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# Behavior Based Safety BPS 2123

## Human Barriers to Safety

by

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# ACKNOWLEDGEMENT

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# Chapter Description

At the end of this chapter, student should be able to explain the fundamentals of elements in human to relate it with managing safety and health in the workplace

## Expected Outcomes

Students able to explain:

- 7 elements in human
- why poor goal setting will eventually fail safety culture in relation to human complexity

## References

1. Geller, E. S. (2001). "Working Safe, 2<sup>nd</sup> ed". Lewis Publishers.
2. Geller, E. S.(2005). Behavior-Based Safety and Occupational Risk Management. *Behavior Modification*. 29(3):539-561.



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# Content

- ❑ Human element (B.A.S.I.C I.D)
- ❑ The relationship between human elements and poor goal setting.



# Introduction

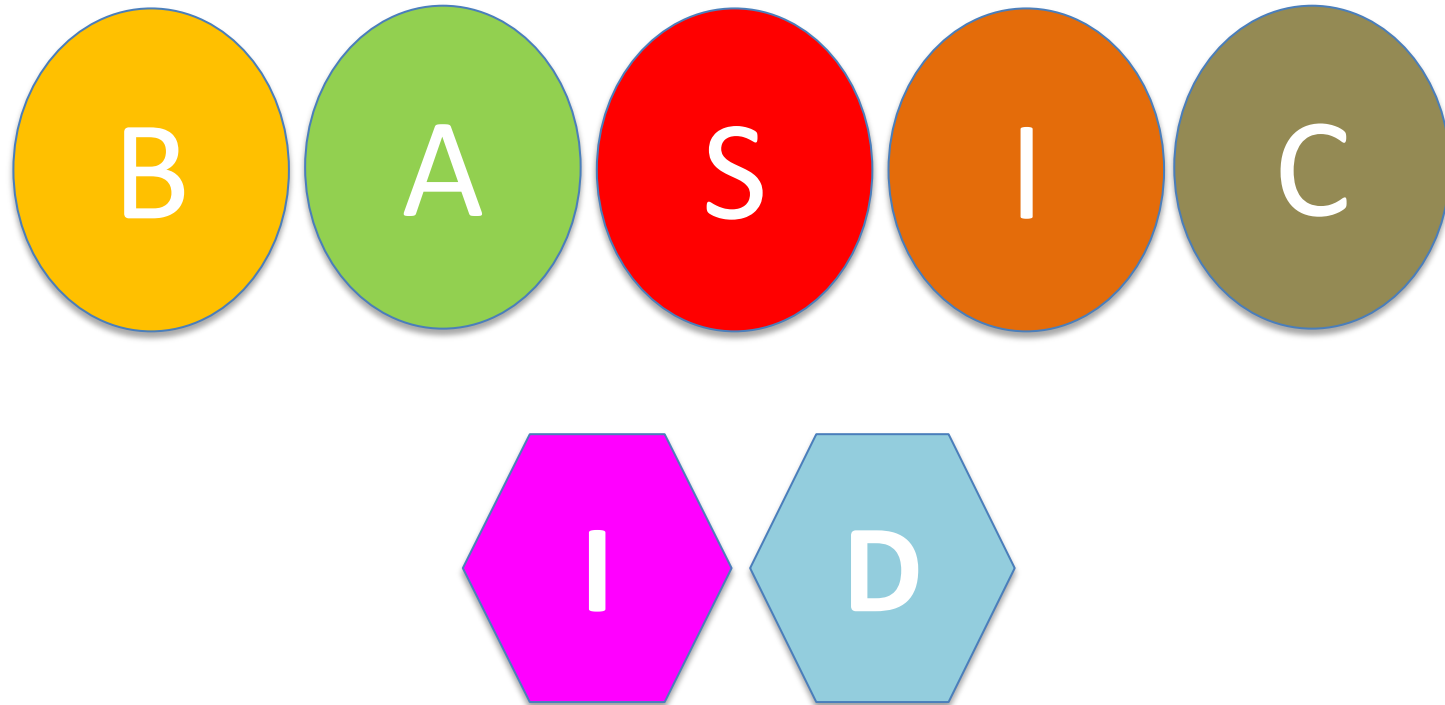
- ❑ Promoting safety and health is a most difficult and ongoing challenges at workplace
- ❑ Understanding the basic of human elements will be benefit in safety management process.

.Machine has no brain.  
.Human has.




