



**World Health
Organization**

Developing a toolkit to provide guidance in controlling hazards for work-related musculoskeletal injuries

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Evelyn Kortum, Occupational Health, WHO/HQ, Geneva
kortume@who.int

WHO Global Plan of Action for Workers' Health

- WHO Global **Strategy** on Occupational Health for All
 - Framework for all work on Workers' Health, including the workplan for the Global Network of Collaborating Centres in Occupational Health
 - Endorsed by the WHA in 1996
- WHO Global Plan of **Action** on Workers' Health, 2008-2017
 - Provides a **framework for concerted action** by all health and non-health actors for protecting and promoting the health of workers
 - Establishes **political momentum** for primary prevention of occupational and work-related diseases
 - Ensures **coherence** in the planning, delivery and evaluation of health interventions at the workplace
 - **Goal: improving the health of all workers**

Implementation mechanisms

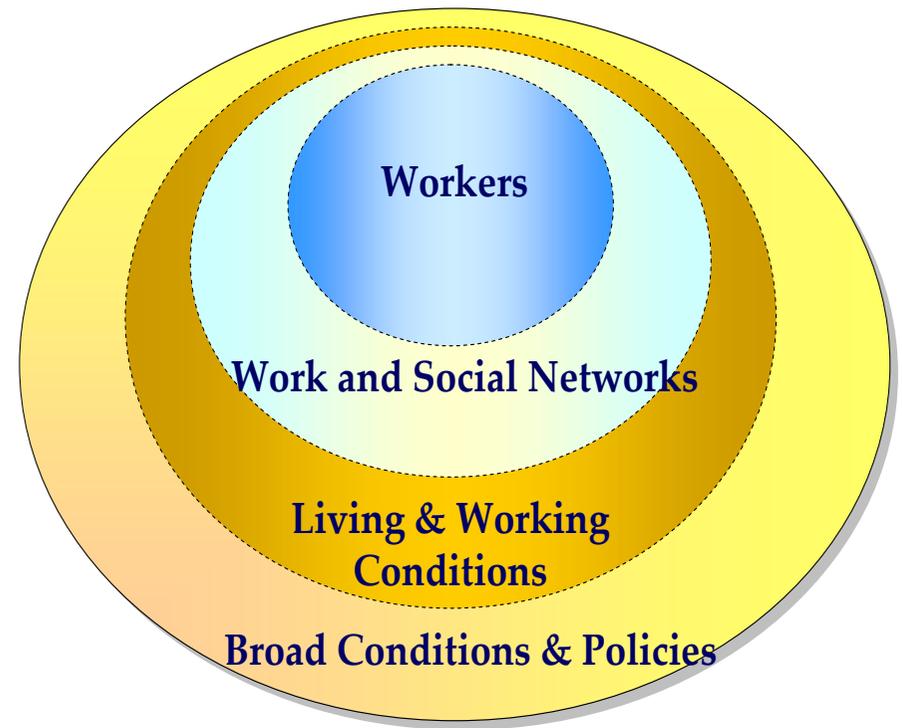
- National plans of action
- Regional efforts on workers health
- Collaboration with ILO (ILO/WHO Joint Committee for Occupational Health)
- Targets and indicators of achievement (baseline study)
- Partnerships – trade unions, employers, civil society, other
- Global Network of WHO Collaborating Centres for Occupational Health, including IEA, ICOH, IOHA

5 objectives of the Global Plan

1. develop & implement national policy instruments
2. protect and promote health at the workplace
3. improve the performance of and access to OH services
4. provide and communicate evidence for action and practice
5. address workers health through other (non-health) policies

Objective 2- Protect and Promote Health in the Workplace

- Healthy workplaces
- Tools and capacities for primary prevention of occupational hazards
- Basic requirements for workplace health protection
- Regulations and standards and their enforcement
- Promotion of health & prevention of non-communicable diseases
- Control of major health threats (HIV/AIDS, Malaria, TB, avian influenza)



WHO strives to include all health determinants of Workers' Health

Working environment hazards

- Mechanical
- Physical
- Chemical
- Biological
- Organisational or
- Psychosocial

Social factors

- occupational status, employment conditions
- income
- inequities in gender, race, age, residence, etc.

Work-related health practices

- individual risk-taking behaviour
- physical exercise, sedentary work
- diet and nutrition
- unhealthy habits – smoking, alcohol

Access to health services:

- preventive OH services
- specialized curative care and rehabilitation
- health & accident insurance



Why do we need WHO toolkits?

