



Science and  
Technology  
Facilities Council

# SHE Training for Technical Early Careers Course



# **SHE Training for Technical Early Careers Course:**

## **A single page summary**

### **Background**

- STFC undertakes a wide range of science and engineering activities which frequently involve one or more significant hazards.
- Against a backdrop of a good safety performance, STFC is strongly aware of the dangers of complacency and is committed to the achievement of continuous safety improvement through the implementation and improvement of its safety management systems
- STFC strives to exceed the minimum requirements of the law and is committed to the development and use of best practice
- STFC expects and requires the full cooperation of all staff in achieving a positive safety culture and continuous improvement in safety performance

### **Three Important messages**

- STFC Health and Safety Management Arrangements delegations and the requirements of the safety codes are relevant to ALL staff. Know how the delegations and codes apply to your individual circumstances and implement their requirements.
- Risk Assessment is fundamentally important – be proactive in knowing which existing RAs apply to you and what new RAs are required. Implement the control methods they contain.
- Always act within your training and competency

### **Observation**

- SHE related activity needs to be proportional to the magnitude of the risks that it is deployed to control.
- SHE activity is most efficient when it is dealt with as an integral part of any work related activity

## STFC SHE Training for Technical Early Careers Course

### Outline programme

**\*\* Please note timings are approximate and will be adjusted to suit progress through the course material \*\***

09:00 to 09:45	Directors introduction Introduction and course programme
9:45 to 10:45	Motivation and the SHE Management System UK and STFC SHE performance overview
10:45 to 11:00	Break
11:00 to 12:30	STFC's Safety Management System and Arrangements SHE Code relevance exercise SHE Code review exercise
12:30 to 13:00	Lunch
13:00 to 15:00	Code structure summary SHE Website Risk Assessment
15:00 to 15:15	Break
15:15 to 16:45	Training needs analysis Safety culture, behaviour and leadership Course assessment





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# STFC SHE Training for Technical Early Careers

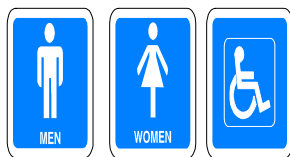


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## Introduction

# Director introduction

# Domestic arrangements



# Course introductions

- Name
- Job description
- Safety management responsibilities and/or hazards you work with
- Any specific safety issues

# Overall aims of the course

- This course is all about:
  - Safety, Health and Environment within the STFC
  - STFC SHE Management and IT Systems
  - STFC's Expectations
  - Raising awareness of STFC's safety culture
- This course is specific to STFC's systems and requirements

# Significance of SHE training

- You have the potential to become STFC's future Leaders
- You will define and create the STFC's future SHE Culture
- The standards you develop now are the standards you will keep
- Do not be influenced by poor standards of others

# The course

- Is designed to be of direct practical relevance to you when you return to your workplace!
- Action Logs are provided to keep a record of things to be done on your return to the workplace
- Laptops are provided to allow thorough exploration of the on-line SHE resources available to you in STFC
- Please make use of this opportunity!

# Learning outcomes

- Appreciate STFC SHE performance in a UK context
- Recognise the motivations for good SHE management
- Understand the structure of the STFC SHE Management System and its regulatory context
- Review the requirements of selected STFC SHE codes
- Recognise the common structural elements of the codes and the common compliance strategies
- Appreciate the need for risk assessment for your activities
- Understand your SHE training needs
- Appreciation of health and safety culture and its importance for exceptional performance

# Course assessment

- There will be two assessments, as follows:
- The course will finish with a 30 minute assessment -
  - Completion of a multiple choice questionnaire on the main elements of the course
  - The course pass mark is 70%
- You will have 2 weeks from the date of the course to submit your Course Workbook to your SHE Training Administrator for moderation.







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# STFC SHE Performance and Motivation for SHE Management

## Motivations for safety management

- We need to – moral and aspirational reasons
  - The desire to protect anyone from injury, pain, suffering and loss of life stands on its own as a humanitarian goal
  - Organisations understand that their staff are their most important asset and that they have a moral obligation to prevent unnecessary suffering and loss of life
  - Poor health and safety management will reduce both quality of life for staff and business efficiency



## STFC H&S – our aspiration

- Encourage a culture of safe working, believing all injuries etc. are preventable.....
- Comply with the spirit and letter of health and safety laws.....adopting the accepted best practices of comparable organisations
- Understand SHE performance, communicate and discuss with staff..... and openly drive continuous improvement



## Motivations for safety management

- We have to – legal reasons
  - All UK organisations are required by law to actively manage the risks due to their activities
  - Responsibility for legal compliance rests firmly with the employer
  - Failure to meet legal requirements may lead to action under either Civil or Criminal Law
  - Legal requirements extend to individuals as well – we all have a responsibility to keep ourselves and our colleagues safe



# Financial

- The latest HSE estimate of the cost of occupational injury and ill health to the UK economy is for FY22/23:

