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# **BEHAVIOUR-BASED SAFETY**

## **A Case Study**

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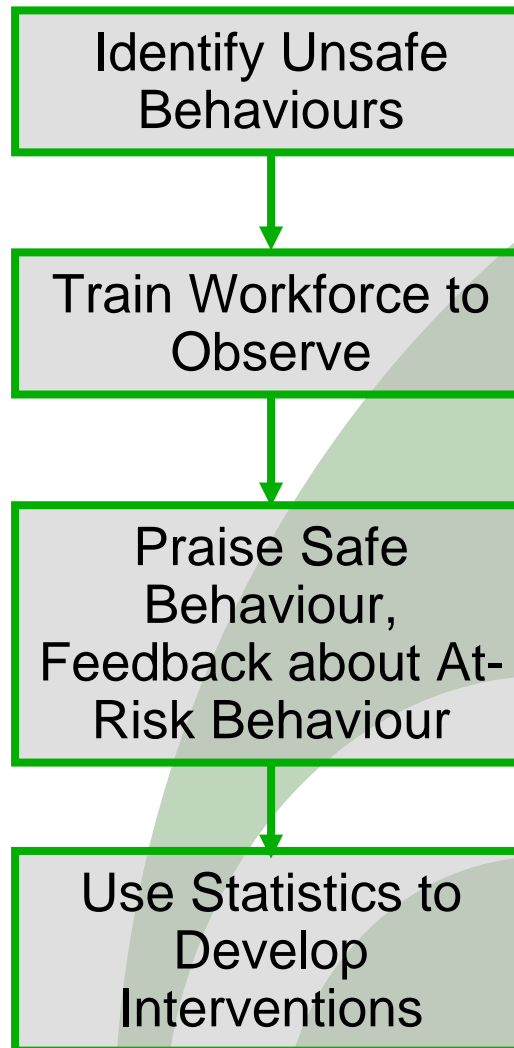
# OVERVIEW

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- ❑ What is Behaviour-Based Safety
- ❑ Two common problems that limit success
- ❑ These problems addressed in a BBS program developed in the manufacturing setting
- ❑ Positive outcomes

# Traditional Behaviour-Based Safety Approaches

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# Two problems

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- ❑ The approach of “Reward / Punishment” for behaviour is not always effective
- ❑ Difficult to achieve sustained success - “culture change”