- The 2002 World Health Report identified a list of selected but not exhaustive occupational risks including
 - **back pain (37%)**; hearing loss (16%); chronic obstructive pulmonary disease (13%); asthma (11%); injuries (8%); lung cancer (9%); leukaemia (2%),
 - WHO study states 8% of depression has been attributed globally to environmental factors, in particular occ. stress (WHO, 2006).
 - Work-related injuries and ill health are of growing concern globally.
 - The ILO estimates that an average of 5% of the workforce is absent from work on any given day, though this may vary from 2-10% depending on the sector, type of work and management culture.
 - Negative impact on workers' health, financial health of businesses, and on economies at large.
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WHO focuses on practical intervention-oriented solutions

- Recognised challenges at different levels: developing countries, SMEs
- Toolkit should
 - be user-friendly and flexible
 - be evaluated in different contexts, including a cost-benefit analysis
 - include training packages deliverable through e-learning and face-to-face
 - be integrated in the provision of basic occupational health services
 - be used as an awareness raising mechanism in different settings

Principles of WHO Toolkits

- offer a framework for identifying, assessing, controlling, managing and evaluating workplace hazards.
- identify potential workplace hazards and/or high exposure work tasks and assess the extent of risk stemming from identified hazards, and the duration of exposures to hazards and potential interactions between hazards.
- assist people in risk management
- have probable effectiveness in eliminating or reducing risk
- practical implementation

3 main components of toolkits

I . PLANNING AND IMPLEMENTATION COMPONENT:

- Purpose of the toolkit
- Target audience
- Description of the working context (SME, industrial sector, occupation, etc.) and content
- How to get started:
 - ensuring management commitment; rationale/business case
 - reinvigorating or setting up Labor/Management Committees
 - defining the role of safety committees

II . TRAINING COMPONENT:

- Models for training to cover requirements, recognition and continued good work practices.
- Training modules on assessment, planning, implementation, evaluation and maintenance of prevention and control strategies.
- Description of measures/indicators of success in implementing training.
- Training recordkeeping, such as attendance records, course participation records, evaluation summaries

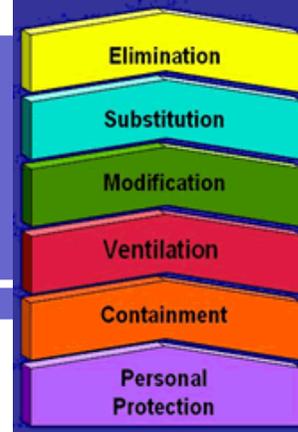
III. EVALUATION COMPONENTS

- Programme for regular site evaluations to identify new or previously not addressed hazards and failures in hazard controls including recommendations for improvement of training and implementation.
- Monitoring system for indicators of success.
- Lessons learnt.

Possible users of the toolkit

- members of a health and safety committee;
- health and safety representatives;
- line supervisors;
- foremen;
- workers;
- government representatives;
- health workers implementing basic occupational health services;
- occupational health and safety specialists.

Some advantages and limitations of the toolbox



ADVANTAGES

- complementary to traditional hazard control systems (based on the hierarchy of controls)
- addresses traditional and emerging workplace hazards
- practicable and easy to use through clear guidance
- cost-effective
- beneficial for SMEs
- beneficial for emerging economies and developing nations
- applicable in most settings
- a tool which may free-up professionals/experts for more complicated work
- a tool that can be implemented by the employer, workers, or their representatives

LIMITATIONS

- accuracy of qualitative assessment
- accuracy of records and resource materials
- effective use of self-assessment tools
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Control banding approach

Practical solutions for traditional hazards : Example of control banding approach

a process in which a single control technology (e.g. *general ventilation*) is applied to one range or band of exposures to a chemical that falls within a given hazard group (such as *skin and eye irritants*).

- menu-driven
- practical
- singular (1 control, 1 band of exposure)
- easily applicable
- cost effective
- ... but not appropriate for managing the multiple, complex hazards affecting musculoskeletal or psychological injuries



