



REPORTS FROM CONTROL BANDING SCIENTIFIC BREAKOUT SESSIONS

**Research Agenda for Developing Nations
Research Agenda for Developed Nations
Expansion of Range of Control Banding
Performance-Based Exposure Control Guides
Open Topics on Control Banding**

2ND INTERNATIONAL CONTROL BANDING WORKSHOP

**Validation and Effectiveness of Control Banding
Cincinnati, Ohio, USA 2 March, 2004**

Open Topics

- Control Solutions need to be expanded
 - ◆ Sector/industry specific
 - ◆ Cost estimates & multiple options
- Training and capacity building
 - ◆ Train the trainers
 - ◆ Implementors
 - ◆ Regulators
 - ◆ Associated professions
- Implementation
 - ◆ Total ES&H management system
 - ◆ OSHA Consultation program
 - ◆ US - TSCA
 - ◆ Select industry trades
 - ◆ Market the success stories
 - ◆ ACOE

Open Topics

- Gotta Re-name it
 - ◆ ESH Risk Management Matrix
- Validation
 - ◆ Agree upon validation protocol
 - ◆ Leverage HSE, NIOSH, OSHA systems currently
 - ◆ Hit up trade organizations
 - ◆ NIOSH health evaluations
- Use CB as a baseline
 - ◆ Lead, asbestos NEAs or NIDs
 - ◆ Opt out on unit processes
- CB fashioned in a flexible manner
 - ◆ Use in a complimentary fashion to current OELs
 - ◆ Interim measure
 - ◆ Use as an alternative to OELs
 - ◆ Each has a particular function, tailored to end use.

Expansion of Range

- What current examples exist where expansion of CB applications might have utility?
- 1) Generally applicable to all areas of health and safety in the workplace
- 2) Nanoparticles
- 3) Metal Working
- 4) Product Stewardship
- 5) Noise
- 6) Brownfield's Recovery
- 7) Coal Mining
- 8) Non-ionizing Radiation
- 9) Epidemiology

Expansion of Range

- What are the appropriate to validate effectiveness of these applications?
- 1) Use the existing NIOSH small business metal working database.
- 2) Evaluate state worker compensation histories for insights into needed prevention strategies
- 3) Evaluate and document concepts such as “use with adequate ventilation”

Expansion of Range

- What are the barriers to expanding CB into new areas/applications?
- 1) Problem identification: “if we can’t define the problems, we can’t expand the solutions”. John Farris
- 2) Fear of getting things wrong.
- 3) High requirement for expert judgement and experience.
- 4) Lack of a priority plan, including the expert resource requirements
- 5) Competition with existing approaches

Expansion of Range

- How will the role of the OSH practitioner fit with the expansion of CB?
- 1) Expansion will place increasing demands on the OSH practitioner
- 2) Expectation for excellence will rise
- 3) Role will be to educate employers and employees, and advocate and validate its use

Expansion of Range

- Which of the CB tools or “Toolkits” discussed at this workshop are most readily suited for expansion or new applications? Others?
- 1) COSHH Essentials
- 2) BAuA
- 3) WHO-ILO global implementation strategy
- 4) Others

Expansion of Range

- What 5 major points could summarize and prioritize the next steps for expanding the range of CB?
- 1) Directory of approaches for categorizing and minimizing risks
 - ◆ CDC Biosafety level
 - ◆ Pharma experience
- 2) Industry trade organization specific pilot studies
- 3) Compilations of lessons learned
- 4) Clarify where dose-response is addressed (hazard side v. exposure side)
- 5) Communication and task forces

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Developing Countries

- SUMMARY AND PRIORITIES
- 1) Developed countries should fund pilot projects and capacity building in developing countries.
 - ◆ Training materials and information, more than implementation
 - ◆ Tools
- 2) Recommend large multinational companies apply and expand efforts in CB implementation and education to their networks and communities.
- 3) Use carrot approach - demonstrated cost savings.
- 4) Increase general awareness of health and safety, including good housekeeping (WISE, WIND)
- 5) Use WHO Collaborating Centres and ILO networks to find the best governmental or non-governmental portal of entry
 - ◆ Institutes, government agencies, insurance companies, national commissions, employers' and workers' associations
- 6) Collaborations and partnerships (twinning) at the technical level
 - ◆ Need for readily applicable control measures

Developed Countries

- Major Barriers to Implementing Control Banding in Developed Countries?
 - 1) Money for entire range of activities
 - 2) Fear of Government Agencies by SME as well as citizens/workers
 - 3) Need for Harmonized standard protocol for defining Control Banding
 - 4) Recognition of Legal Due Diligence if Control Banding Controls in Place and Illness occurs?
 - 5) How to enforce if no monitoring?

