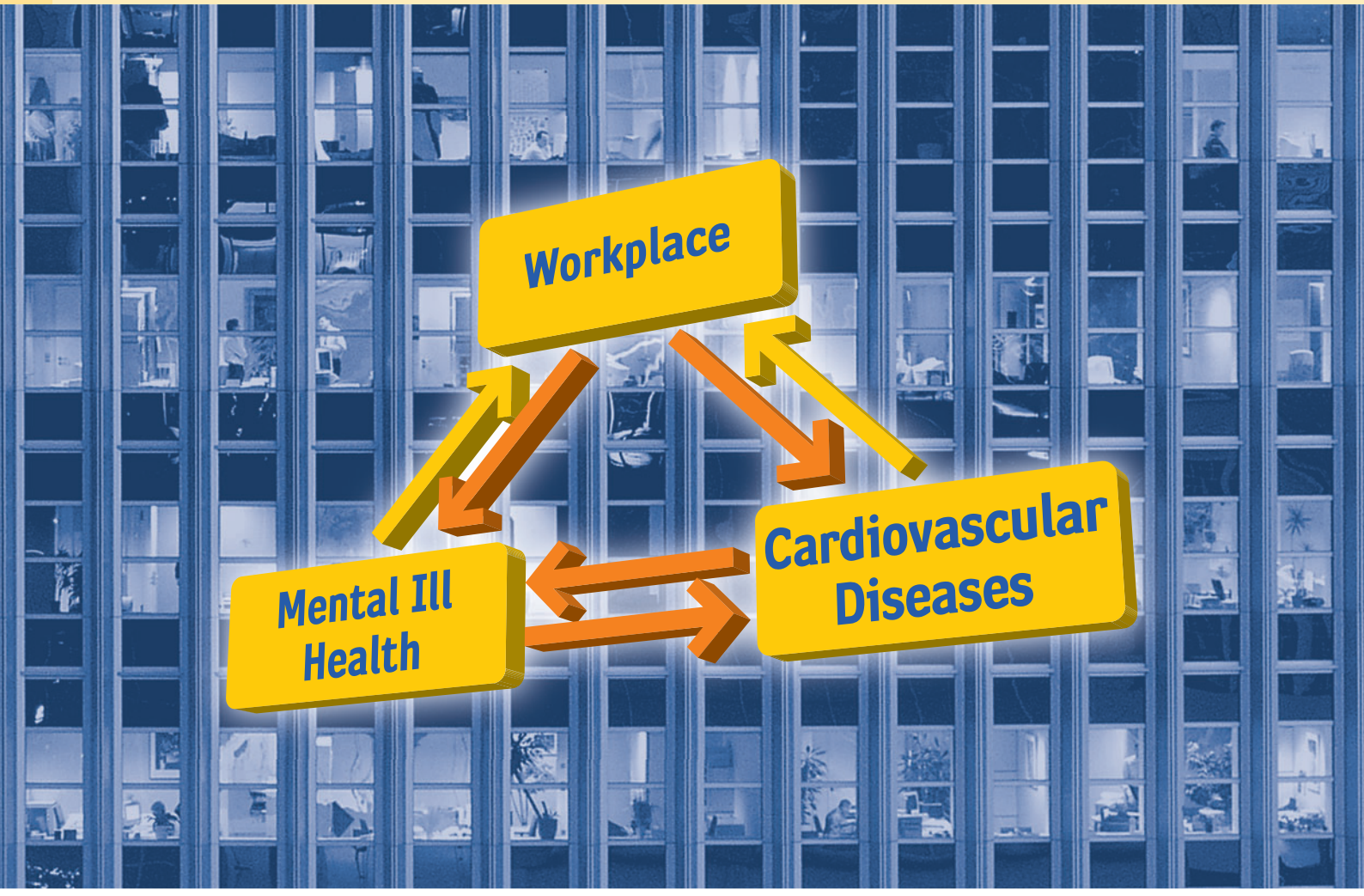
Hearts and Minds at Work in Europe

A European work-related public health report on
Cardiovascular Diseases and Mental Ill Health

Executive Summary



WORK HEALTH

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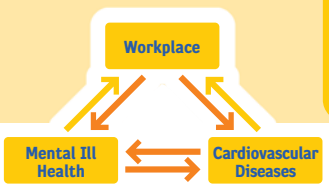

Key messages

Cardiovascular diseases and mental ill health

- **lead to absenteeism of employees and to productivity losses**
- **have work-related risk factors**
- **can be prevented by workplace health promotion with high return-on-investment**

Workplace health should be an issue in all policy fields.