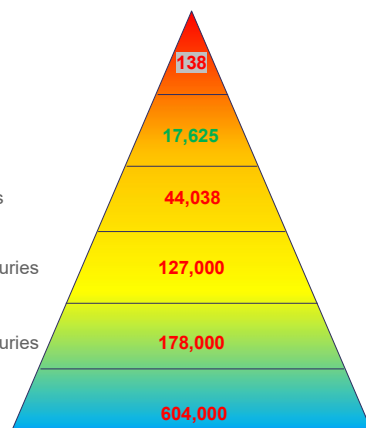
- Total : £21.6 billion
- Ill health : £14.5 billion
- Injury : £7.1 billion
- UKRI budget 25/26 = £8.8 billion
- STFC budget 25/26 = £618 million



[Statistics - Costs to Britain of workplace injuries and new cases of work-related ill health \(hse.gov.uk\)](https://www.hse.gov.uk/statistics/costs-to-britain/)

## UK injury data 23/24 (HSE and ONS statistics)

- Fatal injuries
- Reported major injuries
- Reported >7 day injuries
- Self reported > 7 day injuries
- Self reported > 3 day injuries
- All self reported injuries

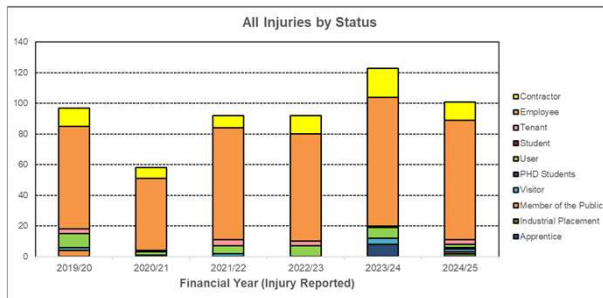


### Overview on injuries in the UK

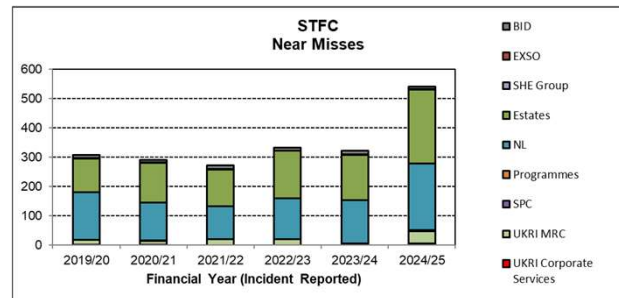
- Fatalities - Long term downward trend slight increase this year
- Employer Reported injuries - Long term downward trend has levelled off
- Self reported injuries – Slight upward movement this year
- Fatal injury statistics are dominated by:
  - falls from height
  - struck by moving vehicles
- Non fatal statistics are dominated by:
  - Slip, trip and fall (31%)
  - Handling, lifting and carrying (17%)

# STFC Incident data

## Injuries

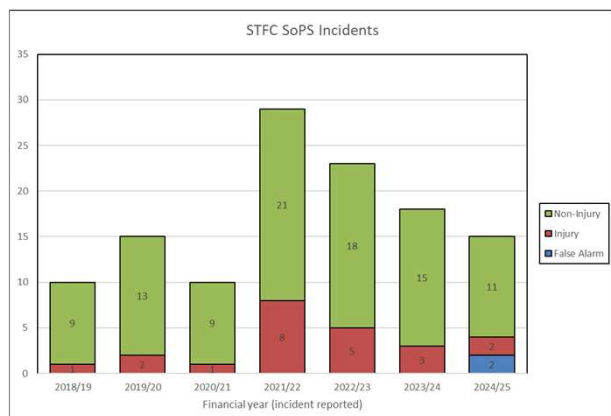


## Near misses (learning opportunities)



# Serious or Potentially Serious Incidents (SoPs)

- Incidents (injuries, near misses, vehicle incidents, fire incidents) that **did, or had the reasonable potential to result in significant and permanent harm** to staff, contractors, tenants, users, visitors at STFC sites or for staff while travelling and working on Council business away from STFC sites



# Exercise 1: Incident examples

A review of some STFC incidents and identification of key management themes which may have caused the accident, and may need addressing

## Self reported work related illness (23/24)

Deaths due to work related illness:

- Around 13,000 deaths/year due to past exposure at work primarily to chemicals or dust
- Approx.
  - 4800 asbestos related diseases.
  - 4200 due to Chronic Obstructive Pulmonary Disease
  - 2600 non-asbestos related lung cancers
  - 350 other long latency diseases
- Estimated 20,000 new cases of breathing or lung problems caused or made worse by work each year.