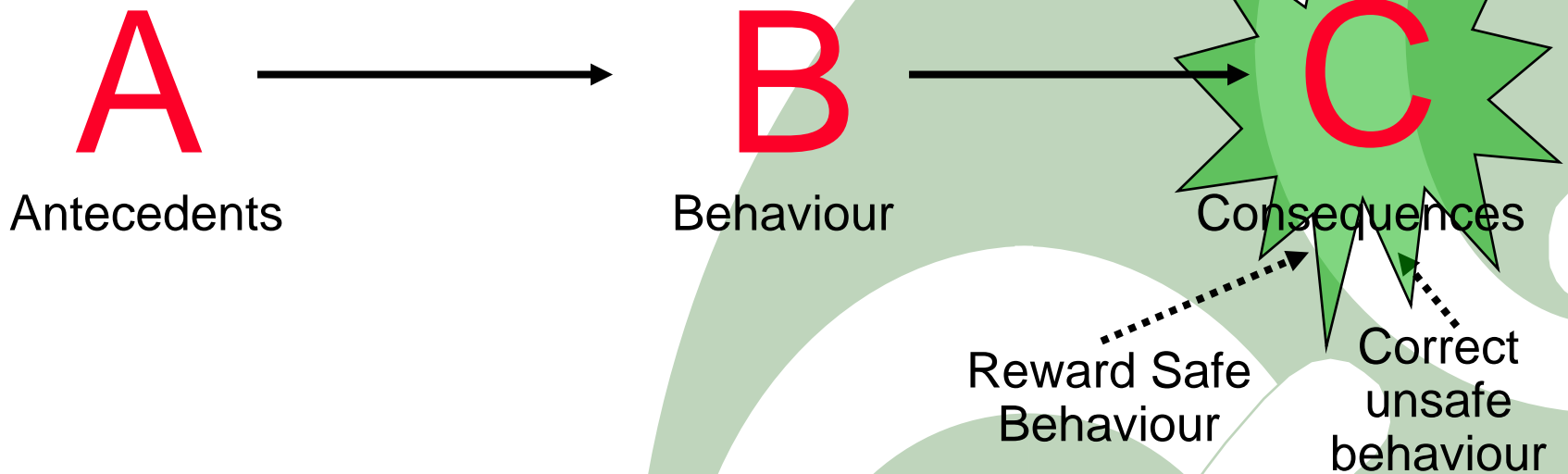
# Problem 1

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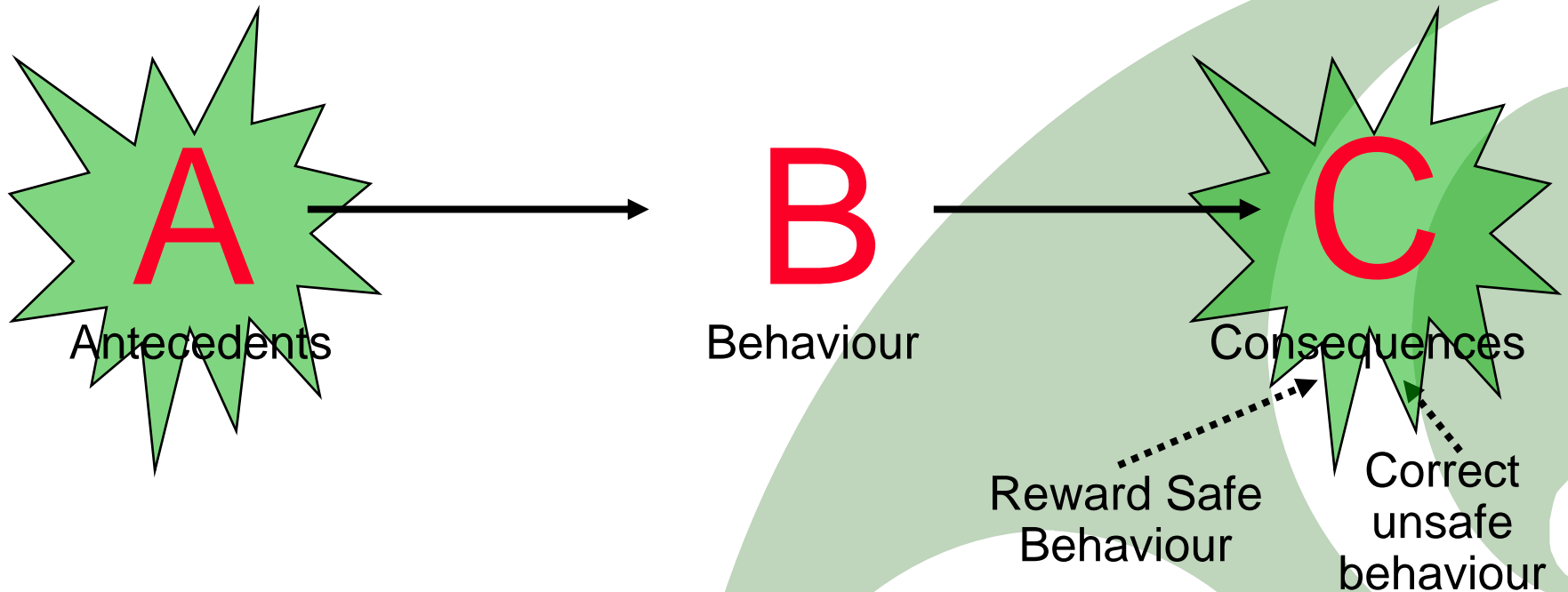
- ❑ The approach of “Reward / Punishment” for behaviour is not always effective

