **Accidents at Work and Occupational Diseases (Amendment) Regulations** 2000 allow INAIL not only to act in the field of social insurance covering work injuries, but also to dedicate its activities to prevention at work and the rehabilitation and reintegration of workers both into work and social life.

Authorities responsible for facilitating and monitoring policies on worker rehabilitation

INAIL administers the compulsory insurance scheme covering accidents at work/industrial accidents and occupational illnesses. It pursues several objectives: the reduction of accidents at work, the insurance of workers involved in risky activities, and the reintegration in the labour market and in social life of work accident victims.

Action plans, initiatives and programmes

Current action plans, initiatives and programmes

In 2000, the Italian government approved an **action plan** to improve the living conditions of people with disabilities. The plan includes measures related to the occupational integration of disabled people, such as removal of barriers in the physical environment (Labropoulou & Soumeli, 2001).

⁽²⁴⁾ <http://www.inail.it/>



Law 68/99 makes provision for partial relief from social security contributions and for financial measures to support any **adaptation of workstations and working conditions** to suit the disability of the worker recruited. This only applies to individuals undergoing external redeployment.

INAIL's training and workplace interventions may apply to those with occupationally-related chronic illnesses. (Labropoulou & Soumeli, 2001; Wynne & McAnaney, 2004).

Research was done to establish what **employment guidance services** were available in the Veneto region of Italy (Wynne et al., 2006). Commonly available elements included job matching, guidance and counselling. Vocational assessment, advocacy services, information and advice, and job coaching were sometimes available.

An **employment access service** is provided by the Don Calabria Centre ⁽²⁵⁾. It encourages companies to be more active in the recruitment and maintenance of employees with disabilities, and works closely with labour market requests and training offers. This involves networking between private and public services, and between rehabilitation, vocational training, labour offices and companies. Projects are developed in partnership with public and private services (Wynne et al, 2006).

Sectoral **agreements** exist in metalworking and textiles to facilitate the employment of disabled people, especially concerning the elimination of physical barriers in the workplace, training and working hours.

A number of agreements between the unions and the employers' association of small firms (API) have been reached at the local level. These agreements envisage **work entry programmes** for the disabled using instruments such as traineeships. Again, these agreements relate more to the integration of disabled people than to the reintegration of workers with MSDs (Labropoulou & Soumeli, 2001).

Providers of rehabilitation services for return-to-work schemes

INAIL is responsible for rehabilitation, vocational training and reintegration. The regional administrations are responsible for the provision of vocational training.

Funding of rehabilitation costs

The relief from social security contributions (to support any adaptation of work stations and working conditions) is proportional to the severity of the disability, and facilities are financed by the National Fund for the Right to Work of the Disabled (European Commission, 2003).

⁽²⁵⁾ <http://www.centrodoncalabria.it>



3.11. LUXEMBOURG



Overview

In the sources that were consulted, no information was found that specifically focuses on the retention, rehabilitation and/or reintegration of workers with MSDs.

The **Act on occupational disability and occupational reintegration** focuses on workers who were/are on long-term sick leave. This Act is applicable to all workers with MSDs. However, it does not deal with the retention of workers with a disability (including workers with MSDs).

The **Act on handicapped workers** provides for incentives and sanctions to encourage employers to employ people with disabilities. This act is only applicable to workers with MSDs who have a reduction of their working capacity of 30% or more.

An initiative in Luxembourg that focuses on external redeployment as well as on internal redeployment of workers is the **Department for Workers with Reduced Labour Capacity**. Workers with MSDs can benefit from this kind of service. Although this is an important initiative, it does not include the retention of workers with a reduced labour capacity.

Authorities and legislation

Legislation concerning rehabilitation of workers ⁽²⁶⁾

Luxembourg has implemented an ambitious policy aiming to rehabilitate and maintain in employment those workers suffering from health problems or disabilities who cannot benefit from the disability compensation system.

The **Law on occupational disability and vocational reintegration** of 2002 covers cases of long-term sick leave among working people, and is intended to prevent a 'medical escape route' from work.

This law applies to any worker who is not recognised as an invalid as defined in Article 187 of the Social Security Code but who, in consequence of prolonged disease, hospitalisation or overwork is unable to continue to work in his/her last job and can profit either from an internal or an external job reclassification. Internal reclassification refers to redeployment within the organisation, with the possibility of adjusting the job or the way the work is organised (for example, through short-time working). External redeployment refers to reclassification on the labour market. Through these means, the authorities aim to keep as many workers as possible in the workforce via rehabilitation within the company (eg through transfer to another workstation or work regime) or by transfer to a new employer. Every company with more than 25 workers has the obligation to apply this rehabilitation policy.

A joint commission composed of representatives of the National Insurance Agency, employers, the Social Security Administration, the Ministry of Health, the Ministry of Labour and the Employment Administration decides on an internal or external

⁽²⁶⁾ <http://www.legilux.public.lu/>



rehabilitation. It may decide against an internal rehabilitation if it would be prejudicial to the worker. The workers that are involved in a rehabilitation process are grouped with handicapped workers for whom special measures are available, such as rehabilitation training period, training courses, and support in the search for a job. Each case is individually followed by the Employment Administration (disabled workers service).

The **Law on Handicapped Workers** of 1991 provides for: a compulsory quota system in both the private and public sectors; wage subsidies, work adaptation grants, incentives and sanctions; pay protection; and total or partial exemption from social security contributions for self-employed people with disabilities. Workers with disabilities are entitled to an extra six days' annual leave (Labropoulou and Soumeli, 2001).

This act defines a handicapped worker as:

- a worker who had an accident at work and has a reduction of his working capability of 30%;
- a person who became disabled in war and has a reduction of his working capability of 30%;
- a person who has a physical, mental or sensory disability and has a reduction of his working capability of 30% in consequence of natural or accidental causes.

Authorities responsible for facilitating and monitoring policies on worker rehabilitation

These include:

- the Ministry of Work and Employment;
- the Sickness-benefit fund;
- occupational physicians.

Action plans, initiatives and programmes

Current action plans, initiatives and programmes

The Department for workers with reduced labour capacity ⁽²⁷⁾ was created in the public employment service with a mission to carry out several tasks in relation to internal or external job placements. These tasks include rehabilitation measures, training and vocational guidance. The Department's goals are:

- to manage the placement and retraining of affected workers;
- to ensure that they are externally redeployed where relevant;
- to follow up cases of internal redeployment;
- to oversee the secretariat of the joint commission for the redeployment of workers who have become incapable of performing their most recent job.

The legislation aims to ensure that there is (Labropoulou and Soumeli, 2001):

- a range of redeployment measures within the firm or on the general labour market;
- a compensatory allowance in cases where the new wage is lower than the previous one;
- a waiting allowance for workers who are no longer entitled to unemployment benefit and who have not been redeployed;
- protection from dismissal for redeployed workers during the first year in the new job;
- adaptation of the workplace and/or training and promotion at work for employees with disabilities.

⁽²⁷⁾ <http://www.adem.public.lu/index.html>



The multisectorial occupational health service (in collaboration with the European Social Fund) organised a training course for workers with severe back problems leading to long or frequent absences from work. The objective of this initiative was to reintegrate the worker into his job with, if necessary, an adaptation of his workstation.

Obstacles, barriers or conflicts limiting the effectiveness of these schemes

- there are already cases of employers fighting the decision of the joint commission;
- there has been an expansion in administrative procedures.

3.12. MALTA



Overview

The employment legislation, policies and initiatives in Malta focus on integrating people with disabilities into the workforce rather than retaining in work employees who have injuries or impairments. The occupational rehabilitation of existing workers is not specifically covered.

Authorities and legislation

Legislation concerning rehabilitation of workers (28)

The Maltese Republican **Constitution of 1974** recognises the right of all citizens to work, and the state's role in promoting the conditions necessary for this. The constitution upholds workers' rights, including the right to professional and vocational training, contributory social insurance and a provision of subsistence for those unable to work.

The **Disabled Persons (Employment) Act** of 1969 provides for a quota system in which employers with more than 20 employees are committed to employing a 2% quota of disabled workers. In practice, this quota system is probably not adhered to as it is not enforced or monitored (ETC, 2004).

The **Equal Opportunities (Persons with Disability) Act** 2000 legislates against all discrimination against people with disabilities, including in employment and training.

The **Protection of Persons with Disability Act** 2000 prohibits discrimination by an employer on the grounds of disability. An employer is required to make reasonable accommodation for a person's disability unless it can be proved that the required accommodation would unduly prejudice the operation of the business.

The **Occupational Health and Safety Act** 2002 aims to enforce and raise awareness of good practices at work, since a healthy work environment is considered necessary to

(28) <http://www.gov.mt>



promote access to and retention of employment among older workers and people with disabilities.

Authorities responsible for facilitating and monitoring policies on rehabilitation of workers

The **Employment and Training Corporation (ETC)** ⁽²⁹⁾ is Malta's public employment service. It was established in 1990 by the Employment and Training Services Act. It has responsibility for implementation of labour market policies. Within the ETC, the **Supported Employment Unit** assists people with disabilities to find work. The **National Commission, Persons with Disability** ⁽³⁰⁾ lobbies for the rights of people with disabilities and takes legal action.

Guidelines and recommendations

Institutions issuing advice, guidelines and recommendations on rehabilitation of workers

The **ETC** issues advice both for employers and people with disabilities seeking employment. The **Occupational Health and Safety Authority Malta** publishes information on MSDs to raise awareness.

Action plans, initiatives and programmes

Current action plans, initiatives and programmes

Under the **National Action Plan for Employment** (ETC, 2004), the strategy until 2010 is to increase the labour supply from particular groups, including people with disabilities. This will include collaboration with non-governmental groups to promote learning opportunities, prevent discrimination and encourage recruitment by private sector employers.

