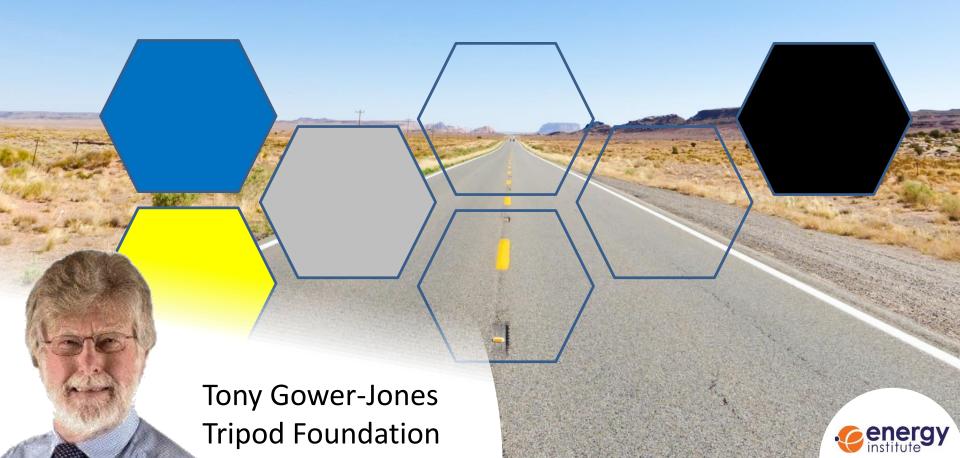
Lessons have been learnt



or have they?









Norway's defining moment

18:30 hrs. 27th March 1980



UK defining moment



22:00 hrs. 6th July 1988









The oil and gas industry has learnt

Some things we have learnt

- Platform design and explosion venting
- Fire and explosion modelling
- Certified Management Systems
- Structured Safety Cases
- Swiss Cheese model
- Bow Tie Analysis
- Tripod Accident Causation model
- Human factors
- Hearts and Minds toolkit
- Life Saving Rules

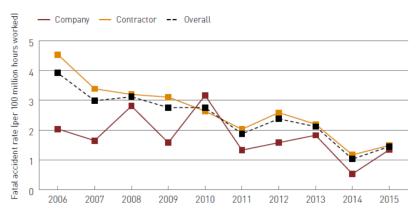
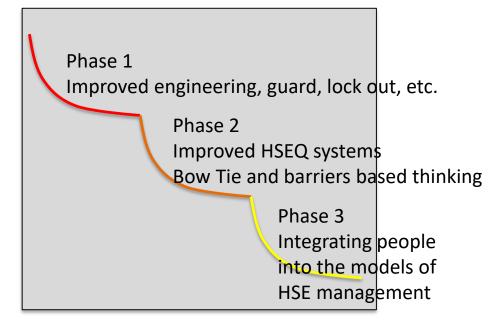


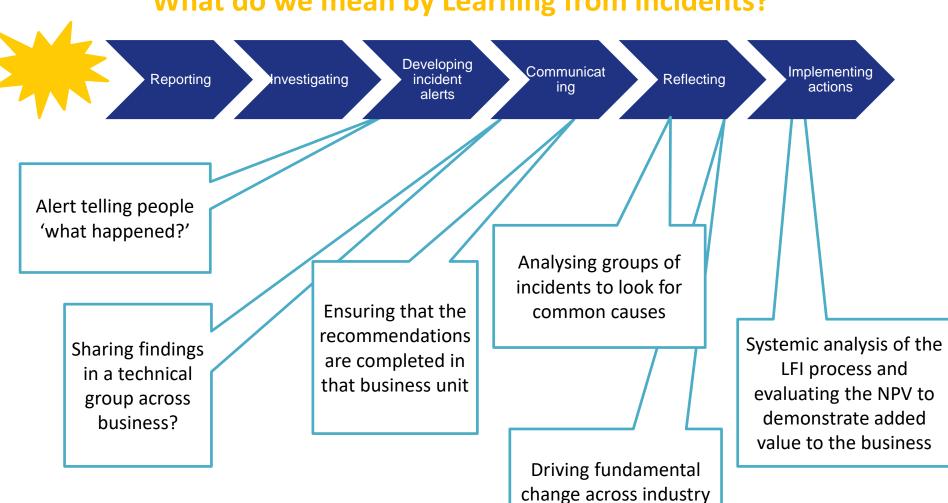
Figure 13: Fatal accident rate by company & contractor (2006–2015)







