

What are our priorities?

The National Institute for Occupational Safety and Health (NIOSH) Prevention through Design (PtD) Initiative works with partners in industry, labor, trade associations, professional organizations, and academia. The program focuses on preventing illness, injury, and fatality by “designing out” occupational hazards and risks.

What do we do?

- **Research** the effectiveness of current PtD interventions, investigate additional solutions for existing design-related challenges, and identify future research needs.
- **Educate** and motivate others to use PtD priorities and processes in collaborative design and redesign of facilities, work processes, equipment and tools by:
 - Helping universities integrate PtD principles into engineering curricula.
 - Encouraging professional accreditation bodies to include PtD in their assessments.
 - Making business leaders aware of potential cost savings from PtD.
- Increase **practice** of PtD by sharing case-studies of real-life PtD solutions, and encouraging stakeholders to apply them and share further.
- Encourage business, labor, government, academic, and consensus standards organizations to integrate PtD into **policy** revisions.
- Produce concise, practical PtD guides and checklists for **small businesses**, their insurers, and the publishers of code books used by their local municipalities.

What have we accomplished?

- The U.S. Green Building Council published a *Leadership in Energy & Environmental Design (LEED) PtD pilot credit* for building certifications after four years of **policy** work with the NIOSH PtD and Construction programs. The pilot credit, developed by NIOSH, prompts the use of PtD methods to design out worker hazards for both the construction phase and operations & maintenance phase of a building’s life cycle.
- Completed **research** and development of a Business Case Developer software tool that helps business managers and safety and health professionals develop proposals on the business advantages of transitioning to a PtD design process.
- Provided **education** in PtD methods at 17 events to over 1,000 influencers in business, safety, health, government, academia, and labor.
- Published safe **practice** outcomes of the 2012 “Safe Nano Design” workshop organized by the NIOSH PtD program, the NIOSH Nanotechnology Research Center, and the State University of New York at Albany. The focus is on safer design of both molecules and manufacturing processes.
- Published two Workplace Design Solution documents on PtD business value and noise reduction. These brief documents are especially helpful to **small businesses**.

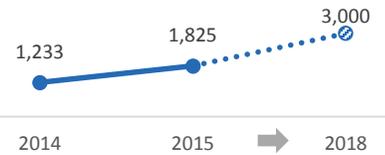
What’s next?

- Publish Capital Projects Processes web site with checklists and case studies showing how to incorporate PtD methods in large building projects, including Green Building.
- Publish a Business Case journal article that shows how to use the free Business Case Developer software. It can be used to make financial and non-financial proposals for adoption of PtD processes in a business.
- Develop 8 or more case studies that provide more examples of how to use the Business Case Developer software.
- Publish 3 educational slide decks with speaker notes and instructor guides on PtD for Engineering undergrad programs in:
 - Agricultural Engineering
 - Capital Projects Process
 - Manufacturing and Industrial Engineering
- Develop model language for incorporating PtD into liability insurance policies for designers and constructors.
- Develop model contract language that incorporates PtD roles and responsibilities into design and construction contracts.
- Serve on the American Society of Safety Engineers’ workgroup to revise the ANSI/ASSE z590.3 Prevention through Design standard. Revisions will provide guidance to better enable businesses to use PtD design methods.
- Publish two Workplace Design Solutions for nanotechnology manufacturing with the NIOSH Nanotechnology Research Center.

At-A-Glance

The Prevention through Design (PtD) Initiative’s mission is to prevent or reduce occupational injuries, illnesses, and fatalities through the inclusion of prevention considerations in all designs that impact workers. This snapshot shows recent accomplishments and upcoming work.

Visits to PtD topics/publications web page



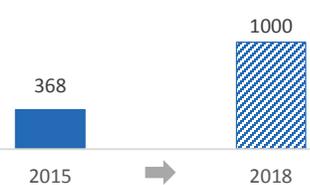
Source: NIOSH program records

Projects using PtD LEED® Credits



Source: NIOSH program records

PtD LEED® Webinar Participants



Source: NIOSH program records

Publication Spotlight: Workplace Design Solutions