Incentives for people with disabilities to return to work include making it possible to work without forfeiting social benefits up to a given income level. A number of incentives are in place for employers who recruit older, disabled or disadvantaged workers, including:

- **a supported employment scheme for people with disability.** This scheme is operated by the ETC unit and utilises the **Employment Training Placement Scheme**, in which the employer receives a subsidy of half the minimum wage;
- the **Bridging the Gap Scheme**, which offers training at the place of work for persons with a disability, during which time the employee is given an allowance;
- **job coach services**, which are also offered if personalised training is required;
- the financial assistance which the ETC is able to offer to the employer to adapt the place of work in order to employ a person with a disability;
- tax incentives which are available for employers who recruit persons from disadvantaged groups, such as those with disabilities.

The **Foundation for Information Technology Accessibility (FITA)** ⁽³¹⁾ assists with applications from people with disabilities for financial assistance to purchase

⁽²⁹⁾ <http://etc.gov.mt>

⁽³⁰⁾ <http://www.knpd.org>

⁽³¹⁾ <http://knpd.org/mittsfita>



computer or assistive technology for education or employment purposes. They collaborate with organisations to provide the workplace adjustments and retraining required for existing employees who have become disabled.

Providers of rehabilitation services for return-to-work schemes

Whilst there are no specific rehabilitative services for workers, the government provides primary health care through health centres offering preventative, curative and rehabilitative services. There are also specialised clinics that include physiotherapy services. Employers can employ company doctors to verify the sick leave of their employees and to urge employees to return to work as soon as possible.

A large number of non-governmental organisations provide services to people with disabilities, although these are not specifically to help disabled people into employment. Such organisations include the Eden Foundation, which provides rehabilitative services for young people born with disabilities, to prepare them for work.

Funding of rehabilitation costs

The health service in Malta is free at the point of delivery and is funded by general taxation. All residents have access to preventative, investigative, curative and rehabilitative services in government health centres and hospitals. Private health services do exist. There is no obligatory health insurance and it is rare for an employer to offer health insurance as an employment benefit.

Obstacles, barriers or conflicts limiting the effectiveness of these schemes

A recent survey of work-related upper limb disorders in Malta suggested that different medical practitioners sometimes express significantly different medical opinions with regard both to the diagnosis and the length of time an employee on sick leave needs to be off work (OHSA, 2005).

It has been argued that the level of benefits that a disabled person receives when unemployed acts as a disincentive to find work.

Methods used to evaluate the efficiency and effectiveness of these schemes to enable workers with MSDs to return to work

In line with targets set out in the National Action Plan for Employment, the government is aiming to increase employment of disabled persons to four fifths of the national employment rate.

It has been argued that the level of benefits that a disabled person receives when unemployed acts as a disincentive to finding work.



NETHERLANDS



3.13.

Overview

Dutch legislation and regulation has changed radically in an attempt to reduce long-term sick leave from work. The latest raft of changes was implemented in 2006. The focus of the changes is to shift the responsibility for costs and absence management from the state to employers. The requirement for employers to continue to pay employees for up to two years of sickness absence is a major financial incentive to invest in occupational rehabilitation and reintegration. The 2006 legislative reform agenda aims to emphasise someone's remaining capabilities rather than focusing on their limitations and disabilities, and so help and encourage them to be reintegrated into employment.

The focus of the changes is to shift the responsibility for costs and absence management from the state to employers.

Authorities and legislation

Legislation concerning rehabilitation of workers

The Ministry of Social Affairs and Employment ⁽³²⁾ has responsibility in the Netherlands for legislation in this area. The 1998 **Working Conditions Act** introduced policies on managing sickness absenteeism. The employer's requirements under this act include:

- drawing up a company health and safety policy to improve working conditions and to prevent sickness, occupational disease, absenteeism and disability;
- consulting with employees and keeping in touch with sick employees;
- contracting a certified Occupational Health and Safety (OHS) Service.

The Working Conditions Act was amended in 2006 to shift responsibilities so that the government now determines a sensible level of protection for employees while employers and employees decide together how that level will be achieved in practice.

The **Act of Lengthening Payment of Wages in Case of Sickness**, introduced in 2004, extended from one year to two the obligation of employers to pay employees who take time off work through sickness. Regardless of the cause of the absence, the employer is required to pay at least 70% of the last wage earned. Most employers take out private insurance to cover these costs. The Act is seen as a financial incentive for employers to look to occupational rehabilitation to return employees to work as quickly as possible and so reduce the amount of sick leave and disability.

The **Gatekeeper Improvement Act** (WVP) of 2002 calls for quick action from employers to reduce absenteeism and occupational disability and to supervise the reintegration of employees. The steps that employees, employers and OHS institutions must take to get sick employees back to work are:

- employers must inform their OHS Service on the first day of employee sickness;
- the OHS Service must assess the case and draw up reintegration recommendations within six weeks of the first day of sickness;
- on the basis of the recommendations, the employer and employee draw up a plan of action setting out the steps expected to achieve a return to work and also setting out the case management agreement;

Reform aims to emphasise someone's remaining capabilities rather than focusing on their limitations and disabilities.

⁽³²⁾ <http://www.employment.gov.nl>



- The action plan is implemented by the employer and employee with progress meetings at least every six weeks.

The Occupational Disability Act was reformed in 2006 with the **Work and Income According to Labour Capacity Act (WIA)**, which aims to focus on the capabilities of people with partial occupational disability rather than on what they are not able to do. It seeks to give people who are partially fit for work a significant incentive to make use of their remaining capacity for work, and it consists of two regulations:

- the regulation governing **Resumption of Work for the Partially Disabled (WGA)**, and
- the regulation governing **Income for the Fully Disabled (IVA)**.

The reformed **Unemployment Insurance Act (WW)** came into force in October 2006. It was aimed at stimulating the prevention of unemployment, and the resumption of work. The maximum duration of unemployment benefit was reduced from five years to three years and two months. Benefits can be stopped if the employee does not make sufficient effort to find work, and up to 30% of WW benefits received by people becoming unemployed after they are 55 years of age will be recovered from their previous employer (Watson Wyatt Brans & Co, 2005).

Authorities responsible for facilitating and monitoring policies on worker rehabilitation

The Working Conditions Act is enforced by the **Labour Inspectorate**, which is incorporated into the I-SZW (Inspection and Information Service of the Ministry of Social Affairs and Employment). The **Implementing Organisation for Employee Insurances (UWV)** is responsible for evaluating reintegration efforts based on the reintegration plan. The focus is on reintegrating people on incapacity benefits back into work. However, the UWV also considers the employee's application for disability benefit, and if the reintegration plan is not available, or it becomes clear that either the employee or the employer have not taken all the necessary steps, the UWV can refuse to accept the application.

Guidelines and recommendations

Institutions issuing advice, guidelines and recommendations on rehabilitation of workers

The Dutch occupational physicians' **guideline on low back pain (NVAB, 1999)** is an evidence-based guideline that advocates visits to the occupational physician every two weeks for diagnosis and assessment. Interventions prescribed include education on activity levels, advice on temporary work adjustments and/or referral to the individual's general practitioner if medical treatment is appropriate.

The **Expert Reintegration Studies Centre (STECR)** ⁽³³⁾ collects and disseminates information on best practice in the reintegration into the workforce of workers with illness or impairment. Initially this organisation concentrated on the reintegration of workers with work-related upper limb disorders. It has also issued guidelines on the best approach to reintegrating workers with low back pain (STECR, 2004).

As Dutch disability studies show that females have a considerably higher risk of entering the disability benefit scheme than males, the Ministry of Social Affairs and Employment has published information for employers focusing on **gender-specific factors in preventing sickness absence**.

⁽³³⁾ <http://www.stecr.nl/>



The **Working Perspective Committee** is a government project that aims to reduce the numbers of people entering the disability benefit system and to increase the numbers of people on disability benefits who are reintegrated into employment. Members of the committee include employers and employee representatives, patient/client organisations, insurance companies, UWV, the Occupational Health Services and the media. The committee aims to promote a positive image of employing people with partial disabilities, and to increase knowledge of sickness prevention, treatment and reintegration (Brenninkmeijer et al., 2003).

The **Netherlands Expert Centre for Work-related Musculoskeletal Disorders (AKB)** ⁽³⁴⁾ aims to provide the public and health care professionals with comprehensive and reliable scientific information on the prevention and effective treatment of work-related musculoskeletal disorders.

Action plans, initiatives and programmes

Institutions issuing advice, guidelines and recommendations on rehabilitation of workers

Under the **WGA scheme** for the reintegration of people with partial disabilities, a number of instruments are available including:

- workplace adjustments;
- reintegration procedures (regular integration or by means of Individual Reintegration Agreements (IRO));
- trial placement;
- no-risk policy;
- discounted insurance premiums for employers.

For young people on disability benefit (**WAJONG**) additional instruments that are available include:

- wage dispensation;
- supervised work.

An incentive for employees under the WGA scheme is that earnings from work are only partially subtracted from their benefits. For employers, the incentives are discounted insurance premiums and the fact that the employer does not have to bear the cost of illness of a person who has been declared unfit for work.

Under the WW, the UWV must take a proactive reintegration approach. Where possible, preventative reintegration measures must be taken to avoid a person claiming the WW benefits and those on WW must be encouraged, with the use of tailor-made solutions, to find and remain in work. Measures available to the UWV include:

- reintegration job coaching;
- use of Individual Reintegration Agreements (IRO).

If the UWV believes that the employer has failed to carry out all necessary steps to reintegrate the employee, the employer will be required to continue paying the employee's salary for another year.

The **Ministerial subsidy scheme for preventing worker absenteeism (SPA)** subsidises product development projects that contribute to the prevention of worker drop-out, or contribute to the integration or reintegration of people with occupational disabilities.

An incentive for employees is that earnings from work are only partially subtracted from their benefits. Incentives for employers are discounted insurance premiums and not having to bear the cost of illness of the employee.

⁽³⁴⁾ <http://www.kenniscentrumakb.nl>



Providers of rehabilitation services for return-to-work schemes

Since January 2006, under the **Health Insurance Act**, all residents must take out mandatory health insurance with private health insurance companies. This provides a basic package of essential healthcare provided by private health care providers. People in employment pay an income-related insurance contribution (this is usually paid by the employer).

