

# Backing Into Safety Culture

or

“How Small Changes in Behavior and Actions Can Lead to Big Changes in Safety Attitudes and Culture”

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**“Safety culture**...refers to the organization’s shared values, assumptions and beliefs specific to workplace safety, or more simply, the relative importance of safety within the organization.”

Examples shared values, assumptions, and beliefs:

- Commitment and active involvement of management
- All members of the organization agree that safety is important, and that safety is important all the time, not just when it is convenient or when it does not threaten personal or institutional productivity goals
- Safety and hazard information is shared, sought and valued; there is a free exchange of safety-related information
- Hazard identification and control is practiced
- All members of the organization are free report hazards and to be heard on matters involving safety
- Continuous learning and improvement are emphasized
- Problem solving is more important than assigning blame

*Safe Science: Promoting a Culture of Safety in Academic Chemical Research*, The National Academies Press, 2014, pp 24-25.

# Safety Culture Traits

## U.S. Nuclear Regulatory Commission

Leadership Safety Values and Actions	Problem Identification and Resolution	Personal Accountability
<i>Leaders demonstrate a commitment to safety in their decisions and behaviors.</i>	<i>Issues potentially impacting safety are promptly identified, fully evaluated, and promptly addressed and corrected commensurate with their significance.</i>	<i>All individuals take personal responsibility for safety.</i>
Work Processes	Continuous Learning	Environment for Raising Concerns
<i>The process of planning and controlling work activities is implemented so that safety is maintained.</i>	<i>Opportunities to learn about ways to ensure safety are sought out and implemented.</i>	<i>A safety conscious work environment is maintained where personnel feel free to raise safety concerns without fear of retaliation, intimidation, harassment or discrimination.</i>
Effective Safety Communications	Respectful Work Environment	Questioning Attitude
<i>Communications maintain a focus on safety.</i>	<i>Trust and respect permeate the organization.</i>	<i>Individuals avoid complacency and continually challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action.</i>



A Venn diagram with two overlapping circles. The left circle is teal and labeled 'Safety Culture'. The right circle is orange and labeled 'Safety Compliance'. The background features a large, faint, light-colored circle on the left side.

## Safety Culture

## Safety Compliance

Embraced voluntarily  
Ethical basis  
Habits  
Questioning  
Person-centered  
Responsibility

Imposed externally  
Legal basis  
Rules  
Acceptance  
System-centered  
Accountability

