The value of the business case for SME's

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Profit, revenu and costs

$\mathsf{P} = \mathsf{R} - \mathsf{C}$



Effects on revenues and costs

	Effects on costs	Effects on revenue
absence of the victim	+	
colleagues stop working	+	
interruptions in the production process	+	
repair and/or clean-up by the maintenance crew	+	
first aid	+	
accident analysis	+	
administrative follow-up	+	
training of replacement worker	+	
recruitment and pay for temporary worker	+	
replacemnt of damaged equipment	+	
fines, increase of insurance premiums	+	
production losses		-
loss of orders/clients		-
company image		-
job satisfaction		-

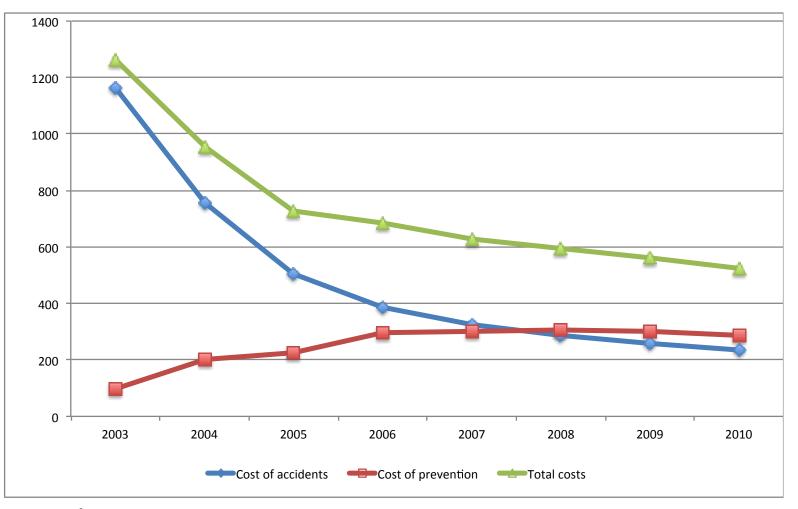
Source: De Greef and Van den Broek, 2009

Impact on profit

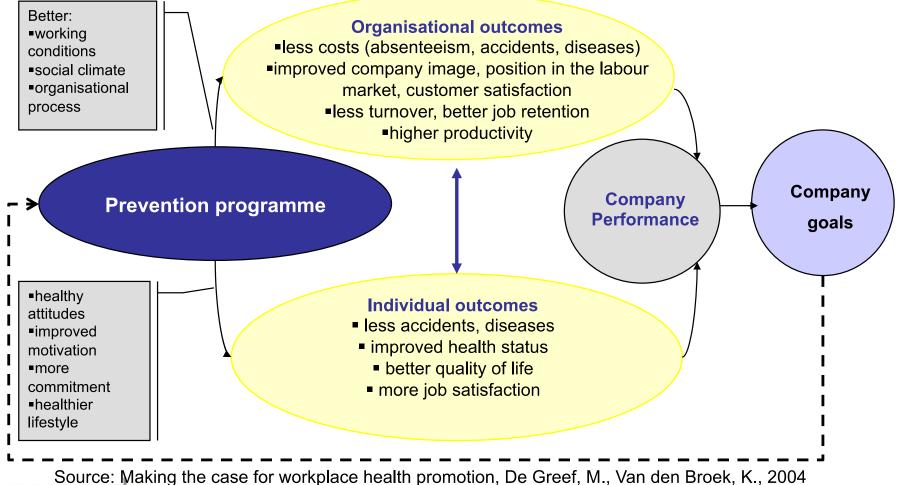
P = R - C Accidents III health



Prevention of foot injuries



From profit to performance



event:

The benefits of OSH

- benOSH: a study on costs of accidents at work and workrelated health problems
- Aim: Reinforce the arguments in favour of interventions on company level to improve occupational safety and health
- Prevent in collaboration with KOOP