1 Hearts and minds at work in Europe – Why a European work-related public health report?

In modern societies, work is the source of most individual, corporate and community wealth. The world of work therefore is particularly vulnerable to disruption caused by illness among employees. Illness can involve a temporary absence, lead to reduced productivity, to long-term disability or even to premature death. It can also end careers with a consequent loss of knowledge, skills and experience from companies and public organisations.

What is becoming more widely recognised is how work itself can make people ill, with a high price to be paid by individuals, organisations and society in general:

- In the European Union in 2005, there were about 4.4 million accidents at work resulting in more than 3 days absence by the employees involved.
- Each year in the EU, 350 million working days are lost due to work-related health problems and almost 210 million due to accidents at work.
- 35% of workers consider that their health is negatively affected by their work.
- The costs of workplace-related illnesses in Europe are estimated to be between 2.6% to 3.8% of Gross Domestic Product (GDP).

It is this interrelation that makes workplace health such an important element of modern public health policies. This is beginning to be reflected in EU policy; e.g. the EU Commission now considers workplace health as one of the most important aspects of EU policy-making on employment and social affairs and is striving for consistency with public health policies. But so far, workplace health affairs play a minor role in EU health monitoring which is focused mainly on work accidents and occupational diseases.

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Why cardiovascular diseases and mental ill health?

This report concentrates on cardiovascular diseases (CVD) and mental ill health – and their links with the workplace (Fig. 1) because these conditions

- are of high public health relevance
- have a strong impact on work e.g. sickness absence and early retirements
- have work-related risk factors
- share common work-related risk factors
- are interrelated, as mental disorders can be a risk factors for CVD and vice versa
- can be prevented by common health promotion and prevention interventions
- can be effectively prevented by taking workplaces as a setting for health promotion and prevention.

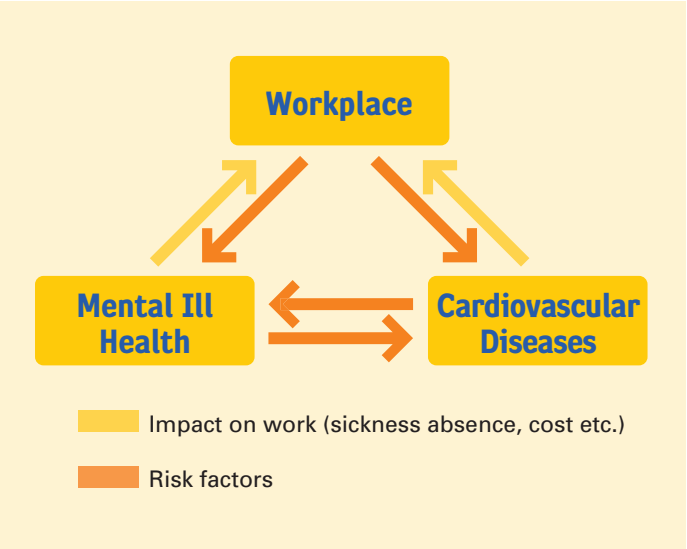


Figure 1: The triangle relationship of CVD, mental health problems, and work

2 The burden of cardiovascular diseases and mental health problems on work

Irrespective of the cause, poor health among employees can have a major impact on all organisations and enterprises. Private companies as well as public services are affected when disease leads to absenteeism or reduced productivity.

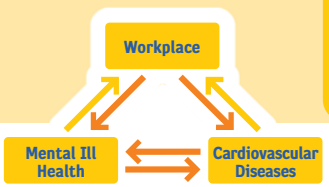
Cardiovascular disease

- CVD is the main cause of death in the European Union.
- It accounts for 42% – over 1.9 million – of all deaths each year in the EU 25.
- Approximately 24% of all deaths in the working-age population – 225.000 – are attributable to CVD.
- The WHO estimated for the European region that, in 2002, 6.4% of years of life lost in disability were due to CVD.

In all countries with available data, the incidence of and mortality from CVD is shown to be higher among men and women in a lower socio-economic position. Several studies have emphasised that conventional risk factors (obesity, high blood pressure, smoking) account for less than half the differences in CVD risk between higher and lower socio-economic groups. People in a lower socio-economic position would still have higher CVD mortality even if their health behaviour was improved. So other risks have to be considered, such as work-related factors.