# KAB Model of Behavioral Change

New Knowledge

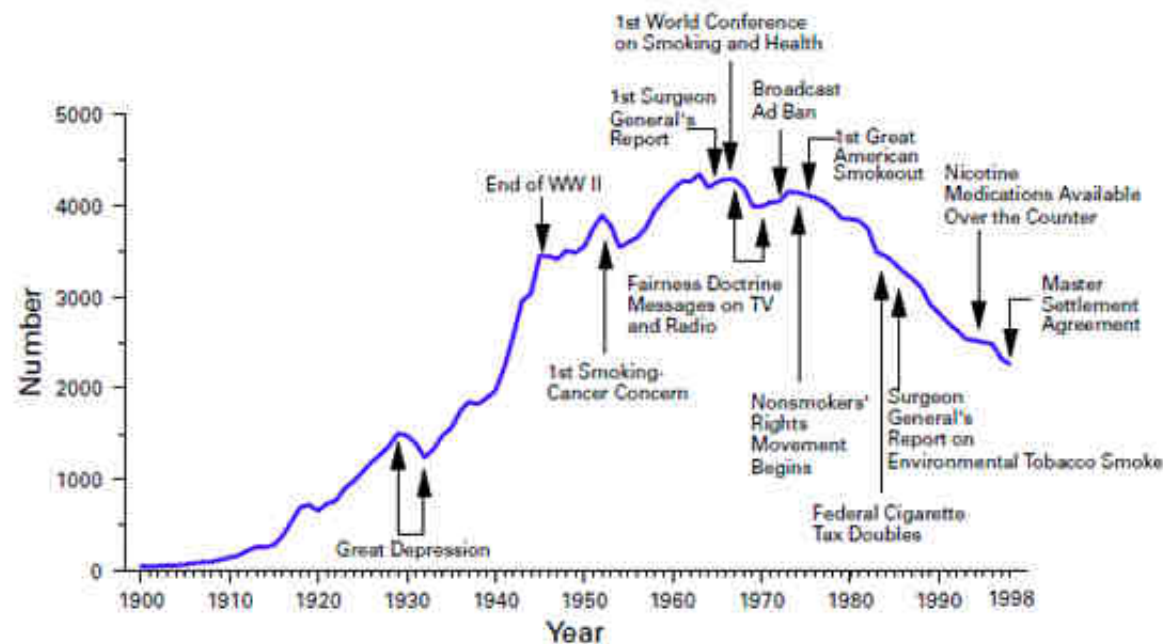


Changed Attitude



Different Behavior

FIGURE 1. Annual adult per capita cigarette consumption and major smoking and health events — United States, 1900–1998



Sources: United States Department of Agriculture; 1986 Surgeon General's Report.

According to repeated nationwide surveys,

# More Doctors Smoke **CAMELS** than any other cigarette!

Doctors in every branch of medicine were asked, "What cigarette do you smoke?" The brand named most was Camel!