Occupational Health Services providers are certified independent commercial organisations that provide services to companies in preventing sickness and disability. Around 650 private companies offer **reintegration services** to UWV unemployment and disability benefit recipients, recipients of social assistance allowances, and employers and health care insurance companies for long-term ill employees.

Funding of rehabilitation costs

The **Health Insurance Act** of January 2006 removed the distinction between sickness insurance and private insurance, and introduced a single mandatory basic insurance package. Everyone who is insured pays a nominal non-income-related premium and the Tax department will administer an income-related contribution that is usually paid by the employer. Employers have to insure their employees against partial disability. **Occupational rehabilitation costs** are paid for by the employer and covered by a tax reduction scheme. Employers may also be eligible for a subsidy to cover the costs of some work adjustments that are required to help the employee continue in work or to return to work.

Obstacles, barriers or conflicts limiting the effectiveness of these schemes

Some studies have shown that effective communication between the occupational physician and the general practitioner has been lacking, and this is perceived as a barrier to the effectiveness of the return-to-work plan (Anema et al., 2002; Buijs et al., 1999).

Methods used to evaluate the efficiency and effectiveness of these schemes to enable workers with MSDs to return to work

The government intends to evaluate the effectiveness of occupational rehabilitation and reintegration schemes by looking for reductions in the duration of sickness absences and in the number of people applying for disability benefits.



PORTUGAL



3.14.

Overview

According to the available information, in Portugal there is no 'return-to-work policy'. However, on the one hand, the Ministry of Health's National Programme Against Rheumatic Diseases ⁽³⁵⁾ highlights the need to consider occupational retraining to prevent relapses. In other words, it is suggested that a good way to prevent probable relapses is to move workers affected by MSDs to jobs more suited to their condition.

On the other hand, the Decree-Law 248/99 that regulates Law 100/97 states that workers affected by occupational injury or diseases are entitled to a job with their current employers that is suited to their condition and remaining capacity. They are also entitled to retraining, job modification, part-time work or retraining for a different job.

Authorities and legislation

Legislation concerning rehabilitation of workers

In Portugal, work-related musculoskeletal disorders are included in an official list (within the group of 'Diseases caused by physical agents') of occupational diseases but not identified as such. According to Law 100/97, which concerns work accidents and work-related diseases, the same rules regarding work accidents are applied to work-related diseases, without prejudice of the rules specifically applied to them.

A definition of 'incapacity' is not provided in the Decree-Law regarding the repair of damages brought about by work accidents and work-related diseases (Decree-Law 360/71). However, it states that the degree of incapacity should be determined from the nature and gravity of the injury, the general condition of the victim, his age and occupation, and the degree of retraining needed to work in the same or another occupation, as well as other circumstances which may impact on his general capacity to earn.

⁽³⁵⁾ <http://www.dgs.pt/>



3.15. SLOVAKIA



Vocational rehabilitation in Slovakia is only provided in case of a work injury or a recognised occupational disease. As a result, not all workers with MSDs will be able to profit from it.

Overview

In Slovakia, the act governing employment services regulates legal relationships in the provision of employment services. It does include disabled workers, but the focus is mainly on the integration of disabled citizens and on the compliance of employers with the statutory quota for employing disabled citizens in the total number of employees. The retention, reintegration and rehabilitation of workers with a disability are not covered in this act.

Occupational rehabilitation in Slovakia is only provided in the event of a work injury or a recognised occupational disease. As a result, not all workers with MSDs will be able to profit from this kind of occupational rehabilitation. Again, this kind of rehabilitation exists mainly to prepare people with disabilities to work again or for the first time. There is no focus on retention.

Authorities and legislation

Legislation concerning rehabilitation of workers ⁽³⁶⁾

The **Act of 4 December 2003 on employment services** defines a disabled citizen as a disadvantaged job seeker. A disabled citizen is a citizen recognised as a disabled citizen pursuant to special regulation, or a citizen whose ability to perform gainful activity is reduced by at least 20% but not more than 40%. The act provides for sheltered workshops / workplaces to provide training for disabled citizens. It also provides for an **Agency for Supported Employing** to provide:

- support and assistance in the acquisition and retention of jobs;
- advisory activities in the field of labour law; and
- finance in connection with claims of disabled citizens arising from their disability.

Under this act, **employers** are obliged to:

- provide suitable working conditions for disabled citizens in their employ;
- provide training and preparation for work for disabled citizens, and give special attention to improving their level of qualifications while they are in their employ.

Authorities responsible for facilitating and monitoring policies on worker rehabilitation

The **Employment Services** system is responsible for 'Implementing active labour market measures, with special regard to the vocational assertion of disadvantaged job seekers'. The services provided include **the Centre of labour, social affairs and family** and **the Office of labour, social affairs and family**. The Office is responsible for:

- establishing special organisational units for the integration of disabled citizens;
- designating jobs unsuitable for disabled citizens in the register of vacancies;
- ensuring that employers fill the statutory quota of disabled citizens in their total numbers of employees.

⁽³⁶⁾ <http://www.employment.gov.sk>



Action plans, initiatives and programmes

Current action plans, initiatives and programmes

The study by Wynne et al. (2006) on employment guidance and counselling services for people with disabilities identified the following elements relevant for **employment guidance and counselling services in Slovakia**:

- job matching: sometimes available;
- guidance and counselling: sometimes available;
- assistance in accessing grants: sometimes available;
- advocacy: sometimes available;
- information and advice: sometimes available;
- specialised vocational education/training: sometimes available;
- occupational rehabilitation: sometimes available;
- pre-vocational training: sometimes available;
- job coaching: sometimes available;
- psychosocial supports: sometimes available.

Providers of rehabilitation services for return-to-work schemes

A study (De Jong et al., 2006) of occupational rehabilitation in five European countries showed that in Slovakia:

- occupational rehabilitation is organised on a voluntary basis;
- career advice is available from the National Labour Office (NLO);
- vocational preparation and training are available for citizens with lower working ability;
- job mediation is provided by NLO;
- sheltered workplaces have been created.

SLOVENIA



3.16.

Overview

The Pension and Invalidation Insurance Act ensures that workers with a disability have the right to occupational rehabilitation and the right to reassignment and part-time work. Since 17 December 2002 there has been provision for the adaptation of workplaces and equipment in relation to occupational rehabilitation and the right to reassignment. This means that employers are encouraged to employ people with a disability or to retain them in work. No specific mention of workers with MSDs has been found.

Slovenia has developed three active employment policy programmes with a focus on the employment of people with disabilities, the adaptation of jobs for these workers, and the promotion of the creation of new jobs. People with MSDs can profit from these initiatives.

People with MSDs, who are having difficulty finding a job, have recourse to sheltered workshops and to Slovenia's employment service.



Authorities and legislation

Legislation concerning rehabilitation of workers

The **Pension and Invalidation Insurance Act (ZPIZ-(1))** of 1999 (MDDSZ, 1999) defines the right to occupational rehabilitation and the right to reassignment and part-time work.

This act defines occupational rehabilitation as an integral process of providing professional, physical and psychosocial training so that an individual can remain employed and be reintegrated into the work environment with suitable adaptation of his workplace with appropriate technical aids, or be appropriately reassigned following training for another job.

The right to occupational rehabilitation is granted to insured persons with a disability of category II, i.e. greater than 50% disability, who are under 50 years of age at the onset of the disability, and who are capable of being retrained for full-time work in another job.

Occupational rehabilitation can be carried out through education, through on-the-job training in an appropriate job with an employer, or by means of off-the-job training.

An insured person has a right to reassignment by the employer to another job after completion of occupational rehabilitation, if he is more than 50 years old and has more than 50% disability. The right to reassignment is also granted to an insured person with invalidity of category III, if his capacity for work has been reduced by less than 50 %, or if he can continue to work full time in his own occupation, but is not capable of working at the job he has been reassigned to.

The 2002 legislation **on criteria, measures and procedures to determine the level of funds for the adaptation of workplaces and equipment for disabled workers** provides for the adaptation of workplaces and equipment in relation to occupational rehabilitation, reassessment and the right to reassignment.

The **Act on occupational rehabilitation and employment of the disabled** of 2004 (amended by the Act of 2005) provides for rights to occupational rehabilitation for the disabled, measures for their employment, and sources of finance. It aims at increasing employment of the disabled and countering discrimination in the labour market. It contains provisions on the conditions under which a worker may be classed as disabled, on measures for occupational rehabilitation, on programmes of social integration, on employment of disabled persons, and on quota systems and subventions.

Authorities responsible for facilitating and monitoring policies on worker rehabilitation

The Ministry of Labour, Family and Social Affairs (MDDSZ) ⁽³⁷⁾ and the Pension and Invalidation Insurance Institute are the main authorities responsible for worker rehabilitation.

Guidelines and recommendations

Institutions issuing advice, guidelines and recommendations on rehabilitation of workers

The **Institute for Rehabilitation** co-ordinates expert development in this field. It prepares reference standards for employment reintegration services and for training

⁽³⁷⁾ <http://www.mddsz.gov.si/>



and education for experts involved in employment reintegration. It prepares methodologies for the assessment of work performance among disabled workers, and carries out surveillance in this field. It must provide expert opinion in disputes over the termination of disabled workers' contracts. It also performs research activities in this field.

Action plans, initiatives and programmes

Current action plans, initiatives and programmes

Programmes

Employment rehabilitation and work inclusion programmes for the disabled are intended to secure equal opportunities of employment and to create optimal conditions for the employment of disabled people and disadvantaged unemployed people, who face complex barriers and have special needs deriving from sickness, infirmity, functional limitation or hindrance, by addressing their special needs and barriers to gaining employment.

Employment rehabilitation covers the following measures:

- advice and motivation for disabled people to take an active role;
- help in accepting their own disability and inclusion in life and work with their disability (psychosocial rehabilitation);
- help in selecting appropriate vocational goals;
- developing social skills and abilities;
- seeking appropriate work (employment);
- analysis of specific jobs and environments;
- plans for adapting jobs and environments;
- plans for providing technical aids;
- training and help for disabled persons for working in specific jobs or in their selected profession;
- monitoring disabled persons in their jobs after taking up work;
- ongoing evaluation of the success of the rehabilitation process;
- drawing up opinions on the level of the rehabilitant's abilities, knowledge, working practices and interests;
- monitoring the rehabilitant during training and education.

