Chronic
Unease

A State of Mind for Managing Safety

To be wary is to be ready for the unexpected.
According to research conducted with senior managers in the offshore oil and gas industry by Centre for Safety researcher, Dr. Laura Fruhen, and University of Aberdeen researcher, Professor Rhona Flin, unease could be key in supporting managers in maintaining a safe work environment. This whitepaper looks at how chronic unease can support managers in managing risks effectively in safety critical organisations.

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What is chronic unease?

Chronic unease refers to the experience of discomfort and concern about the management of risks. It is a healthy scepticism about one's own decisions and the risks that are inherent in work environments.

Some of the world's safest organisations, also called high-reliability organisations (HROs) manage to operate safely over long periods of time in risky contexts. It has been proposed that being in a constant state of unease critically supports their excellent safety record.

Some characteristics of HROs:

- They evaluate the absence of surprises as a reason for anxiety, not complacency (Rochlin, 1993).
- They assume that they might not fully comprehend the complex systems they operate and are preoccupied with failure (Weick & Suttcliffe, 2007).
- They adopt a many-angled approach of constant improvement towards safety issues (Rochlin, 1993).

Building on unease as a characteristic of HROs, researchers Dr. Fruhen (The University of Western Australia) and Prof. Flin (University of Aberdeen) investigated how chronic unease might support senior managers to handle risks in a way that contributes to their operations' reliability. This project was sponsored by Royal Dutch Shell.

Why apply chronic unease to senior managers?

- Senior managers have a critical influence on organisational safety (Christian et al, 2009).
- Senior managers' work is complex and often abstract.
- Senior managers can be removed from the hazardous operations where their decisions will have an effect.
- Senior managers deal with uncertain and ambigious information.
- Unease has been associated with senior managers' influence on safety (Burns, 2002).

What makes some senior managers more uneasy than others?

Dr. Fruhen and Prof. Flin conducted a review of the research literature and an interview study with senior managers in the offshore oil and gas industry to investigate what personal characteristics can make some senior managers more uneasy than others.

The five characteristics identified were safety imagination, pessimism, vigilance, tendency to worry, and experience.

Safety Imagination	The ability to mentally project the development of a situation into the future based on its current state
Quote from interview study	"If that gas cloud had ignited, it would have been a huge fireball and what [a] catastrophic event [that] would have been"

Pessimism	A personality trait reflecting a tendency to resist complacency and to anticipate failure.
Quote from interview study	"Frankly one of these high consequence types of events could happen any time during that direction." "[You] constantly say no, it's still not good enough, no, it's still not good enough."

Vigilance	The ability to notice and identify (weak) indicators of risks in the environment.
Quote from interview study	"Chronic unease means for me having that alarm, that radar, having my antennae up every time we do something different which we haven't done before and really going back to the first principles."

Tendency to worry	A tendency to worry about risk and safety.
Quote from interview study	"I am constantly worried that someone is going to get hurt."

Experience	Whether they have been involved in an incident before.
Quote from interview study	"If you have been involved with a process safety event or there has been a fatality and somebody has been killed, you never have to spend any time convincing those people of the importance of this subject."

How do you channel unease to positively impact upon safety?

Unease can be channeled to positvely impact safety. Several responses to unease were identified by the researchers.

1. Transformational and Transactional Leadership

- Motivating team members to question established ways of approaching problems.
- Listen to their concerns.
- Passionately sharing feelings about the importance of safety.
- Creating a vision for safety related goals.
- Setting clear standards on safety.
- Rewarding achievements.
- Close monitoring of task executions.
- Correcting arising safety issues.

## 2. Demonstrating Safety Commitment

- Showing safety is a priority and approaching it as a positive outcome.
- Not compromising safety for other competing issues.
- Spending time on safety.
- Providing support for staff on safety issues.

3. Flexible Thinking

- Not jumping to conclusions.
- Avoiding standard answers as to why issues occur.
- Exploring new problems with a fresh look, while building on experience.
- Considering all sources of data and information and identifying whether you need more data and information.
- Critically examining the issues that are behind the situation.
- Considering each issue on its own, but also the interconnections between issues.