There are big differences in CVD rates across European countries:

- In 2004, the standardised death rate for CVD for the under-65s was more than twice as high in the 10 New Member States as in the previous 15 EU countries.



The hearts and minds relationship

The idea that people's hearts and minds are inextricably linked has a long cultural tradition, as terms such as "heartache", "broken heart" or "heart-pounding situation" demonstrate. The connection can be summarised as follows:

- Mental ill health is as much a risk factor for cardiovascular disease and mortality as lack of physical activity or high cholesterol
- Coronary heart disease can affect the mental health of patients. The prevalence of depression in the general population ranges from 3% to 10%, but among patients with myocardial infarction the rate rises up to 25%

- Countries with relatively low rates (under 35 deaths per 100.000) were Austria, France, Malta and Spain.
- Particularly high were the three Baltic states, plus Hungary and Slovakia, with rates between 104 and 170 deaths per 100.000 persons in the working-age population.

Mental ill health

More than 27% of the adult EU population aged 18-65 – that is 83 million people – are estimated to experience at least one form of mental disorder during any given year.

- Studies suggest that almost every second person in the EU has been affected by mental disorders at some point in their life.
- The two most common mental disorders among people aged 18 to 65 in the EU are depression and anxiety.
- According to the European Study of the Epidemiology of Mental Disorders, unemployed persons have double the risk of a mental disorder.
- The incidence of mental health problems differs widely between economic sectors and occupational groups.

Production losses due to CVD and mental ill health

In the EU25, the total bill for CVD was estimated to be € 169 billion a year, of which 62% was due to healthcare (€ 105 billion), 21% to productivity losses (€ 35 billion) and 17% due to informal care (€ 29 billion) in 2003.

- 2.18 million working years were lost through CVD mortality (€ 24.4 billion)
- 268.5 million working days were lost through CVD morbidity (€ 10.8 billion)

Mental illness is a leading cause of short-term absenteeism, long-term sick leave, early retirement and disability pension claims. Because of the combination of high prevalence, early onset and possibly unfavourable long-term course of the illness, the economic burden associated with mental disorders is immense.

- The total annual cost for the year 2004 was estimated at € 240 billion in Europe. The majority of these costs (55%) are related to the indirect costs which amounted to € 132 billion.
- Amongst mental disorders, the indirect costs of mood disorders (depression and bipolar disorders) was the highest (€ 77 billion), followed by the indirect costs for addictions (alcohol, drugs).

3 The impact of work on CVD and mental ill health – Focusing on psychosocial stress at work?

There has been a recent shift in occupational health concerns away from physical hazards in the workplace to the impact of the psychosocial work environment. A growing body of evidence shows that modern working life is physically safer but more and more mentally stressful and while the prevalence of mechanical and chemical hazards is decreasing, psychosocial work stress has become the most prevalent risk factor. As a consequence, research on work-related risk factors commonly focuses on psychosocial stressors at work. Particularly research into mental health issues at work are generally conducted under the rubric of work stress.

- Stress is often used as an 'umbrella concept' covering many different hazards.
- It is often difficult to find a single cause for 'work stress'.
- Specific stressors include:
  - work demands (particularly workload or time pressure)
  - emotional demands
  - lack of control
  - imbalance between effort expended and reward received
  - insufficient support from colleagues and management.

Work-related stress – a major risk factor for CVD and mental ill health

Work stress plays an important role with regard to the causation of CVD and mental ill health (Fig. 2).

Cardiovascular disease

- Permanent job stress can double the risk of myocardial infarction among men, putting it on the same level as high blood pressure and obesity.
- Stress is also related to the development of hypertension, an important risk factor for atherosclerosis, coronary heart disease and stroke and angina pectoris, which often precedes a heart attack.
- Recent research highlights links between work stress and the co-occurrence of other disorders (e.g. diabetes mellitus) and potentially preventable unhealthy lifestyle behaviours (e.g. smoking, excess alcohol consumption, physical inactivity).
- The probability of dying or suffering from CVD is up to 300% higher when workers are exposed to high demands and low control over work tasks
- In women, job strain increases the risk of CVD from 20% to 60%.