Work inclusion programmes are programmes that ensure that disabled people are able to work through training, familiarisation with work, and acquiring work skills and abilities. They make it possible for disabled persons to be included in work and the wider social environment.

Adapting jobs for unemployed disabled people is carried out through the adaptation of premises and technical equipment at the workplace.

It is implemented through the payment of a lump sum to employers for adapting workplaces for unemployed persons with severe disabilities. The programme is carried out based on an employment plan and a prepared programme of workplace adaptation.

The target group is disabled unemployed people who have the possibility of employment through adaptation of the job/work place.

Local employment programmes aim at stimulating the creation of new jobs and employment of disadvantaged unemployed persons in the regions, administrative units and municipalities set out in point two of the decision determining and



categorising areas with unemployment rates higher than the average in the Republic of Slovenia, and determining active employment policy measures.

The objective is to develop new local employment programmes and create new jobs for disadvantaged unemployed persons in regions, administrative units and municipalities with above-average unemployment rates, which should contribute to a reduction in the unemployment level in these areas and reduce the proportion of disadvantaged workers among the unemployed.

The **Institute for Rehabilitation** ⁽³⁸⁾ offers occupational rehabilitation programmes that evaluate employability and placement potential and offer training and support to disabled workers, unemployed disabled people, and individuals on long-term sick leave, among others. The aims of the programmes are to decrease the negative effects of disability due to disease, injury or a congenital condition, and to develop an individual's capacities and abilities to the extent that he or she may find and retain employment, and achieve promotion. Referrals can come from physicians or specialists, the Institute of Pension and Disability Insurance of Slovenia or the Employment Service of Slovenia.

Initiatives

Wynne et al. (2006) found the following elements relevant for **employment guidance and counselling services in Slovenia**:

- vocational assessments: least available;
- job matching: commonly available;
- guidance and counselling;
- assistance in accessing grants;
- advocacy: commonly available;
- information and advice;
- case management;
- specialised vocational education/training: commonly available;
- occupational rehabilitation: least available;
- pre-vocational training: least available;
- job coaching: least available;

Providers of rehabilitation services for return-to-work schemes

The centre for occupational rehabilitation of the **Institute for Rehabilitation** is the main Slovenian institution offering services in the field of occupational rehabilitation of adults with impaired employability.

An insured person employed in the Republic of Slovenia is entitled to provision of occupational rehabilitation by the employer who employed him at the onset of disability. The **Pension and Invalidity Insurance Institute** is obliged to provide occupational rehabilitation to other insured persons. The Employment Office may co-operate with the Institute and the employers in provision of occupational rehabilitation.

Sheltered workshops (industrial facilities for occupational rehabilitation and for prevention of disability) can be established by the Insurance Institute and are responsible, together with the Employment Office, for occupational rehabilitation, training and employment of the insured.

The employment rehabilitation programme is carried out by providers selected by public tender. The work inclusion programme for the disabled is carried out by the **Employment Service of Slovenia** (ZRSZ).

⁽³⁸⁾ <http://www.ir-rs.si/en/vocational>



Funding of rehabilitation costs

The MDDSZ funds the active employment policy programmes.

The Pension and Invalidation Insurance Institute (Institute) bears the costs of adaptation of premises and working implements when these are needed for occupational rehabilitation. The Institute may, in part or in whole, bear the costs of the adaptation when it is needed for the employment or reassignment of a person with a disability to another job. The Institute may earmark a part of the invalidity **insurance funds** for the promotion of employment of unemployed disabled workers. The costs of occupational rehabilitation are to be borne by the Institute.

Obstacles, barriers or conflicts limiting the effectiveness of these schemes

The Eurofound study (Wynne et al., 2006) on employment guidance and counselling services for people with disabilities shows that the following elements were least available:

- vocational assessments;
- occupational rehabilitation;
- pre-vocational training;
- job coaching.

Methods used to evaluate the efficiency and effectiveness of these schemes to enable workers with MSDs to return to work

Under the Pension and Invalidation Insurance Act of 1999, at least every six months, the insured person and the provider of occupational rehabilitation are obliged to report to the Institute on the implementation and progress of occupational rehabilitation.

The Ministry of Labour, Family and Social Affairs monitors the Active Employment Policy Programmes, evaluating their finances, content, suitability and effectiveness.

SWEDEN



3.17.

Overview

From the limited information that could be found within the scope of the project, it appears that there are many sources of advice on rehabilitation in Sweden. However, it is not clear whether there is a special focus on musculoskeletal disorders.

Employers are responsible for organising and managing job adaptation and rehabilitation for employees affected by work-related health problems.

Employers are responsible for organising and managing job adaptation and rehabilitation for employees.



Authorities and legislation

Legislation concerning rehabilitation of workers

Under the **Swedish Work Environment Act**, the employer has to ensure that there is an organised scheme of job adaptation and rehabilitation for the discharge of the duties incumbent on him under this Act and under the National Insurance Act.

The Swedish provisions on **Job Adaptation and Rehabilitation** (AFS 1994: 1) reinforce the fact that the employer is responsible for organising and managing job adaptation and rehabilitation for employees. This is to facilitate a return to work and resumption of duties for those affected by illness or disability and any associated impairment of work ability.

The **National Insurance Act** grants compensation for sick-listed people and makes possible work tests and work injury insurance for rehabilitation measures.

Authorities responsible for facilitating and monitoring policies on worker rehabilitation

These include:

- the employer;
- the Swedish Work Environment Authority (SWEA) ⁽³⁹⁾;
- the Swedish Social Insurance Administration;
- the Swedish Social Insurance Agency ⁽⁴⁰⁾.

SWEA co-operates with the Social Insurance Office with a view to identifying employers defaulting on their duties regarding job modification, and rehabilitation is based on uniform action plans.

The Employment Service also has resources to arrange work for people with disabilities, as has "Samhall", a state-owned Swedish company assigned to provide meaningful work that furthers the personal development of people with disabilities.

Guidelines and recommendations

Institutions issuing advice, guidelines and recommendations on rehabilitation of workers

These include:

- the Swedish Work Environment Authority;
- the Swedish Social Insurance Administration — a guide regarding the rehabilitation of workers can be found on their website;
- AFA Insurance, which provides workers with extra security by supplementing statutory insurance cover;
- Alecta, which deals with occupational, including disability, pensions;
- Prevent ⁽⁴¹⁾ — a provider of knowledge and training in the field of health and safety;
- the Occupational Health Service ⁽⁴²⁾;

⁽³⁹⁾ <http://www.av.se/inenglish/index.aspx>

⁽⁴⁰⁾ <http://www.forsakringskassan.se/sprak/eng/>

⁽⁴¹⁾ http://www.prevent.se/in_english/default.asp

⁽⁴²⁾ <http://www.foretagshalsovard.se/>



- employees' organisations, such as the Swedish Trade Union Confederation (LO) and TCO;
- employers' organisations, such as the Confederation of Swedish Enterprise and Almega.

Several other organisations and institutions also issue advice, guidelines and recommendations on the rehabilitation of workers.

Providers of rehabilitation services for return-to-work schemes

The employer should organise rehabilitation in co-operation with the employee, the Swedish Social Insurance Agency and other relevant authorities. The employer can get support from the Occupational Health Services, which are independent expert resources in rehabilitation and which often provide programmes for rehabilitation.

Funding of rehabilitation costs

The employer is responsible for funding rehabilitation costs.

UNITED KINGDOM



3.18.

Overview

The main elements of the UK system for ill or disabled employees include a legal system that underpins health and safety in the workplace, income continuation for long-term sickness absence and protection against discrimination for the disabled. However, despite the employment legislation, benefits system and a range of rehabilitative support available, there is no single service that has core responsibility for helping the individual return to work after long-term sickness absence (Stratford et al., 2005). The UK still has high levels of long-term sickness absence and the high percentage of people who then never return to work and go on to incapacity benefit is seen as a major area of concern in the UK (Wynne & McAnaney, 2004). Whilst the policies for unemployed disabled people getting back into work are well established, the process of returning sick or injured employees to work is not so well established and work in this area is ongoing.

Whilst the policies for unemployed disabled people getting back into work are well established, the process of returning sick or injured employees to work is not so well established.

Authorities and legislation

Legislation concerning rehabilitation of workers

There is no law in the UK that requires employers to rehabilitate employees who are off work sick. However, the legal requirements listed below may apply in some circumstances. UK legislation is available from the Office of Public Sector Information (OPSI), with all legislation from 1987 and some earlier Acts on their website ⁽⁴³⁾.

⁽⁴³⁾ <http://www.opsi.gov.uk/>



Under the **Disability Discrimination Act 1995 (DDA)**, it is unlawful to discriminate against disabled persons in connection with employment and there is a requirement on employers to accommodate employees with disabilities. The employer has to make 'reasonable adjustments' for a disabled person where arrangements made by the employer or physical features of the employer's premises place the disabled person at a substantial disadvantage. Enforcement procedures involve recourse to an industrial tribunal. However, the practicability and financial costs can be taken into consideration when determining what is a reasonable adjustment.

The **Disability Discrimination Act 1995 (Amendment) Regulations 2003** implemented the disability aspects of the EC Employment Directive (2000/78/EC). It ended the exemption of small employers from the scope of the DDA and brought within it some previously excluded occupations, such as the police, fire-fighters, prison officers and business partners. The Armed Forces are still exempt. Disability-related discrimination is added to the types of discrimination covered by the act.

Under the **Health and Safety at Work etc. Act 1974**, (HSAW Act) employers are required to protect their employees after they return to work if they have become more vulnerable to risk because of illness, injury or disability.

Employers considering taking disciplinary action or dismissing employees for ill health reasons have responsibilities under the **Employment Rights Act 1996** to adopt fair procedures before dismissing employees on grounds of sickness absence.

Under the **Employment Act 2002 (Dispute Resolution) Regulations 2004** employers are required to adopt statutory minimum dismissal, disciplinary and grievance procedures.