# Traditional Approach...

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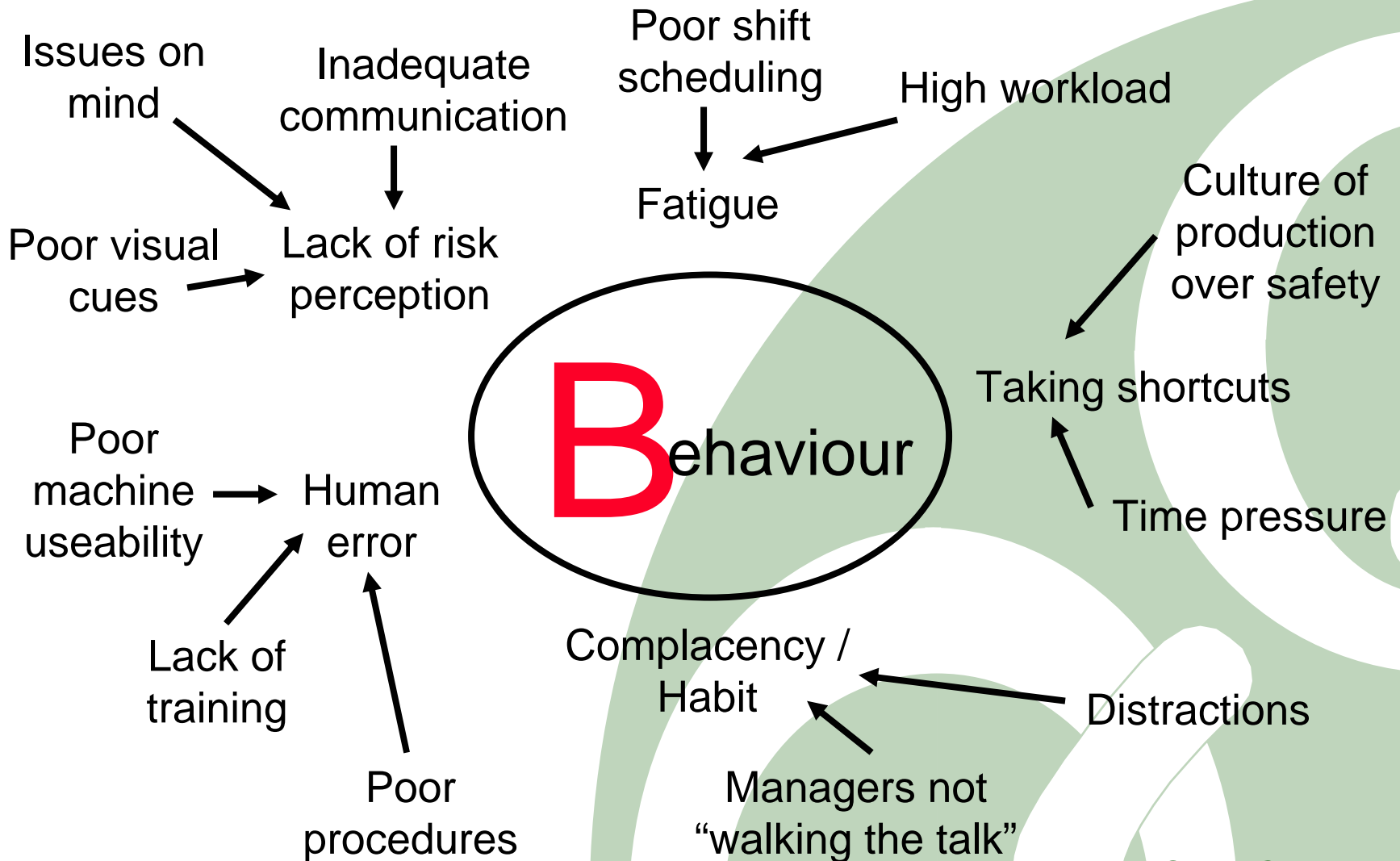
# Should also focus on...



