

NIOSH/AIHA Alliance

Working together to protect worker health
Prevention through Design



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*Linking financial and non-financial business benefits
for better protection of worker health*

AIHA VALUE STRATEGY

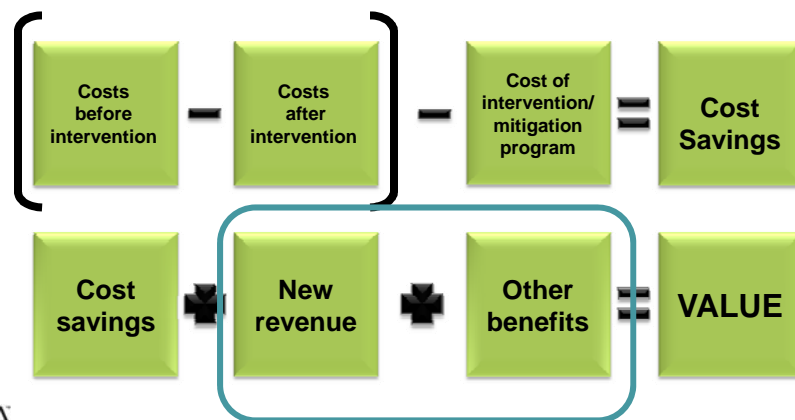


Background

- AIHA sponsored research to identify IH business value links
 - Goal: Illustrate the “business case” for IH programs and activities
- Initial results presented at 2008 AIHce in Minneapolis



A Framework



Key Findings

IH impacts on the **overall business process** were often the most significant



The most significant IH value contributions did not come from the traditional sources, such as:

- Lower worker compensation premiums
- Reduced fines and penalties
- Health-related costs



Key Findings

The most cost-effective value contributions result from...

- Eliminating the hazard or implementing engineering controls...
...instead of using PPE or administrative controls even if the initial cost is higher
- Proactively improving processes to prevent occupational illnesses...
...rather than retroactively reducing health-related costs or worker compensation premiums



Key Findings

The most significant value contributions result from...

- Anticipating worker exposures and designing process improvements to reduce or eliminate these exposures...

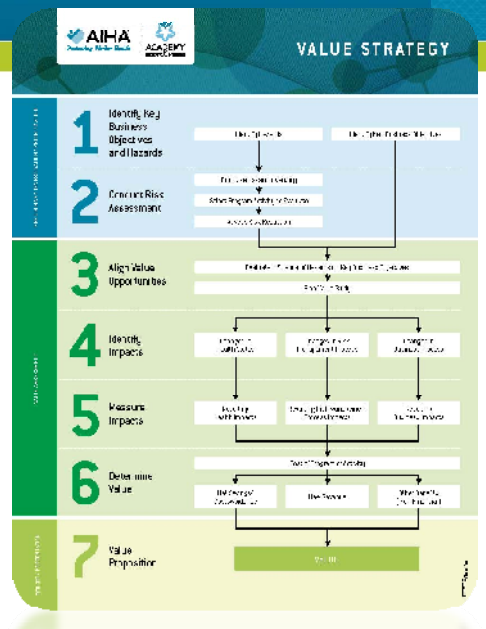
... resulting in significant contributions to business profitability

