

# Failing Safely



# Part One – The What



# Human & Organisational Performance

It's not Looking at the individual worker and worker behavior, or not at the system and human factors, it's looking at the connection between the worker and the system

# Traditional Health and Safety

- Regulations/rules - Compliance
- Design – designing out unsafe conditions
- Behaviour – human factors
- Process – getting them right
- Systems – making them more reliable

# Flawed Assumptions

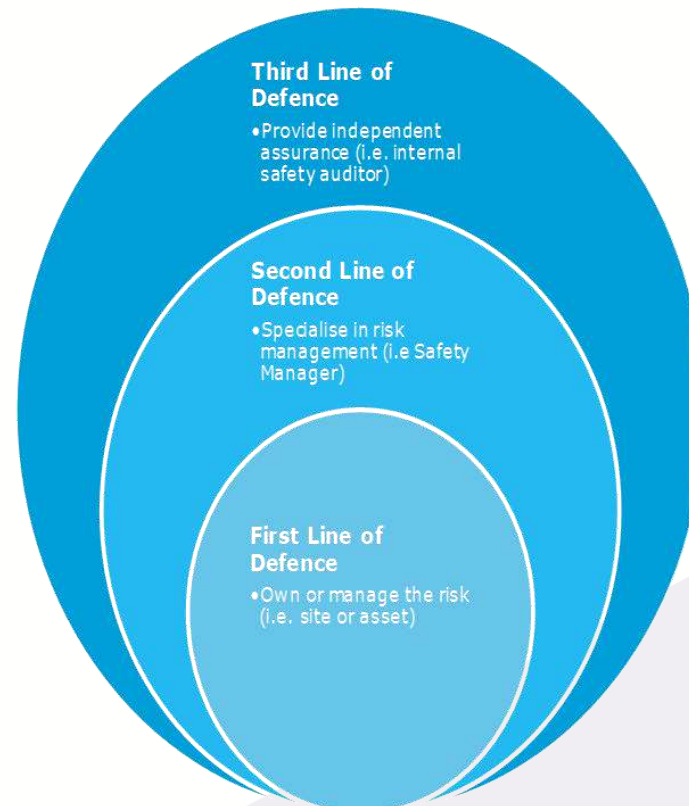
1. Bad things happen because people are bad
2. Behavior is a choice. And then if you simply choose to do the right thing, you would never have any accidents



# US Safety Expert Dr Todd Conklin

- Human error is inevitable
- Even the best operator makes mistakes
- Businesses need to allow for error and protect their workers from the consequences of unintended mistakes – they need to learn to “fail safely”

- ‘Safety is not the absence of accidents. Safety is the presence of defenses.’



# An Example

- Volvo has a goal of creating a fatality-free car by 2020
- But since 2007, there have been no recorded deaths in car-crashes involving Volvos
- So, does Volvo already make a fatality free car? And if so, how did it achieve that impressive goal?





# The Five Principles of HOP

- Principle One: Human Error is Normal
- Principle Two: Blame Fixes Nothing
- Principle Three: Learning Is Vital
- Principle Four: Context Drives Behavior
- Principle Five: How You Respond to Failure Matters



# Principle One: Human Error is Normal

- Systems aren't tolerant of normal error
- Systems are poorly designed; because
  - A system should have enough latitude in it
  - So that when a worker zigs instead of zags, the consequence of that is detection and correction, not catastrophic failure

# Principle Two: Blame Fixes Nothing

- Blame is emotionally satisfying
- Blame stops improvement
- Blame is cheap
- Blame makes error sound like a choice
- Error is error, blame is blame
- When you start to separate the two, that's when organizations start getting better

# Principle Three: Learning Is Vital

The operation:

- Listens carefully to weak signals.
- Recognizes that expertise lives at every level of the organization, and it takes that, and it learns
- To do that, you have to think differently about your workers.
- The workers are not a problem to be fixed, the workers actually become the problem solver, the solution

# Principle Four: Context Drives Behavior

- Traditional research would say to change behaviour, consequences must be soon, certain or significant (either negatively or positively)
- New research takes into account context. E.g.:
  - Peer pressure
  - Social forces
  - Expectations

# Principle Five: How You Respond to Failure Matters

- Management's response to failure:
  - Telegraphs to your team everything they need to know about how serious you are about being resilient
  - A negative response = people hiding information
- A positive response = lots of information, but you are aware of how the 'world' is operating

- [Interview with Dr Todd Conklin](#)
- [Todd Conklin - Pre-accident Podcast Series](#)
- [Andrew Sharman – ‘Mind your own Business’](#)
- [Sidney Dekker – Art of Work](#)