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# Complexity of Human



# Elements in Human that make them Complex

- 
- Behavior**
  - Attitude**
  - Sensation**
  - Imagery**
  - Cognition**
  - Interpersonal**
  - Drugs**

# Human Dimension...

Human Dimension	Description
Behavior	Human observable action Pressing machine , lighting up cigarette
Attitude	Attitude to safety was fairly neutral, but after near hit by sharp object, human's attitude may be changed dramatically and start to comply with safety procedure
Sensation	Dealing with hazardous materials, hand-eye coordination, hearing and smell ability might help person to react quickly when any failure.
Imagery	Person visualized accident in his "mind-eye". Previous experiences and knowledge make person have mental image about accident that is good to motive them in safety



# ... Human Dimension

Human Dimension	Description
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Cognition	<b>Mental speech</b> Fighting with spouse (before go to work) for example may disturbs person feeling and contribute to error that resulted in the near hit.
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Interpersonal	Other people in our life who will contribute to decision making about safety. <i>Example:</i> pressure from colleagues to bypass safety system that installed.
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Drugs	Physiological changes due to drug (medication, smoke or caffeine) and may lead to distress and also may influence behavior, attitude, sensation or cognition to become abnormal.
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# Human is Already Complex

Don't make it more complicated by setting up  
poor goal setting in Safety



# All Injuries Are Preventable

No harm if this slogan used to keep person motivated in safety. **OPTIMIST!**

**But**, this slogan can be the reason why **Total Safety Culture** is **IMPOSSIBLE.**

*Why?*



# Why?

# ~~All Injuries Are Preventable~~



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# Other Slogans...

How about...

**Zero Injuries!**

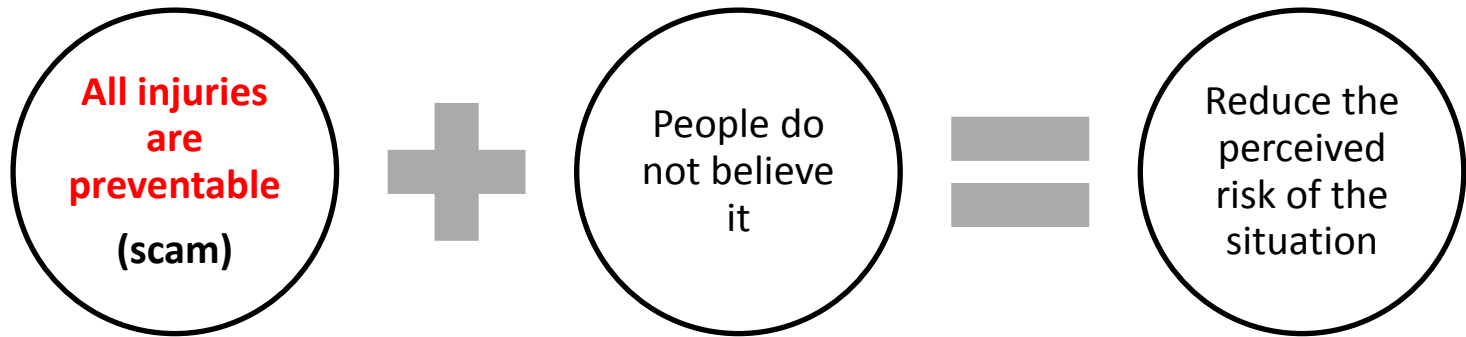
**1**



**Special reward \$\$\$ for not  
having injury...**



# Bad Slogan and Its Effect #1



In real workplace ,  
factors that contribute  
to near hit or accident  
**sometimes**