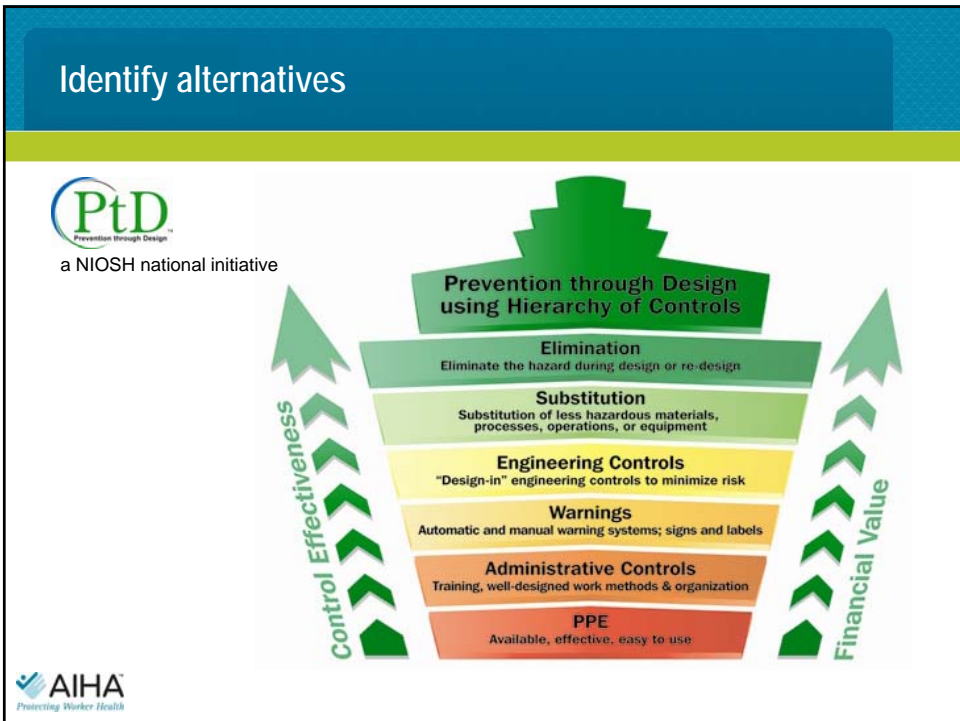
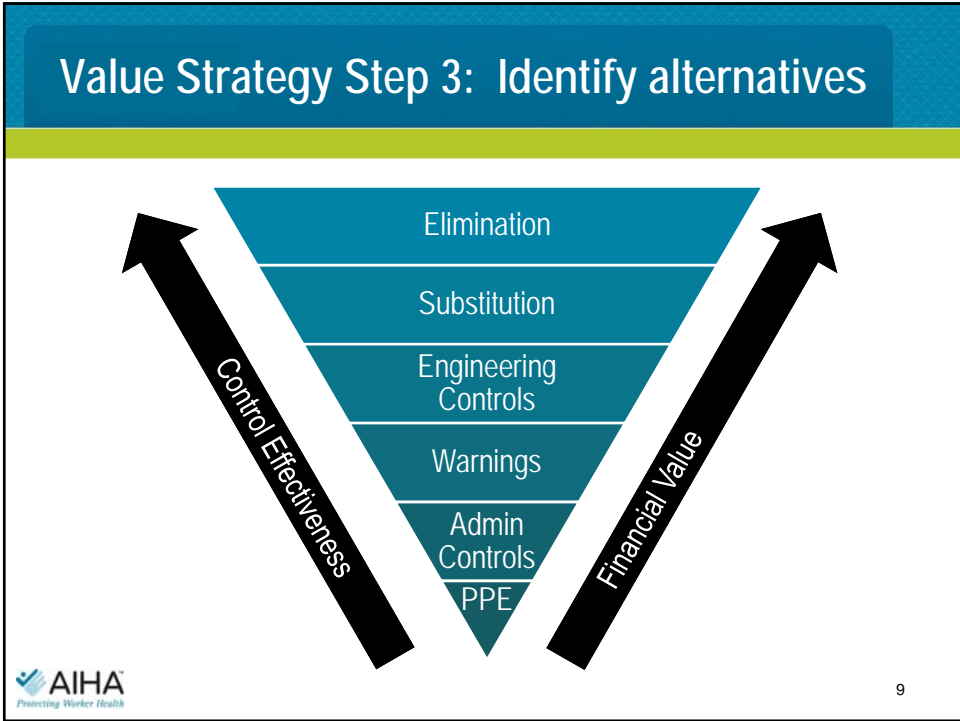
- IHs participating on business teams to solve problems...

