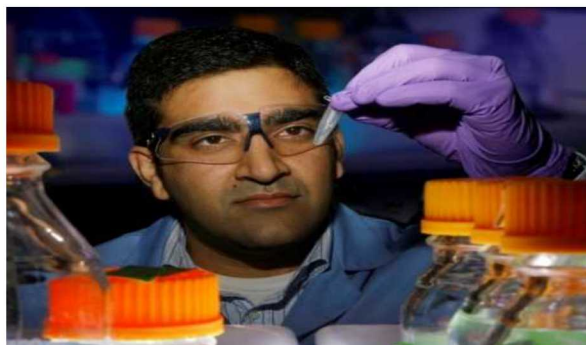


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# Division 1000 Safety Culture

Ron Detry and Fran Nimick

August 24, 2016

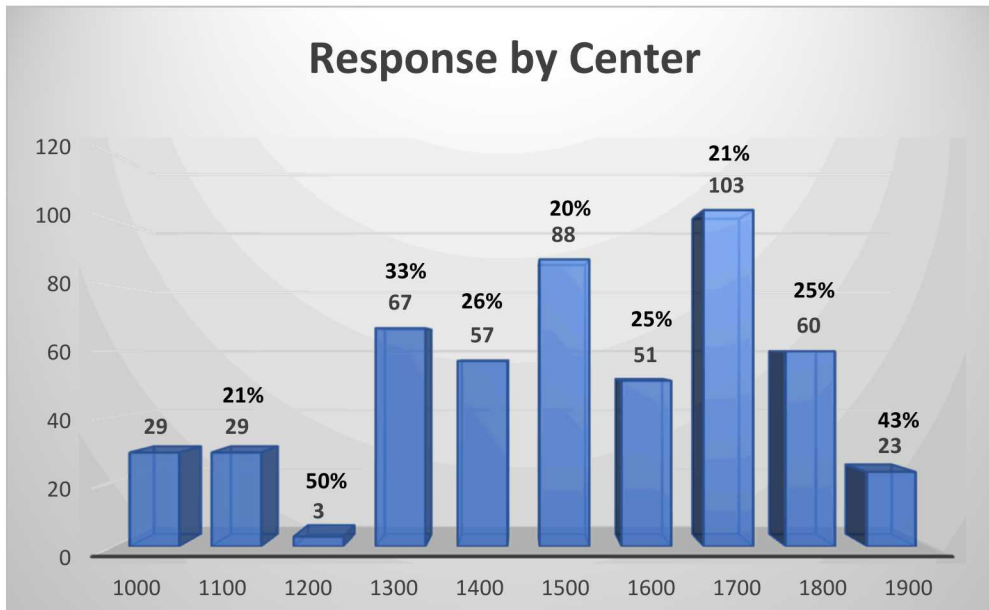
# Approach

- Division-wide email survey conducted in May
  - Designed to include all members of the workforce
- Survey questions chosen to
  - Provide some connection to the 2014 DuPont Safety Perception Survey
  - Address key components of a safety culture\*
    - Organizational (includes leadership)
    - Individual
    - Engineered (not addressed in this survey)
  - Provide initial assessment of parts of Division 1000 FY16 Strategic Plan, Theme 4: Safety Imperative
- Survey consisted of 13 “radio button” questions and 4 open-ended questions allowing comments

*\*Source: SAND2013-4261 Independent Audit and Advisory Services Study Report: Enhance Safety Culture, Marc Evans*

