

Issue 04

Future challenges in workers' compensation

A discussion paper by the Munich Re Centre of
Competence for Workers' Compensation



Münchener Rück
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The **Munich Re Group** operates worldwide, turning risk into value. In the financial year 2008, it achieved a profit of €1,528m on premium income of around €38bn. The Group operates in all lines of business, with around 44,000 employees at over 50 locations throughout the world and is characterised by particularly pronounced diversification, client focus and earnings stability. With premium income of around €22bn from reinsurance alone, it is one of the world's leading reinsurers.

About the Centre of Competence for Workers' Compensation

Acting on its keen awareness of the special role – and global importance – of workers' compensation insurance, the Munich Re Group established the Centre of Competence for Workers' Compensation in 1998. Since then, the highly specialised and dedicated team of experts has been monitoring and analysing developments in this complex type of social insurance on a worldwide scale. Today, the Centre of Competence is an internationally valued and respected source of advice and information regarding systems with state and/or private-sector involvement.

Dear Reader,

The Munich Re Centre of Competence for Workers' Compensation has been closely monitoring international developments in this extremely complex area of risk management for more than ten years. In addition, we have been listening to the views and experiences of diverse stakeholders from all over the world. One of the main conclusions we have reached as a result of our research and knowledge-gathering can be summed up as follows: the demands on workers' compensation are changing.

Due to its key role in society, workers' compensation is far too important to be put at risk. And the only way to guarantee that it remains fit for the future is through an open exchange of views among all involved parties. This is why we have compiled some thought-provoking information on future challenges. By no means comprehensive or conclusive, the brief overview in the following pages is designed to offer insights and foster discussion.

Regardless of your personal level of direct or indirect involvement in workers' compensation, your thoughts are important – and you can make a valuable contribution. We wish you interesting and informative reading.

With best regards,

Victor Schultheiss
Head of Centre of Competence
for Workers' Compensation



Executive summary

Workers' compensation at a crossroads

All over the world, workers' compensation systems face new challenges – with more looming on the horizon. The Munich Re Centre of Competence for Workers' Compensation has gathered information on a number of issues with possible repercussions for this important form of social insurance.

The main challenges are identified as follows (listed alphabetically): chronic diseases, climate change, demographic shift (greying workforce), legal conflict, migration, musculoskeletal disorders, obesity, psychological disorders, use and abuse of prescription drugs. Each of the factors – individually and/or in combination with others – could potentially put significant pressure on a workers' compensation system. For the sake of brevity and clarity, this paper looks at four examples that underscore the importance of closely monitoring these developments.

Climate

Global climate change is now widely accepted as scientific fact. Rising water levels are already rendering some coastal and island regions uninhabitable, triggering migration. Experts forecast an increase in the frequency and/or intensity of heat waves and droughts in southern regions and milder winters with more precipitation in northern geographies. The probable impacts on occupational disease include increased risk of heat-related disorders, respiratory disease due to pollens and cancers caused by ultraviolet radiation.

Demographics

Higher life expectancies and the increasing average age in most countries suggest that tomorrow's workforces will contain a bigger share of older employees. A greying future workforce will be more prone to accidents and diseases associated with ageing. In addition, more long-latency illnesses must be expected.

Drugs

More and more professionals use prescription drugs to boost performance. Taking any medication for a purpose other than that for which it has been approved is inherently risky, and many such stimulants and antidepressants have lists of known side effects, including addiction. Some amphetamine-based drugs, designed to treat attention-deficit hyperactivity disorder (ADHD), are already in use as cognitive enhancers in significant numbers. And a new generation of pharmaceuticals aimed at treating cognitive decline – with considerable potential as so-called neuroenhancers – is emerging. Workers who overestimate capabilities, become euphoric and lose sleep could represent a higher accident risk.

Obesity

Obesity, defined as a body mass index (BMI) of more than 30, is already considered a global epidemic – and it continues to increase. Excessive body fat is linked not only to a large number of common health problems, but also to occupational accidents and diseases. Significantly overweight employees have been shown to suffer more on-the-job accidents.

