

# BBS and Culture – A Paper

AIHCE DOE Presentation

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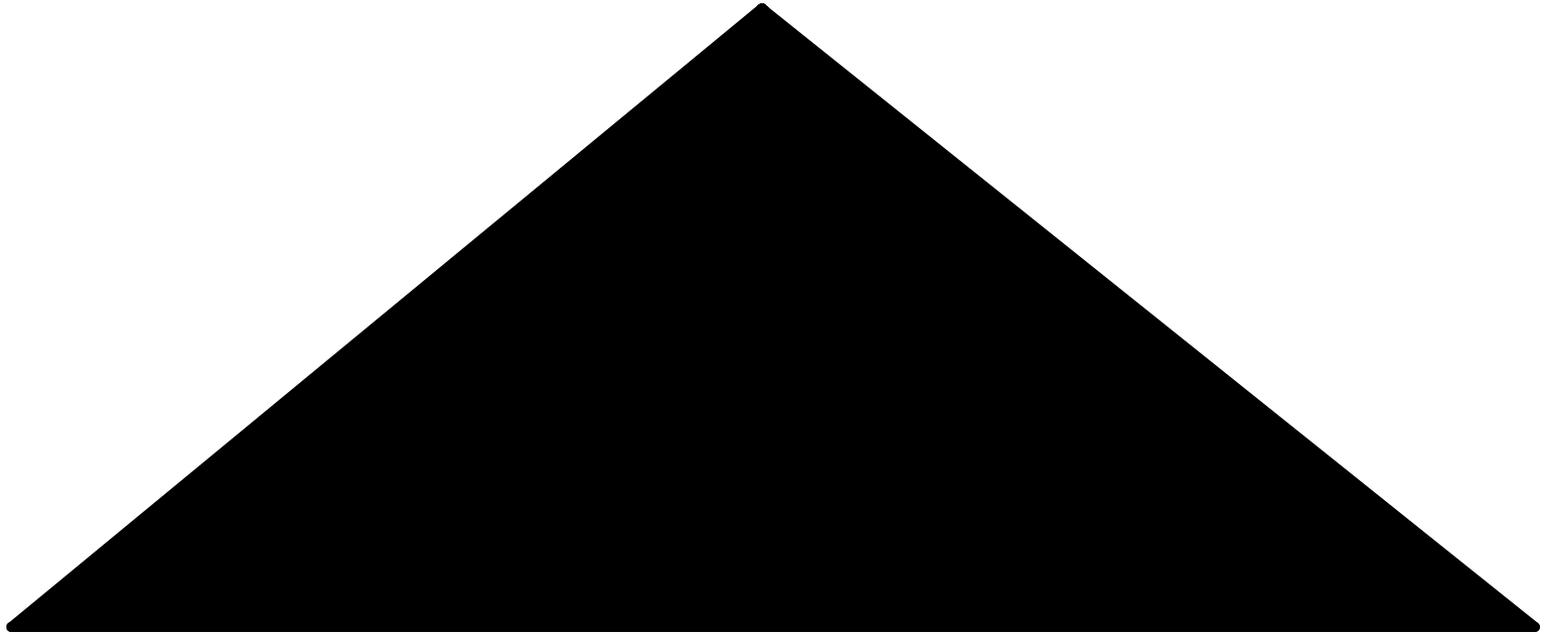
“Good Research needs both  
the genius to make new  
discoveries and the discipline  
to do it safely.

LBNL Lab Director  
September 2002

# Human Factors Approach

- “Nobody Gets Hurt”
- **Human Factors is the integration and application of available scientific knowledge about people, facilities, and management systems to improve interactions in the work place.**
- **People intervention can involve behavioral approaches, workplace design, workplace perceptions, and incident investigation.**

**Interventions: Always  
Consider These 3 Components**



# Safety Intervention Strategies

<u>Approach</u>	<u># of Studies</u>	<u># of Subjects</u>	<u>Reduction %</u>
Behavior Based	7	2,444	59.6%
Ergonomics	3	n/a	51.6%
Engineering Change	4	n/a	29.0%
Problem Solving	1	76	20.0%
Gov't Action	2	2	18.3%
Mgt. Audits	4	n/a	17.0%
Stress Management	2	1,300	15.0%
Poster Campaign	2	6,100	14.0%
Personnel Selection	26	19,177	3.7%
Near-miss Reports	2	n/a	0%

# BBS

- Behavior Based Safety Observation
  - All employees and contractors proactively and routinely identify and eliminate unsafe behaviors by themselves and their coworkers.
  - All levels of the organization are involved in the observations
  - Mostly peer to peer observations
  - Observations are interactive and used to reinforce safe behaviors and correct unsafe or at risk behaviors.