You'll enjoy Camels for the same reason so many doctors enjoy them. Camels have cool, cool mildness, peak after peak, and a flavor unmatchable by any other cigarette. Make this sensible test: Smoke only Camels for 30 days and see how well Camels please your taste, how well they suit your throat as your steady smoke. You'll see how enjoyable a cigarette can be!

THE DOCTORS' CHOICE IS AMERICA'S CHOICE!

ANNE B. SMITH says: "I smoke Camels. They're smooth, mild, and just what I need."

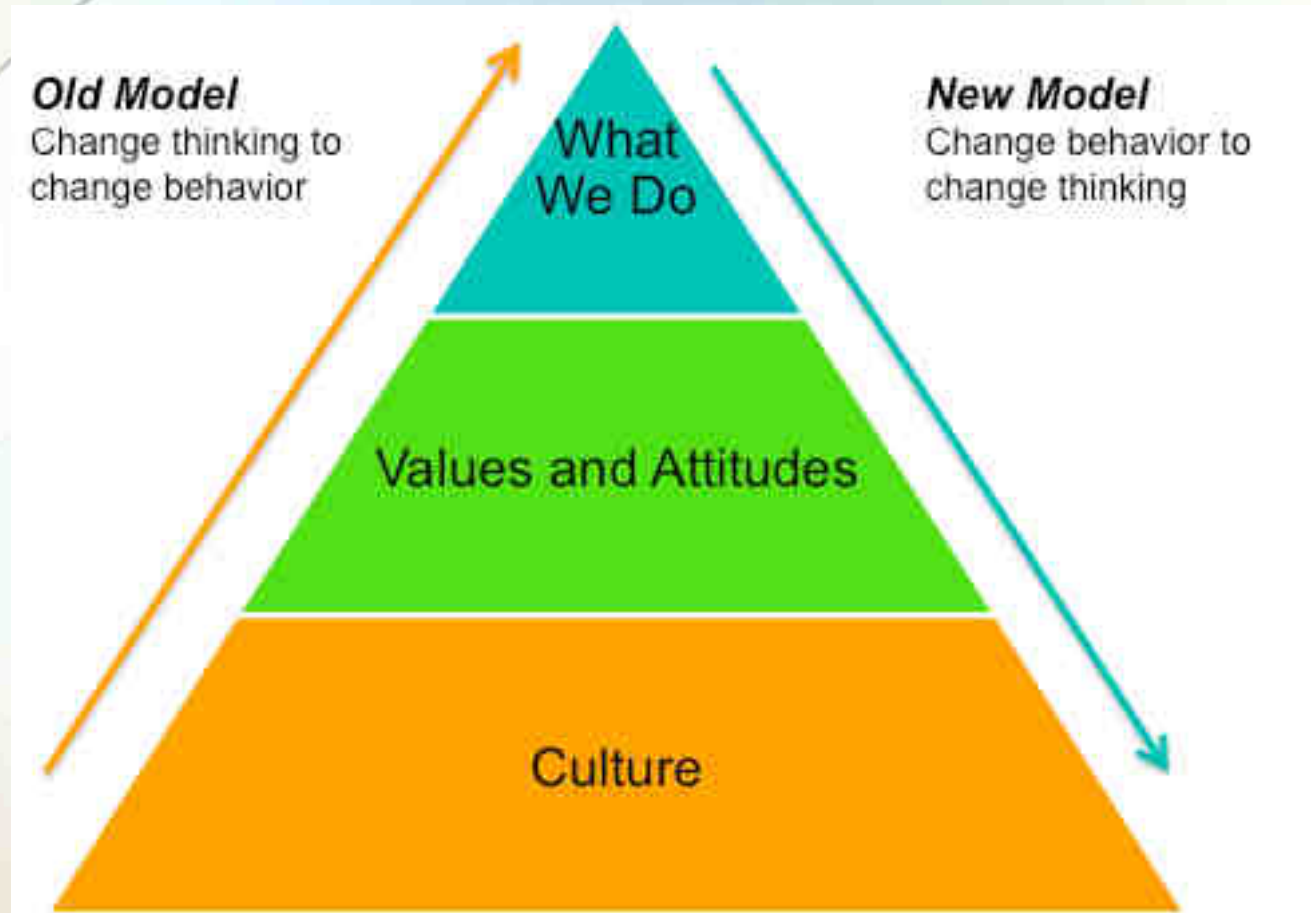
JOHN B. SMITH says: "I've smoked Camels for years. They're smooth, mild, and just what I need."