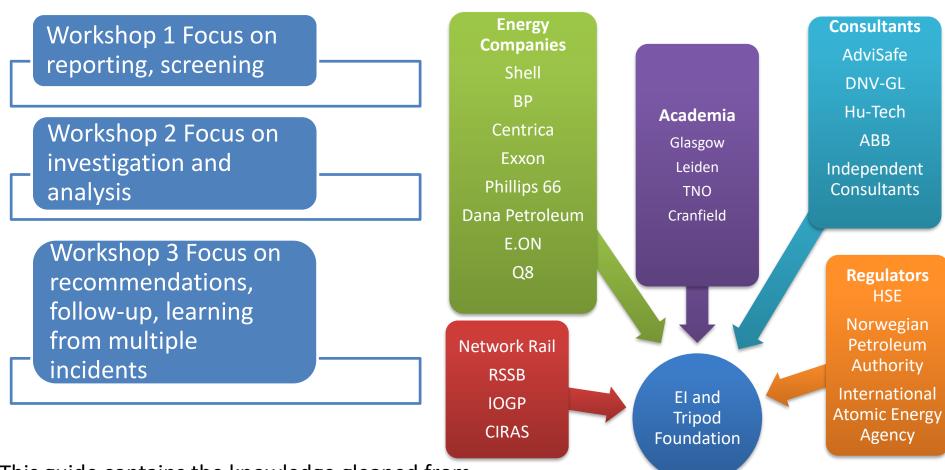
What do we mean by Learning from incidents?





energy The El Guide to learning from Incidents Stichting Tripod Foundation





This guide contains the knowledge gleaned from

50+ experts in their field

With on average about 20 years of experience across high reliability industries

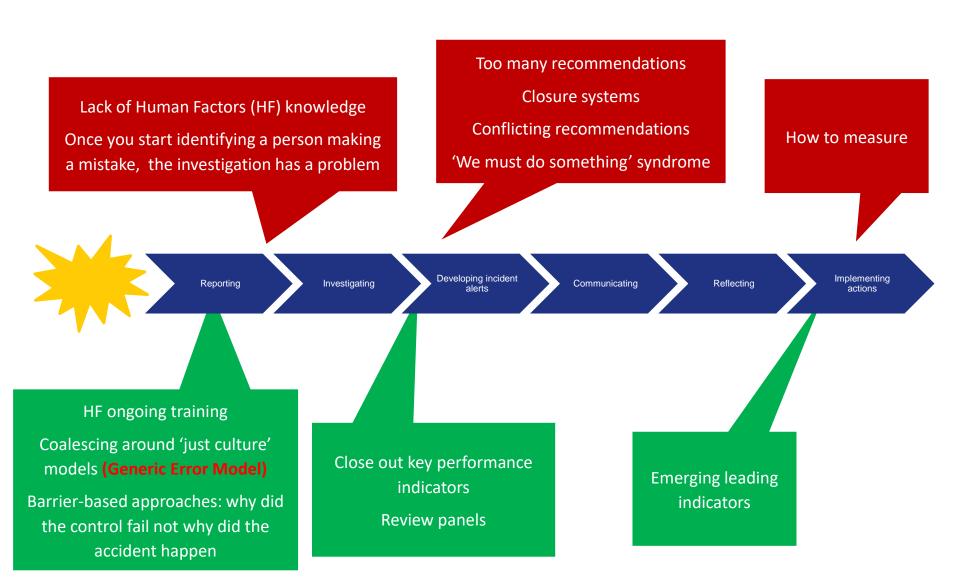
1,000 years for knowledge and experience combined in one guide