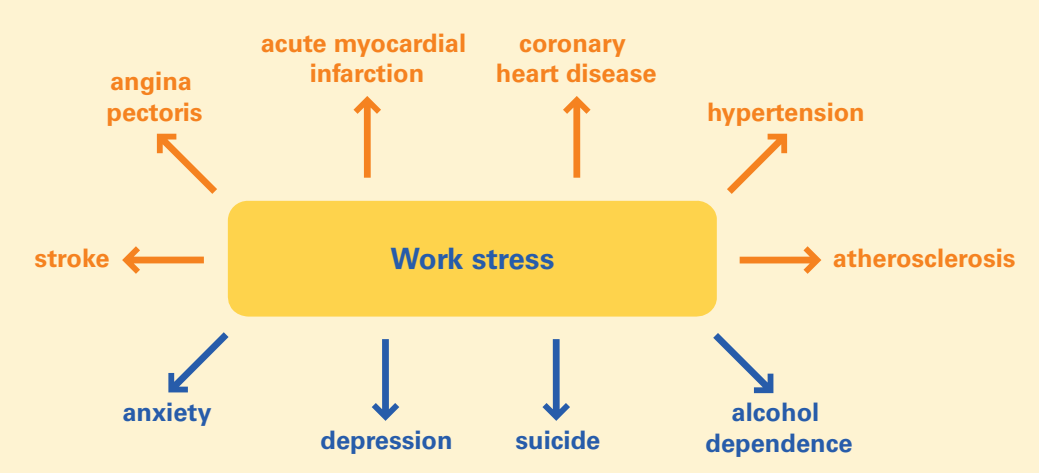
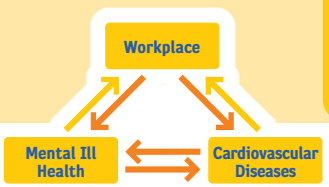


Figure 2: Work stress is a cause for multiple diseases



- 6% of all CVD cases among men and 14% in women are attributable to job strain.
- Working very long hours is linked to diabetes, hypertension and CVD.
- Shift and night work increases the risk of CVD by at least 40%.

Mental ill health

Job stress has been linked to mental health problems (e.g. mental exhaustion, irritability, depressive feelings, burnout syndrome) as well as defined mental disorders like major depression, anxiety or alcohol dependence.

- The risk of common mental disorder is substantially higher (80%) among workers who experience high job strain or high effort-reward imbalance.
- Poor social support or poor interpersonal relationships at work are also associated with an increased risk of common mental disorder (30%).
- Workers reporting a high level of job strain in combination with high job insecurity are 14 times more likely to experience depression than those who have active, secure jobs.
- People have double the risk of a mental disorder if they are unemployed.
- There is a strong association between workplace bullying and subsequent depression (e.g. a four fold risk of depression), and depression also predicts new cases of bullying. Violence, bullying and harassment at work also lead to higher levels of anxiety and irritability.
- Work stress can be responsible for sleeping problems or sleep disturbance, both associated with depression and burnout syndrome. The probability of sleep disturbance is up to four times higher when workers are exposed to work stress. Other risk factors are shift work and a long working week.
- There is also an association between work stress and heavy alcohol consumption or alcohol dependence.

Work stress is unevenly distributed

In 2005, almost two thirds of all workers in the EU25 reported working with tight deadlines for at least one quarter of their time and also at very high speed. These conditions are more common among men compared to women. About 40% of all workers are additionally exposed to repetitive tasks or to monotonous work.

Also, more than one-third of workers have no control over the order of tasks; slightly lower proportions report no control over work methods or pace. One-third of all workers reports low social support from colleagues. 16% of all workers report long working days. Shift workers often have no control over tasks, methods and rate of their work. Furthermore, there is a clear relationship between shift work and the perceived difficulty of balancing work and other commitments.

The sectors most affected by working at very high speed and tight deadlines are construction, hotels and restaurants and transport and communication (all with more than the 70% in at least one of the two categories). In terms of occupations, craft-related trades workers and plant and machine operators are most often affected by high work intensity and the performance of short repetitive tasks and monotonous work.

A lack of job control is most frequent among workers in manufacturing and mining, hotels and restaurants and transport and communication. By occupations, the lowest level of job control can be found among plant and machine operators, in elementary occupations and in the armed forces. Support from colleagues and superiors is less common among elementary occupations and agricultural workers.

Workers in agriculture and fishing as well as in the hospitality industry reveal a relatively high rate of long working days. By occupations, agricultural workers, legislators and managers most often work ten hours a day. Shift work is most common among workers in hotels and restaurants, transport and communication and manufacturing, and in the health sector.