4. Seeking Information

- Searching for risk related information.
- Identifying patterns.
- Learning more about safety.
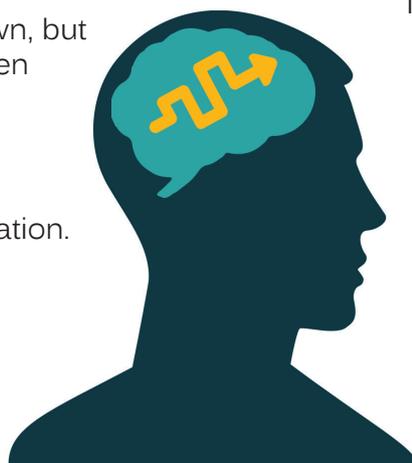
Is more unease always better?

Dr. Fruhen and Professor Flin reasoned that there is an optimal and healthy level of unease that should be aimed for. Too little unease might lead to complacency, so that warning signals are ignored, ambiguities are marginalised, and negative indicators, and adverse consequences are rarely considered. Too much unease might lead to the experience of anxiety, affecting decision making, action and over the long run, (mental) health.
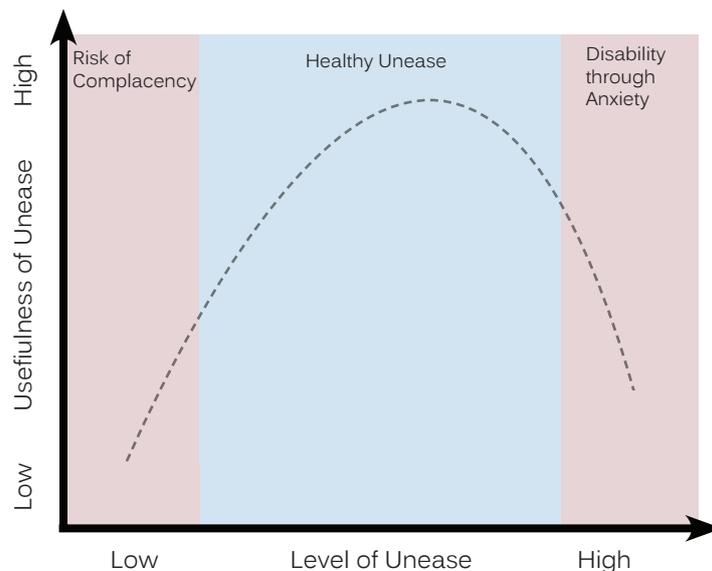
Each manager is likely to have a healthy level of unease (the margins differ for each person), where he or she is alert and manages risks effectively.

Summary

In addition to all the formalised and technical information managers have available to them, unease is another source of information. While it might be highly subjective, it may nonetheless be supportive in identifying areas of risk management that deserve more attention.

The intuition of unease should be cultivated in organisations, with managers first leading the way and encouraging their subordinates and others to voice doubts and concerns regarding risks in the workplace.

This whitepaper is based on work conducted by Centre for Safety researcher, <u>**Dr. Laura Fruhen**</u>, and University of Aberdeen researcher, Professor Rhona Flin. This research was conducted at the University of Aberdeen and sponsored by Royal Dutch Shell.

Dr. Fruhen's research focuses on leadership and management influences on safety. She has conducted research in the energy industry, the aviation sector and fire fighting. Her work has been funded by the European Organisation for the Safety of Air Navigation (EUROCONTROL), Shell, the German National Academic Foundation and she has been awarded an Endeavour Fellowship by the Australian Government's Department of Education

See Dr. Fruhen's profile on the Centre for Safety website:
http://www.centreforsafety.com.au/collaborations/researchers/fruhen

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About the UWA Centre for Safety:

The UWA Centre for Safety is a hub for cutting edge research, innovative ideas, and practical solutions across the field of work safety.

Formed out of a partnership between Rio Tinto and The University of Western Australia, the Centre is dedicated to solving important safety challenges, and creating sustainable organisational change.

The Centre for Safety brings together world renowned experts across disciplines including Psychology, Engineering, Medicine, Business, Law and Health Science. This unique multidisciplinary approach towards safety provides critical insights into current industry concerns.

By encouraging collaborations between research, industry and government, the Centre for Safety is leading the way for safety innovation.

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