Hearts and minds at work in Europe
A European work-related public health report on cardiovascular diseases and mental ill health

Why a work-related public health report?
Working life can adversely affect the health of employees and their families. At the same time, an individual’s state of health can have a tremendous impact on work. Private companies as well as public services are affected by diseases because of employee absenteeism or reduced productivity, irrespective of the cause of the disease. Workplace health is therefore a public health issue as well.

Why focus on CVD and mental ill health?
Cardiovascular diseases (CVD) and mental ill health put a major burden on European workers, organisations, economies and social security systems.

Cardiovascular disease is responsible for
- 24% of all deaths in the working-age population
- 6.4% of years ‘life lost in disability’ in the European Established Market Economies
- a total economic cost of €169 billion in 2003 in the EU, of which 21% (€34 billion) was due to productivity losses

Mental health problems...
- affect more than 27% of the adult EU population (aged 18-65) – 83 million people – during any given year
- like depression accounts for 15% of ‘years lived with disability’ in the European Established Market Economies
- are estimated to have cost Europe €240 billion in 2004, of which 55% (€132 billion) was due to productivity losses

There are strong two-way links between both disorders and the workplace (Fig. 1). On the one hand, due to their frequent occurrence, the disorders have a major impact on work e.g. by causing sickness absence and early retirements. On the other hand, both diseases have (common) work-related risk factors. The relationship between CVD and mental disorders is also bi-directional. Mental disorders can be risk factors for the development of CVD and vice versa.

Why focus on psychosocial stress at work?
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 is becoming one of the most important work-related risk factors. As a consequence, research on work-related hazards now commonly focuses on psychosocial stressors at work.

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
- interpersonal conflicts (e.g. bullying, harassment)
- job insecurity

Work stress – a major risk factor for CVD and mental ill health
Work stress is important as a cause of CVD and mental ill health (Fig. 2). Permanent job stress can double the risk of myocardial infarction among men, putting it on the same level as high blood pressure and obesity. The probability of dying or suffering from CVD is up to 300% higher when workers are exposed to high demands and low control over their work.

Work stress is also related to the development of hypertension, an important risk factor for atherosclerosis, coronary heart disease, stroke and angina pectoris. Additionally, job stress is linked with the co-occurrence of other disorders (e.g. diabetes mellitus) and potentially preventable unhealthy lifestyle behaviours (e.g. smoking, excess alcohol consumption, physical inactivity).

Job stress has been linked to mental health problems (e.g. mental exhaustion, irritability, depressive feelings, burnout syndrome) as well as to defined mental disorders like major depression, anxiety or alcohol dependence. For example:
- The risk of common mental disorder is substantially higher (80%) among workers who experience high job strain or high effort-reward imbalance
- 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. Additionally, people have double the risk of a mental disorder if they are unemployed

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

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.
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There is a strong association between workplace bullying and subsequent depression. Violence, bullying and harassment at work also lead to higher levels of anxiety and irritability.

There is also an association between work stress and heavy alcohol consumption or alcohol dependence.

**The distribution of work stress in the European workforce**

**Work stress is common:**
- almost two thirds of all workers in the EU25 report both working with tight deadlines for at least one quarter of their time and at very high speed. About 40% are exposed to repetitive tasks or to monotonous work.
- more than one third of workers have no control over the order of their tasks; slightly lower proportions report no control over work methods or pace.
- one third of all workers report low social support from colleagues.
- 16% of all workers report long working days (17% work shifts).

**Work stress is unequally distributed in the European workforce:**
- working to tight deadlines or at very high speed is more common among men than women.
- young workers claim most often that they have no control over task order, work methods or speed of work.
- the sectors and occupations most affected by a lack of job control are workers in manufacturing and mining, hotels/restaurants, transport and communication, plant and machine operators, in elementary occupations and in the armed forces.
- high work intensity is more common across the EU15 countries than in the new EU Member States.

**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 - most effective when work health and public health aspects are addressed together - can aim at:
- work-related stress factors in the work environment, labour relations and working conditions and at non work-related stress factors in people’s private lives.
- mediators influencing the extent to which people deal with stress factors like labour capacity, motivation, the balance between individual stress and stress-bearing capacity.
- organisational and social factors at job and company level, such as job autonomy, contact opportunities and leadership style.

Preventive measures lead to a reduction of risk factors and diseases and have a positive return-on-investment. Health promotion programmes lead to a significant reduction in absenteeism with a return-on-investment of up to 1:5.

**Recommendations to policy makers**

CVD as well as mental health problems have multiple determinants, demanding a multiple approach for health promotion and prevention activities. Additionally, because both diseases are interrelated, there is a need for collaboration across different professions and policy fields. Decision makers and advisers in the field of public health, occupational health and safety and social insurance need to influence policies in the following ways:
- Advocate workplace health e.g. by making workplace health issues an integral part in all policy fields; addressing the specific needs of high risk groups, combating health inequalities and promoting social inclusion.
- Enable workplace health e.g. by treating workplace health issues as part of employment strategies, improving the information basis, and promoting research into evidence of workplace health interventions.
- Mediate workplace health e.g. by promoting collaboration between OSH and public health institutions, enforcing European and national regulation in prevention and occupational health & safety, promoting European and national health action plans, ensuring that these plans address workplace health issues and by taking a broader view to workplace health in the social dialogue.

**Figure 2: Work stress is a cause for of multiple diseases**

- angina pectoris
- acute myocardial infarction
- coronary heart disease
- hypertension
- stroke
- anxiety
- depression
- suicide
- alcohol dependence
- atherosclerosis

**Figure 3: The policy makers’ chart for workplace health**

- Advocates workplace health
  - Work Health issues integral to all policies
  - Public health view taken in work health issues
  - Monitoring the policy effects on workplace health

- Enable people
  - Work Health issues considered in employment strategies
  - Improving the information basis
  - Research evidence of work health interventions

- Mediate processes
  - Health action plans to address work issues
  - Enforce regulations in prevention and workplace safety
  - Broaden view of workplace health in social dialogue

**Note facts**
- CVD and mental ill health are a burden to work
- Work is a risk factor
- Workplace health intervention are effective

**Consider challenges**
- Demographic & structural changes to work
- Increasing health & safety discrepancies in Europe
- Increasing discrepancies in preventive services