Authorities responsible for facilitating and monitoring policies on worker rehabilitation

The **Department of Work and Pensions (DWP)** ⁽⁴⁴⁾ is responsible for delivering the Government's welfare reform agenda.

The **Disability Rights Commission (DRC)** was established by the Disability Rights Commission Act 1999 with duties to work to eliminate discrimination against disabled people, to promote equal opportunities for them, to encourage good practice in their treatment and to advise the government on the working of disability legislation.

Guidelines and recommendations

Institutions issuing advice, guidelines and recommendations on rehabilitation of workers

The **DRC** issued a **Code of Practice on Employment and Occupation** that explains how disabled people are protected from discrimination if they are in employment, seeking employment or involved in a range of occupations (DRC, 2004).

The **Health and Safety Commission (HSC)** and **Health and Safety Executive (HSE)** ⁽⁴⁵⁾ were set up under the 1974 HSAW Act. HSE guidelines on **Managing Sickness Absence and Return to Work** include guidance on MSD return to work. It suggests that employers work with the employee and labour representatives to prevent illness,

⁽⁴⁴⁾ <http://www.dwp.gov.uk/>

⁽⁴⁵⁾ <http://www.hse.gov.uk/>



injury and disability leading to prolonged sickness absence and job loss. It describes six steps to do this:

- identify measures to improve worker health and prevent it being made worse by work;
- develop workplace plans and policies on sickness absence management;
- keep in touch with workers on sick leave;
- plan adjustments that enable the worker to return to work;
- support sick workers to help them return to work;
- promote understanding of health conditions and disability in the workplace.

HSE has funded research into the costs and benefits of active case management and rehabilitation for musculoskeletal disorders and a best practice model has been produced for use by UK organisations. The guidance recommends early access to appropriate advice, remaining at work or returning early, and the employer staying in touch with the individual during sickness absence (Hanson et al., 2006).

Job Centre Plus offices have been set up by the DWP around the country to help people to find work and to claim benefits. They publish general guidance on the services they offer to people with illness or disability who are looking for work or who fear that they might lose their jobs because of their condition or disability⁽⁴⁶⁾.

The **Trades Union Congress** (TUC)⁽⁴⁷⁾ represents six and a half million workers in the UK. Its approach is that employers should have effective occupational health strategies in place, and that return-to-work plans should be developed for any employee who is sick, injured or disabled. These could include rehabilitation, job redesign and flexible working. In addition, the 'Pathways to Work' programme should be used as a gateway to new opportunities for individuals to access work or training.

Employer organisations such as the **Engineering Employer's Federation** (EEF), produce guidance for their members on rehabilitation. The EEF (2004) has published a practical guide '**Fit for Work** — a complete guide to managing sickness absence and rehabilitation' to help firms maximise staff attendance, reduce litigation and better manage a healthy return to work for staff on sick leave for more than four weeks.

On behalf of the NHS Plus project, the **Faculty of Occupational Medicine** has produced evidence-based guidelines (Carter & Birrell, 2000; Waddell & Burton, 2000) on low back pain at work. These are aimed at health professionals undertaking occupational health management of low back pain, and they focus on appropriate interventions.

Action plans, initiatives and programmes

Current action plans, initiatives and programmes

Building Capacity for Work: A UK Framework for Vocational Rehabilitation (DWP, 2004). DWP is using information about best practice, research and available capacity to develop a strategy for occupational rehabilitation through a broadly representative steering group. While there are well-developed strategies to help people not in employment, the work to help people with health conditions or impairments to retain employment is only in its infancy. Additional research on occupational rehabilitation has been commissioned under this framework.

⁽⁴⁶⁾ <http://www.jobcentreplus.gov.uk/>

⁽⁴⁷⁾ <http://www.tuc.org.uk/>



Improving the Life Chances of Disabled People (Prime Minister's Strategy Unit, 2005). This unit recommended that by 2008 the DWP and Department of Health (DoH) should develop and launch arrangements for provision of occupational rehabilitation that should involve:

- building a firm evidence base for occupational rehabilitation;
- building capacity in occupational health services in both public and private sectors;
- securing greater health service focus on work and employment;
- restructuring rehabilitation services, roles and deployment of rehabilitation professionals;
- considering how far employers and others can be expected to bear the costs and the extent to which the taxpayer should bear the costs.

HSC's Strategy for Workplace Health and Safety in Great Britain to 2010 builds on the **Revitalising Health and Safety (RHS)** and **Securing Health Together (SH2)** ten-year strategies launched in 2000. RHS sets out how the UK Government and the HSC will work together to improve health and safety at work, with the aim of reducing the impact of health and safety failures by 30% over ten years. SH2 is an occupational health strategy which is a vision to tackle the high levels of work-related ill-health and to reduce the personal suffering, family hardship and costs to individuals, employers and society that are involved. The 2010 strategy includes a commitment for HSE to work with the DWP to strengthen the role of health and safety in getting people back to work through greater emphasis on rehabilitation.

The **Public Service — Government Setting an Example** is a programme set up by the HSC to improve health and safety management in the public sector by engaging central government, local government and public services in reducing the number of working days lost, by helping individuals return to work more quickly.

The **NHS Plus** project involves a network of more than 100 National Health Service (NHS) occupational health departments that provide support on a commercial basis to small/medium-sized organisations. The NHS Plus website ⁽⁴⁸⁾ gives guidance to employers on common occupational health problems and produces evidence-based guidelines to improve the quality and delivery of occupational health care.

Pathways to Work is a pilot scheme run by Job Centre Plus offices in some areas of the UK. It has been developed to provide support and help for people claiming Incapacity Benefit (IB) to return to work. The scheme offers work-focused interviews with a personal adviser to identify an individual's work goals and the barriers to achieving them and, then to provide support in overcoming the barriers.

One part of Pathways to Work is the **Condition Management Programme (CMP)**, delivered in partnership with the NHS and designed to help people on IB back into work. It offers support for the three most common conditions among IB claimants: musculoskeletal, cardiovascular and moderate mental health problems. Using cognitive-behavioural therapy, CMP practitioners support clients through a 4-14 week programme enabling them to better understand and manage their condition, with a particular focus on building their confidence about returning to work.

Return-to-work Credit (RTWC) is an earnings supplement available to people who have been on incapacity benefit for at least 13 weeks and who return to paid work of at least 16 hours per week and earn less than £15,000 (around EUR22,000) per annum. It is payable for a maximum of 52 weeks. The aim is to provide clearer returns from working and to ensure a firm transition back to employment.

⁽⁴⁸⁾ <http://www.nhsplus.nhs.uk/>



The **New Deal for the Disabled** is a voluntary programme delivered through Job Centre Plus. It is aimed at offering advice and support for disabled people who want to get a job, by accessing a network of approved Job Brokers.

Access to Work is an established scheme offered by Job Centre Plus. It offers employers advice on overcoming any difficulties associated with recruiting or employing a disabled person and a grant towards additional costs such as the use of an interpreter or support worker, purchasing assistive equipment, adapting premises or equipment, or transport costs. The grant can cover 100% of the additional costs for a newly employed disabled person or 80% of costs over £300 (around EUR442) for an existing employee.

Providers of rehabilitation services for return-to-work schemes

The NHS provides general healthcare and rehabilitation care to the population free at the point of delivery. Private medical health care is available and some companies provide health insurance for their employees. NHS Plus provides rehabilitation services on a commercial basis to companies. Larger employers in the UK often buy rehabilitation services from private occupational health providers or employ their own in-house occupational health professionals. Research (Hanson et al., 2006) indicates that only 3% of small and medium companies buy-in rehabilitation services.

Funding of rehabilitation costs

Employers are required to buy **Employers' Liability Compulsory Insurance (ELCI)** under the **Employers' Liability (Compulsory Insurance) Act 1969** to cover claims from their employees for compensation for injuries or ill health caused by their work. These insurance premiums have increased substantially in recent years and funding ELCI has become a problem for some small businesses (DWP, 2003).

Rehabilitation provision through the NHS is funded by general taxation. Employers contract in or provide in-house occupational health provision. They may pay privately for medical rehabilitative treatment, e.g. physiotherapy, or pay for private health insurance for their employees, who can then access rehabilitation from their private health providers.

The Access to Work scheme provides grants towards equipment and adaptations.

Obstacles, barriers or conflicts limiting the effectiveness of these schemes

Delays in processing compensation claims while fault is established can delay the offering of early rehabilitation. While employers' liability insurers would like to offer no-fault rehabilitation, they need to be confident that this will have sufficient impact on the frequency and size of claims to offset the cost of providing rehabilitation more widely.

A report on job retention and occupational rehabilitation (James et al., 2003) suggests that the following factors can hinder the nature and impact of the rehabilitation process:

- the availability of resources and specialist expertise, especially for smaller employers;
- the surrounding legal framework;
- long NHS treatment waiting lists;
- poor communication between workplace personnel and outside medical professionals;
- lack of case management support.



Most general practitioners do not consider work issues or become involved in return-to-work plans, as they receive little occupational health training, and occupational health services are not readily available to provide the occupational rehabilitation required (Prime Minister's Strategy Unit, 2005).

Methods used to evaluate the efficiency and effectiveness of schemes to enable workers with MSDs to return to work

Statistics on sickness absence and incapacity benefit are monitored. The current practice in the UK is for government initiatives to be evaluated against specific numerical targets.

3.19. CONCLUSIONS

International conventions such as the Convention on the Rights of Persons with Disabilities, Europe-wide commitments such as the Social Charter and EU strategies such as the European Employment Strategy all encourage governments to create national policies to facilitate the return to work of people suffering from disabilities. A special focus on rehabilitation and reintegration of workers is part of the new Community strategy 2007-2012 on health and safety at work. This objective is further reinforced by the Resolution of the Council of the European Union. While musculoskeletal disorders tend not to be specifically mentioned in these documents, they must be seen as creating overarching frameworks that encourage return-to-work policies for people suffering from MSDs.

