

Preventing Accidents

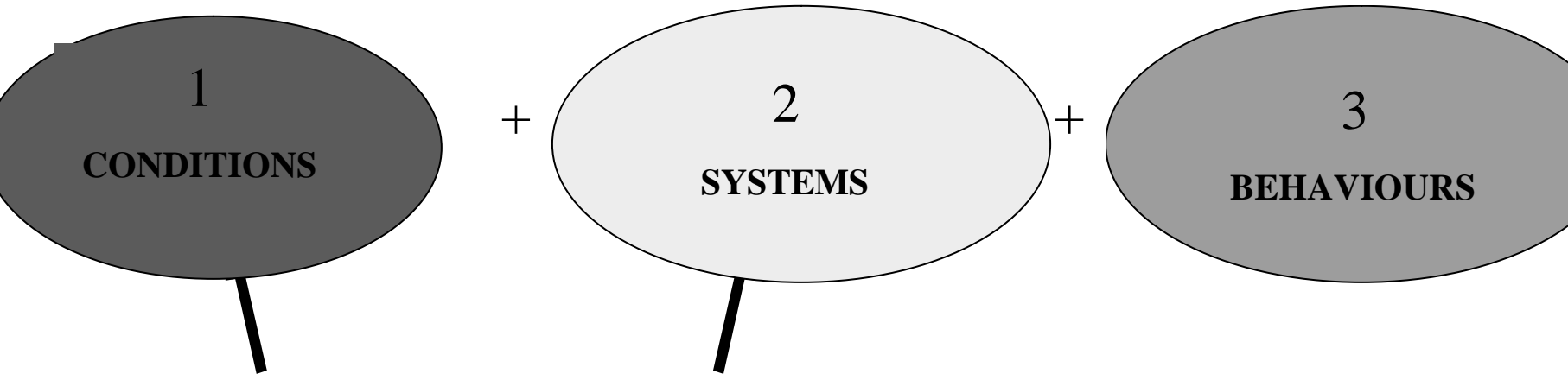
The Human Factors

Sounds Familiar ?

- Trapped hand clearing blockage inside machine**
 - Pallet left lying in walkway**
 - Not wearing specified PPE**
 - Stepped backwards and fell over -**
-
- Most accidents involve unsafe behaviour**
 - Changing unsafe behaviours will reduce your future injuries**

Accidents Can Be Prevented

If



Focus is usually on conditions & systems (necessary)

But behavioural causes are involved in most accidents

Eg what caused your last driving, diy, gardening accident ?

Effective accident prevention has to tackle all 3 areas

Unsafe Behaviours

- **May be unintentional (human error)**
- **May be intentional (rules violation)**
- **Different motivations**
- **Different ways to help prevent**

Human Errors

'To err is human - to forgive divine'

Alexander Pope - 1711

**'To err is human - to forgive is not company
policy' Anon**

Have you ever - - -

- Parked and left your car lights on ?
- Set the video/dvd recorder incorrectly
- Forgotten someone's birthday ?
- Mislaid house or car keys ?

3 types of human error

- **Slip (selected wrong gear)**
- **Lapse (forgot to put lights on)**
- **Mistake (crashed new automatic)**
- **No deliberate intent to 'break rules'**

Ways to help prevent

- **Slip and Lapse - make differences obvious / avoid distractions if critical activity / use visible or audible reminders - eg car prompts for lights, seat belt.**
- **Mistake - ensure appropriate training for competence / ensure instructions are clear and helpful / avoid workplace over reliance on memory**

Human Error Risk Factors

eg

- Unclear / complex instructions
- A and B are different but look similar
- Inadequate lighting for task
- Over reliance on verbal instructions

- Can be people and / or workplace risks
- Use a simple workplace audit form
- Link to near miss reporting

Rules Violations

Rules Violations

- **Intentional actions or non actions**
- **Driving examples ?**
- **At work examples ?**
- **Why do we (sometimes) break rules ?**

Perceived Consequences

- What determines whether we obey 'a rule' or not ?
- Knowledge of 'the rule' ?
- Perceived personal consequences of obeying or not obeying ?

Perceived Consequences

- Prompt is 40mph speed limit
 - Clear road / late for work
 - No sign of police or cameras
 - What do you do ?
-
- Now approach a speed camera
 - What do you do ?

Perceived Consequences Workplace 'A'

Rule is 'wear eye protection when mixing chemicals'

- Eye protection usually missing or dirty
- Under time pressure to get job done
- Others don't always wear eye protection
- Managers don't seem to notice
- It's only a quick job / not much risk
- Have done it before without any problem

One day → likely to be a serious eye injury

Your safety rules

- **Simple, clear, and easy to understand ?**
- **Visual reminders where appropriate ?**
- **Are they (seen as) appropriate to risk ?**
- **Consistently enforced ?**
- **No different 'custom and practice' ?**

Behavioural Safety Implementation

- **Initial training :-**
 - **Manager / supervisor workshops**
 - **Team / shift workshops**

- **Follow up processes :-**
 - **Manager / others 'behavioural auditing'**
 - **Workforce behavioural safety process***

**A workforce run
behavioural safety
process**

3 Process Steps

- **Define top 5-6 recurring injury types**
- **Workforce develop a few 'key safe behaviours' for each injury type**
- **Observation of unsafe behaviours and feedback by trained workforce volunteers**

Define Top Injury Causes

- Will cover c.90% of all injuries
- eg
- Hit by moving object
- Collision with stationary object
- Slips, trips, and falls
- Manual handling / lifting

Key Safe Behaviours

- At home, driving, and at work
- Lots of observable safe behaviours (too many to be of use)
- However, a few key safe behaviours can help prevent many common accidents
- eg - what are a few key safe behaviours that you could always do to help prevent being mugged and robbed ?

Key Safe Behaviours

- Can also define for common workplace injury types
- eg - collision with a stationary object
- Can define a set of observable key safe behaviours to avoid collision with a stationary object
- Eg - always look where you are going
- Eg - don't step back without looking
- Eg - don't obstruct your vision
- Eg - use correct access to areas and walkways

Observation and Feedback

- **Someone can observe my unsafe behaviour and give feedback to raise my awareness – helpful, no name**
- **Can train workforce volunteers to do this to help colleagues change unsafe behaviours**
- **An ongoing 24/7 workforce owned process**
- **Changing unsafe behaviours will reduce injuries**
- **Workforce need to 'buy it' and 'how to do it'**
- **Pilot first → take learnings → roll out**

Working

The Odds

