

# Chemical risk management in small and medium-sized enterprises

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## Introduction

Selected examples of strategies and tools

Comparison of experiences

Discussion and conclusions

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**Based on the CEFIC project: "Strategies for success?  
Managing chemical risks in small workplaces:  
a review of European practice" (2004 – 2006)**

**Co-operation partners from United Kingdom, Netherlands,  
Spain, Sweden, Germany and Austria**

**Target group: enterprises with fewer than 100 employees**

**to review the evidence of strategic approaches  
to identify main factors that determine their effectiveness  
to explore supports for their sustainability + transferability**

## Health effects – a flashlight

<b>Occupational diseases</b>	<b>% amongst all recognised occ. diseases</b>	<b>% linked to chemical exposure</b>	<b>% of recognised occ. diseases linked to chemical exposure</b>
<b>cancers</b>	<b>5 %</b>	<b>4 – 90<sup>1)</sup> %</b>	<b>0.2 - 4.5<sup>1)</sup> %</b>
<b>neurological diseases</b>	<b>8 %</b>	<b>2 %</b>	<b>0.2 %</b>
<b>respiratory diseases</b>	<b>14 %</b>	<b>36 – 89<sup>1)</sup> %</b>	<b>5.0 – 12.5<sup>1)</sup> %</b>
<b>skin diseases</b>	<b>14 %</b>	<b>88 %</b>	<b>12.3 %</b>
<b>total</b>			<b>18% to 30<sup>1)</sup> %</b>

<sup>1)</sup> Second percentage: including chemical dusts (asbestos, silica dusts, wood dusts ...)

Source: Tony Musu, REACHing the workplace. TUTB 2004

## **Regulatory frameworks for chemical risk management that emerged in the 1980s failed in small enterprises**

### **Most SEs beyond reach of regulatory surveillance or professional help**

- **in general, assumed levels of awareness, comprehension and capacity not found amongst owners/managers**
- **enforcement agencies insufficiently resourced**
- **access to prevention services limited**

### **Limited knowledge in SEs, e.g. reg. substitution and control measures**

- **deficiencies in most SDS and in many labellings (ECLIPS study 2004)**
- **lack of comprehension in small enterprises**

## Relationship chemical exposure - company size

Frequency	Company size					
	1-9	10-99	100-499	500-999	1000+	Total
<b>Skin exposure</b>						
daily/weekly	45.3	33.5	27.4	28.4	23.7	32.4
only monthly	11.3	8.7	8.3	4.2	5.4	8.3
never	43.4	57.8	64.3	67.4	70.9	59.3
<b>Respiratory exposure</b>						
daily/weekly	50.0	43.3	36.1	33.1	29.4	40.3
only monthly	10.0	9.1	9.4	8.8	9.0	9.3
never	40.0	47.6	54.5	58.1	61.6	50.5

Source: Anja Kremer. Gevaarlijke stoffen (Hazardous substances). TNO, not yet published

## Chemical risk management: Small is not

beautiful

### OSH performance in smaller enterprises:

- general and multi-faceted lack of resources
- OSH problems more dependent on poor risk management than on the seriousness of the existing hazards
- limited access to external OSH services
- limited development of OSH resources, e.g. competency, training, information, safe equipment, etc
- infrequent inspection and control
- limited access of workers to work councils, trade unions

**Exacerbated by: job insecurity, weakness of organized labour, high proportion of precarious or illegal workers, sheer number of enterprises**

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## Types of strategies (tools)

### Generic strategies

- COSHH Essentials (UK), Easy-to-use Workplace Control Scheme (D)

### Sector-based approaches

- VASSt (NL), covenants (NL), by Accident Insurances (e.g. GISBAU, D), Hazardous Substances in the Trades (D), ...

### Approaches based on size of enterprise

- AUVAsafe (A), training on specific risks (Mutuas, ES)

### Provision of structured collections of methods and instruments

- Hazardous Substances under Control (GER), eval.at (A), Control Guidance Sheets (elements of COSHH essentials, UK), KemiGuide (S),

### Intermediaries as elements of strategy

- trade union regional OSH reps (S), AUVAsafe (A), advisors of Chambers of skilled crafts (D), advice in the supply chain, ...