What this means for workers' compensation

These changes are real. Precisely how they will unfold and interact to compound one another is impossible to forecast. Very probable results include sharp increases in the complexity of attributing disorders to occupational causes as well as in the frequency of litigation. For this reason, risk carriers and policy-makers must be prepared to take steps to stabilise the delicate balance between the four basic components of social insurance – definitions, benefits, coverage, financing. The shifting risk landscape and what it means for the definition of events that trigger claims (triggers) and premiums must be closely monitored. All workers' compensation systems are well advised to subject current reserves – notably IBNR (incurred but not reported) and IBNER (incurred but not enough reserved) – to a stress test in order to determine whether they are sufficient to meet the challenges ahead. A very close look at the logic used to define premiums (loadings) might be useful. The categorical pricing approach used in many countries might not be valid in tomorrow's world. At the same time, it should be noted that the world's workers' compensation systems have overcome many obstacles over the past 125 years. Based on transparency, co-operation and dialogue, these future challenges can be mastered as well.



Workers' compensation insurance

A pillar of social and financial security

Since its inception in the late nineteenth century, workers' compensation insurance has developed into one of the most important cornerstones of social justice and welfare.

Its immediate effect was to largely free workers and their families of the often tortuous task of litigation against employers to gain compensation in the event of occupational disease or accident. But it was also welcomed by many companies, which had previously faced court cases with uncertain outcomes. Workers' compensation insurance required employees to forgo the right to sue for damages due to a covered claim. By providing a clear framework of covered risks and benefits in cash or in kind, workers' compensation has served as a pillar of financial security.

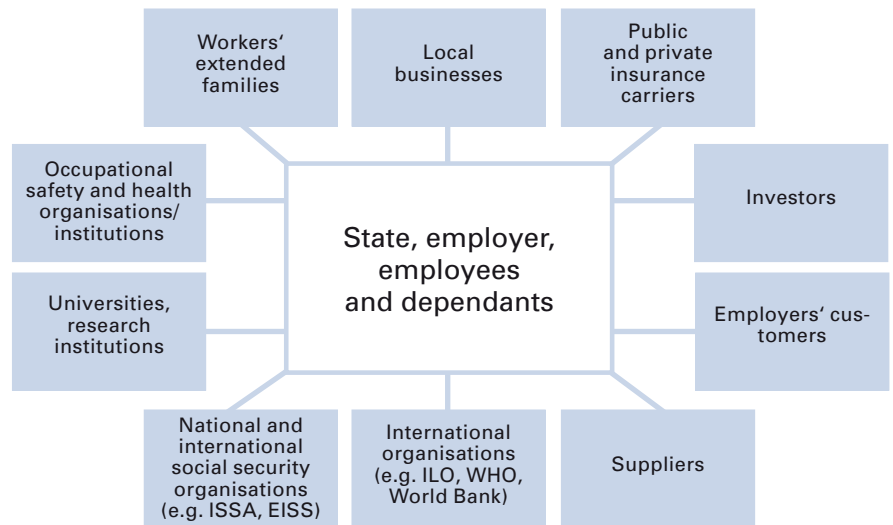
Today's systems vary widely, with many countries maintaining public monopolistic programmes while others include private participation. The solutions also differ in terms of which risks are recognised as occupational. The laws governing attribution of disease or accident to work-related causes are anything but uniform. Carpal tunnel syndrome, which affects the wrist and hand, causing symptoms including numbness and a tingling or burning sensation, is one example of a disorder that is categorically excluded in some countries and included in others – in some as an occupational accident while in others as an occupational disease. In other words, definitions are in fact a purely political matter.

Stakeholders throughout society

But as multifaceted as the approaches to workers' compensation insurance are, all markets share a number of characteristics. They all involve a complex matrix of stakeholders (see Figure 1, The stakeholder matrix): alongside the primarily affected parties – employer, employee and dependants, the state – the risks and benefits have direct or indirect bearing on many other elements. Customers and suppliers of employers, for example, would feel the consequences should a system fail to provide the necessary financial stability and planning security to keep a company solvent. Without insurance, entire families would be at risk of having to compromise their lifestyles should breadwinners fall ill, which would in turn impact the communities in

which they live. The resilience and effectiveness of a state's workers' compensation insurance system is a key factor in the viability of its government and institutions. Arguably, workers' compensation touches each and every member of society.

