



LEARNING FROM INCIDENTS

EXAMPLES OF WEAK SIGNALS AND MIND TRAPS

Chronic Unease = Alertness to Weak Signals and to Mind Traps

What are the Signals?

Weak Signals are signs or indications from our surroundings that things **may not** be all right, and that some of the barriers intended to prevent an incident are starting to fail or are missing.

Some examples are:

- Corrosion where we didn't expect it...
- An unusual smell when we visit a production unit...
- A pump vibrating in an unusual way...
- A new employee looking puzzled by a vital piece of equipment...
- A meter is giving an unexpected reading...
- Paperwork supporting critical tasks not being completed...
- Procedures being incorrect or out of date...
- Decisions not to comply with standards or normal practices...
- Supervisors repeatedly not taking concerns of junior staff seriously.

What are Mind Traps? (also known as Cognitive Bias)

The term refers to a natural tendency for human thinking to be unduly influenced by existing mental models (what someone wants, expects, or thinks is going to happen) despite evidence that suggests something else, by emotion or by a reluctance to apply mental effort, so jumping to easy conclusions without giving a decision proper attention.

These Mind Traps can affect our thinking from the perception and interpretation of information from our senses, through to judgement and decision making.

Some examples of Mind Traps are:

- The tendency to under estimate a risk that has become familiar, and is associated with tasks that we undertake regularly without incident (risk normalisation).
- The tendency to search for or interpret information in a way that confirms our preconceptions. A willingness to ignore, or find alternative explanations that allow us to rationalise away information that does not fit with our mental model of the situation (confirmation bias).
- The tendency to be over-optimistic, overestimating the likelihood of success, also known as wishful thinking (optimism bias).
- The tendency to want to continue on a course of action once committed to it, even when circumstances change and risks increase (plan continuation).
- The tendency to want to agree with the consensus view of a group of peers
- The tendency to perceive risks based on the way the problem is stated ('framed'). E.g. the statement "there is a 90% chance of success" will be seen more positively, and with less risk associated than the statement "There is a 10% chance of failure".

Thinking fast and thinking slow

Most of the time we use our fast thinking brain, nothing wrong with that, it works well in routine and familiar situations. But we have to recognise that when we are thinking like this we are subject to Mind Traps. We jump to conclusions, and then look for the facts. When making HSSE Critical decisions, we need to avoid the Mind Traps by engaging our slow thinking, rational brain.

- Fast Thinking: intuitive, effortless, emotional, jump to conclusion, automatic, always on
- Slow Thinking: deliberate, effortful, rational, evidence based, offunless switched on

“A state of Chronic Unease is achieved when we have created a culture where we are alert to weak signals, and make effective and timely challenges and interventions on risk assessments and decision making”.