# “Radio Button” Questions

# Demographics

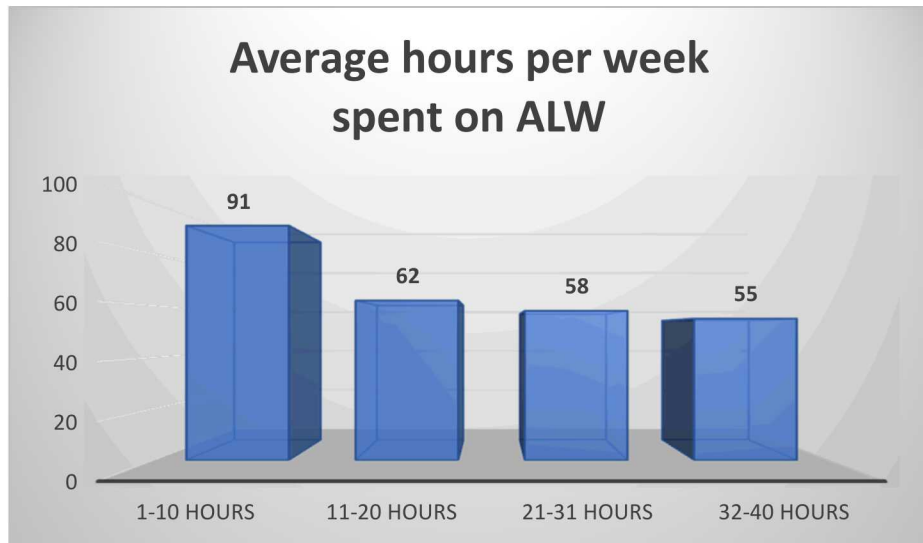


- 510 Responses in total
  - Responses and response rates shown per Center
  - No response rate for Division 1000 because 29 people chose this response (for anonymity?) while there are only 12 in the organization
- Corresponding total from DuPont survey was 1005
- Representativeness is indeterminate

# Activity Level Work Demographics



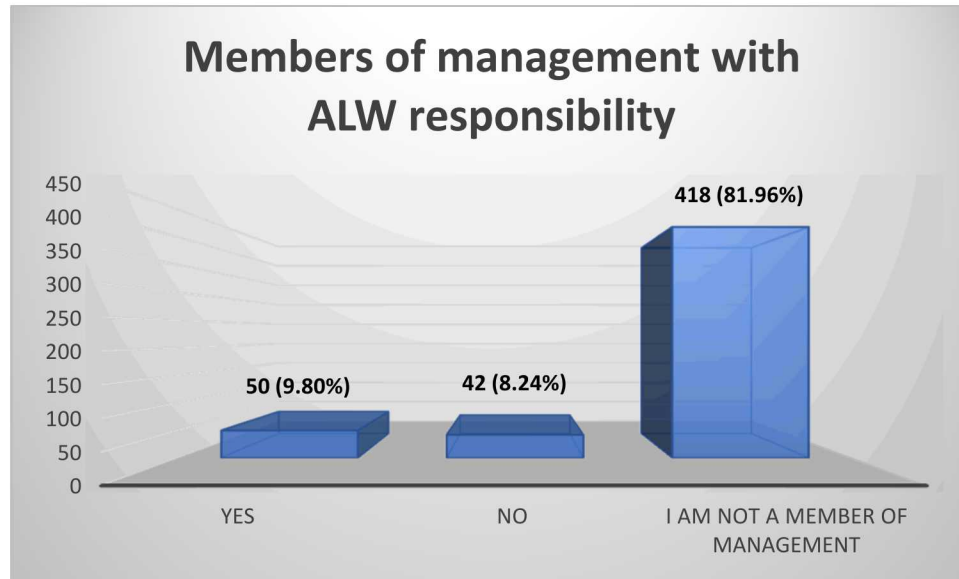
52% of the respondents perform Activity Level Work (ALW)\* ...



... to varying degrees.

*\*"Activity level work is any project, job, task, or sub-task performed in the field or on the floor either at DOE/NNSA sites/facilities or off-site where hazards are present or safety concerns are a particular issue."*