Workers in the hotels and restaurants sector as well as in construction report job insecurity most often. By occupation, plant and machine operators and employees in elementary occupations worry most about losing their jobs. Workers in education and health and in the hotels and restaurants sector report higher than average levels of bullying and harassment.

Work-related stress is increasing in a changing world of work

The nature of work is changing rapidly. Today's world of work is unrecognisable from the workplace of only a few years ago. Employers and employees have embraced revolutionary communications advances, the introduction of flexible working arrangements, greater diversity in the workplace and significant restructuring of working arrangements through outsourcing and off-shoring.

General trends include changing work patterns (new technology, increase of the service sector) as well as changes in employment patterns (downsizing, outsourcing, flexibility and mobility). In response to globalisation and economic pressures, companies have looked for greater flexibility to respond rapidly to peak production demands and seasonal variations whilst controlling labour costs. Their approach has included introducing new working practices such as 'just-in-time' production and temporary work and fixed-term contracts.

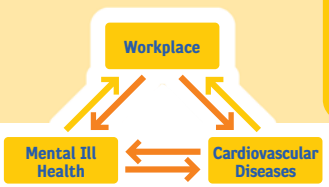
In many work areas, job demands have increased, including an intensification of work and requirements on workers to be more flexible and to rapidly learn to carry out new tasks. It is clear that public health and workplace health interventions on cardiovascular and mental health problems among workers will be a major challenge for the future for the maintenance of a healthy workforce.

4 Strategies for healthy hearts and minds at work

Sustainable stress prevention is the most effective way to deal with CVD and mental ill health at work. Interventions can effectively reduce risk factors and diseases and show a positive return-on-investment. These interventions are most effective when work health and public health aspects are addressed together.

- Workplace stress interventions have pointed effects on the improvement of the health of employees as well as on the economic performance of enterprises. The scientific consensus is that preventive measures lead to a reduction of risk factors and diseases and have a positive return on investment.
- Health promotion programmes have been shown to lead to a reduction in absenteeism of 12% to 36% with a return-on-investment of up to 1:5. This means that for every €1 spent on the programme, potentially €5 could be saved due to reduced absenteeism costs.
- The effect on direct medical costs includes fewer visits to the doctor, less hospitalisation and fewer days spent in hospital. The results show an average reduction in medical costs of 26%, the return-on-investment is reported to be between 1:2 and 1:6.
- The overall benefits – including financial savings – of health promotion programmes may not become fully apparent until many years after the health risks have been reduced – which makes the short-term benefits even more remarkable.

This positive economic effect is the most powerful health promotion argument for companies and social insurance institutions.



5 From individual level intervention to (pan-)national action plans – Recommendations to policy makers

Cardiovascular diseases and mental ill health have multiple causes. They are associated with working and living conditions, individual characteristics and socio-economic status. Health promotion and prevention activities must therefore take a multi-disciplinary approach and recommendations on how to tackle CVD and mental ill health in a workplace scenario have been produced for various audiences.

However, there is still a tendency in some areas to treat these issues in isolation. This report emphasises that diseases often are interrelated and that effective and sustainable health promotion and prevention calls for collaboration across different professions and policy fields.

The recommendations of this report are directed at policy making. They are aimed at the people who have the power to develop or influence policies and practices at an international, national, regional, local or company level. Policy makers need to be able to identify the warning signs of workplace health problems within their daily flood of information.

As a starting point for action, policy makers should bear in mind the following:

- the world of work affects health and is itself affected by ill health
- this is especially true for CVD and mental ill health
- workplaces are powerful settings for health promotion and prevention
- workplace health interventions are available and effective
- workplace health issues apply to non-working life as well
- workplace health is an essential part of public health.

There are currently great challenges to workplace health from

- ongoing demographic and structural changes in the world of work
- regional health and safety discrepancies in Europe, especially among the new Member States
- the imbalance in access to preventive services, especially among small and medium enterprises (SME) and migrants.

Decision makers and advisers in the field of public health, occupational health and safety and social insurance need to influence policies through the principles of advocating health, enabling people and mediating processes as laid out in the WHO Ottawa Charter for health promotion.