JOHN B. SMITH says: "I've smoked Camels for years. They're smooth, mild, and just what I need."

For 30 days, test Camels in your "T-Zone" (T for Throat, T for Taste).

Information and knowledge alone are not enough.

Actions that require a behavior change (“Smokeouts,” “no smoking” areas, taxes, alternatives and other interventions) get smokers to stop.



Focus on what behaviors you want people to exhibit, then design processes around those behaviors. It's much easier for people to act their way into thinking than think their way into acting.

—John Shook, Lean Enterprise Institute





## 5 Tips For Enjoying An Alcohol-Free Party Season



FRIENDS DON'T LET FRIENDS DRIVE DRUNK



U.S. Department of Transportation

Start by changing  
behaviors



**madd**<sup>®</sup>  
NO MORE VICTIMS<sup>™</sup>




A woman with blonde hair, wearing a dark blazer over a teal top, is speaking and gesturing with her hands. She is holding a small yellow object in her right hand. The background is dark with a large red circular light effect.

**“If you feel like you shouldn’t be  
somewhere: Fake it. Do it not until you  
make it—but until you become it.”**

— AMY CUDDY

**TED** GLOBAL 2012

By adopting the posture of a confident person, others will believe you are confident, and you will start to feel confident.



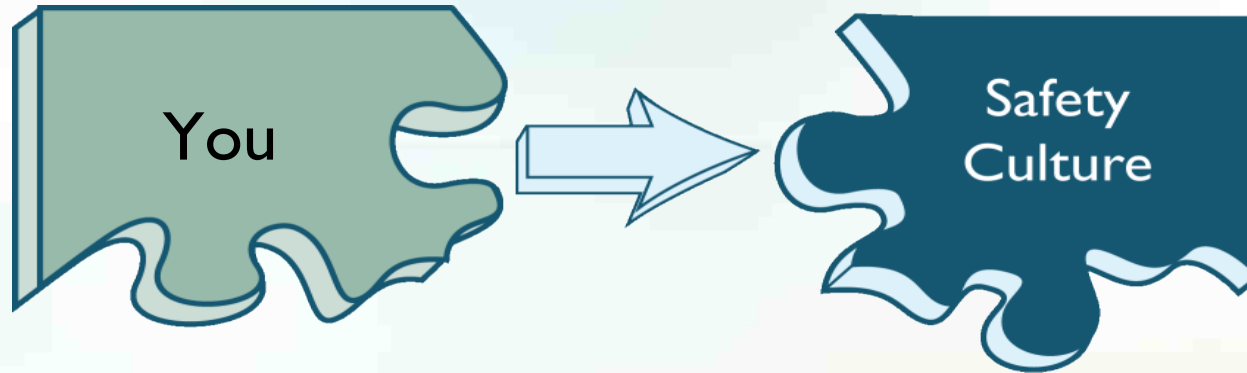
**Small Changes  
in Behavior and Actions  
Lead to Big Changes  
in Safety Attitudes and Culture**

THE BIG QUESTION: What behaviors and actions will lead to new values and attitudes, and grow Yale's safety culture?

My proposal: Let's agree on what behaviors we want people to exhibit and work together to encourage them.

I propose that we focus on the following five behaviors:

# Take responsibility for safety.



Our recipe for a safe campus includes so many things: marked crosswalks, handrails, smoke detectors, blue phones, fume hoods, 9-1-1, stop lights, “no smoking” signs, safety glasses, vaccinations, fire extinguishers... Lots of stuff.

But it needs you.

It’s your decision to step off the curb or wear a bike helmet.