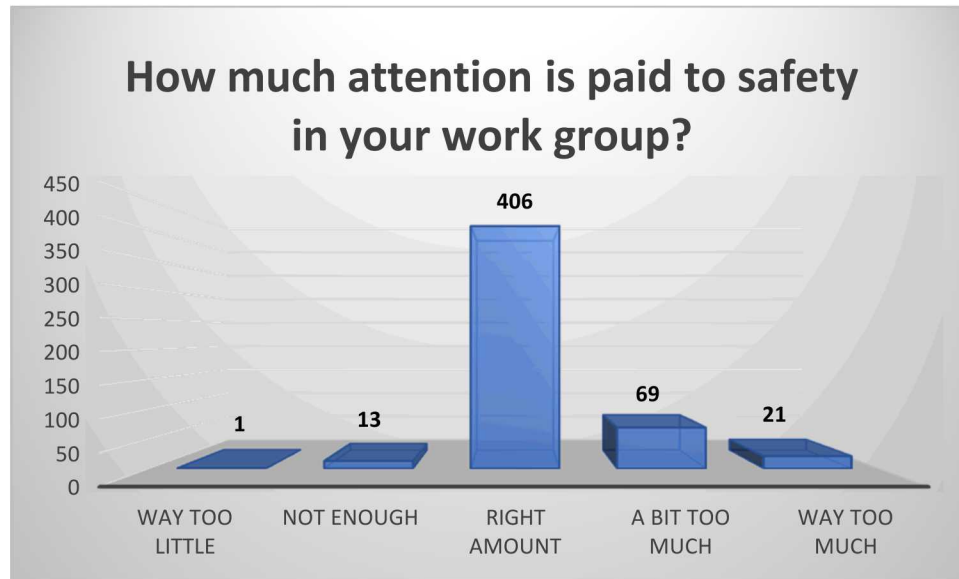
# Activity Level Work Demographics (concluded)



- 18% of respondents are managers
- Of those, 54% oversee activity level work

# Attention Paid to Safety

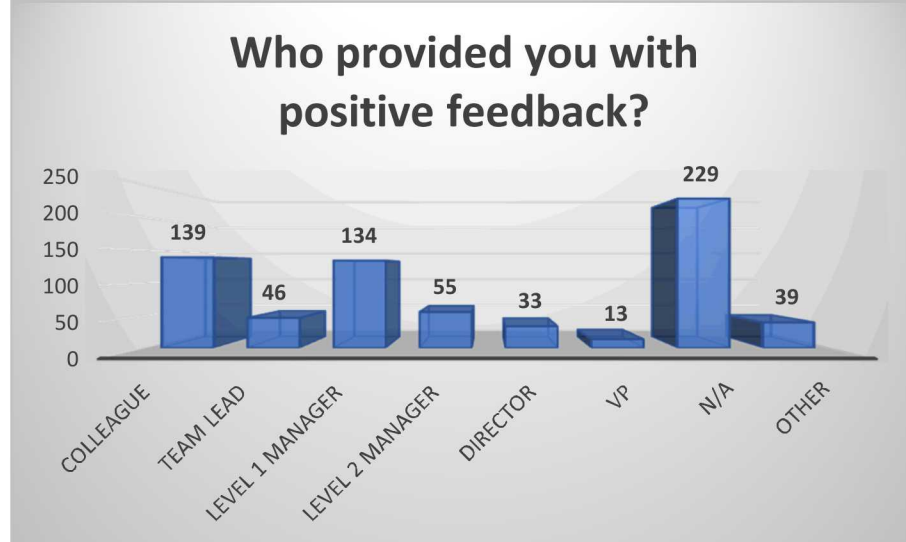
(Organizational element of safety culture)



- 80% of respondents felt the attention paid to safety was “about right”
- Corresponding response to DuPont question (Priority respondents think others give to safety) was 50-55%
- 18% of respondents felt the attention was “too much” or “way too much”

# Positive Feedback for Safety Actions

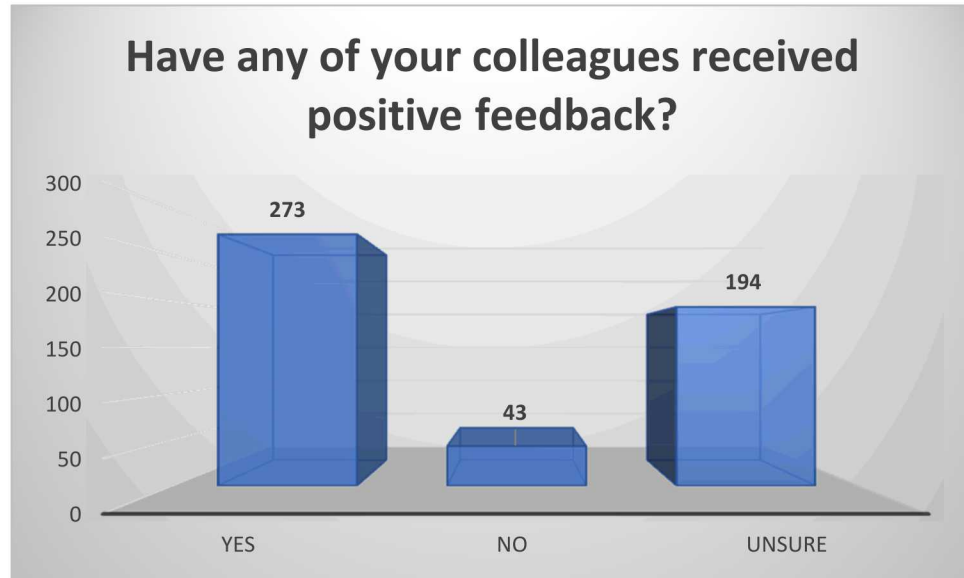
(Organizational element of safety culture)