Learning across LFI Phases

Stichting Tripod Foundation





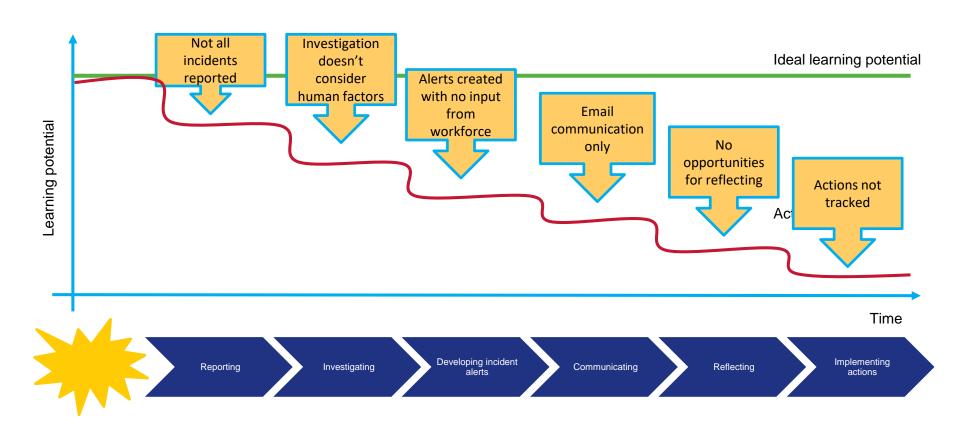






Insight 1: Learning potential is being lost

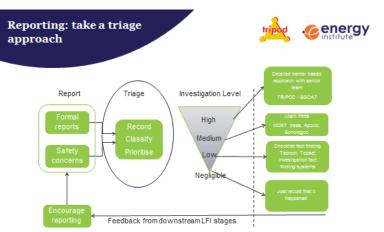
Blockers and enablers







Four known issues with learning

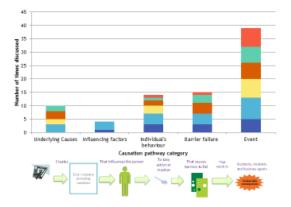


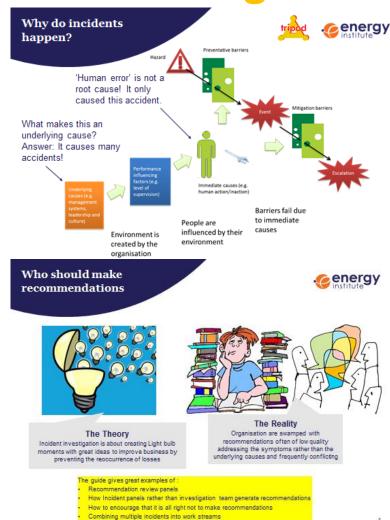


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Conversations about safety in leadership meetings

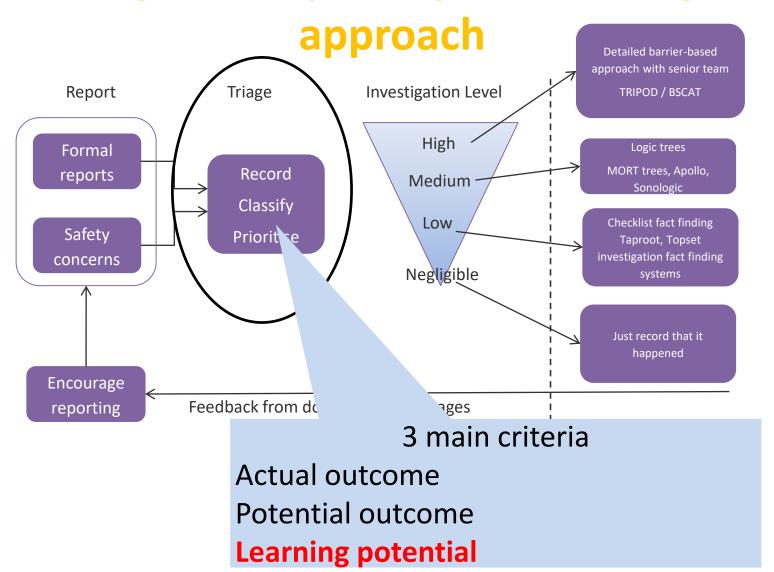








Insight 2: Reporting: take a triage

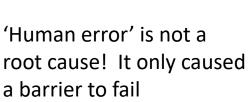




Why do incidents happen?

Stichting Tripod Foundation





What makes this an underlying cause?

Answer: It causes many

accidents!

Underlying causes (e.g. management systems, leadership and culture)

Performance influencing factors (e.g. level of supervision)

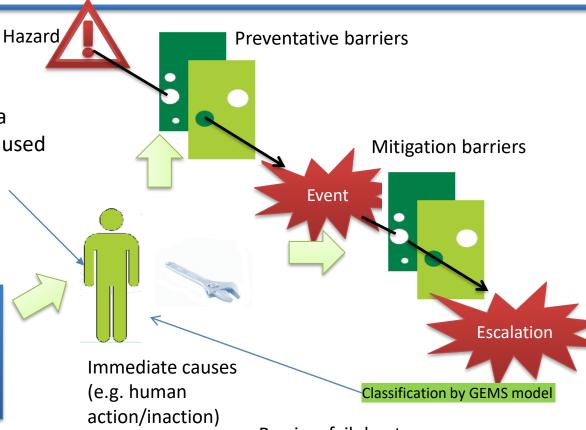
Environment is created by the organisation