# US Airways Flight 1549

January 15, 2009

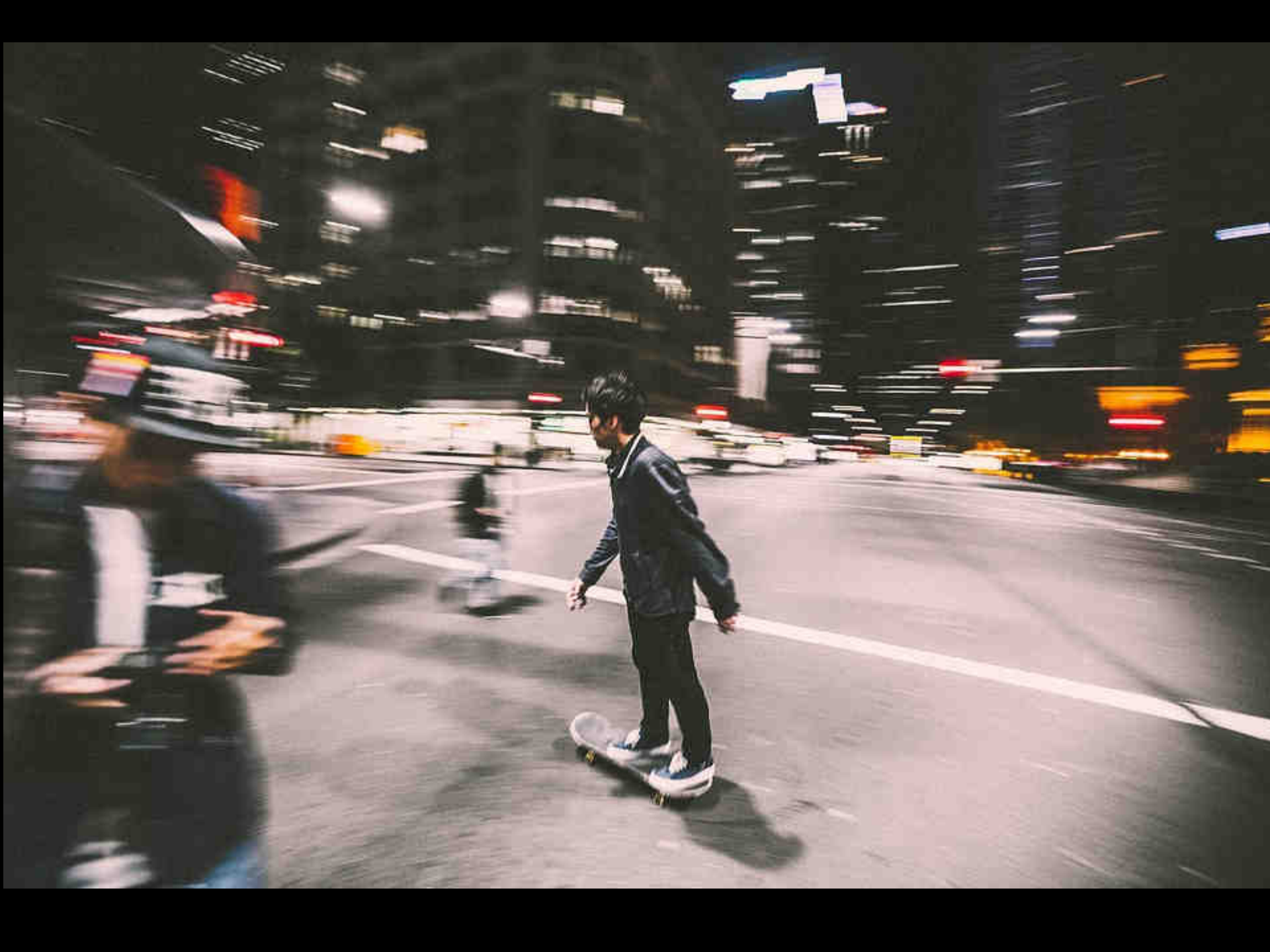
3:25:51 p.m. - Takeoff

3:26:37 - Pilot Chesley Sullenberger remarked to First Officer Jeffrey Skiles, "What a view of the Hudson today!"

3:27:11 - The plane struck a flock of Canada geese at an altitude of 2,818 feet, shutting down both engines. They were 4.5 miles from of LaGuardia, the airport they just left.

Sullenberger took control of the plane while Skiles worked the checklist for engine restart.

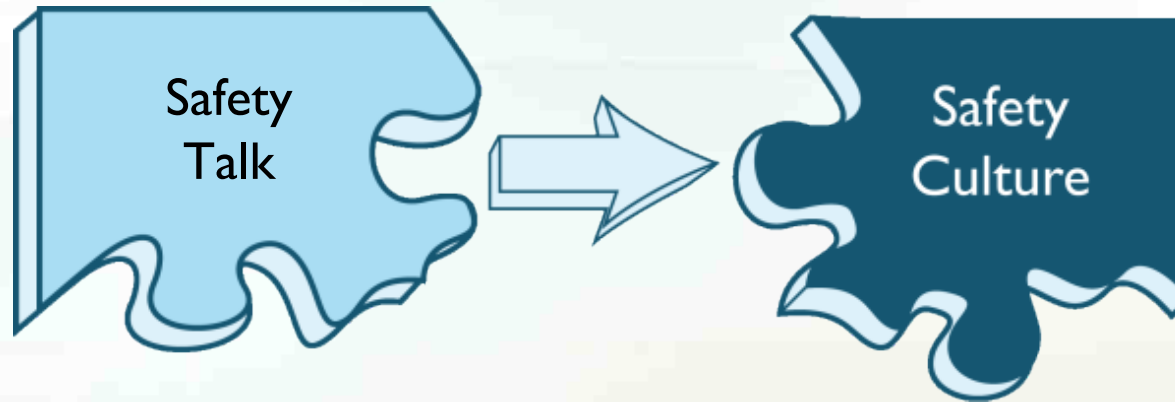
3:27:33 - Sullenberger radioed a mayday call to New York Terminal Radar Approach Control: "This is Cactus 1539. We've lost thrust on both engines. We're turning back."







# Talk About Safety.



You don't know what you don't know.