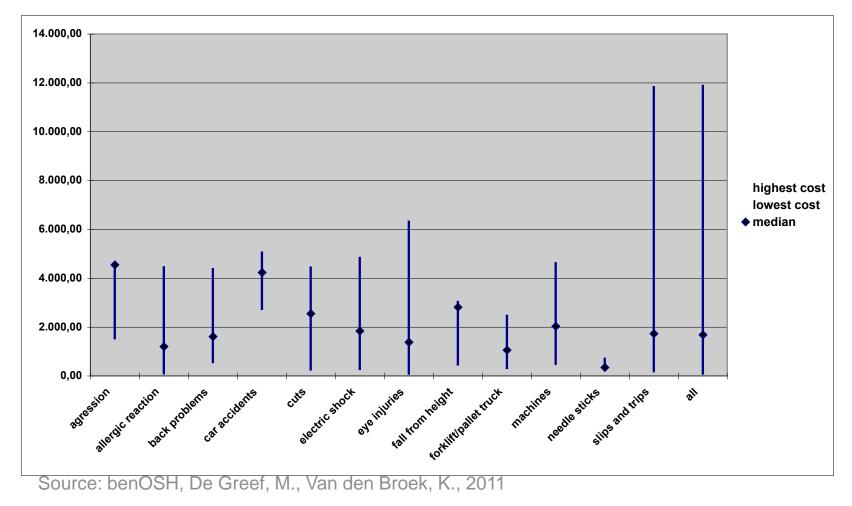
benOSH: objectives

- EU has a well developed legal framework to organise safety and health on company level
- However: emphasizing economic aspects can provide additional support for prevention
- Objectives of the project:
 - To develop knowledge about costs of accidents at work and workrelated ill-health
 - To demonstrate the benefits of prevention

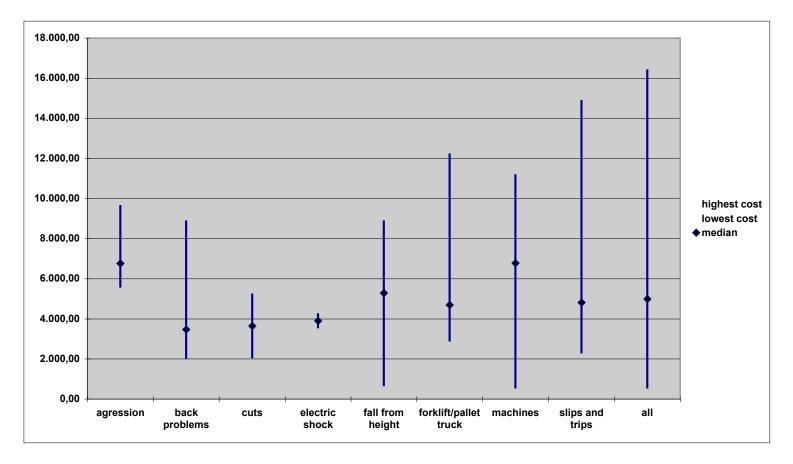
benOSH: methodology

- Two-track approach
 - Desk research: Literature review and scoping study
 - Case studies: analysing costs of accidents at work and work-related ill-health/cost-benefit analysis
- 400 cost calculations, 56 cost-benefit analysis
- Report and publication

Cost calculation: low severity

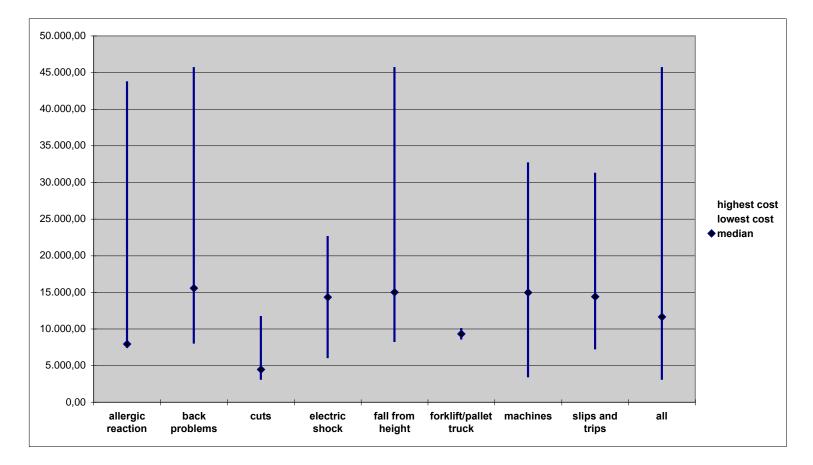


Cost calculation: average severity



Source: benOSH, De Greef, M., Van den Broek, K., 2011

Cost calculation: high severity



Source: benOSH, De Greef, M., Van den Broek, K., 2011

The business case (1)