In the Bismarckian social health insurance systems that exist in many European states (Austria, Belgium, France, Germany, the Netherlands, Switzerland) (Busse, 2004), there is a strict separation between the world of work and the world of social insurance. Either a person is at work and occupational health care workers look after his health, or he is unable to work and social insurance authorities evaluate his condition. The logic behind this separation in so-called 'dual systems' is not compatible with integrated counselling and assistance for the worker with a health problem.

In countries with adversarial legal systems, employers may be reluctant to reintegrate an employee for fear of aggravating a musculoskeletal condition. Similarly, employees may be reluctant to return to work in case it reduces their personal injury compensation.

The objectives of occupational rehabilitation in an ideal system are the restoring or improving of health and integration / reintegration of the individual into the workplace and society. What is counted as rehabilitation varies between countries but in the most comprehensive systems, it includes medical, occupational and social rehabilitation.

The financial support and services available to individuals at risk of unemployment because of a health condition vary between countries. Support for employers, such as funding for work adaptations and improving workplace conditions, is also available in some states.



Traditionally, rehabilitation systems have tended to focus on people with disabilities so severe that they are unable to enter the workforce without special help. Many countries also have systems to aid individuals who have become disabled through war or other traumatic injury. However, fewer countries have systems specifically designed to aid the rehabilitation of individuals suffering from musculoskeletal disorders who have ceased work or are in danger of ceasing work because of these conditions.

Providing help only to the severely disabled will tend to exclude individuals with less severe MSDs who could return to work with simple adjustments or help. Due to the high economic and social costs associated with disability from musculoskeletal disorders, rehabilitation systems are being modified in many countries (e.g. the Netherlands) to have an increased emphasis on early recognition of problems and avoidance of long-term incapacity for work, including returning people with MSDs to work as quickly as possible. These systems can involve financial incentives and pressures to encourage employers to rehabilitate injured workers. There is still a need for the scientific basis of early return-to-work policies to be strengthened.

Examples of Member States’ actions in reintegrating workers with MSDs

Good practice examples	
Policies	<p>Focus on restoration of a person’s health and capacity to work — rehabilitation according to the principle ‘rehabilitation, rather than pension’ (AT; NL)</p> <p>Trend to transfer obligations on the participation of people with impairments in work from state and / or social insurance to employers (DE; NL; SE)</p> <p>Specific initiatives to reduce the impact of particular work-related MSDs (BE)</p>
Incentives	<p>Employer is required to pay employee a wage during his sickness (including long-term) — financial incentive for employer to facilitate employee’s early return to work through occupational rehabilitation (NL)</p> <p>Financial support to employer by covering the costs of a fixed-term trial employment of an injured worker or costs of technical workplace adaptation (DE; UK; IE)</p> <p>Stimulate vocational reintegration of employee by maintaining their income (benefits) or providing earnings supplement during early return to work (BE; UK; NL)</p>
Service providers	<p>Comprehensive care including medical, occupational and social rehabilitation (AT)</p> <p>Multidisciplinary approach - enhanced collaboration between treating physician, occupational physician and medical advisor of insurance fund (BE)</p> <p>Back-to-work measures (e.g. lighter duties, retraining and transfer to alternative tasks, job coaching) are formulated through the cooperation of all parties involved — insurer, occupational physician, employee and employer (BE)</p> <p>Condition Management Programme supporting persons with MSDs in managing their condition and returning to work (UK)</p> <p>Online information system supporting vocational (re)integration (DE)</p>
Workplace	<p>Optimising employment policies for employees with acquired disabilities or longstanding health problems (including MSDs), for example by introducing Disability Management (BE; DE)</p> <p>Employers as ‘early warning system’ facilitating early recognition and avoidance of long-term incapacity at work (DE)</p> <p>Adapting working conditions and work organisation to fit employees with MSDs (e.g. through part-time work, flexible working) (BE)</p>



Examples of identified problems	
Policies	Return-to-work services do not cover all workers with MSDs (IT, SK) Separation between the world of work and the world of social insurance prevents integrated counselling and assistance for the worker with a health problem (AT, BE, FR)
Lack of incentives	Fault-based system — discourages employers from reintegrating employee for fear of aggravating the condition (IE) Employees are reluctant to work in case it reduces their personal injuries compensation (IE)
Service providers	Lack of co-ordination between involved parties (FI) Delay of early rehabilitation due to long waiting lists or administrative burden (AT; UK)

The expansion of the European Union in recent years has resulted in the new Member States adapting their policies and programmes to the norms of the Union. This process is further advanced in some countries than in others.

3.20. REFERENCES

Adamakis I, Athanasios I, Ikinallas T, Tsaraklis Z, Christodoulou A. (2005) 'Αξιολόγηση της νομοθεσίας για την υγιειν και ασφάλιση της εργασίας στην Ελλάδα' ('Evaluation of Greek legislation on health and safety at work') *Ενημερωση* (Briefing – The monthly magazine of the Institute of Work of the National Workers' Union Of Greece) 2005 (April); 116 Available in Greek at: <http://www.inegsee.gr/enimerwsi-116-doc2.htm>

Anema JR, van der Giezen AM, Buijs PC, van Mechelen W. 'Ineffective disability management by doctors is an obstacle for return to work: a cohort study on low back pain patients sick listed for 3-4 months', *Occup Environ Med* 2002; 59(11): 729-733.

Bloch FS, Prins R. (editors) *Who returns to work and why? A six country study on work incapacity and reintegration*, Somerset, NJ, Transaction Publishers, 2001.

Brenninkmeijer V, Raes A, Houtman I. 'Review and inventory of national systems and policy: The Netherlands', in: *Impact of changing social structures on stress and quality of life: individual and social perspectives*, Surrey, Surrey University, 2003. Available at: http://www.surrey.ac.uk/Psychology/stress-impact/publications/wp2/wp2_reportNetherland.pdf

Buijs P, van Amstel R, van Dijk F. 'Dutch occupational physicians and general practitioners wish to improve co-operation', *Occup Environ Med* 1999; 56(10): 709-713.

Busse R. *Experience of Western European Social Health Insurance Countries: Reflections for Slovakia*, Technische Universitaet Berlin, 2004. Available in English at: http://www.mig.tu-berlin.de/files/2004.lectures/2004.06.03_Bratislava2_RB.pdf

Carter JT, Birrell LN (editors). *Occupational health guidelines for the management of low back pain at work – principal recommendations*, London, Faculty of Occupational Medicine, 2000.



Council of Europe, *European Social Charter (revised)*, Strasbourg, 1996. Available in English at: <http://conventions.coe.int/Treaty/en/Treaties/Html/163.htm>

Council of Europe, *European Social Charter (revised) Status as of: 26/10/2005*, Strasbourg, 1996. Available in English at:
<http://conventions.coe.int/Treaty/Commun/ChercheSig.asp?NT=163&CM=7&DF=26/10/2005&CL=ENG>

Council of the European Union, 'Council Decision of 12 July 2005 on Guidelines for the employment policies of the Member States (2005/600/EC)', *Official Journal of the European Union*, Volume 48, L 205, 5 August 2005, Luxembourg, Office for Official Publications of the European Communities, 2005, pp. 21-27. Available in English at:
http://eur-lex.europa.eu/LexUriServ/site/en/oj/2005/l_205/l_20520050806en00210027.pdf

Council of the European Union, *Council Resolution on a new Community Strategy on health and safety at work (2007-2012)*, Brussels, 2007. Available in English at:
http://eur-lex.europa.eu/LexUriServ/site/en/oj/2007/c_145/c_14520070630en00010004.pdf

De Jong P, van den Hauten M, Snijders R. *The approach to non-specific sickness in five European countries* Ape rapport nr 231, The Hague, Aarts De Jong Wilms Goudriaan Public Economics bv, 2006. Available in Dutch at <http://www.ape.nl>

Department of Justice, Equality and Law Reform. *Guide to the Disability Act 2005*, Dublin, Department of Justice, Equality and Law Reform, 2006. Available in English at: http://www.justice.ie/en/JELR/Pages/Guide_to_Disability_Act_2005

Department of Labour, *Services for the Disabled – General Information*, Nicosia, Cyprus, Ministry of Labour and Social Insurance of the Republic of Cyprus, 2003. Available in English at:
http://www.mlsi.gov.cy/mlsi/dl/dl.nsf/dmlgeneral_en/dmlgeneral_en?OpenDocument

Department for Work and Pensions, *Review of Employers' Liability Compulsory Insurance: Second Stage Report*, London, DWP, 2003. Available at:
http://www.dwp.gov.uk/publications/dwp/2003/elci/dwp_employers_review04-12-2003.pdf

Department for Work and Pensions, *Building Capacity for Work: A UK Framework for Vocational Rehabilitation*, London, DWP, 2004. Available at:
<http://www.dwp.gov.uk/publications/vrframework/>

Disability Rights Commission, *Code of Practice – Employment and Occupation*, London, DRC, 2004. Available at:
http://www.drc.gov.uk/library/publications/employment/code_of_practice_-_employment.aspx

Donceel P, Mortelmans K. *Problems in cooperation between social insurance and occupational health care in Belgium*, Workshop of the EUPHA Section on Social Security and Health, Graz, Austria, 10-12 November 2005. Abstract available in English at: http://www.eupha.org/html/documents/ssh/2005_Workshop.doc

Employment and Training Corporation of Malta, *National Action Plan for Employment 2004*, Malta, 2004. Available at:
http://ec.europa.eu/employment_social/employment_strategy/nap_2004/nap2004_mt_en.pdf

Engineering Employer's Federation, *Fit for Work – Managing Sickness Absence and Rehabilitation*, London, EEF, 2004. Available through <http://www.eef.org.uk/UK/preview/guidance/allmembers/publication30032004.htm>

European Commission, *Improving quality and productivity at work: Community strategy 2007-2012 on health and safety at work*, Brussels, European Commission, 2007. Available in English at: http://eur-lex.europa.eu/LexUriServ/site/en/com/2007/com2007_0062en01.pdf

European Commission, *Social protection of people with disabilities – Italy*, MISSOC Info 01/2003, Brussels, European Commission Directorate General for Employment, Social Affairs and Equal Opportunities, 2003. Available in English at: http://ec.europa.eu/employment_social/missoc/2003/012003/it_en.pdf

European Commission, *The European Employment Strategy – More and better jobs for all*, Brussels, European Commission, 2006. Available in English at: http://ec.europa.eu/employment_social/publications/2006/ke7406693_en.pdf

Faller H. 'Patient education: concepts and evaluation', In: VDR (ed.), *Medical Rehabilitation in Germany – Experiences and Development*, Verband deutscher Rentenversicherungsträger, DRV-Schriften: Band 38, Bad Homburg: WDV Wirtschaftsdienst, Oktober 2002.