- 64% of respondents have taken some form of safety action
  - Of those, 77% received positive feedback from someone
  - Corresponding response from DuPont survey (Recognition for safety achievements) was around 10-15%
  - Addresses Strategic Plan Action 4.1.4: Publically recognize positive steps forward in our safety culture
- 
- Multiple responses allowed (“check all that apply”)
  - 459 instances of someone providing positive feedback
    - Management (Level 1 through VP) provided positive feedback 235 times
    - Team Lead provided feedback 46 times – could be formal member of management structure or a project leader
    - Colleagues provided positive feedback 139 times
  - The 229 “N/A” responses don’t match the sum of “No” and “NA” responses on the top chart (260)



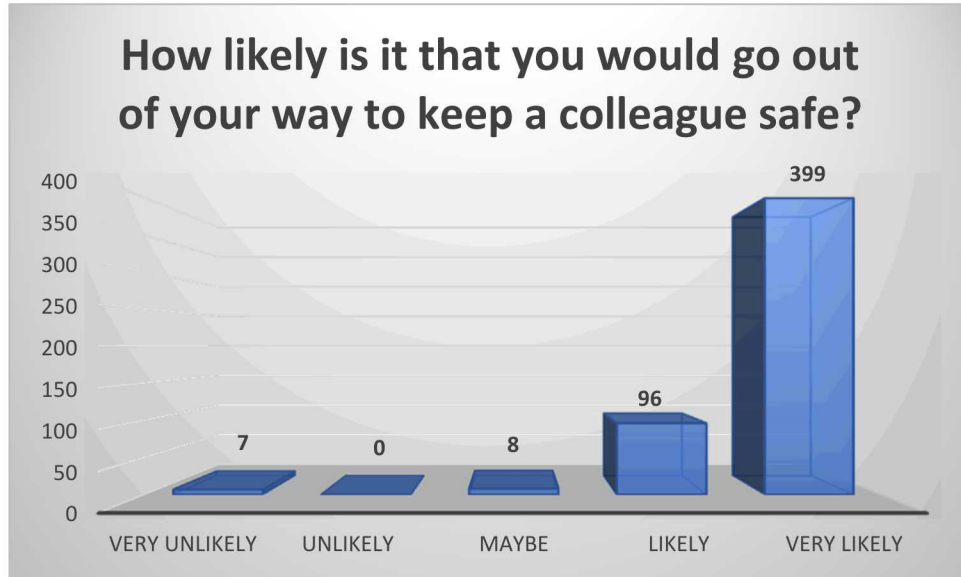
# Awareness of Positive Feedback Given Others



- 54% of respondents were aware that a colleague had received positive feedback for a safety action
- Another indication of progress on Strategic Plan Action 4.1.4

# Likelihood of Helping Others

(Individual element of safety culture)



- 97% of respondents say it is “Likely” or “Very Likely” that they would go out of their way to keep a colleague safe
- Corresponding response in DuPont survey (Extent individuals feel empowered to take action in safety) was around 80%

# Involvement in Establishing Safety Policy/Practices

(Organizational element of safety culture)



- 41% of respondents have been involved in establishment of a safety policy, and
- 54% know that a colleague has been involved
- Corresponding response to DuPont survey (Involvement in safety activities) was around 30%
- Addresses Strategic Plan Action 4.1.5, Increase use of an inclusive, all-level team approach to establish safety practice and policy