- To demonstrate that investing in OSH creates benefits on company level
- Methodology: Cost-benefit analysis
- Calculation of indicators such as:
 - the Net Present Value

$$NPV = \mathop{\text{a}}_{t=0}^{T} \frac{R_t}{\left(1+r\right)^t}$$

m

• the Profitability Index

$$PI = \frac{\overset{T}{\overset{}}_{t=1}}{\frac{I_{t=1}}{(1+r)^{t}}} \frac{R_{t}}{\left(1+r\right)^{t}}}{\underset{t=1}{\overset{}}_{t=1}} \frac{B_{t}}{\frac{(1+r)^{t}}{C_{t}}}}{\frac{C_{t}}{(1+r)^{t}}}$$

• the Benefit Cost Ratio

• Helpful in decision-making e.g. to make a choice whether or not to invest, or to choose between two alternative measures.



Investing in Human Capital

Case studies: some examples

- Case 1 Preventing back pain in construction
- Case 2 Stress in a small consulting company
- Case 3 Cuts: which solutions are at hand?
- Case 4 Reducing slips and trips: investing in a slip resistant floor
- Case 5 Prevention of back pain in health care
- Case 6 Setting up an intensive training scheme to prevent trips and similar accidents
- Case 7 Prevention of aggression and violence against bus drivers.
- Case 8 Courier services: tackling road safety
- Case 9 Eliminating the risk: the baker's asthma case
- Case 10 Allergic to epoxy: early warning symptoms

The business case: summary

				Scenario 1*			Scenario 2		
Measure	Code	#	%	Net Present Value	Profitability Index	Benefit- Cost Ratio	Net Present Value	Profitability Index	Benefit- Cost Ratio
substitution/avoidance	I	3	5.4	2,207.52	2.56	1.60	13,857.89	4.08	2.25
organisational measure	11	6	10.7	2,310.96	1.74	1.04	21,829.57	3.18	1.36
new equipment/auxiliaries	111	20	35.7	1,713.35	1.41	1.40	8,983.74	2.76	2.70
workplace adjustment	IV	6	10.7	2,389.38	1.37	1.22	8,984.01	2.15	1.66
training	V	16	28.6	605.02	0.95	1.12	8,092.65	3.39	2.51
personal protective equipment	VI	5	8.9	154.38	1.05	1.18	11,038.12	1.83	2.10
all		56	100	1,434.875	1.29	1.21	9,218.81	2.89	2.18

Source: benOSH, De Greef, M., Van den Broek, K., 2011

Key messages: general

- Accidents at work and work-related ill-health hinder economic growth
- Consequences of accidents at work and work-related illhealth go beyond the workplace
- Costs are partly shifted to society and individuals

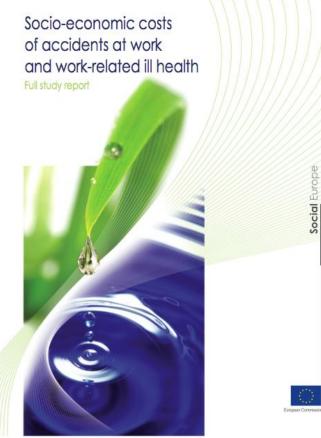
Key messages: company level (1)

- Consequences of accidents at work and work-related illhealth are not always accounted/visible
- Consequences of accidents at work and work-related illhealth increase company costs and decrease revenues
- Calculating costs raises awareness about the necessity of prevention
- Accidents at work and work-related ill-health bring about considerable costs

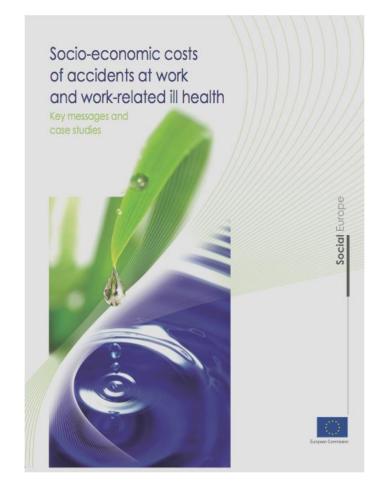
Key messages: company level (2)

- Investing in occupational safety and health contributes to company performance through tangible outcomes
- Evidence derived from practice: investment studies show that investing in occupational safety and health yields positive results (in terms of profitability)

benOSH: study report - publication



www.prevent.be/p/benosh





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