FÁS (Training and Employment Authority), *Building on our Vision: FÁS Statement of Strategy 2006-2009*, Dublin, FÁS, 2006. Available in English at: http://www.fas.ie/en/pubdocs/strategy/SOS_ENG.pdf

Federal Ministry of Work and Social Affairs, *Social Code Book IX*, Berlin, 2001. English summary available at: <http://www.bmas.bund.de/Englisch/Navigation/Participation-of-disabled-persons/social-code-book-ix.html>

Hanson MA, Burton, K, Kendall NAS, Lancaster RJ, Pilkington A. *The costs and benefits of active case management and rehabilitation for musculoskeletal disorders*, Research Report 493, Sudbury, Suffolk, HSE Books, 2006. Available at: <http://www.hse.gov.uk/research/rrpdf/rr493.pdf>

Health and Safety Executive. *Employers' Liability (Compulsory Insurance) Act 1969 – A guide for employees and their representatives*, Sudbury, Suffolk, HSE Books, 2000. Available at: <http://www.hse.gov.uk/pubns/hse39.pdf>

Huppe A, Raspe H. 'Efficacy of inpatient rehabilitation for chronic back pain in Germany: a systematic review 1980-2001', *Rehabilitation* (Stuttg), 2003: 143-154.

James P, Cunningham I, Dibben P. *Job retention and vocational rehabilitation: The development and evaluation of a conceptual framework*, Research Report 106, Sudbury, Suffolk, HSE Books, 2003. Available at: <http://www.hse.gov.uk/research/rrpdf/rr106.pdf>

Labropoulou K, Soumeli E. *Workers with disabilities: law, bargaining and the social partners*, Dublin, European Foundation for the Improvement of Living and Working Conditions, 2001. Available in English at: <http://www.eiro.eurofound.eu.int/2001/02/study/tn0102201s.html>

Lang G, Reischl B, Hauser C, Martinetz L, Reiterer B, Rössler B. *Impact of Changing Social Structures on Stress and Quality of Life: Individual and Social perspectives. Review and Inventory of National Systems and Policy: Austria*, Vienna, Forschungsinstitut des Wiener Roten Kreuzes (FRK), 2003. Available in English at:



http://www.surrey.ac.uk/Psychology/stress-impact/publications/wp2/wp2_reportAustria.pdf

Leech C. *Preventing Chronic Disability from Low Back Pain*, Dublin, Department of Social and Family Affairs, 2004. Available in English at:
<http://www.welfare.ie/publications/renaissance.pdf>

Mazina D, Paulus D, Mairiaux, Ph. 'Chronic low back pain, Part III Chronic low back pain and occupational health in Belgium', *KCE reports* vol. 48, Federaal Kenniscentrum voor gezondheidszorg 2006. Available in English at:
http://kce.fgov.be/index_nl.aspx?ID=0&SGREF=5260&CREF=8650

MDDSZ, *Pension And Invalidity Insurance Act (ZPIZ-(1))*, Ljubljana, Slovenia, Ministry of Labour, Family and Social Affairs, 2003. Available in English at:
http://www.mddsz.gov.si/fileadmin/mddsz.gov.si/pageuploads/dokumenti__pdf/zpiz1_en.pdf

MDDSZ, *Active employment policy programmes for 2003*, Ljubljana, Slovenia, Ministry of Labour, Family and Social Affairs, 2003. Available in English at:
http://www.mddsz.gov.si/fileadmin/mddsz.gov.si/pageuploads/dokumenti__pdf/apz2003_an.pdf

Ministry of Labour and Social Insurance of the Republic of Cyprus, *Νομος ου ρονοει Για Τα Ατομα με Αναηριες N. 127(I) 2000 (Law providing for Persons with Disabilities No L127 (I) 2000)*, Ά.Ά. θαñ É(É) Άñ. 3420, 21.7.2000, Lefkosia Cyprus, 2000, pp. 1385-1397. Available in Greek at:
[http://www.mlsi.gov.cy/mlsi/dl/dl.nsf/All/642D565D68F299FBC2256E7500246654/\\$file/1.%20127\(I\)%202000.pdf?OpenElement](http://www.mlsi.gov.cy/mlsi/dl/dl.nsf/All/642D565D68F299FBC2256E7500246654/$file/1.%20127(I)%202000.pdf?OpenElement)

Ministry of Labour and Social Insurance of the Republic of Cyprus, *National Action Plan for Employment 2004-2006*, Lefkosia, Cyprus, 2004. Available in English at:
http://ec.europa.eu/employment_social/employment_strategy/nap_2004/nap2004_cy_en.pdf

NVAB (Dutch Association of Occupational Medicine), *Handelen van de bedrijfsarts bij werknemers met lage-rugklachten. Richtlijnen voor Bedrijfsartsen* (Dutch guideline for the management by occupational physicians of employees with low back pain), Eindhoven, NVAB, April 1999. Available in Dutch at:
http://nvab.artsennet.nl/uri/?uri=AMGATE_6059_340_TICH_R1384801110088571

Occupational Health and Safety Authority, *Repetitive Strain Injuries*, Malta, 2005. Press release available in English at: <http://www.ohsa.org.mt/showpage.asp?pageid=109>

Prime Minister's Strategy Unit, *Improving the life chances of disabled people*, London, Cabinet Office, 2005. Available at:
http://www.cabinetoffice.gov.uk/strategy/downloads/work_areas/disability/disability_report/pdf/disability.pdf

Schmidt CO, Kohlmann T. 'What do we know about the symptoms of back pain? Epidemiological results on prevalence, incidence, progression and risk factors', *Z Orthop Ihre Grenzgeb* 2005; 143(3):292-8.

STECR, *STECR Werkwijzer. Lage rugklachten en arbeidsomstandigheden* (STECR workindicator. Low back pain and working conditions), 2004. Available in Dutch at:
<http://www.stecr.nl/download/lagerugklachten.pdf>

Stratford N, Taylor R, Legard R, Natarajan L, Purdon S, Shaw A. *The Job Retention and Rehabilitation Pilot: reflections on running a randomised controlled trial*, Research Report



No. 305, London, Department for Work and Pensions, 2005. Available at: <http://www.dwp.gov.uk/asd/asd5/rports2005-2006/rrep305.pdf>

United Nations, *Convention on the Rights of Persons with Disabilities*, 2007. Available in English at: <http://www.un.org/disabilities/convention/index.shtml>

Vilmos N (ed). Federal Ministry of Social Security, Generations and Consumer Protection, *Summary. Assistance To People With Disabilities In The Austrian Social System*, 3rd edition, Vienna, Austria, Federal Ministry of Social Security, Generations and Consumer Protection, 2005. Available in English at: <http://eu2006.bmsg.gv.at/cms/eu2006EN/attachments/4/6/2/CH0580/CMS1133946383574/summary.pdf>

Waddell G, Burton AK. *Occupational health guidelines for the management of low back pain at work – evidence review*, London, Faculty of Occupational Medicine, 2000.

Watson Wyatt Brans & Co, *The Dutch Employment and Income According to Capacity for Work Act (Wet werk en Inkomen naar arbeidsvermogen, or WIA)*, Amsterdam, Watson Wyatt Brans & Co, 2005. Available in English at: http://www.watsonwyatt.com/europe/netherlands/research/publicaties/pdf/WIA_en_pensioen_ENG.pdf

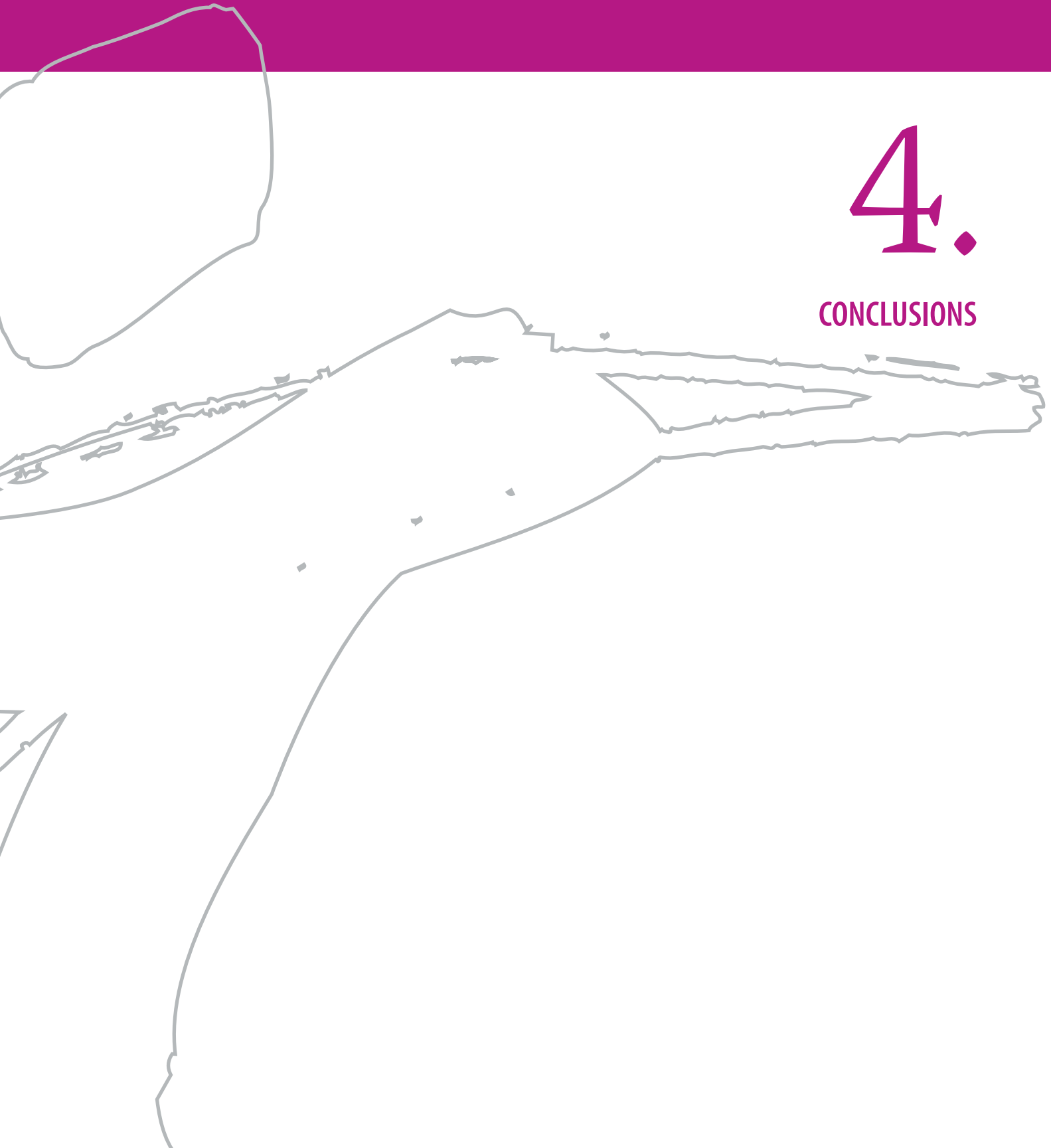
Wynne R, McAnaney D. European Foundation for the Improvement of Living and Working Conditions, *Employment and disability: back to work strategies*, Luxembourg: Office for Official Publications of the European Communities, 2004. Available in English at: <http://eurofound.europa.eu/pubdocs/2004/115/en/1/ef04115en.pdf>