# Participation in Management Discussion of Safety

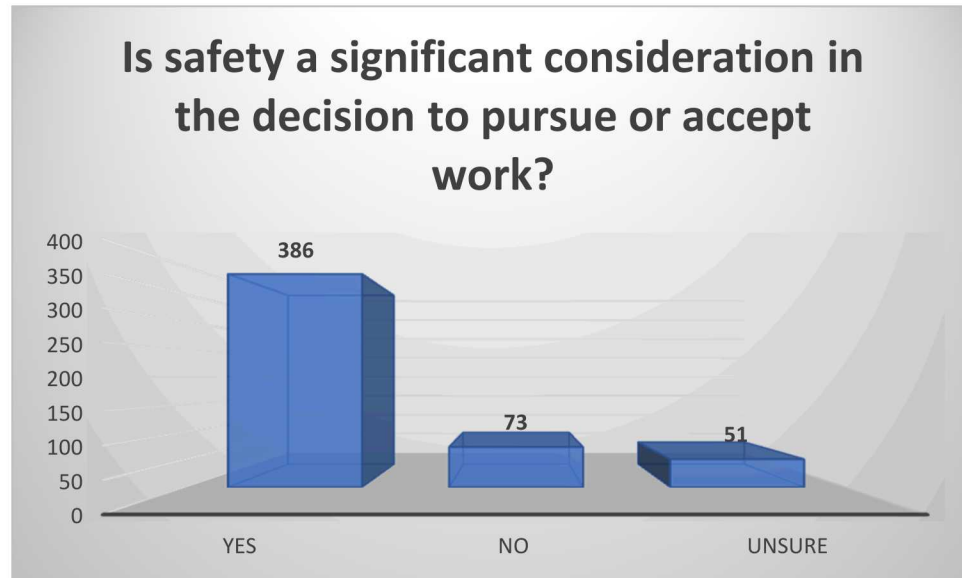
(Organizational element of safety culture)



- 76% of respondents have participated in management-coordinated discussion of safety
- Corresponding positive response to DuPont question (Involvement in safety activities) was around 30%
- Addresses Strategic Plan Goal 4.2, Increase healthy communication with the goal of deepening our collective understanding of safety and
  - Action 4.2.1, Convene dialogue sessions concerning difficult safety topics,
  - Action 4.2.2, Encourage safety-related dialogue between and among all levels of the Division

# Consideration of Safety in Accepting Work

(Organizational element of safety culture)



- 76% of respondents said “yes”
- ... but 14% said “No” and 10% were not sure!
- Corresponding positive response to DuPont survey questions (Priority respondents give to safety and priority respondents think others give to safety) was around 50-60%
- Addresses Strategic Plan Action 4.1.3, Integrate safety considerations as an essential element of our strategic thinking

# Perception of the Division Safety Messages

(Organizational element of safety culture)



- Of the respondents,
  - 68% had a slightly or strongly positive view
  - 23% were neutral
  - Only 9% had a negative view
- Addresses Strategic Plan Action 4.2.3, Craft and deliver safety messages well tuned to the needs of different Division audiences

# Open-Ended Response Questions

- Four questions allowed respondents to make suggestions
- Lots of them did!
- Analysis approach
  - Read all responses and noted what seemed to be significant repeated themes
  - Re-read responses and binned according to those themes
  - Identified a few other noteworthy comments
- Analysis of responses is subjective opinion of evaluators

# In what ways can the safety messages be made more meaningful to you?

(Organizational element of safety culture)

- 36% response rate (182 responses)
- Recurring themes:
  - Relevance (meaningful to the individual, appropriate to their work, etc.) - 39 responses
    - Focus on engineered safety for activity level work excludes office workers
    - Conversely, discussion of slips, trips and falls seems irrelevant to those engaged in really dangerous stuff
  - Message is OK as is (does not include “I don’t know” responses as writer could hate them but have nothing to suggest) – 12 responses
  - Make the message positive: emphasize benefit, recognize/reward good events and practices, etc. – 10 responses
  - Trust: trust the employee to know and do what is right, treat employee like an adult, etc. – 5 responses
- Addresses Strategic Plan Action 4.2.3, Craft and deliver safety messages well tuned to the needs of different Division audiences