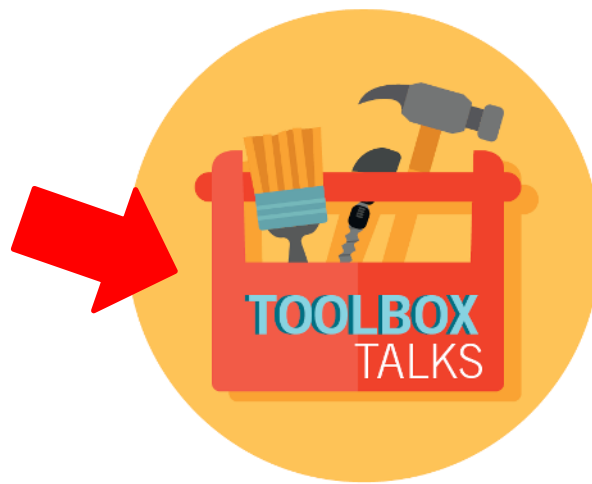
You might know with experience, but who has time to wait?

That's why we need to talk about safety. Ask others about hazards.

Two people will assess risks more accurately than one. Three people better than two. Etc.


People discuss these things when safety culture is healthy.

Three ways  
to Talk  
About Safety

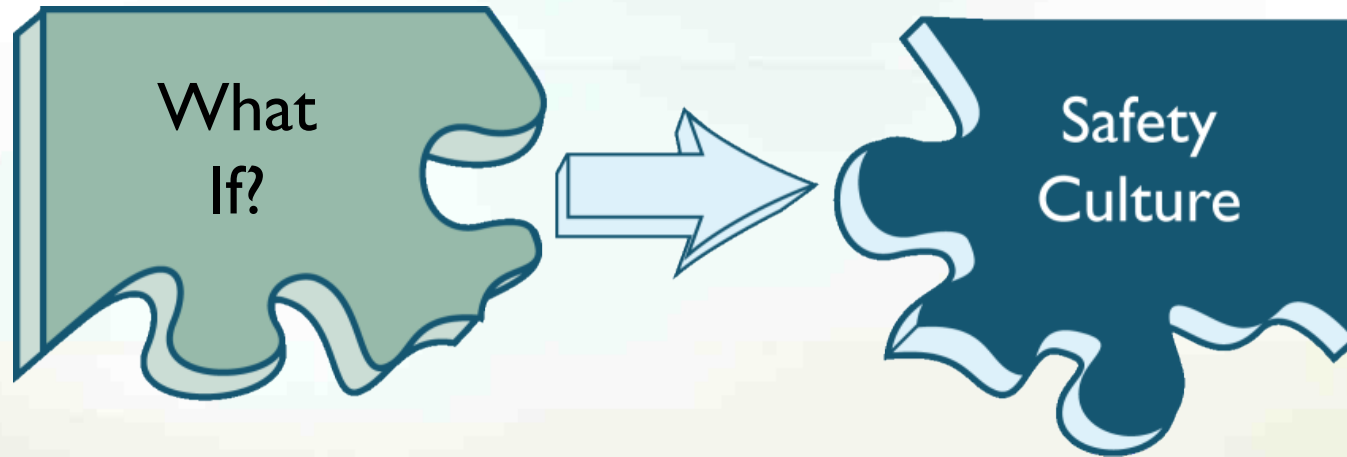


# Safety Moment

RESPIRATORY PROTECTION

- 
- > When we encourage the submission of Good Observations
  - > And respond to them consistently
  - > This changes the way employees feel about their management and the company
  - > **They feel understood**
  - > They feel emotionally supported

# Plan for safety.



Think about it.

What can you do now—what can you do differently—to prevent it from happening?