**Focus on changing factors that AFFECT  
behaviour**

**Intervene at the CAUSE not just the OUTCOME**

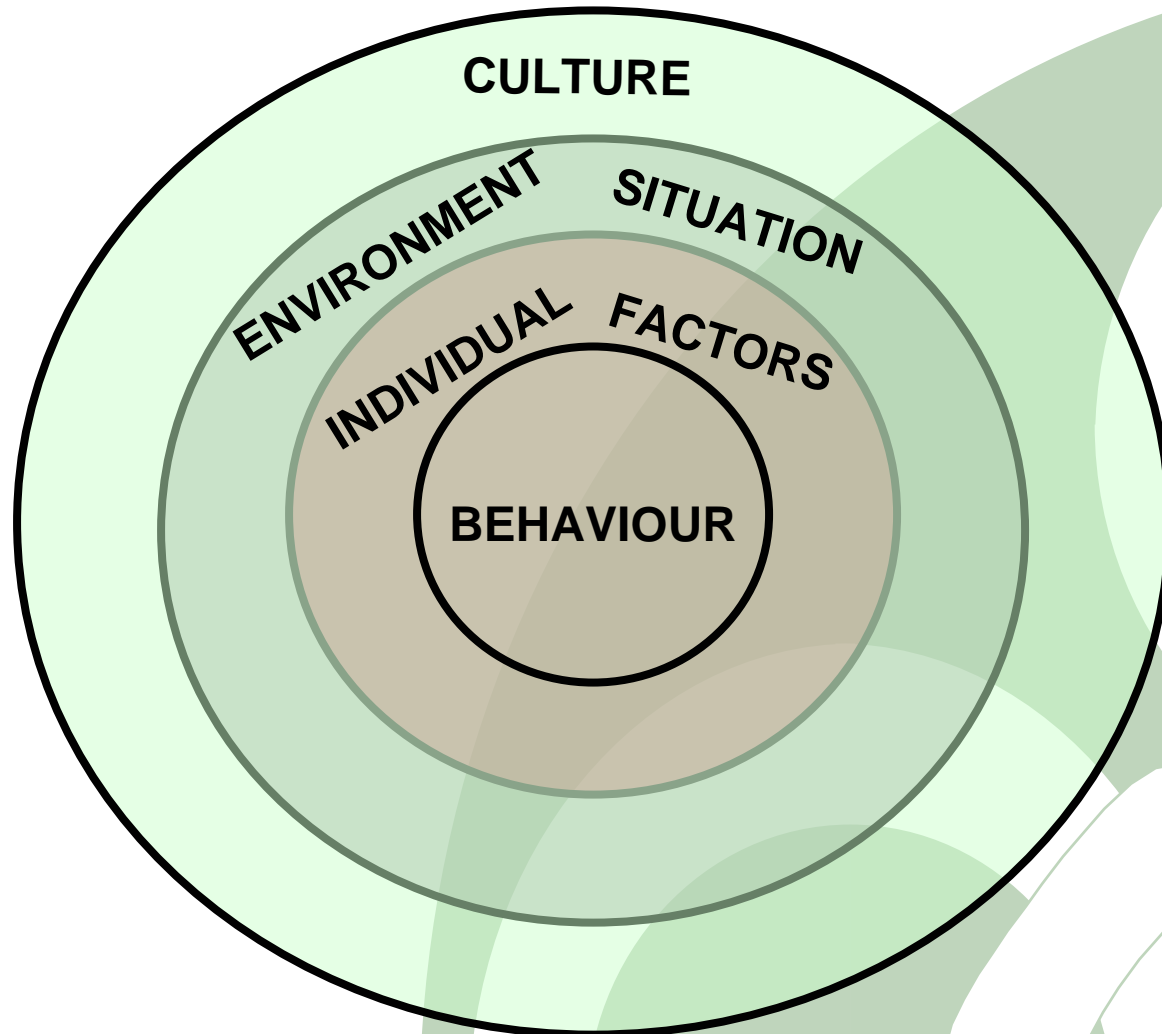
# Factors that affect behaviour





# Therefore...

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# Our approach in the manufacturing industry ...