Can't be anticipated

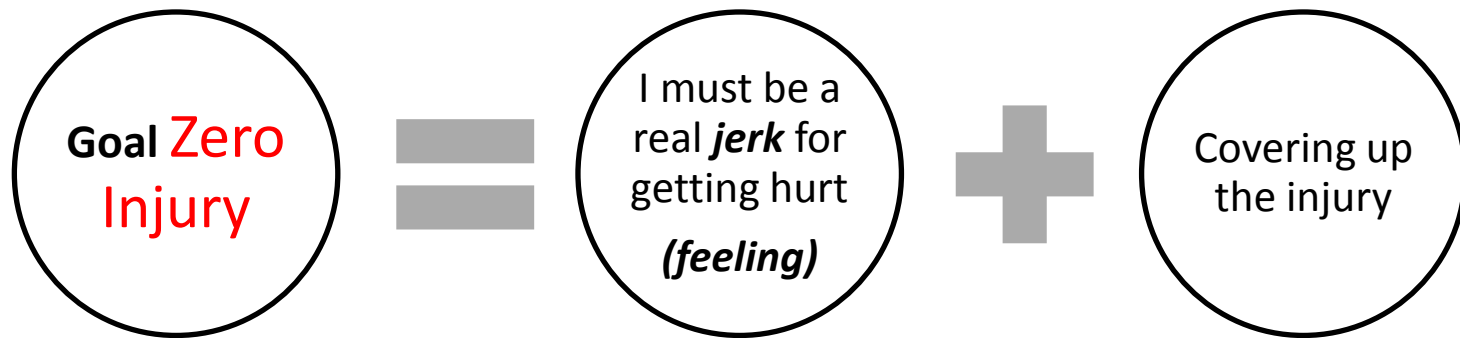
- Can't be controlled

Can't be prevented

**Cognitive Failure**  
(uncontrollable)



# Bad Slogan and Its Effect #2



**There will be no room for improvement for  
at – risk behavior and condition.**

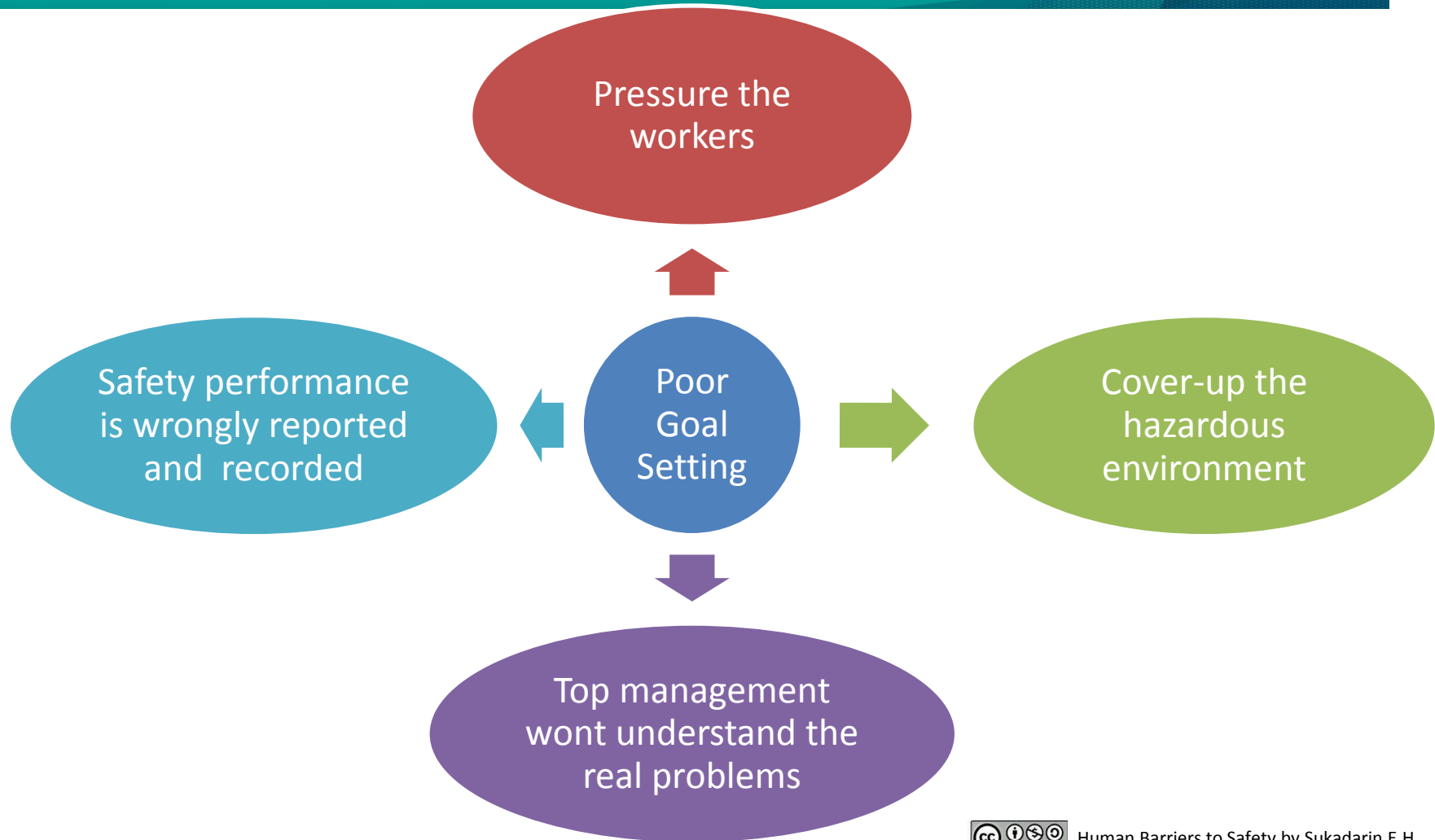
# Bad Slogan and Its Effect #3

**Special reward \$\$\$  
for not having injury...**





# Poor Setting and Barrier to Reporting



# Conclusion

Human is complex but there are various of ways to make it simple.

Understanding human elements will make the safety management efforts less hurdles

It is continuous process. Dealing with human is not a “plug and play” approach.



# Thank You