Wynne R, McAnaney D, O’Kelly C, Fleming P. European Foundation for the Improvement of Living and Working Conditions, *Employment guidance services for people with disabilities*, Luxembourg: Office for Official Publications of the European Communities, 2006. Available in English at: <http://www.eurofound.eu.int/pubdocs/2006/33/en/1/ef0633en.pdf>



4.

CONCLUSIONS



Although there are considerable differences between countries, MSDs are still widespread in Europe. They are often recurrent and in some cases they lead to sickness absence and even long-term disability. In such cases the prognosis for return to work and complete recovery is poor. The high prevalence of MSDs among workers, together with their consequences for the individual and their economic costs, requires action in the workplace. Apart from actions aimed at the prevention of MSDs, others are needed to reduce long-term disability and to facilitate the rehabilitation and reintegration of workers who have experienced MSDs because of their work.

Actions aimed at rehabilitation and reintegration can take place at different levels. On the international, European and national level, legislation and funding could be used to stimulate worker rehabilitation and reintegration. Institutions such as health care providers, rehabilitation services, insurance funds, OHS centres, research institutes etc. could issue advice, guidelines and recommendations. Finally, employers or employers' organisations could take steps to facilitate rehabilitation and reintegration. In the first part of this report an account was given of a literature review, concerned with work-related interventions, aimed at the rehabilitation of workers with MSDs. In the second part an overview was provided of policy initiatives dealing with the retention, reintegration and rehabilitation of workers with MSDs.

Interventions in the workplace

A literature search has been carried out on work-related interventions aimed at the rehabilitation of workers with MSDs. Work-related interventions are different from clinical interventions, as the latter are usually aimed at pain reduction or the cure of the underlying pathology. Work-related interventions could also be aimed at the improvement of environmental and personal conditions in order to increase participation in work and society and to control limitations. As the focus in this report is on the rehabilitation of workers, the evaluation is limited to those interventions that could be beneficial for the return-to-work of patients with MSDs.

For **back pain**, clear evidence has been given that it is important for patients to stay active and return to ordinary activities as early as possible. A combination of optimal clinical management, a rehabilitation programme and organisational interventions is more effective than single elements alone. A multidisciplinary approach offers the most promising results, but the cost-effectiveness of these treatments needs to be examined. Temporarily modified work is an effective return-to-work intervention, if it is embedded in good occupational management. Some evidence from high and moderate quality studies supports the effectiveness of exercise therapy, back schools and behavioural treatment. Lumbar supports such as back belts and corsets are not effective.

It appears that several intervention programmes are effective for chronic back pain (lasting more than 12 weeks), whereas interventions for acute back pain (lasting less than 4 or 6 weeks) are seldom more effective than no treatment or usual care. Treatment at the sub-acute stage is probably the most effective, as it will prevent the transition to chronic back pain. It should be noted that the examined effects of the interventions are short- or intermediate-term. There is no evidence that any of these interventions has a long-term effect on pain and function.

Interventions for **upper limb pain** include technical and mechanical interventions in the workplace, psychosocial interventions, exercise therapy and multidisciplinary treatment. It can be concluded that the scientific evidence for successful interventions for upper limb pain is limited. Until such evidence is available, a multidisciplinary

Policy makers and employers should not be reluctant to carry out preventive actions because of a lack of 100% proof of interventions' effectiveness, since evidence criteria for workplace interventions might need to be optimised.



approach, containing a cognitive-behavioural component. Might be the most effective type of intervention.

No intervention strategies have been found for **lower limb pain** in the workplace. The results of studies concerning lower limb treatment in general indicate that exercise programmes might be effective for hip and knee problems.

Although many studies have been carried out, the evidence for the effectiveness of interventions is limited, in particular in relation to interventions aimed at upper limb symptoms. It has been suggested that criteria for assessing the quality of the studies and for evidence, used in scientific studies, are not fit for the complexity of workplace interventions. For example blinding and randomisation are often not feasible. Therefore, studies of successful interventions may not be included in a review, or are considered of low quality. This raises the question as to whether these types of interventions should be subjected to the same rigour as those used to evaluate medical treatment. **The evaluation of workplace interventions probably should adopt different criteria on which to base evidence classification.** These criteria are still lacking. Therefore, it is important that **policy makers and employers should not be reluctant to carry out preventive actions because of a lack of 100% proof.** Moreover, secondary and tertiary prevention should be supported by primary prevention in order to preclude the recurrence of MSD episodes.

Policy initiatives — at the international and European level

International conventions such as the Convention on the Rights of Persons with Disabilities, Europe-wide commitments such as the Social Charter and EU strategies such as the European Employment Strategy encourage governments to create national policies to facilitate the return to work of people suffering from disabilities. Though these policies concern persons with disabilities in general they may also have a beneficial impact on return-to-work among workers with health impairments. A special focus on rehabilitation and reintegration of workers is part of the new Community strategy 2007-2012 on health and safety at work. This objective is further reinforced by the Resolution of the Council of the European Union. While musculoskeletal disorders tend not to be specifically mentioned in these documents, they must be seen as creating overarching frameworks that encourage return-to-work policies for people suffering from MSDs.

Policy initiatives — on a national level

The legislation and policies on rehabilitation are still different in the European Member States. In some countries rehabilitation is very limited, while in other states it includes medical, occupational and social rehabilitation. Most countries have a system of financial support and services available to individuals at risk of unemployment because of a health condition. However, the amount of support and the kind of services differ largely. Although European initiatives encourage governments in this field and new Member States to adapt their policies and programmes to the norms of the Union, this process is further advanced in some countries than in others.

In many countries a so-called 'dual system' is operative. In this system there is a strict separation between the world of work and the world of social insurance. Either a person is at work and occupational health care workers look after his



health, or he is unable to work and social insurance authorities evaluate his condition. This system is not compatible with integrated counselling and help for workers with a health problem.

Some countries have adversarial legal systems. For example in some countries, in order to receive compensation, employees are required to take legal action against employers for work-related illness or injury. This discourages the employer from reintegrating an injured employee, or paying for treatment or rehabilitation, since this may imply an admission of liability, or for fear of aggravating a musculoskeletal condition. Similarly, employees may be reluctant to return to work in case it reduces their personal injury compensation.

Due to the high economic and social burden associated with disability from musculoskeletal disorders, rehabilitation systems are being modified in many countries to have an increased emphasis on early recognition of problems and avoidance of long-term incapacity for work, including provision of comprehensive care based on medical, occupational and social rehabilitation. Still there is a need for proper evaluation of these initiatives in most countries.

Different systems exist to stimulate initiatives among employers. One way is to let employers pay for the costs of sickness absence. This system offers a large financial incentive, meant to pressurise and encourage employers to rehabilitate injured workers. Another way is to support employers in their rehabilitation activities, by funding work adaptations and improvements of workplace conditions.



European Agency for Safety and Health at Work

Work-related musculoskeletal disorders: Back to work report

Luxembourg: Office for Official Publications of the European Communities

2007 — 100 pp. — 21 x 29.7 cm

ISBN 978-92-9191-160-8

Price (excluding VAT) in Luxembourg: EUR 25

How to obtain EU publications

Our priced publications are available from EU Bookshop (<http://bookshop.europa.eu/>), where you can place an order with the sales agent of your choice.

The Publications Office has a worldwide network of sales agents. You can obtain their contact details by sending a fax to (352) 29 29-42758.



In order to improve the working environment, as regards the protection of the safety and health of workers as provided for in the Treaty and successive Community strategies and action programmes concerning health and safety at the workplace, the aim of the Agency shall be to provide the Community bodies, the Member States, the social partners and those involved in the field with the technical, scientific and economic information of use in the field of safety and health at work.

European Agency for Safety and Health at Work

<http://osha.europa.eu>



European Agency
for Safety and Health
at Work

Gran Vía 33, E-48009 Bilbao
Tel.: (+34) 94 479 43 60
Fax: (+34) 94 479 43 83
E-mail: information@osha.europa.eu
Price (excluding VAT) in Luxembourg: EUR 25



Publications Office
Publications.europa.eu

ISBN 978-92-9191-160-8



9 789291 911608