Figure 1: The stakeholder matrix



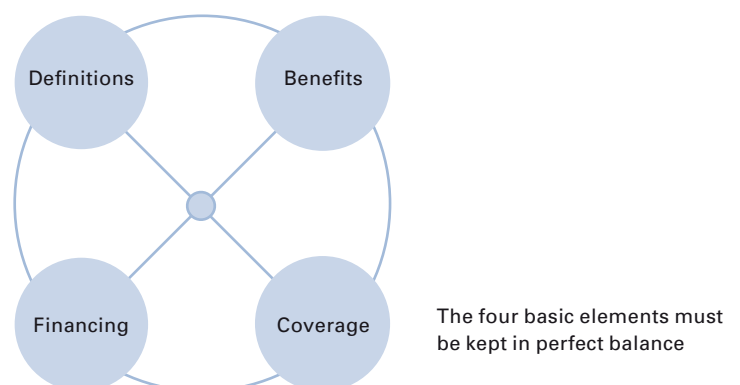
All systems have one thing in common: a complex matrix of stakeholders

A further aspect common to all solutions concerns the basic mechanisms with which they function. These can be divided into four highly interconnected components: definition of occupational accidents and diseases (what is covered?); benefits provided in the event of a covered risk (compensation in cash or in kind?); coverage (which groups are covered?); and financing (who pays how much and when?). These must be in balance at all times (see Figure 2, Social insurance in balance). As the four columns strongly interact with one another, any development in one area has consequences in others. A disproportionate burden can threaten the entire system.

Complex attribution

Against this backdrop, it is extremely important to closely monitor trends in workers' compensation insurance. Most experts agree that the foremost developments in past decades have been increases in hazards whose effects appear long after exposure (long-latency risks) as well as in diseases with multiple causes (multi-causality risks). These trends, coupled with changing working habits and new technologies in the workplace, have converged to make attribution more and more complex. In future, further increases in this complexity must be expected.

Figure 2: Social insurance in balance





Future challenges

Is today's system fit for tomorrow's working world?

When the world's first Workers' Compensation Act was passed in 1884, it was designed to address the needs of companies and their employees in a society that had been radically reshaped by the industrial revolution. It provided a level of financial security for workers in the event of occupational accidents and diseases, while at the same time largely protecting employers from lawsuits – up to then an employee's only recourse to secure compensation in such cases.

The occupational hazards in workplaces of the period were clearly defined. Today, the situation is quite different: although traditional risks like exposure to noise are still significant, there is a clear trend toward multi-causal and less tangible risks. These include, for instance, ergonomic and organisational occupational hazards, notably those related to stress. The Munich Research Centre of Competence for Workers' Compensation researches and maintains an ongoing dialogue on these factors with a broad spectrum of stakeholders. In order to establish a frame of reference for the definition and observation of globally relevant future challenges, the Centre of Competence has developed four key criteria for analysing developments:

Independent: Can it affect any workers' compensation system, independently of the way it operates (with or without competition, public or with private participation, etc.)?

International: Can it affect any workers' compensation system, regardless of the country or territory in which the system operates?

Important: Is the expected impact in terms of frequency and severity sufficient to warrant heightened awareness?

Identifiable: Is there any evidence indicating that it could potentially impact workers' compensation systems?

Based on these “4 Is”, nine future challenges have been defined. These issues, which have been the subject of heightened research and information-gathering efforts by the Centre of Competence over the past two years, are listed alphabetically below:

- Chronic diseases
- Climate change
- Demographic shift (greying workforce)
- Legal conflict
- Migration
- Musculoskeletal disorders
- Obesity
- Psychological disorders
- Use and abuse of prescription drugs

In March 2009, the Centre of Competence hosted its fourth Workers’ Compensation Symposium, focusing on future challenges. The gathering of international experts – including high-ranking representatives from research institutes and international organisations as well as decision-makers and researchers from various healthcare and insurance markets – confirmed the relevance of the nine global issues defined above.

The nine factors can be expected to impact workers’ compensation to varying degrees at different times. In some cases, with climate change for example, many potential effects can only be roughly estimated at this point. Interactions between the issues – such as how the increasing frequency of heat waves due to global climate change might affect the growing number of clinically obese workers in many countries – represent an additional major variable. Together, the nine challenges may well complicate the attribution process and lead to increased litigation.

To gain a better understanding of the current and emerging issues workers’ compensation systems will have to deal with in future, it is helpful to look at the most important challenges in more detail. Although all nine are significant, below we have outlined four examples. These details underscore the importance of heightened awareness.

Climate change

The future repercussions of global climate change on workers’ compensation are difficult to judge. However, there is widespread agreement that climatic zones will shift, with consequences for vegetation, agriculture and fauna. In addition, the melting of glaciers – which can already be observed – is expected to result in flooding of coastal regions. And experts forecast an increase in the frequency and/or intensity of heat waves and droughts in southern regions and milder winters with more precipitation in northern geographies. The probable impacts on human health and thus on occupational accidents and diseases – at least as aggravating factors – are manifold (see Figure 3, Global climate change and its impacts).