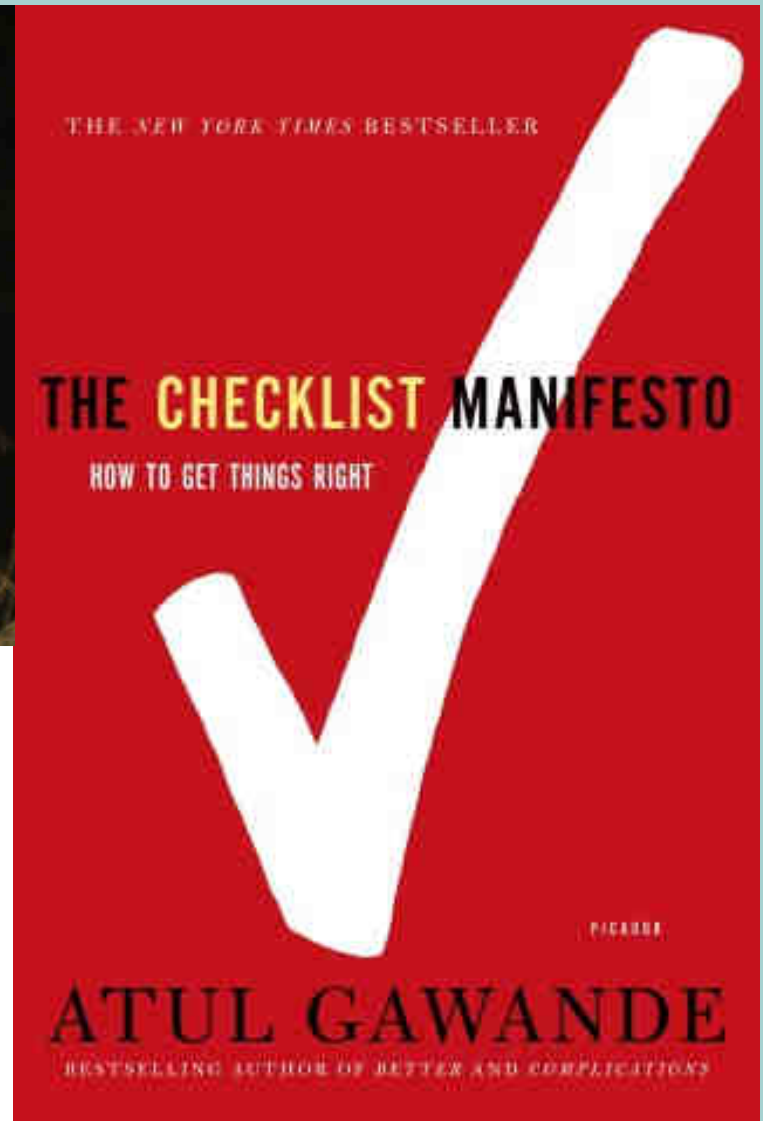
Safety culture is about planning ahead. Discussing possible outcomes. Considering options, alternatives, contingencies.



## Two ways to Plan For Safety (and one way to not plan)



- R** Recognize the hazards
- A** Assess the risks of the hazards
- M** Minimize the risks of the hazards
- P** Prepare for emergencies from uncontrolled hazards



# Look out for others.

Being considerate

Making suggestions

Reporting problems

Altruism

Intervention

The buddy system

Mentor

Supervisor





# Model safety.

Your secret admirers.

They're watching you.

Listening to you.

Switch from coffee to tea.

Next thing you know, they're drinking tea too.

Cultivate Yale's safety culture by what you do and say.