How practical solutions differ for hazards affecting musculoskeletal injury risk

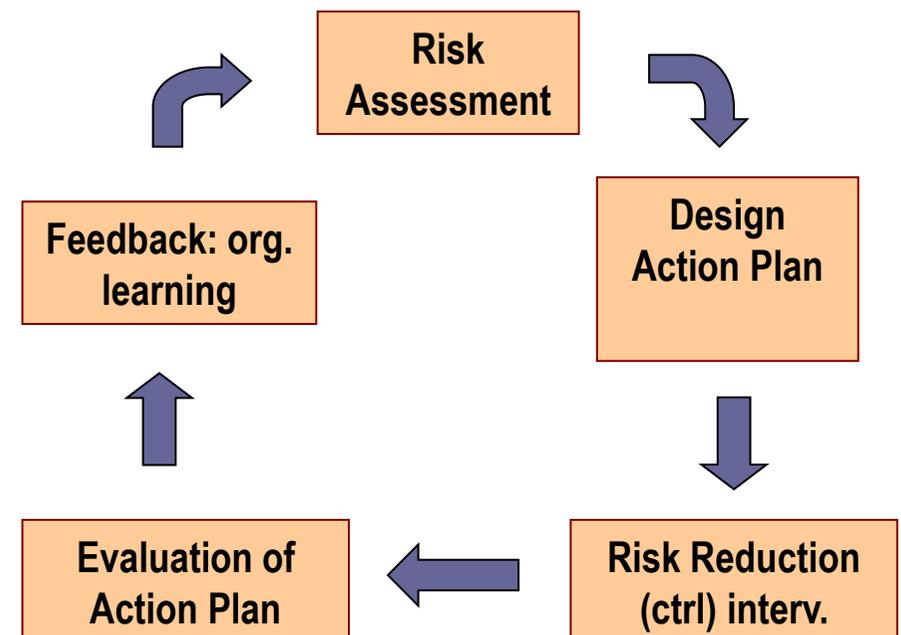
- less clearly defined
- multi-factorial
- growing awareness
- social & organizational context
- measurement complex
- protection complex (knowledge, available tools, but problems with practical application)
- more complex mechanisms
- ...

Possible elements of a project to develop a toolkit for managing musculoskeletal injury risk

- Undertake literature review & establish inventory of existing tools, standards...
- refine tools with a focus on flexibility (SMEs, different occupational sectors, needs to be globally applicable...)
- develop appropriate expertise & support for use of the toolkit (e.g., e-learning)
- develop training packages deliverable through e-learning and face-to-face
- use the toolkit as an awareness raising mechanism in different settings
- evaluate the toolkit in different contexts conducting a cost-benefit analysis
- integrate the toolkit in the provision of basic occupational health services
- develop international standards
- *Working group established!*
- establish a global network of providers/experts
- Identify funding...

Basic principles to consider when developing a WHO toolkit to manage musculoskeletal injury risk

- **Comprehensive approach:** ...examples that can show the interrelationship between relevant physical, psychological and organisational factors affecting health outcomes
- **Theory-based, evidence-based &** encompass major theoretical models
- **Empowerment, continuous improvement, CSR**
- Apply the **risk management approach**



05 PRIMA-EF Indicator Model

Question: Can we piggy-back on the PRIMA-EF for the development of the ergonomics framework and toolkit?

In developing an integrated indicator model for monitoring psychosocial risks, several criteria have to be taken into account. The indicator model should:

- identify indicators on exposure (e.g. psychosocial risk factors), outcomes and preventive action or interventions
- illustrate the cyclical process of psychosocial risk management
- address three levels of impact: the individual level, the organisational level and the society/sector or national level.

The PRIMA-EF indicator model, presented in Figure 2, meets all three criteria.