An aggregate 1°C increase in monthly mean temperature may increase total, respiratory and cardiovascular mortality by 1.4%, 10.4% and 1.6% respectively if the temperature exceeds the comfort range.

W.J.M. Martens, Health Impacts of Climate Change and Ozone Depletion: An Ecoepidemiologic Modeling Approach

Air pollution episodes are often linked to stationary or slowly migrating anti-cyclonic or high pressure systems, which reduce pollution dispersion and diffusion.

Schichtel and Husar, 2001; Rao et al., 2003

In 2000, excessive UVR exposure is believed to have caused about 60,000 premature deaths.

IPCC, Climate Change 2007

Rising sea levels affect around 19.2 million people. By 2010, the figure is expected to rise to about 50 million.

The United Nations University, Institute for Environment and Human Security

Hot weather

There is evidence linking extreme heat episodes with increased illness and mortality. The heat wave in France in August 2003 caused more than 14,800 deaths. In some areas, excess mortality rose to more than 100% in comparison to the previous three years. For outdoor workers, these risks might be considered occupational hazards. US statistics include employees in the construction, agriculture, forestry and fishing sectors among those most exposed to the risk of heatstroke. In general, working in hot environments diminishes mental performance (Ramsey, 1995) and increases accident risk (Ramsey et al., 1983).

Poor air quality

Rising temperatures have also been associated with various negative effects on air quality. Pollens become more abundant, which in turn influences the incidence of allergic and respiratory diseases. And as the formation of ozone – a factor in respiratory diseases like asthma or chronic obstructive pulmonary disease – depends on sunlight, concentration is typically highest during the hot weather.

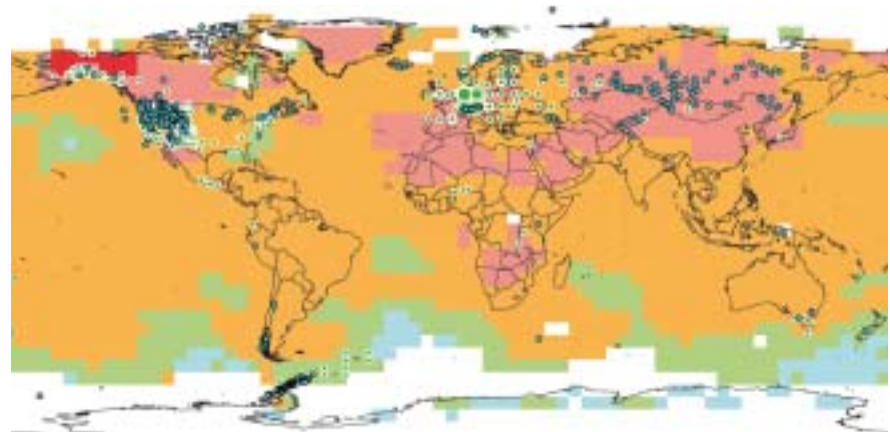
Ultraviolet radiation

Experts say climate change also influences exposure to ultraviolet radiation (UVR), which is associated with higher rate of skin cancers and ophthalmic diseases.

Rising sea levels

Many island and coastal populations have already been displaced due to rising sea levels. Experts also caution that “environmental refugees” numbering hundreds of millions could be seeking to emigrate to more favourable climates in future, thus exacerbating a further complicating factor in workers’ compensation (migration).

Figure 3: Global climate change and its impacts



Observed data series
 ● Physical systems (snow, ice and frozen ground; hydrology; coastal processes)
 ● Biological systems (terrestrial, marine, and freshwater)

Temperature change °C
 1970-2004

Europe *
 ○ 1-30
 ○ 31-100
 ○ 101-800
 ○ 801-1,200
 ○ 1,201-7,500

* Circles in Europe represent 1 to 7,500 data series

Climate zones are shifting, with manifold impacts on health and safety

Source: IPCC Climate Change

Average life expectancy of Europeans has increased by 28 years, from 45 to 73, over the past century.

Professor Eino Heikkinen of the University of Jyväskylä in Finland

By 2050, 80% of all deaths in Europe are expected to occur in people older than 60.

WHO

Demographic shift (greying workforce)

With life expectancies rising and people staying healthy later in life, it stands to reason that tomorrow’s workforces will include a larger proportion of older workers. A further, related, statistic that speaks for this development is the marked increase in the average age in most countries (see Figure 4, Greying populations). Assuming the scenario of a greying future workforce, workers’ compensation and occupational health systems must prepare to accommodate a number of new or increased needs.

