Promoting safety culture through sharing—a Dow perspective

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Safety Is Easy
Definition of Culture

a: the customary beliefs, social forms, and material traits of a racial, religious, or social group; also : the characteristic features of everyday existence (such as diversions or a way of life) shared by people in a place or time

b: the set of shared attitudes, values, goals, and practices that characterizes an institution or organization

c: the set of values, conventions, or social practices associated with a particular field, activity, or societal characteristic

d: the integrated pattern of human knowledge, belief, and behavior that depends upon the capacity for learning and transmitting knowledge to succeeding generations

from Merriam-Webster
Culture is Harder
Our goal is to eliminate all injuries, prevent adverse environmental and health impacts, reduce wastes and emissions and promote resource conservation at every stage of the life cycle of our products.
Each employee has a responsibility in ensuring that our products and operations meet applicable government or Dow standards, whichever is more stringent.

All employees, contractors, and visitors are expected to exhibit appropriate and responsible behavior during their presence within a Dow facility.
EH&S Expectations @ Dow

Protect People and Environment
Vision of Zero
Responsible behavior

Bottom Line:
Dow Expects Employees to Go Home Healthy and Safe....Everyday
Personalization
Culture
Metrics
Organization, Work Processes, Operating Discipline
Universities and Industry: Common Challenges & Opportunities

- Mindset of Incident Prevention Not Inevitable Incidents
- Organizational Design
- Need and Ability to Share Researcher Experience
- Safety Is Core Not an “Extra”
- Commit to Safety Not Compliance

“Safety is a priority and a worker will not be penalized for a delay caused by being safe.”

“The striking difference [between University and work safety] was in the training and awareness.”

“In Graduate School, pretty much every reaction was run wearing only safety glasses, thin nitrile gloves and maybe a lab coat. Having access to the appropriate PPE has been a major change.”
Safety Culture

- Leadership Engagement
- Employee involvement

Safety Goals & Metrics
- Training
- Procedures
- Chemical Hygiene Plan

Hazard
- Assessment
- Managing Change
- Inspections
- Audits
- Incident Investigations

Industrial Hygiene
- Personal Safety
- Engineering Design
- Emergency Response
- Environmental
- Process Safety
- Product Sustainability
Key Elements of a Sustainable Safety Culture

- Set Expectations
- Visible in the Field
- Show commitment
- Ensure compliance

- Leadership Engagement
- Hazard Awareness
- Change Effective Communication

- Hazard recognition
- “Fresh eyes” approach
- Change management

- Make safety personal
- Intervention culture
- Positive reinforcement

- Near miss events
- Share best practices
- Safety moments
R&D Management of Change

- All experiments evaluated for hazard mitigation
- Compliance with both internal and external regulations are maintained
- Changes have appropriate reviews and approval
- Documentation related to the change is created or updated
- Documentation centrally located to ensure accessibility
- Appropriate training is conducted
- Notification to affected personnel is completed
Transparent Communication
Make it Personal
Ask open-ended questions
Create an environment where people are free to ask questions
Escalate issues

4 key principles that help us institute safety culture
Task:
• Make up a standard solution in a volumetric flask consisting of copper sulfate, sulfuric acid and water.

Apply PACE principles to have a safety discussion
• Share Experiences
• Discuss the tasks associated with making the solution
• Ask Open Ended Questions - Consider Hazards
Dow Lab Safety Academy

Since 2013 Launch...

- 25,000+ enrolled viewers
- >250,000 views
- >60 universities
- >40 Government Agencies & National Labs
- >100 companies
- 10 countries
- 1 external award
- More than a dozen media stories

http://safety.dow.com
## Dow Lab Safety Academy – Modules

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Fume Hood Basics