## Example: COSHH Essentials (HSE, UK)

### Web-based "complete tool": [www.coshh-essentials.org.uk/](http://www.coshh-essentials.org.uk/)

- helps small firms to establish accessible assessment & control criteria
- generic approaches to health hazards/potential exposure & to control through simple system, based on labelling and suppliers' SDS
- in a process in which hazards and exposure potential (based on likely use scenarios) are grouped in various combinations that generate appropriate control measures

### Basic scheme = simple step-by-step guidance

- with checklists to guide through the assessment process
- means of identifying the appropriate control guidance sheet
- not comprehensive, but wide coverage

## Example: GISBAU (D)

**CD- / Web-based tool for the **construction** sector: [www.gisbau.de](http://www.gisbau.de) provided by the Liability Insurance Association in the Construction Industry**

- **WINGIS** database: task-specific information for chemical products, differentiated for employers, occ. physicians, occ. hygienists, works councillors
- **product codes**: 13 groups of chemical products, divided into 52 sub-groups with 261 categories in total
- **model work instructions** for all 261 categories available

**Advice offered by Association's Technical Inspectors / CD free of charge**

- wide dissemination of CD
- suppliers interested in inclusion of products into product code scheme
- however: no systematic assessment of effects yet

## Example: AUVAsafe system (A)

I

### OSH care system for smaller enterprises

- free OSH care by AUVA for worksites with up to 50 employees
- decentralised: prevention centres in all 9 federal states
- strongly promoted by AUVA, authorities and social partners
- all OSH areas covered, but chemical risks are a central part

### Established quality assurance system

- special training, networking, meetings ... of all prevention experts
- systematic feedback and evaluation procedures,  
including yearly customer survey

## Example: AUVAsafe system (A)

II

### Coverage of AUVAsafe (1999 – 2004)

- 52.1% of all worksites/enterprises with 1 to 10 employees
- 72.2% of all worksites/enterprises with 11 to 20 employees
- 73.5% of all worksites/enterprises with 20 to 50 employees
- Total: 62.2% of all worksites/enterprises with 1 to 50 employees

### Remarkable success, but

- number of contact hours very low in this company range
- still about 40% of the target group without any efficient service
- what happens in SMEs with more than 50 employees?

## Example: Hazardous Substances under Control (D)

**Internet portal: [www.gefahrstoffe-im-griff.de](http://www.gefahrstoffe-im-griff.de) provided by the Occupational Health Administration of the State of North-Rhine Westphalia**

- provision of well-structured access to wide range of tools provided by various German institutions
- four different modes of access available, including online-advice on occupational health by expert network, **KomNet**

- other federal states are joining the portal
- increase in monthly access numbers from 4,900 to 15,000 (2004 – 2006)
- however: electronic response tool (contact form) hardly used
- **KomNet**: user satisfaction and user profile enquired
- **KomNet** approach transferred to areas beyond occupational health

## Example: advisors of Chambers of Skilled Crafts (D)

### Technical advisors provided by Chambers of Skilled Crafts

- support offered solely by personal communication
  - provision of access to, and application of, instruments from other institutions
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- support adapted to the **need of owner** of individual (small) enterprise
  - continuous **learning process** feasible
  - owner of enterprise addressed in his own language / by competent expert → development of **personal trust** facilitated
  - precondition: continuity of advisors
  - very resource-intensive
  - **service offered by a very small number of Chambers only**

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## Conclusions

### Relevant strategic elements

- provision of support on demand
- mode of communication: face-to-face; relevance of personal trust
- (professional) status of promoters (“street credibility”)
- (high) technical competence of promoters

### Support offers should be **tiered** and **adjustable** to target group

- adequacy of offer (comprehensibility; design, volume, format; resources needed for implementation) for target group
- motivation of target group
- competence and resources (ability) of target group