Injuries

A statement by the UK Health and Safety Executive, corroborated by statistics from Colombia and Argentina, says the rate of fatal injury among male workers increases with age. Companies will require special safety measures and employee training to keep their workforces healthy.

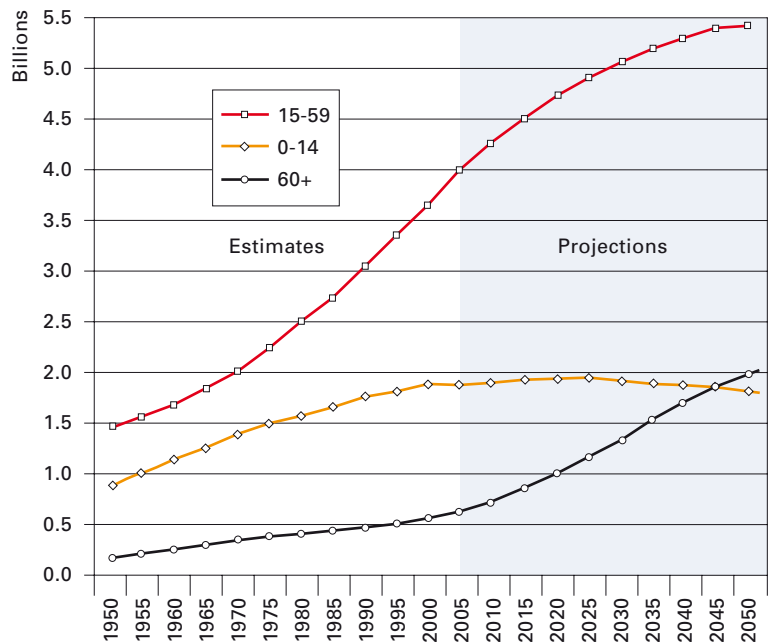
Complications

The health risks that typically come with age, such as vision impairment, musculoskeletal disorders like lower back pain and psychological disorders like depression, require special consideration not only in terms of prevention, but also in case of rehabilitation. In addition, they can act as complicating factors in the event of occupational accident or disease. As a result, more complex and costly medical treatment and long-term care must be expected.

Long latency

By nature, long-latency disorders become more frequent with advanced age.

Figure 4: Greying populations



Average age is increasing in most countries

Source: UN Population Division (UNPD)

Employees in obesity class III (BMI 40) had 11.65 claims per 100 full-time employees, while recommended-weight employees had 5.80; the effect on lost workdays (183.63 vs. 14.19 lost workdays per 100 full-time employees), medical claims costs (US\$ 51,091 vs. US\$ 7,503 per 100 full-time employees), and indemnity claims costs (US\$ 59,178 vs. US\$ 5,396 per 100 full-time employees) was even stronger.

Archives of Internal Medicine, April 2007

In 2002, 30.3% of boys and 30.7% of girls in England were overweight; 16% were clinically obese.

British Medical Association

In 2004, 31.1% of males and 33.2% of females over the age of 20 in the USA classified as clinically obese.

WHO

Obesity

Global authorities including the International Obesity Task Force and the World Health Organisation already consider obesity a global epidemic (see Figure 5, Weighing in on obesity). Defined as a body mass index (BMI) of more than 30 (see Figure 6, How BMI is calculated), obesity is widespread in many countries – and it continues to increase. Excessive body fat is linked not only to a large number of common health problems, but also to occupational accidents and diseases. Tackling the problem of obesity calls for heightened cooperation among employers, employees, risk carriers and regulatory bodies aimed at fostering awareness of healthier lifestyles and eating habits.