Policy makers are recommended to advocate workplace health by

- making workplace health issues an integral part of all policy fields
- taking a public health perspective
- addressing the specific needs of high risk groups
- combating health inequalities
- promoting social inclusion
- enhancing intrinsic job quality
- closing the policy cycle by monitoring the effects of policies on defined targets

Policy makers are recommended to enable workplace health by

- treating workplace health issues as part of employment strategies aiming at
  - improving employability
  - early and healthy return to work for absentees
  - improving quality of work
  - ensuring decent work.
- improving the information basis by
  - the collection of occupational information in surveys
  - monitoring workplace health in routine surveys like the Eurobarometer
  - reporting on health impacts – including cost and benefits – on work
- promoting research into evidence of workplace health interventions with regard to
  - the positive effects of works
  - specific problems in high risk occupations
  - the specific risk of migrants and unemployed

Policy makers are recommended to mediate workplace health by

- promoting the collaboration between OSH and public health institutions (common strategies, research programmes and action plans)
- enforcing European and national regulation in prevention and occupational health & safety
- promoting European and national health action plans
- ensuring that health actions plans address workplace health issues
- promoting target setting
- taking a broader view of workplace health as part of the social dialogue
- promoting collective agreements on workplace health promotion and prevention
- promoting the evaluation of a framework agreement e.g. on work-related stress.

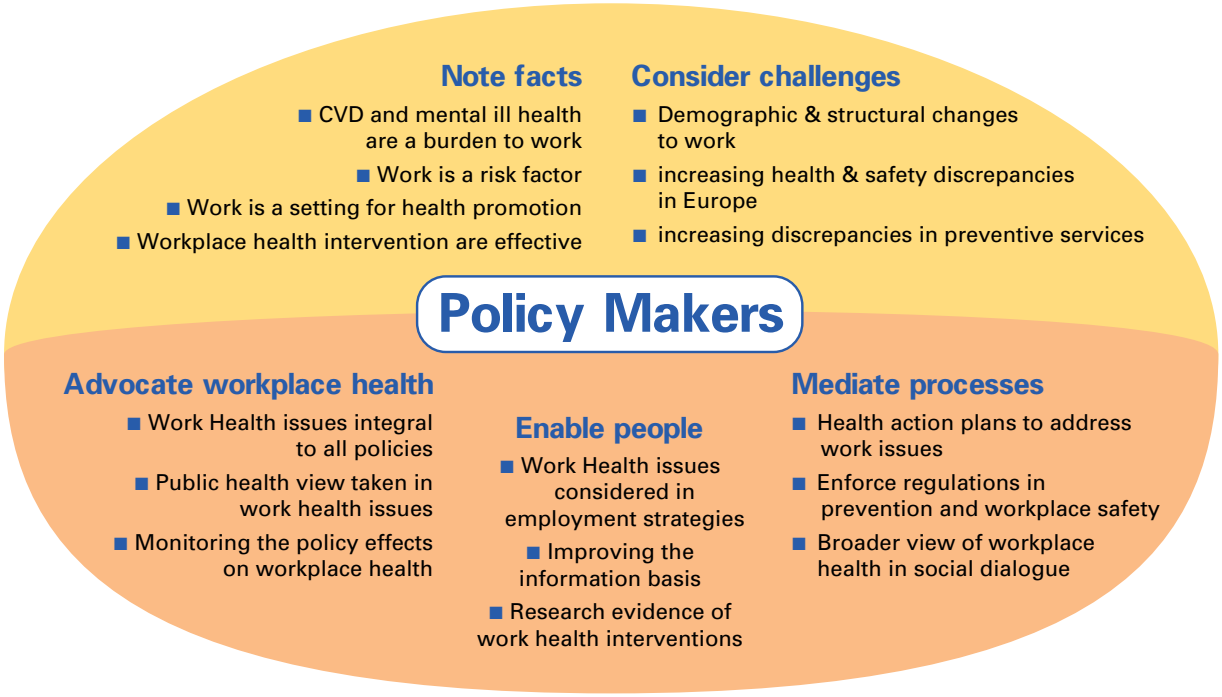


Figure 3: The policy makers' chart for workplace health

Working life can act as a risk factor for the health of employees and their families. However, irrespective of the cause, private companies and public services are affected by diseases through employee absenteeism or reduced productivity. It is this interrelation that makes workplace health such an important element of modern public health policies. Workplace health is a public health issue as well. This report emphasises that sustainable health promotion and prevention calls for collaboration across different professions and policy fields.

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