



ELSEVIER

www.elsevier.com/locate/jsr

Journal of Safety Research 39 (2008) 113



www.nsc.org

Prevention through Design — Introduction

John Howard

Director, National Institute for Occupational Safety and Health

One of the best ways to prevent and control occupational injuries, illnesses, and fatalities is to "design out" or minimize hazards and risks early in the design process. The National Institute for Occupational Safety and Health (NIOSH) is leading a national initiative called Prevention through Design (PtD) to promote this concept and highlight its importance in all business decisions. PtD addresses occupational safety and health needs in the design process to prevent or minimize the work-related hazards and risks associated with the construction, manufacture, use, maintenance, and disposal of facilities, materials, and equipment.

A growing number of business leaders are recognizing PtD as a cost-effective means to enhance occupational safety and health. Many U.S. companies openly support PtD concepts and have developed management practices to implement them. Other countries are actively promoting PtD concepts as well. The United Kingdom began requiring construction companies, project owners, and architects to address safety and health during the design phase of projects in 1994, and companies there have responded with positive changes in management practices to comply with the regulations. Australia developed the Australian National OHS Strategy 2002–2012, which set "eliminating hazards at the design stage" as one of five national priorities. As a result, the Australian Safety and Compensation Council (ASCC) developed the Safe Design National Strategy and Action Plans for Australia encompassing a wide range of design areas including buildings and structures, work environments, materials, and plant (machinery and equipment).

NIOSH has partnered with the American Industrial Hygiene Association (AIHA), the American Society of Safety Engineers (ASSE), the Center to Protect Workers' Rights, Kaiser Permanente, Liberty Mutual, the National Safety Council (NSC), the Occupational Safety and Health Administration (OSHA), ORC Worldwide, and the Regenstrief Center for Healthcare Engineering for the development of a National Initiative on Prevention through Design. Additional partners may be joining this national initiative soon and we invite others who are interested in joining to contact NIOSH.

The approach to develop and implement the PtD National Initiative is framed by industry sector and within four functional

areas: Practice, Policy, Research, and Education. This process encourages stakeholder input through a sector-based approach and will be integrated into the National Occupational Research Agenda (NORA).

The ultimate goal of the PtD Initiative is to prevent or reduce occupational injuries, illnesses, and fatalities through the inclusion of prevention considerations into all designs that impact workers. Along the way, intermediate goals will be identified to provide a path toward achieving the ultimate goal. NIOSH will serve as a catalyst to establish this Initiative, but in the end, the partners and stakeholders must actively participate in addressing these goals to make PtD business as usual in the 21st century.

The first Prevention through Design (PtD) Workshop was held in Washington DC July 9–11, 2007 to launch a National Initiative aimed at eliminating occupational hazards and controlling risks to workers "at the source" or as early as possible in the life cycle of items or workplaces. The workshop attracted approximately 225 participants from diverse industry sectors and disciplines and included: plenary speakers highlighting the success of PtD in several industries; breakout sessions to identify opportunities, barriers, and next steps for each industry sector; and cross-industry breakout sessions to map out the top over-arching issues for PtD in the functional areas of Practice, Policy, Research, and Education. The output from the workshop will be used to develop a strategic plan that highlights actions and milestones to institutionalize the concept throughout the United States. This edition of the *Journal of Safety Research* is devoted to PtD and includes the proceedings from the Prevention through Design Workshop meeting, breakout session reports from the industry sectors and functional areas, as well as technical papers authored by experts in PtD.

Additional information about PtD can be found on the NIOSH website at: <http://www.cdc.gov/niosh/topics/PTD/>. If you have any comments that you would like to make about the PtD Initiative, please send them to ptd@cdc.gov.

E-mail address: jhoward1@cdc.gov.