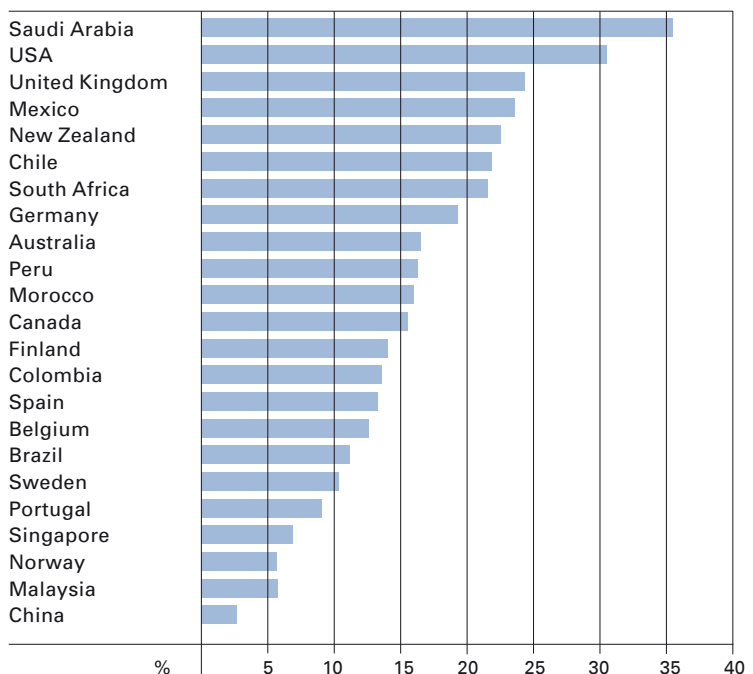
Accidents and diseases

Significantly obese workers have been shown to suffer more frequent and severe on-the-job accidents. A general lack of physical fitness coupled with the increased strain that the excess weight places on the musculoskeletal system can cause and exacerbate accidents. At the same time, obese employees are believed to be more susceptible to some toxins, which are absorbed through the skin. And it has been argued that workplaces and personal protective equipment are not adjusted to this specific working population. For example, protective suits and fall-arrest equipment are not designed for the extremely obese.

The next generation

Studies in a number of countries point to alarming rates of obesity among children. That means future workforces are likely to be even heavier on average than those of today – and that the health issues associated with obesity will be with us for a long time.

Figure 5: Weighing in on obesity



Authorities consider obesity a global epidemic

Population with BMI > 30

Source: Global Database on Body Mass Index

World Health Organization

Depression and obesity may be linked.

Science Daily, 6 June 2008

Psychological well-being

There is evidence suggesting a link between obesity and psychological disorders such as depression. Although the causal pathway is difficult to determine (are the depressed more likely to become obese or the obese more likely to become depressed?), the development points to increasing future problems on many levels.

Figure 6: How BMI is calculated

BMI formula: bodyweight in kg divided by height in metres squared (kg/m²). BMI = 70kg/(1.75)² = 70/3.0625 = 22.9

	Principal cut-off points
Underweight	< 18.50
Normal range	18.50 - 24.99
Overweight	≥ 25.00
Obese	≥ 30.00

Body Mass Index is the most widely accepted gauge of obesity

Source: adapted from WHO 2008

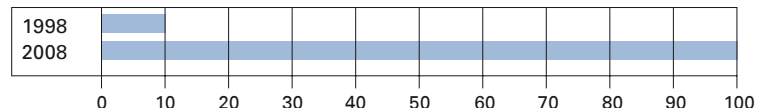
4.1% of US undergraduates have taken prescription stimulants for non-medical purposes.

University of Michigan Substance Abuse Research Center, 2005

Use and abuse of prescription drugs

Growing numbers of workers use stimulants and anti-dementia drugs to optimise their performance. Antidepressants are also often used without diagnosis to achieve a heightened sense of mental well-being. In general, such “off-label” use of any medication (for a purpose other than that for which it has been approved) is inherently risky. The known side effects of amphetamine-based stimulants include headaches, loss of appetite, nervousness and sleeplessness. They can also become addictive. Yet acceptance of prescription drug use to boost performance in today’s competitive working world, even when mild side effects must be expected, is high in many countries. Amphetamine-based stimulants designed to treat attention-deficit hyperactivity disorder (ADHD) are already in use as cognitive enhancers in significant numbers (see Figure 7, Global upswing in stimulant usage). In Germany alone, around two million employees report having used medication to improve their work performance. And evidence suggests that this is just the beginning: a new generation of pharmaceuticals aimed at treating cognitive decline – with considerable potential as so-called neuroenhancers – is emerging.

Figure 7: Global upswing in stimulant usage



Prescriptions of methylphenidate-based stimulants increased tenfold between 2008 and 1998 to almost 46 million – illegal sales not included.

Source: Wirtschaftswoche (a leading German financial journal)

20% of German employees consider medication to boost on-the-job performance justifiable, even without medical indication.

Recent survey by the German health insurer DAK

The majority of "Nature" readers say healthy adults should be permitted to use neuroenhancers.

Recent poll by the scientific journal Nature

Legal sales of prescription drugs containing methylphenidates (group of amphetamines), mainly used for ADHD treatment has increased tenfold since 1998.

