

#### Workshop III



# CB implementation: communication, training and education









### **Key Questions**



- How do SME accept current CB tools to fulfil their legal duties in occupational safety and health?
- How can CB be part of training courses und university education?
- What are the best ways and target groups to promote CB?



### Operational analysis of Stoffenmanager Henri Heussen, Arbo Unie, NL



#### Stoffenmanager: how (well) is it used?

- is the tool understandable and of practical value for the users?
- is there a match between the tool and the users?
- a quality check at user level i.e at the individual workplace.

#### **Results:**

- wide variation in user characteristics: job-title, experts & non-experts,
   size of companies: ~50% work at SMEs, 14% at small companies
  - Discussion on adding a focus in Insurance Agencies in user survey
  - 5 times more Safety Engineers than Industrial Hygienists, most 'educated' users
- all modules are used: module "risk assessment inhalation" = 73%
  - Need to increase the communication of available tools and their use
- users rate modules between "neutral" and "satisfied"
- reason not using a module: not aware of possibilities communication

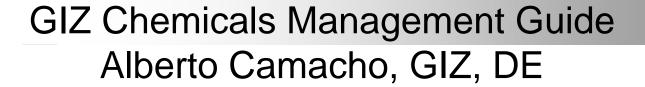


# CB training for OSH professionals Annette Wilmes, BAuA, DE

- Teaching unit for safety specialists and their trainers.
- Short Presentations in insurance and other institutions.
  - Off-the-job training: they learn what to do, but need 'when to use it'
  - They need the toolbox, multidisciplinary as well as easy to complex
- CB Tools essential for safety specialists EMKG wheel & card
  - Easy, systematic approach Outcomes important for use
- Training of safety specialists and promotion at trade fairs.
  - Feedback: online availability for storing and access of data
- Training presentation and examples for EMKG applications on our website. Need understanding of EMKG for questions.
- 2014: EMKG 3.0 & a new train-the-trainer concept.
  - Integration of a tool for explosion risks



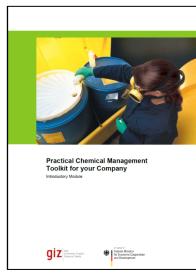


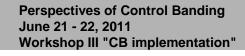




Our aim is to provide support in addressing challenges regarding:

- 1. Ensuring/improving efficient use of chemicals
  - \* If you control chemicals, you save money (...also reduce exposures)
- 2. Managing the risks to the environment, health and safety
  - \* Need environmental CB to protect public in long term
- 3. Considering reduction of production costs
  - \* Control hazards: Health, Physical, Environmental
- 4. Integrating new concepts like Non-product output (NPOs), Control banding and Work Safety into existing management structures, particularly of SME: **Mosquito consultants!**
- 5. Helping companies to meet social and environmental standards: Outcome of using CB to teach assessment needs
- 6. Facilitating the ISO certification process for companies







### CB social media and Pimex Videos Henri Heussen, Arbo Unie, NL

#### Lessons learned from 10 years of Stoffenmanager

- Human behaviour is an implicit (even not always explicit) essential element of occupational hygiene practice
  - How do prove ill-health from exposures is important to the worker?
- You have to do more then just providing a tool on the internet
  - You must 'hook' the worker to make it part of their awareness
- Can not copy the process of implementation from one company to another
  - Tailor-made, Safety culture, Good news: general principles!!

Development & technical evaluation of CB tools is not enough

Need to reach workers & experts simply: Twitter: tweet issues to experts

#### General principles:

Personalisation of the hazards and risks

Risk communication: using a CB tool is by itself a personalisation step

Social media strengthen this personalisation process

Also: Visualisation techniques (PIMEX)

Future: VEM and interactive paper? (CGS, MSDS)





## CB in tertiary education (I) Paul Swuste, Delft University of Technology, NL

- Should CB be part of all academic training programs?
   YES long term goal ('no' too hard to say at this workshop)
  - Advantages: Uses existing knowledge directly to control
  - Limitations: Design-to-control, limited scenarios to exposure realm
- Should CB be limited to design & OSH programs?
  - Need to grab management influence and build into teaching methods
  - Need to move CB as close as possible to the decision makers
- How to incorporate CB in already overcrowded programs?
  - If you move CB into curriculum, something needs to move out
  - Basis of risk assessment leading into exposure assessment
  - Foundation of occupational risk management and OHSMS teaching



# CB in tertiary education (II) Tobias Keller, University of Wuppertal

#### **Education**

#### **Currently**

- CB <u>Basics</u> integrated in <u>Bachelor</u> Education
  - Taught as methods & concepts for Assessment and Protection Measures
- -Advanced CB Basics in Master Education
  - Management of Hazardous Substances
  - Methods & legal basics, product safety (REACH, GHS, CSR), occupational safety (SDS, CB tools, EMKG)

#### <u>Future</u>

- Basics and Advanced Basics combined in Bachelor Education
  - \* Taught within the Occupational Safety