Classification by Basic Risk Factors (Leads to Caused by Classification model

action/inaction)

People are influenced by their environment

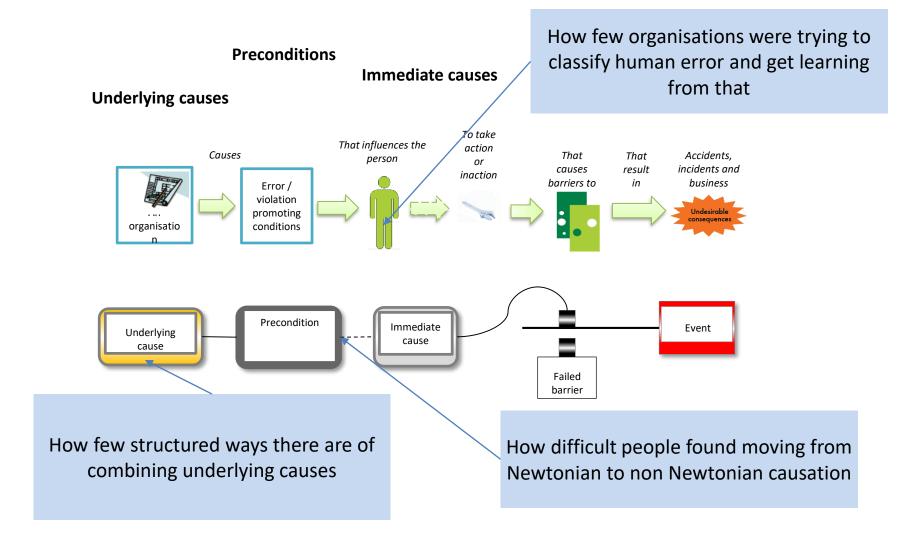
Barriers fail due to immediate causes







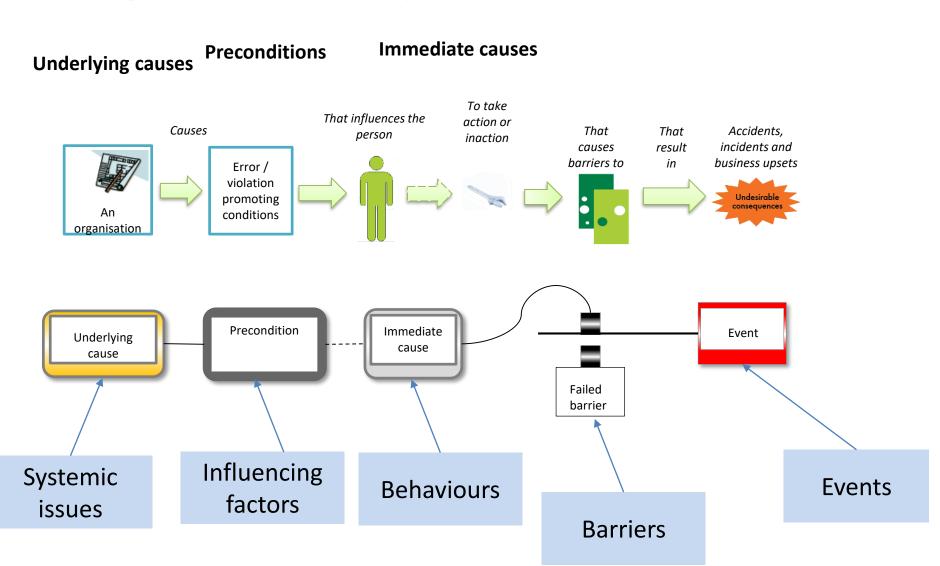
Tripod Incident Causation Model







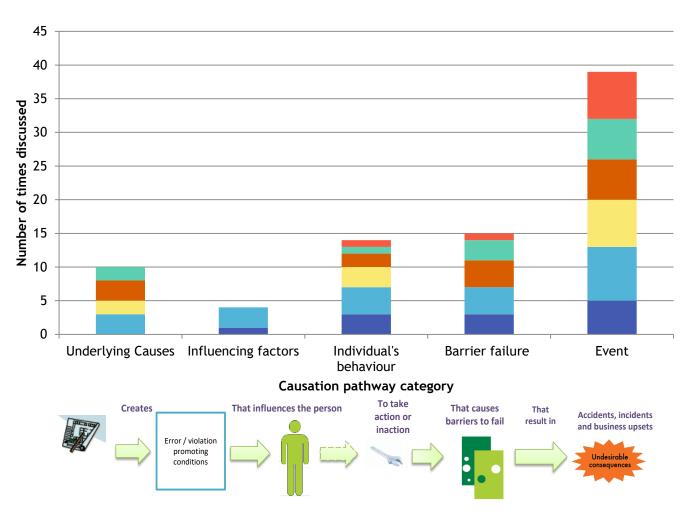
Insight 3: Leadership Conversations







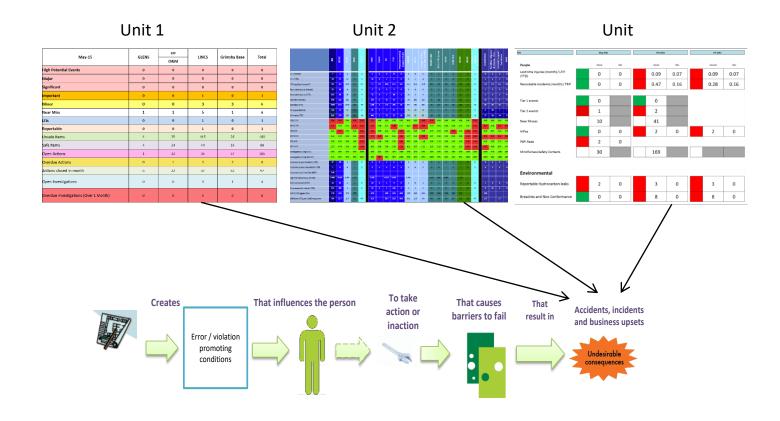
Conversations about safety in leadership meetings







Dashboards







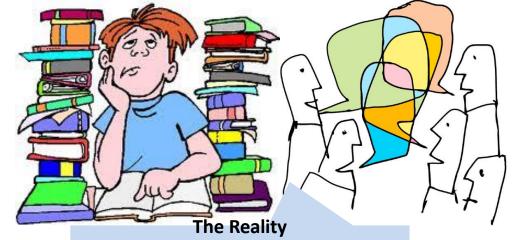
Insight 4: Who should make

recommendations?



The Theory

Incident investigation is about creating 'Light bulb moments' with great ideas to improve business by preventing the reoccurrence of losses



Organisations are swamped with recommendations, often of low quality, addressing the symptoms rather than the underlying causes, and frequently conflicting

The guide gives great examples of:

- Review panels for both incidents and recommendations
- How to involve the right people rather than investigation teams to generate effective recommendations
- How to encourage that it is all right not to make recommendations
- Combining multiple incidents into work streams





Insight 5: Effective Learning

- Case study: Hearts and Minds Learning from incidents tool
- Piloted at Centrica, RWE, EDF, and NHS Grampian
- Workshop-based toolkit to engage people in various parts of the LFI process.
- Contains tools to help managers and supervisors engage their teams on an incident