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- ❑ Paperlinx paper manufacturer
- ❑ 650 employees across two paper mills
  
- ❑ Educate workforce to identify causes of unsafe behaviour

# Observation Form

**Australian Paper** **SILCAR**  
32001

**Section 1:**

1) Date 11/02/03 Time 9:00 P.M.

2) Observer M. SMITH

3) Shift E

4) Department/Area DESPATCH

5) Description of Hazard  
FORKLIFT TRAFFIC  
MANY MOVEMENTS  
LACK OF ROOM  
NEED 2 MOVE WEBS  
MORE SAFELY!

6) Was the Hazard addressed? If yes, how?  
SEE BELOW

7) If no, suggest how the hazard could be addressed  
REDESIGN FORKLIFT  
(SEE SKETCHES)

**Australian Paper** **SILCAR**

**Section 2:**

8) Rank the hazard as High, Medium or Low Risk  
**Alert supervisor immediately if you identify a High Risk hazard**

9) RISK CATEGORIES At Risk

|  |                                     |
|--|-------------------------------------|
| a) <b>Manual Handling</b><br>Lifting, body position, posture, loads handling                     | <input type="checkbox"/>            |
| b) <b>Tagging/Permits/Isolation</b><br>Personal Danger Tags, Out of Service Tags.                | <input type="checkbox"/>            |
| c) <b>Working at Heights</b><br>Harness/lanyard, anchor points, working from basket/platform     | <input type="checkbox"/>            |
| d) <b>PPE</b><br>Hard hat, safety glasses, belt, safety boots                                    | <input type="checkbox"/>            |
| e) <b>Job Preparation</b><br>Work areas assessed, brief inspection of work area prior to work    | <input checked="" type="checkbox"/> |
| f) <b>Housekeeping</b><br>Workplace tidy/to standard, hoses, cords and leads, debris and rubbish | <input type="checkbox"/>            |
| g) <b>Mobile Plant</b><br>Pre-Start filled in correctly, speed, smooth operation                 | <input checked="" type="checkbox"/> |
| h) <b>Time Pressure</b><br>Lack of time, rushing to complete job                                 | <input checked="" type="checkbox"/> |
| i) <b>Training</b><br>Lack of training or instruction on how to carry out the task               | <input type="checkbox"/>            |
| j) <b>Procedures</b><br>Incorrect procedure, procedure not followed                              | <input type="checkbox"/>            |
| k) <b>Other Issues</b>   | <input type="checkbox"/>            |

10) Place completed form in box provided.