Toennesmann, 2008

Use of prescription antidepressants with the active ingredient fluoxetine has increased by 43% between 2005 and 2007.

Recent survey by the German health insurer DAK

Overdoing it

Experts agree that many stimulants can lead workers to overestimate capabilities, become euphoric and develop sleeping disorders. Although it is currently difficult to quantify their impact on occupational accidents, these factors clearly have the potential to cause dangerous situations – especially where machines or vehicles are involved.

Under pressure

As can be expected, use of cognitive enhancers is most prevalent in high-pressure occupations. In some cases, employees have felt compelled to begin using neurological medication just to keep up. This could result in an "arms race" that would further increase pressure to perform – an important factor in many physical illnesses and psychological disorders.

Unknowns

As the development pipeline produces new neurological pharmaceuticals, increased off-label use must be expected. Precisely how this will affect health and safety in the workplace remains to be seen. Although no direct comparison can be made with alcohol or illicit drug use, it is interesting to note that alcohol has been shown to increase the likelihood of an occupational accident by a factor of two or even three (United Nations 1993).

The sum total

The total effect of these issues must be expected to add up to far more than the sum of their individual parts. It is important to note that the four aspects discussed above represent only a limited view of the overall future workers' compensation world. A brief look at the five other factors reveals – among other things – that compounded effects involving multiple scenarios can play a major role. Migration, for example, not only puts workers in situations where they are unfamiliar with the language as well as local working habits (notably safety and health procedures), it also tends to place them in positions outside of their actual occupations – a source of accidents and heightened on-the-job stress. Chronic diseases and musculoskeletal disorders increase significantly with both age and excessive body mass. Psychological disorders encourage use of prescription neurological drugs, and have been linked to weight gain. And all of these factors are likely to strain regulatory frameworks and contribute to increasingly frequent and complex litigation.

Jarmo Jacobsson (left)
and Andrés Angel (right)
speaking at the Workers'
Compensation Symposium

In March 2009, the Munich Re Centre of Competence for Workers' Compensation hosted an international symposium to look at the future challenges facing different systems all over the world. While at the three-day event, two decision-makers with major workers' compensation organisations commented on the role of the Centre of Competence in tackling the challenges that lie ahead.

"We have a relationship of nearly ten years with the Centre of Competence. And I think it's a unique unit, worldwide. There are a lot of organisations studying health and prevention strategies and how to reduce medical costs or whatever, but not many dealing with the insurance part."

"So I think that's the main benefit of the centre. If you take into account that they are always trying to understand what's happening all around the world, and actually when they go, for example, to a country like Colombia, people listen to them. The government listens to the centre, because it's been studying developments all around the world. If, for example, they're thinking of changing a new definition in the laws, well the Centre of Competence has a lot of information that helps those governments or those companies to do a better job."

"And it helps to have a good partner, which is how we see Munich Re and the Centre of Competence; as a partner, a long-term partner for our reinsurance programme. Basically, you feel better when you know your partner knows at least as much if not more than you know. Because you have a good and strong relationship and good discussion of the problems of the future and how we can tackle those challenges. Or we can ask whether there are situations anywhere else in the world like the ones we face in Colombia."

Andrés Angel
Vice-President
Inversura SA
Inversura SA is the holding company of Susalud (HMO) and Suratep, Colombian workers' compensation insurer.



"I have worked for this organisation for eight years, but I have a long history in the Finnish insurance industry and I've been involved in the workers' compensation system. We have a kind of market pool in Finland, and I know that Munich Re has been a leader in this pool since the 1960s – quite a long time. A long-standing relationship, as it used to be in reinsurance. As I think it should be, even though of course we have competition."

"But I think it's very important that this kind of market player brings together all different players and also the public sector, because it's very inspiring to hear different views, and this is the kind of line that always involves the public sector – occupational health, occupational diseases – so it's fantastic that this competent international player is actually organising this kind of forum. Of course I understand that there's a long-term business idea behind it – and there has to be."

"To be honest, this is a very, very difficult line of insurance and it's good to understand how it is done in other countries. Of course we offer our experience too, because this is a long-term investment: if you give something, you're going to get something. It's a normal situation. So it's fantastic to have this kind of forum – this is unique. We have casualty seminars, property or D&O seminars, but workers' compensation is very special."

Jarmo Jacobsson
Chief Actuary, Director
Federation of Accident Insurance Institutions (FAII),
Finland
The FAII coordinates all organisations involved in Finland's statutory accident insurance.