...that other professionals are not qualified to address

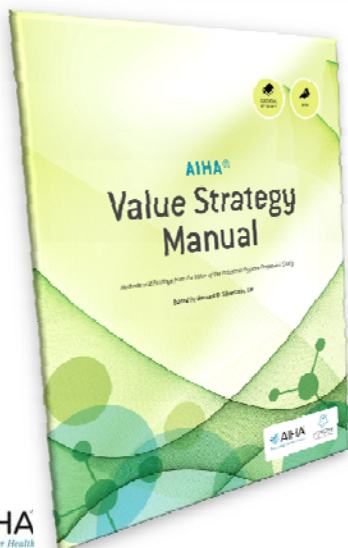


The AIHA Value Strategy





Where we are today



- Value Strategy Manual published
- Continuing education courses available
 - Introductory
 - Advanced
- Electronic tools available
- Credential for practitioners in development



*Focusing exposure risk assessment and management
for better protection of worker health*

HAZARD BANDING



What are we working to accomplish?

- Develop the framework to systematically evaluate the occupational hazards for chemicals without authoritative OELs (PELs, RELs, WEELs, TLVs, etc.) and communicate the hazards in terms of “health hazard bands”
- Focus on the development of eco-toxicology and physical hazard bands to assist the practitioner in a holistic evaluation of chemical hazards

Health Hazard Banding

Working Definition

The process through which the hazards of a material are collected, evaluated in terms of potential adverse effects from occupational exposure routes, and communicated in terms of health hazard band ranges.

Background Scope of OELs

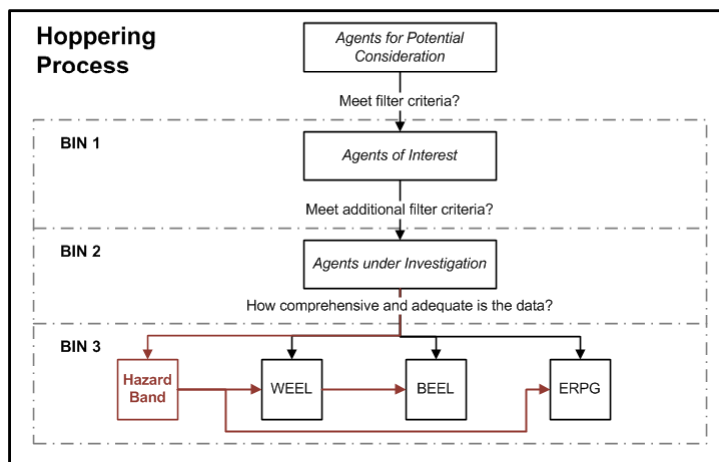
The OSHA Hazard Communication standard incorporating the Global Harmonization System estimated that there are 880,000 hazardous chemicals in current use

- OSHA currently regulates ~ 500 chemicals,
- NIOSH has ~650 RELs
- Worldwide there are ~1300 various OELs, including WEELs and TLVs

Why health hazard bands?

- Facilitate the application of Prevention through Design to eliminate hazards and minimize risks to chemical agents
- Provide guidance for materials for which there are not yet sufficient data to develop an authoritative OEL
 - Hazard banding is now part of the WEEL development process

Guide Value Development Process



NIOSH-AIHA Alliance Projects *planned and in-progress*

- Technical guidance document providing...
 - Criteria to group chemicals into bands
 - Integration into H&S management systems
 - Overall process an organization may use to implement hazard banding, including the decision logic
Drafted with development of an ANSI standard in mind
- Ancillary document as an implementation guide
- Exploring options for a database of information needed for development of guide values and hazard bands

NIOSH-AIHA Alliance Projects

planned and in-progress

- Electronic tools to facilitate evaluating hazard data and assign chemicals without authoritative OELs into hazard bands
 - Including a health hazard band matrix such as the one that currently included in the AIHA guide value development process
- Education materials for H&S professionals, managers, and workers
 - Including continuing education and online community opportunities through AIHA