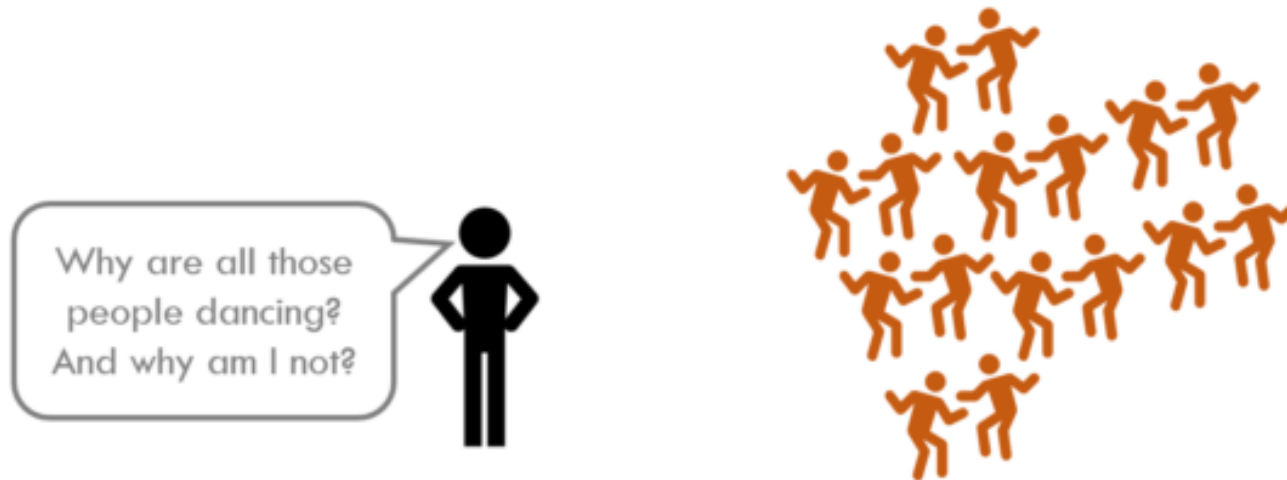
Wearing PPE is the most obvious way to set an example



# Not Just the PI



## Understanding Social Norms



Undergraduate behavior is mostly influenced by peer group norms.

Graduate student behavior is mostly influenced by the power relationships they are part of.

# Mind Games: Sometimes a White Coat Isn't Just a White Coat

By Sandra Blakeslee

*New York Times*, 2 April 2012



If you wear a white coat that you believe belongs to a doctor, your ability to pay attention increases sharply. But if you wear the same white coat believing it belongs to a painter, you will show no such improvement.

So scientists report after studying a phenomenon they call enclothed cognition: the effects of clothing on cognitive processes.

It is not enough to see a doctor's coat hanging in your doorway, said Adam D. Galinsky, a professor at the Kellogg School of Management at Northwestern University, who led the study. The effect occurs only if you actually wear the coat and know its symbolic meaning — that physicians tend to be careful, rigorous and good at paying attention.

# Environmental Factors That Affect Behavior

Leadership/vision

Standards

Policies and laws

The physical environment  
(a dirty labcoat will too)

“Behavior is a function of the person, his or her environment, and the interaction between the two.”

—Kurt Lewin

...all provide information about  
group, institutional and community norms and expectations.



We design safe crosswalks.



Because Yale's culture is safety.



1. Be responsible for safety

2. Speak up for safety

3. Plan for safety

4. Look out for others

5. Model safety

Safety  
Culture

Safety  
Culture

Safety  
Culture

I propose:

- Encourage students, faculty and staff to adopt these five behaviors.
- Mention these behaviors in our training.
- Remind people of these behaviors in our posters and publications.
- Evangelize these behaviors when interacting with people on campus.
- Design processes around these behaviors.
- Actively solicit, curate and redistribute illustrative stories made by students, faculty and staff.

Specifically—for example we could:

- Ask people to don safety glasses or a lab coat.
- Share stories about safe behaviors.
- Suggest ways for people to talk about safety, such as including “safety moments” in their meetings. Provide sample safety moments.
- Provide examples of how people can plan ahead using checklists and risk assessments.
- Suggest ways that people can look out for other people’s safety. Publicize stories of people who do this.
- Share stories of people who model safety, especially leaders and prominent faculty.
- Show photos of everyone in a lab wearing safety glasses and lab coats.



*The Most Important Takeaway  
From This Presentation*

**The best two ways to improve  
safety attitudes and culture:**

1. Get people to wear PPE
2. Spread the habit of including a “safety moment” at the start of meetings

We protect our eyes.



Because Yale's culture is safety.



We talk about risk.



Because Yale's culture is safety.

We focus on prevention.



Because Yale's culture is safety.