Developed Countries

- Appropriate Research Topics to Validate Control Banding Effectiveness?
- 1) Vapor degreasers in SME 1980s success
- 2) Asphalt Paving NIOSH Partnership as prototype for future collaboration
- 3) Validate both Prospectively and Retrospectively
- 4) Need Baseline Data from SME before effectiveness can be measured after CB
- 5) Prospective study on chemicals with BEI
- 6) Retrospective Study on OSHA Pb, Asbestos, and NIOSH Consult Files

Developed Countries

- Measures of Effectiveness/Success of Implemented Control Banding Strategies in Developed Countries?
- 1) Exposure Monitoring after CB implementation
- 2) External Validation on different data set than used for building CB guidance
 - ◆ COSHH built on UK data validated on FRG data
- 3) Insurance/Worker Compensation Validation in Retrospective Studies
- 4) Pharmaceutical Industry has completed the existence proof. Are using CB now.
- 5) Insurance/Workers Comp. Industry as Stakeholder
- 6) Trade unions are major stakeholders in UK and EU

Developed Countries

- Mechanisms to Communicate, Enhance and Implement Control Banding Concepts in Developed Countries?
- 1) Chemical manufacturers to offer control banding with their products
- 2) Dry cleaning experience of NIOSH shows cost
- 3) Trade organizations have been successful
 - ◆ Product stewardship and Responsible Care
- 4) AIHA Std Presentation for Local Sections
- 5) AIHA Std Presentation for Chambers of Commerce emphasizing ROI
- 6) SME good news web site
- 7) SDS should have CB instructions GLOBALLY

Developed Countries

- Which of the Control Banding Tools Discussed at this Workshop are Most-Readily Suited for Applications in Developed Countries?
- 1) COSHH Essentials
- 2) Pharmaceutical Industry Experience
- 3) We think, Ceramic Fiber Industry is using the fundamental CB concepts
- 4) SDS from primary manufacturer to formulator and SME users to contain full CB data, (as condition of business?)

Developed Countries

- From our Discussion, Prioritize Major Opportunities for Implementing Control Banding in Developed Countries?
- 1) CB: if no OEL or no monitoring technology
- 2) Checklist for Control Strategies in SME
- 3) Clarify OELs ... they have never been point estimates, they ARE bands
- 4) Global Standardization through ILO
- 5) Peer Review Procedure and Agency
- 6) Build database of Economic Case Studies
- 7) Provide Legal Acceptability for Users of CB

Developed Countries

- New Name for Control Banding
But, WHY?
- 1) Occupational Exposure Control
- 2) Occupational Exposure Prevention
- 3) Control Intervals
- 4) Intervals for Managing Risk
- 5) Hierarchy of Controls
- 6) Groupings for Hazard Abatement
- 7) Qualitative Risk Grouping
- 8) Occupational Risk Management

Developed Countries

- Goals of our two hours in Session II
CB = Control Banding, DC = Developed Countries
- 1) Eat Box Lunch
- 2) Major Barriers to CB in DC
- 3) Means to Validate CB in DC
- 4) How to Communicate, Enhance, Implement CB in DC
- 5) Measure Effectiveness of CB in DC
- 6) Identify “Tools” from this Workshop to use in DC
- 7) Five Priorities for Next Steps in DC
- 8) 120/7 means ~ 17 minutes each.

Performance-Based

- What five major points summarize and prioritize the next steps for developing and verifying performance based exposure control guides?
- 1) Involve stakeholders to identify, design and implement hierarchy of controls.
- 2) Define minimum performance standards to evaluate and verify effectiveness of controls.
- 3) Create protocols and materials to train workers to use and maintain control measures and understand limitations.
- 4) Develop mechanisms and define incentives to share information globally to constantly attempt to improve control measure recommendations.
- 5) Consider how we will handle and respond to non-airborne exposures, such as chemical-dermal and physical agents.

On Behalf of the
Control Banding
International Technical Group

THANK YOU!