- Tell me and I forget
- Teach me and I may Remember
 - Involve me and I learn



Learning from incidents



This toolkit helps you understand the importance of contextualising learning to be effective





Conclusion



- The guide helps you structure your thinking
- Where is my organisation stronger or weaker
- Which area do I wish to improve
- What is the best practice in that area

A fantastic, free resource is available from the EI, and applicable to any industry.

 Learning from incidents, accidents and events (2016), published by the EI

Freely available from:

http://publishing.energyinst.org/

Bargain Price of £0





Acknowledgements

- Fellow board members and co-authors
 - Professor Jop Groeneweg
 - Willem Peuscher
 - Mark Taylor
 - Stuart King

Further Information

- Learning from incidents, accidents and events (2016), published by the EI ISBN 9780852939277
- Tripod Beta: Guidance on using Tripod Beta in the investigation and analysis of incidents, accidents and events using Tripod beta, ISBN: 9780852937280
 - ANNEX I: CAUSED BY... LEADS TO... A method for identifying and classifying the underlying causes of incidents, accidents and business losses http://publishing.energyinst.org/tripod/resources
- Hearts and Minds Learning from Incidents
 http://heartsandminds.energyinst.org/toolkit/learning-from-incidents
- Managing the Risks of Organisational Accidents, Author: James Reason Published: 1997
 ISBN: 1 84014 105 0

Questions?





