Intervention Research in Occupational Safety & Health: A Conceptual Model

Why a Model?
- Provide an integrating framework for otherwise diverse OSH research activities
- Articulate relationships between various types of intervention research
- Enable an assessment of the current state of the field
- Develop common language to facilitate communication

What is the Model?
- Intervention research is cyclical and progressive (see figure)
- Intervention research phases: development, implementation, and effectiveness
- Developmental research describes the de novo development or selection/ adoption of an appropriate intervention for a specific work context
- Developmental research draws from OSH principles (e.g., hierarchy of controls, “the 4 E’s”) as well as theory from other fields (e.g., education, economics, organizational development)
- Implementation research qualitatively and/or quantitatively characterizes how interventions are implemented, as well as barriers and facilitators to implementation
- Implementation research is also known as process evaluation or program monitoring
- Effectiveness research assesses the degree to which the intervention achieves its intended goals
- Common effectiveness measures include changes in knowledge, behaviors, exposure levels, injuries, or illnesses
- Common tasks are involved in all phases of intervention research, starting with needs assessment and concluding with communication of findings
- Intervention research can be conducted at a wide range of levels, ranging from small worksite programs to national or international standards
- Intervention research inventories can be constructed using 3xN tables of intervention phase versus level (e.g., worksite program, industry-wide, national policy)

How can the Model be used?
- Retrospective Assessment: Where have we been?
  ▶ How much OSH intervention research has there been? What kind? In what areas?
  ▶ How much on developmental, implementation, effectiveness studies?
  ▶ How much at various levels: worksite programs to national policies?
- Prospective Planning: Where are we going?
  ▶ Are funding patterns working to fill existing gaps?
  ▶ Which areas of intervention research should be prioritized?
  ▶ Recommend calls for papers, priorities for research and funding