# What is one action you can take that would most improve your personal safety while conducting work?

(Individual element of safety culture)

- 37% response rate (187 responses)
- Recurring themes:
  - Mindfulness/awareness/focus (during the work) – 37 responses
  - Think/plan ahead (before the work) – 33 responses
  - Ergonomics – 21 responses
  - Slow down/don't rush (during the work) – 15 responses
  - Stop (if in doubt or work seems unsafe)/ask questions (before or during the work) – 12 responses

# What is one action someone else can take that would most improve your personal safety while conducting work?

(Individual element of safety culture)

- 32% response rate (162 responses)
- Recurring themes:
  - *Several themes from previous question reappear here, such as Slow down, Mindfulness, Think and plan, and a few ergonomic items*
  - Challenge me and/or the process, help me understand – 10 responses
  - Be aware of surroundings, other people and possible impact on them – 10 responses
  - Don't distract me! – 7 responses

# Other comments or feedback to improve the safety culture in Division 1000

- 22% response rate (110 responses)
- Recurring themes:
  - Overbearing safety culture – including focus on paperwork versus real safety, impact on getting work done, perception of CYA, overreaction, focus on the trivial, etc. – 35 responses
  - Things are getting better at Corporate, Division or Center level – 11 positive comments (and 2 negative ones)
  - Funding issues have a negative impact on safety (also heard in several engineered-safety reviews of other Divisions) – 5 responses
  - Relevance (make message, actions more relevant to workforce) – 5 responses

# Other comments or feedback to improve the safety culture in Division 1000 (concluded)

- Other responses of note:
  - Personal ownership for safety:
    - *“Work on the perception that safety ownership is local, and robust support is provided enthusiastically from upper management”*
    - *“More recently the message has shifted to emphasize our personal responsibility and accountability in keeping myself and others safe. This should continue!”*
  - Broader focus on quality vs. just safety
    - *“The key fundamental weakness of Sandia's safety approach is that it focuses on the wrong thing. It emphasizes safety results instead of the cultural behaviors that provide multiple benefits - only one of which is safety. By isolating safety as the single management priority the opportunity is lost. Instead, showing the staff that the thing we are all struggling with is the human performance error rate ...Then show them how they have been trained to use their engineering skills to solve engineering problems but that a different mindset and approach are needed to use their engineering skills to solve a new class of problems, human factors problems.” (Excerpt)*
  - Two responses mentioned hesitancy to report: *“Culture should be trusting and open to ensure that MOWs always report everything despite an event becoming a recordable event that does not look good on the indicators.” (Excerpt)*
  - Two comments addressed timely dissemination of safety information, about incidents but also about what others have done to make their work safer

# Recommendations

- Continue to increase positive feedback for safety actions, and publicize such feedback better
- Work to increase participation in management-coordinated discussions of safety from 76% toward 100%
- First-level management needs to take primary responsibility for making safety messages relevant and meaningful for their staff
- Strongly recommend HPI (human performance improvement) training to increase awareness of error precursors
- Instill concept of conducting personal “tail-gate safety meeting” at beginning of each day and/or before each changed activity begins
- Expand communication of lessons learned (both positives and negatives)
- Evolve from upper-management expectation that work be conducted safely to upper-management support for safe implementation of work by departments

# Acknowledgements and Thanks

- To Liza Kittinger (00431), for electronic implementation of the survey, and compilation of “radio button” results
- To Jon Snell, for critical review of draft conclusions
- To Caren Wenner (00254), for front-end discussion of potential value and pitfalls of safety-culture surveys

Backup Slide

# Other potential recommendations

- Close gap between 41% helping with establishing safety policy and 52% doing ALW
- Increase management emphasis on considering safety in decisions to accept/reject work
- Messaging should explicitly differentiate the requirements framework from the safety culture that develops to work within that framework
- Communicate clearly, Division-wide, that funding is available to rectify unsafe conditions
- Communicate that safety is only the most visible aspect of the general need for error awareness/reduction in all operations (security, quality, ...) – i.e., operational excellence