# Example of a novel solution

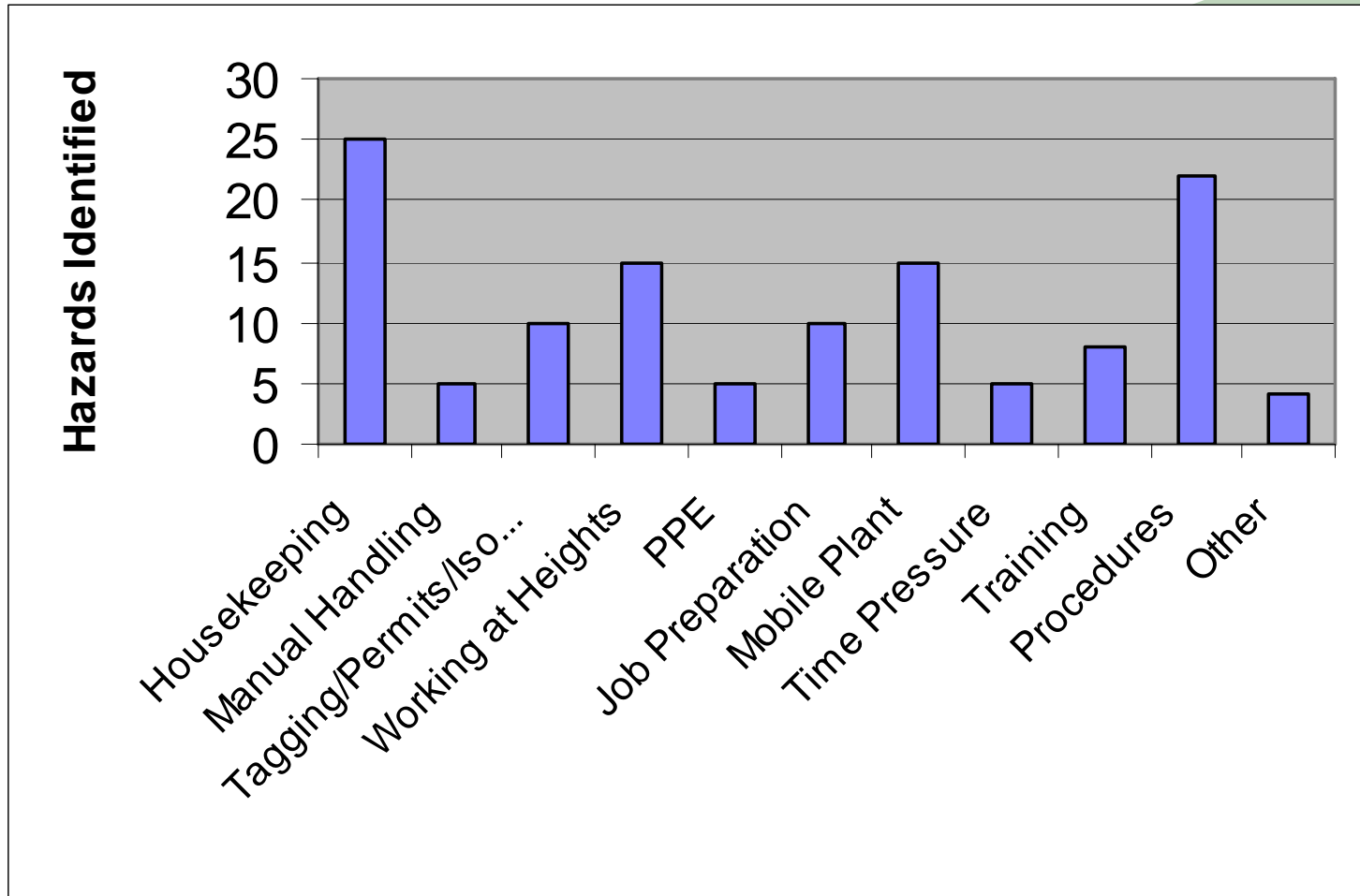


# Use your BBS program to...

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- ❑ Have regular team meetings
  - view program statistics
  - develop intervention strategies

# Example of meeting statistics



# Example of team meeting



# Problem 2

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- ❑ Difficult to achieve sustained success - “culture change”