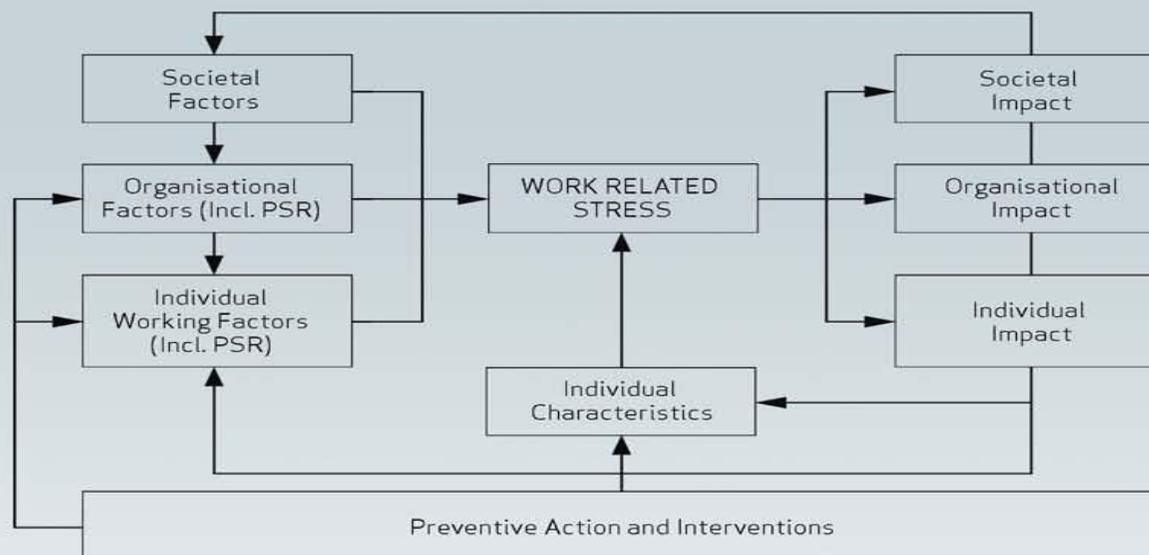
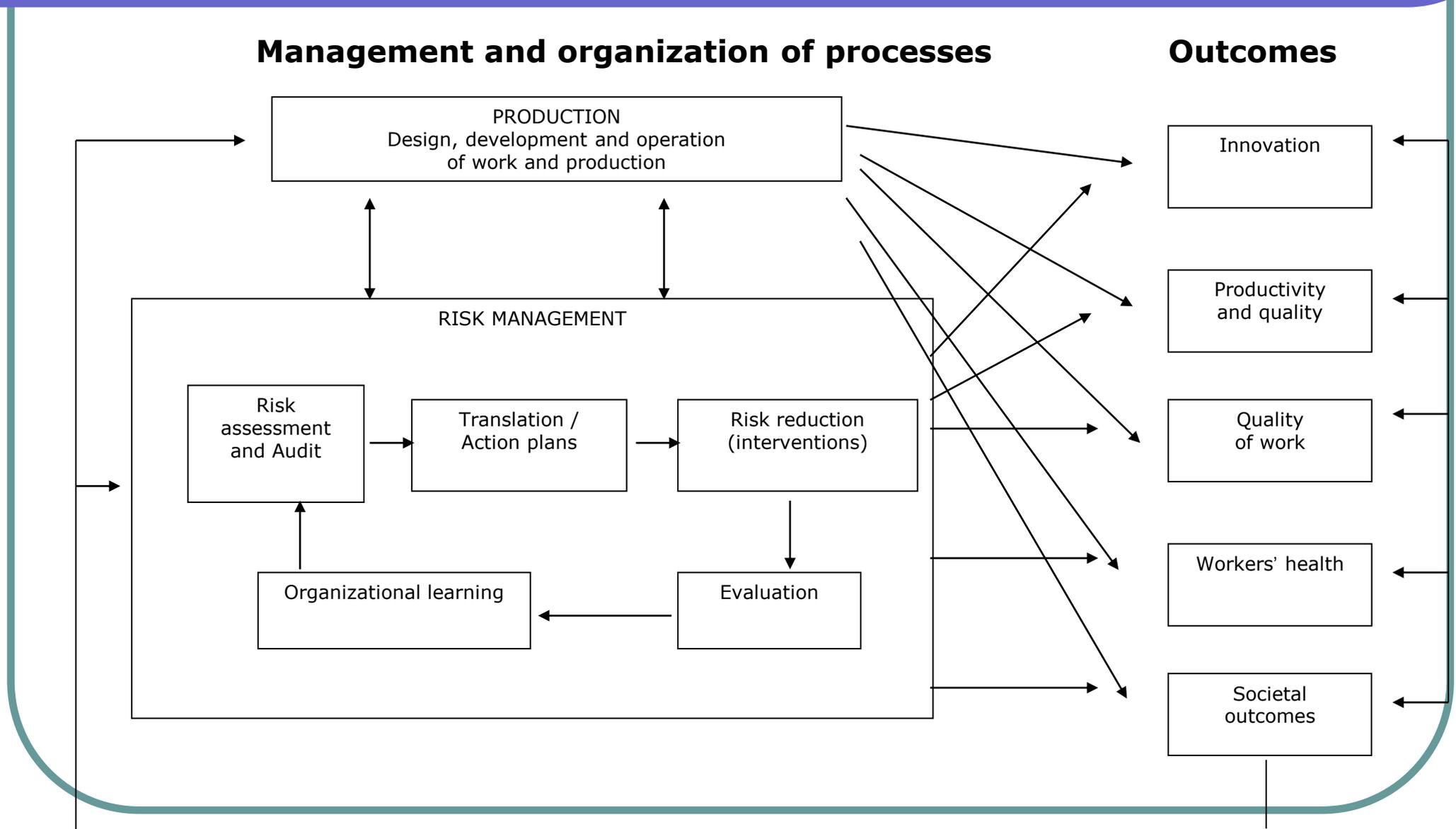