# Human behavior is both:

◆ ⇒ Observable



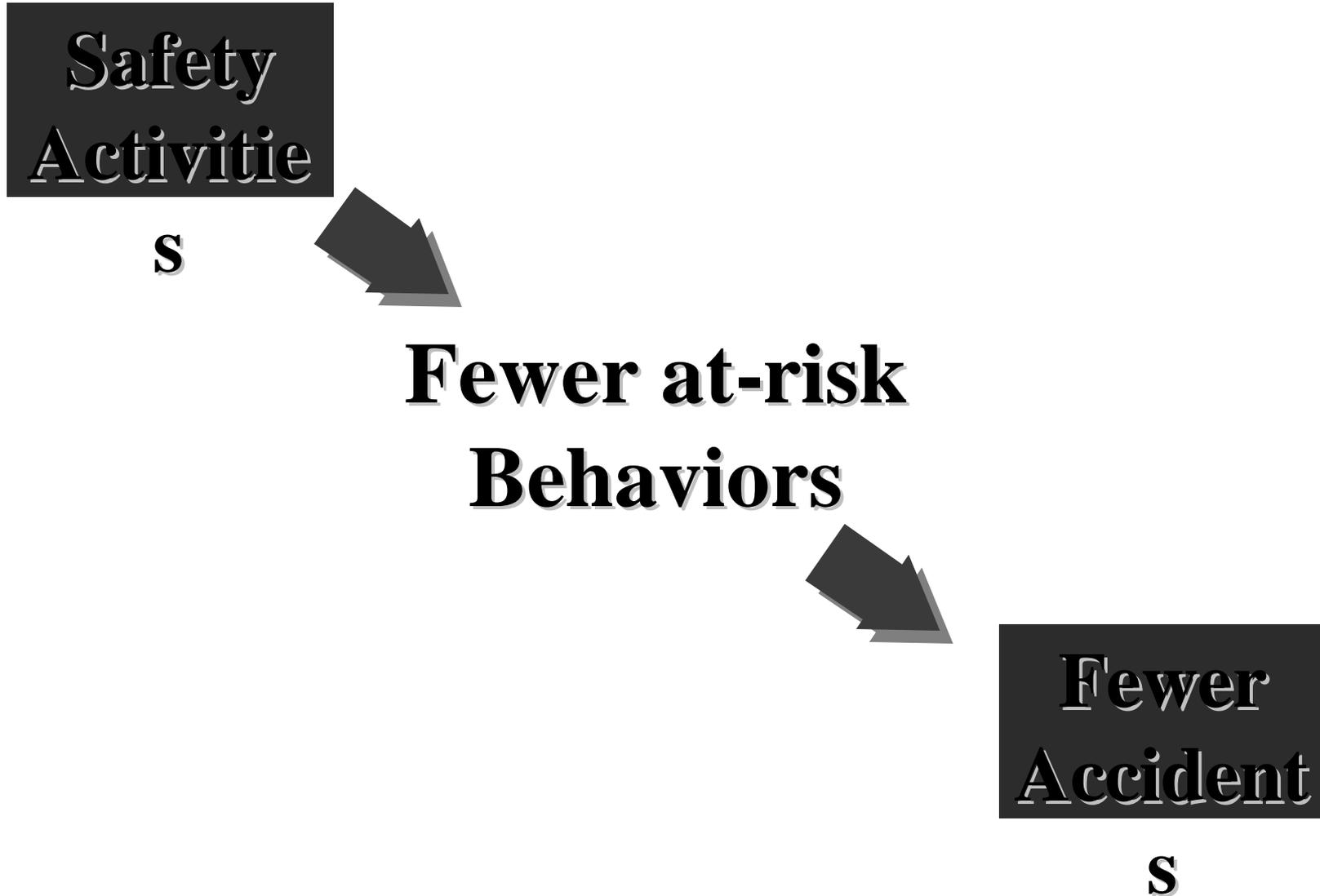
⇒ Measurable



therefore

***Behavior can be managed !***

# Behavior Based Safety

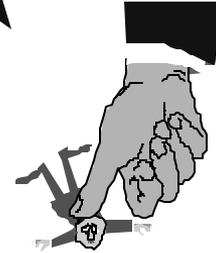


# Primary Concepts

¶ **Process, not a program**



↑ **Adaptation Vs. Adoption**



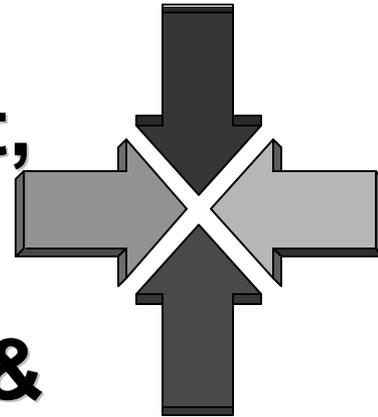
✓ **Employee Involvement -  
personal stake**

♂ **Don't Blame Employees -  
behavior is a function of the**



# Primary Concepts

⌚ **Parallels with Quality - involvement, feedback, measurement, upstream Vs. downstream, problem solving, & statistics.**



↗ **Develop Internal Resources for Implementation**



♂ **Objective - improvement which can not be based on random variation**

⌘ **(Measurement & Work focus “...”) ...**

# Considerations

- Laboratory professional environment is unique
- DOE contractors have applied human factors mostly to non-professional staff with much success
- Company culture
- Management commitment
- Employee buy-in

# Value Added

- Lower workers compensation
- Better worker communication
- Nobody Hurt – the right thing
- The next wave in injury reduction
- Aid VPP Certification

# Costs

- Initial costs for training can be high
- Lost productivity can be a cost
- Third party contractors – expensive
- Documentation can be a cost if not controlled
- LANL - \$200K start up
- LBNL – Returned investment within 6 mos.

# Barriers

- “Snooping” – independent work
- Time lost to observations
- No one else on the site is doing this
- Firm management commitment?
- Insufficient incentives!!
- Communication and publicity
- Initial training and costs