Conclusions

Awareness, dialogue and cooperation are called for

This paper does not intend to provide actual forecasts or solutions to future challenges, but rather to inspire lively dialogue and information sharing. At the same time, it seeks to present thoughts and findings that should become part of the discussion on the future of workers' compensation.

The developments looked at here are real and for the most part unstoppable. Some are in their infancy, like the use of cognitive enhancers, while others, such as musculoskeletal disorders, have been with us for many decades, yet are taking on new dimensions. It cannot be stressed enough that no single challenge can be isolated. They all have considerable potential to compound one another, leading in many cases to occupational diseases and accidents of greater frequency and/or severity as well as to unprecedented legal complexity. It will become more and more difficult to determine whether claims are linked directly or indirectly to work. Increasing migration will mean multiple workers' compensation systems and policies in different countries will often be involved in a single case. How can it be proved or disproved, for example, that a worker of advanced age suffers from lower back pain as a result of work? And how can labour histories of workers moving between countries, systems and regulatory frameworks – and often changing occupations on the way – be sufficiently documented?

To ensure that workers' compensation insurance can continue to fulfil its intended role – to protect workers and their families from financial burden in the event of an occupational accident and/or a disease and to give employers clear cost frameworks – it is time to think about how much the world in which it must function is changing. Systems should operate as smoothly and fairly as possible, with a maximum degree of openness to workers and a minimum of litigation.

Stability built on perfect balance

Above all, the four basic mechanisms of social insurance – definitions, benefits, coverage, financing – must be kept in perfect balance to ensure future stability. The needs of all directly involved parties including employees, employers and the state as well as indirect stakeholders – in a broader sense, all of society – must be met. This calls for a heightened spirit of cooperation and transparency among all involved in the world's

workers' compensation systems. In general, claims management will play a more prominent role, as will knowledge management and a more technical approach to understanding insured risks. Sharing methods and technologies that enhance efficiency – examples include state-of-the-art data capture and management systems, discussed at the Fourth Workers' Compensation Symposium hosted by the Munich Re Centre of Competence for Workers' Compensation in March 2009 – is a good start. In addition, the challenges looming on the horizon will compel risk carriers and lawmakers to closely monitor the shifting risk landscape and what it means for the definition of events and conditions that trigger claims (triggers) and premiums.

The time is ripe for all workers' compensation systems to subject current reserves – notably IBNR (incurred but not reported) and IBNER (incurred but not enough reserved) – to a stress test in order to determine whether they are sufficient to meet the challenges ahead. Especially in light of the fact that most emerging risks affect multiple groups including traditionally low-risk groups like office workers, a very close look at the logic used to define premiums (loadings) might be useful. The categorical pricing approach, the allocation of industry types to specific or recommended tariffs or tariff ranges used in many countries, might not be valid in tomorrow's world.

For 125 years, workers' compensation insurance has been serving as an anchor of financial security and social stability. During that time, it has seen war and economic crises come and go. Entirely new industries and technologies have emerged, and previously unknown occupational diseases have appeared. Throughout all these developments, the concept of workers' compensation insurance has endured. Provided stakeholders maintain an awareness of new developments and engage in open dialogue aimed at finding the best possible solutions for all parties, workers' compensation systems can master the challenges of the 21st century too.



Francisco de Bras Oliveiras
Caixa Seguros é Saúde, Portugal
speaking at the workers'
Compensation Symposium 2009
in Munich.

"I expect future pressure on premiums. On the claims side, there will be pressure from private medical providers seeking profit. Among claimants relapses or demands for permanent incapacity revisions will increase. And more regulatory control from supervisors and less reliability on financial income from technical provisions will cause combined ratio figures to climb."



Alejandro Morales
Mutual de Seguridad, Chile
speaking at the workers'
Compensation Symposium 2009
in Munich.

"Although we have a fixed price, my perception is that in the near future there will be adjustments in the pricing formula to accommodate the increase in

claims, but not in the recalculation algorithm. The inclusion of new diagnoses which are borderline with non-job-related diseases will impose a further burden on claims and costs."



Jawad Janeb
Jordan Insurance Company
speaking at the workers'
Compensation Symposium 2009
in Munich.

"With the current financial crisis, major factors like weakening wage and salary growth and the overall reduction in investment are expected to slow growth in workers' compensation insurance. At the same time, medical costs continue to rise. This trend threatens to cause higher combined ratios for both the public social security administrator and private insurers writing workers' compensation business."

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