# Our Approach

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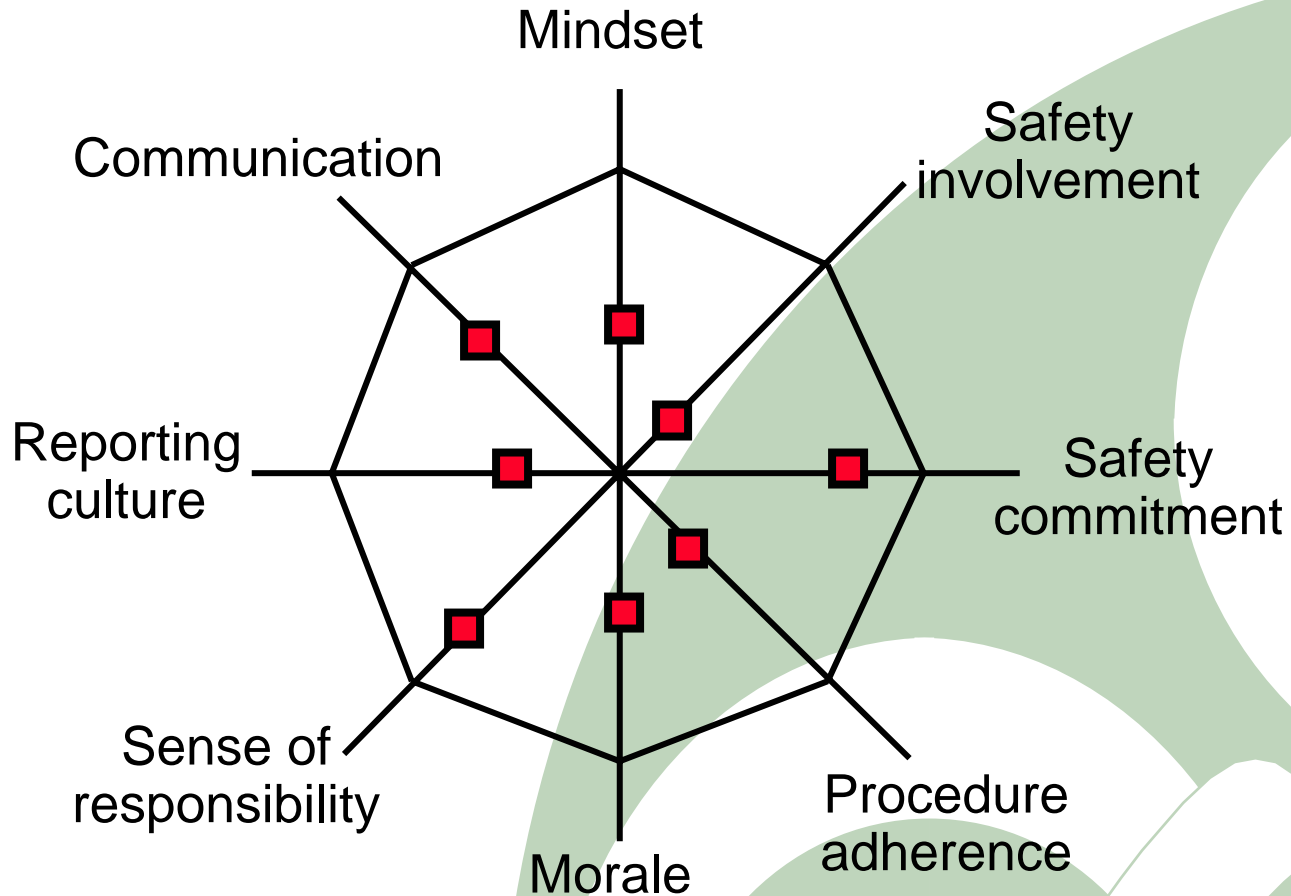
- ❑ Use the BBS program to develop a **positive safety culture**
- ❑ Use it as a way of driving culture change
- ❑ Culture Change = Sustained Change

# How did we do this?

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1. Understand current safety culture and safety systems

# Web of Safety Culture



# Our Approach *cont...*

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1. Understand current safety culture and systems and processes in place
2. Identify areas for improvement in culture
3. Identify readiness for change

# Our Approach *cont...*

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## 4. Set up a design committee to develop the BBS program

**This promotes ownership and commitment and relevance for the worksite**

- Design to target key areas for culture improvement
- Capitalise on areas of culture strength
- Align with current systems and processes
- Start simple
- Flexible

# Culture Change

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## Bottom-up

- Eg. participation in program assists with developing a positive safety culture

## Top-down

- Line management play a critical role

**Need to understand current culture to be able to design the program to achieve your desired culture**

# Initial outcomes 6 months after implementation...

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## ❑ SAFETY PERFORMANCE

- 18% decrease in number of injuries reported
- Return on Investment

## ❑ VISIBLE SAFETY IMPROVEMENTS

- Forklift
- Manual Handling Strains and Sprains
- 17 SOP's identified as inaccurate/unsafe as a result of observations across shifts. Shifts worked together to re-develop these.

## ❑ CULTURE IMPROVEMENTS

- Culture assessment in September

# Take home messages...

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- ❑ Identify and address *causes* of unsafe behaviour
- ❑ BBS as a way of building and sustaining a positive safety culture