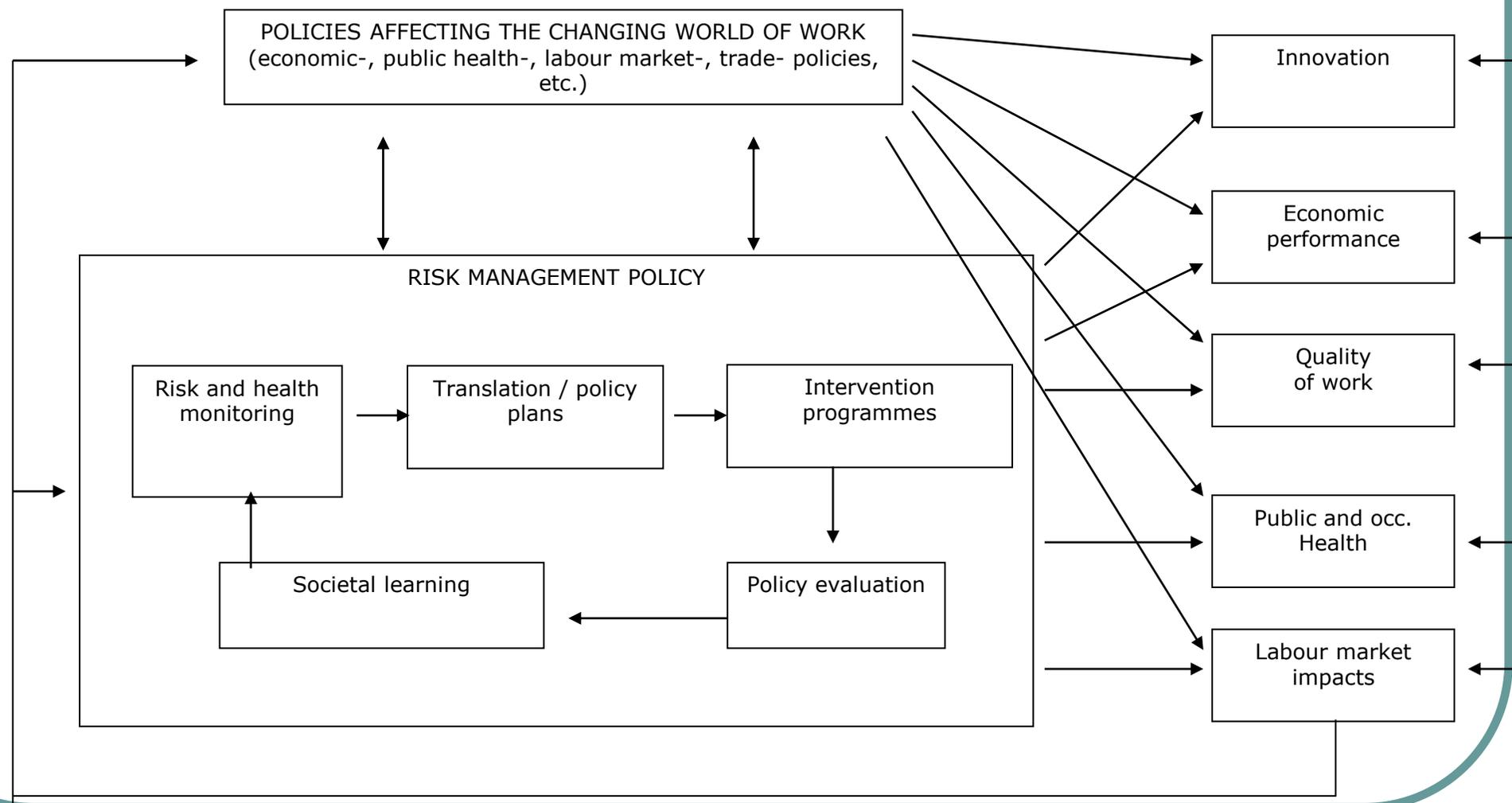
Figure 2.
Indicator model on psychosocial risks at work linked up with preventive action and interventions
(PSR = psychosocial risks)

PRIMA-EF Framework Enterprise Level Management and organization of process



PRIMA-EF Framework

Policy Level: The macro level RM policy processes



PRIMA-EF resources

- http://www.who.int/occupational_health/publications/Protecting_Workers_Health_Series_No_9/en/index.html
- <http://prima-ef.org/default.aspx>