#### Dissertation

- Developing and applying the Control Banding Approach to mechanical Hazards
  - \* Banding in mechanical hazards remains a challenge to solve



# Changes in the world of work Issues to be addressed as regards dangerous substances http://osha.europa.eu



Dr. Elke Schneider EU-OSHA

- Trend to multiple jobs, how to assess exposures and protect workers
- Move from industry to services
  - Statistics insufficient (e.g. EU accidents data do not cover education and health services)
- Increasing number of female workers & insufficient knowledge
- Increasing number of migrant workers & insufficient knowledge
- \* Survey: Dangerous substances very high for worker concerns
- \* Emerging risks lead to need for CB to control dangerous substances Maintenance jobs require customized CB approaches & CGSs
- \* Support for risk management methods and funds for development Generic workplace risk assessment tool <a href="http://www.oiraproject.eu/">[http://www.oiraproject.eu/</a>]



### How do SME accept current CB tools to fulfill their legal duties in occupational safety and health?

- Which methods are available to SMEs in chemical risk management?
  - COSHH Essentials, Stoffenmanager, EMKG, GIZ CMG + specific tools (nano, sectors)
- Which methods are the most business-wise solutions? Ones that are used.
- Are CB tools a business-wise solution? Which circumstances?
  - Sector-specific survey by Stoffenmanager indicates it is, mostly for use by OSH experts (incl. H&S representatives and technicians)
- If they accept CB tools, which steps will users have to take to successfully complete a risk assessment and implement the right control measures?
  - It is not the risk assessment, but implementation is based on discussing benefits vs. costs (compare results to existing controls, plan, do, check, act + verify)
- Is there a common road to success? Communicate, train on use, implement, control
- And if there is, which hurdles do they have to overcome? Convince of benefits
- How do they do this? user must understand regulatory needs and alternatives vs. cost
- What are the success and failure factors? discuss 'how' to implement



### **CB** implementation in SME

#### success factors

- management committed
- CB for dummies
- tailored guidance
- simplicity
- using success examples
- implement
- demonstrate compliance
- trained CB users

#### failure factors

- cost of implementation
- cost of risk assessment
- lack of mosquitoes
- not realizing options
- competing agendas
- ensuring quality results
- lacking trust in CB
- not enough time



# How can CB be part of training courses und university education?

- For training courses, what is the best way to train workers?
  - How to use CB tools, but also understanding the implementation.
  - Personalizing risk: participatory in solutions, not in blaming them
- What is the best way to train the trainers?
  - Online, Trade shows, Classroom, Workplace, Hands on
- University education, best way to integrate CB into curriculum?
  - With risk assessment, then occupational risk management & OHSMS
- Types of topics covered for undergraduate & masters courses?
  - Curriculum removed to replace with CB? Tiered approach, integration
  - Practical aspect? Role of consultant, selling H&S, convincing mgt
  - Basics of CB, use of tools, hands-on, tool development, & business



### **CB** training and education

#### Workers:

- Concept of chemical, physical, bio hazards
- hazards x exposure = risk
- CB tools & online hazard info
- Learn to identify, own their own safety & solutions, right to know

#### **Trainers:**

Need an overview of all CB tools, how they work, strengths & limitations, educational methods, aspects of implementation. The need to check and verify control



# What are the best ways and target groups to promote CB?

- Experiences with tool development & inclusion/consultation of stakeholders
  - Surveys vary from COSHH & Stoffenmanager, both stakeholder & worker input process
- What are your CB experiences? Limitations, advantages, feedback?
  - Not a panacea, but best with limited information. Limited with quantitative regulations.
- Where does CB work best? What are the lessons learned?
  - Best with no alternative (depending on country), best with train-the-trainers and the users
- How could current tools be improved? Ideas abound, money is what is lacking.
- Experiences: development, awareness-raising, promotion, dissemination?
  - EMKG promotion is a lesson for us all, still need "mosquito consultants" to keep the buzz
- How to ensure participation (+ workers) and continuous improvement?
  - Begin tools based on worker/stakeholder needs, teach at the worker level for growth
- How to ensure feedback of users? Limited to 25% at best, otherwise whips & chains
- How to communicate tool limitations and where it doesn't work at all?
  - Lead with limitations, acknowledge weaknesses, but without expertise it is better than nothing



### **CB** promotion

target groups: multilingual tools, multidisciplinary toolboxes All enterprises, stakeholders, managers, informal economy, insurance companies, consultants, trade sector unions,

inspectors, assurance managers, auditors, safety

engineers, occupational physicians, ergonomists.....

instruments / media: CB glossary & dictionary

Online CB tool access, computer and smart phone 'apps', easy-to-use tools (e.g. EMKG wheel), social media, online examples, success stories, lessons learned

**feedback:** Availability of tools & types of tools, their use, but *Need money*, mosquito consultants, social networks, &???

