







An tÚdarás Sláinte agus Sábháilteachta Health and Safety Authority





Colleen Butler, PhD., C.ErgHF MCIEHF Human Factors Specialist/Inspector 26 November 2024



Outline



- What is safety culture?
- What role has safety culture had in accidents?
- What are key influences on safety culture?
 - Management Commitment
 - Communication
 - Organisational Learning
- What can you do to influence safety culture?

Safety Culture

"The product of **individual and group values, attitudes, perceptions, competencies and patterns of behaviour** that can determine the commitment to, and the style and proficiency of an organisation's health and safety management system".

Health and Safety Commission Advisory Committee on the safety of nuclear installations (1993)

How people feel

Psychological aspects

Can be described as the 'safety climate' of the organisation, which is concerned with individual and group values, attitudes and perceptions.

What people do

Behavioural aspects

Safety-related actions and behaviours

What the organisation has

Situationalaspects

Policies, procedures, regulation, organisational structures, and the management systems

(Health and Safety Executive, 2005; Cooper, 2000)

Visible

'the way we do things around here'

Formal team processes

Visible behaviours

Documented health and safety procedures

Stated values – what we say we care about

'the way we really do things around here'

Informal team processes

Actual management priorities

Unwritten rules

Lived values – what we actually care about

Less visible

Silent rules

Safety culture and accidents

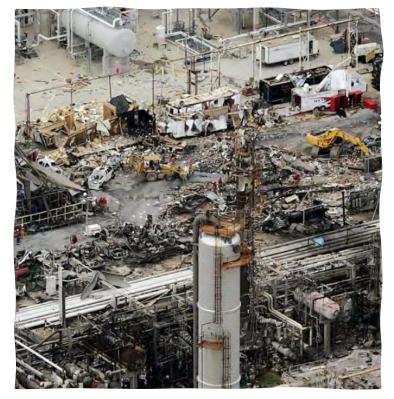


Buncefield, UK, 2005.

"...keeping the process operating
(COMAH Competent Authority, 2011)

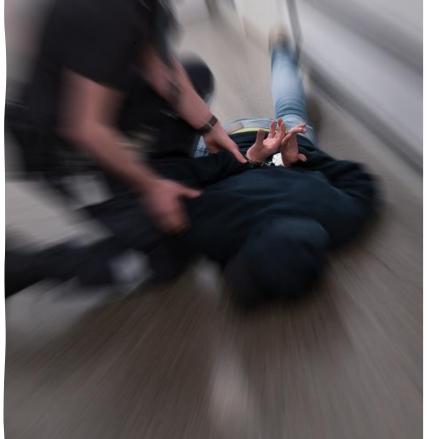


Space Shuttle Challenger, 1986
"The Silent Safety Program..."
(Presidential Commission Report, 1986)



Texas City, 2005
"..BP lacked a learning culture"
(US CSB Investigation Report, 2007)







Accident Investigation Case Study

Health and Safety Executive (2024) Annual Science Review

29 June 2015 – Van-based officer, asked to assist with prisoner movement from Blackfriars Crown Court, London



Prevailing Culture in June 2015



Long standing issues:

X inattention to communication of safety critical information

X time pressures, business priorities



A second incident in June 2016

(IOSH, 2023: https://www.ioshmagazine.com/2023/06/07/serco-fined-ps225m-after-custody-officer-sustains-fatal-brain-injuries)



Management Commitment



- ✓ Visibility
- ✓ Response
- ✓ Balance of health and safety and organisational goals
- ✓ Resources and support





Safety Critical Communication



Clarity

Quality

Timing

"The quality of a conversation influences the quality of decision making which influences the quality of the outcome."

(John O'Leary on Space Shuttle Challenger, 2015)



Organisational Learning



- ✓ Analysis of incidents
- ✓ Focus on underlying causes
- ✓ Looking beyond human error systems approach
- ✓ Timely feedback and action

"..Learning means changing.."

Chartered Institute of Ergonomics and Human Factors (2020) White Paper: Learning from Adverse Events.

https://ergonomics.org.uk/resource/learningfrom-adverse-events.html



Influencing Safety Culture



- Manage expectations
- Engage at all levels
- Communicate as you go
- Capture what people feel and do, what the organisation has
- Focus on one topic



Key Messages



- Safety culture > what people feel, do, what the organization has
- Management commitment, communication, organisational learning
- Intervention > Ensure engagement at all levels, ongoing communication; focus on one topic



References



Chartered Institute of Ergonomics and Human Factors (2020) White Paper: Learning from Adverse Events. https://ergonomics.org.uk/resource/learning-from-adverse-events.html

Control of Major Accidents (COMAH) Competent Authority Investigation Team. *Buncefield: Why did it happen?* COMAH final report, 16 February 2011. Bootle: HSE. <a href="https://webarchive.nationalarchives.gov.uk/ukgwa/20220701173308mp_/https://www.hse.gov.uk/comah/buncefield/

ncefield-report.pdf

Cooper, M.D., (2000) Towards a Model of Safety Culture. Safety Science, 36, 111-136

Health and Safety Executive (2005) A review of safety culture and safety climate literature for the development of the safety culture inspection toolkit. HSE RR 367 (2005). http://www.hse.gov.uk/research/rrpdf/rr367.pdf

Health and Safety Executive (2024) Annual Science Review: Investigation into a fatality during a prisoner restraint at a Crown Court, p.7. https://www.hse.gov.uk/Research/content/science-review-2024.pdf Last accessed 18 April 2024.

Institution of Occupational Safety and Health (2023) Serco fined £2.25m after custody officer sustains fatal brain injuries. https://www.ioshmagazine.com/2023/06/07/serco-fined-ps225m-after-custody-officer-sustains-fatal-brain-injuries

O'Leary, John (2014) The importance of good conversation and how to have it https://www.youtube.com/watch?v=Nn-Ue14bvIw

Presidential Commission (1986) Report to the President on the Space Shuttle Challenger Accident. https://sma.nasa.gov/SignificantIncidents/assets/rogers commission report.pdf

US Chemical Safety and Hazard Investigation Board (2007) Investigation Report. Refinery Explosion and Fire. https://www.csb.gov/bp-america-texas-city-refinery-explosion/









An tÚdarás Sláinte agus Sábháilteachta Health and Safety Authority

Go raibh maith agaibh Thank you



T: 0818 289 389

E: contactus@hsa.ie

W: www.hsa.ie