[Occupational Lung Disease statistics in Great Britain, 2024 \(hse.gov.uk\)](https://www.hse.gov.uk/occupational-lung-disease-statistics-in-great-britain-2024/)

Number of individual cases of work related illness among people who have worked in the last 12 months  
**1.7 million**

Stress, depression or anxiety  
**776,000**  
(New cases: 300,000)

Musculoskeletal Disorders  
**543,000**  
(New cases : 168,000)

Other illness  
**354,000**  
(est New cases : 141,000)

# STFC Occupational Health(OH) Service

The Occupational Health service provides:

- Health screening – ensure staff are fit to perform certain roles, e.g. drive a Fork Lift Truck;
- Health surveillance – staff who work with known hazards, e.g. working in a noise control area, with ionising radiation, or with chemicals which are known skin/lung sensitisers
  - [See [Appendix 1 of SHE Code 24](#) for more information]; and
- Advice to line managers managing staff with either: known health conditions, e.g. epilepsy; or a newly emerging health condition which impacts on their ability to fulfil their role, e.g. work related stress, musculoskeletal issues, long Covid, etc. ([management referrals](#)).

Occupational Health is managed by SHE Group, in close communication with HR. The service is provided by a contractor (Optima Health) with a staff member based full-time at RAL (R12). All management referrals are processed by HR via a confidential portal direct to Optima Health.

- OH queries for all sites should be directed to: [ohc@stfc.ac.uk](mailto:ohc@stfc.ac.uk), x6666
- STFC Contract Manager: [laura.davies@stfc.ac.uk](mailto:laura.davies@stfc.ac.uk)



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## Don't forget your SHE Website

(a one-stop shop  
for guidance on  
all SHE topics)



The screenshot shows the STFC SHE website with a blue header. The main content area features a large banner for reporting an injury or near miss, a 2025 ROSPA award announcement, and a grid of links categorized under Useful Links, SHE Notices, SHE Training, Safety, Occ. Health and Wellbeing, and Radiation and Environment. Several links are circled in red, including 'Risk Management', 'A to Z of SHE Group's website', 'Occupational Health', and 'Mandatory SHE Induction Training'.

Useful Links	SHE Notices	SHE Training
<a href="#">Risk Management</a>	<a href="#">SN315 - SHE Audit programme for 2025/26</a>	<a href="#">Mandatory SHE Induction Training</a>
<a href="#">A to Z of SHE Group's website</a>	<a href="#">SN314 Sharing learning and information</a>	<a href="#">SHE training catalogue</a>
<a href="#">Fire Safety</a>	<a href="#">SN313 - Summer Safety</a>	<a href="#">Totara - STFC's Learning Management System</a>

Safety	Occ. Health and Wellbeing	Radiation and Environment
<a href="#">Departmental SHE Improvement Plans</a>	<a href="#">Occupational Health</a>	<a href="#">Radiation Safety</a>
<a href="#">SHE posters</a>	<a href="#">BiteSize Health Videos</a>	<a href="#">Recycling and waste disposal</a>
<a href="#">STFC Safety Committees</a>	<a href="#">STFC First Aid</a>	<a href="#">Waste disposal and recycling contact points</a>



# New First Aid Sharepoint site

A new [Sharepoint site for First Aid](#) has been launched providing information on how the first aid service runs on STFC sites.

For more information, contact:  
Laura Davies, SHE Group

There is also a link to Mental Health first aiders/wellbeing allies at the bottom of the front page.

For more info on mental health, contact:  
Mark Britton from UKRI Wellbeing team

## Mental Health

The Health and Safety Executive (HSE) recently updated its guidance to emphasize employers' responsibilities in considering employees' mental health during their first aid needs assessment. This means workplaces need to assess and address mental health risks alongside physical risks.

STFC Mental Health First Aid is managed by the UKRI Wellbeing Team. To find out who your local Wellbeing Allies and Mental Health First Aiders are, use the QR code below or go to: [The Source/Wellbeing at UKRI/Our Wellbeing/List of Wellbeing Allies/Local](#)



The screenshot shows the STFC First Aider Information & Guidance Hub website. It features a green header with the STFC logo and navigation links: Home, Key Documents, Pages, Site contents, and Edit. The main content area includes a welcome message, a section for site-specific first aid information with links to Daresbury Laboratory, Rutherford Appleton Laboratory, and Royal Observatory Edinburgh, and a section for further information, useful links, and forms. The footer includes a QR code and a Mental Health First Aider logo.

# Fire Risk Management Sharepoint site (new)

A one stop shop for all fire safety information including fire codes, strategies, building risk assessments, fire drill reports, advice notes and more.

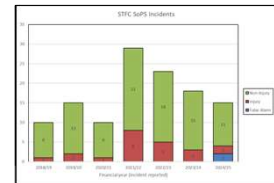
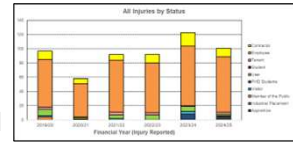
Any questions, please contact:  
[FireSafetyRAL@stfc.ac.uk](mailto:FireSafetyRAL@stfc.ac.uk)



The screenshot shows the STFC Fire Risk Management Hub website. It features a red header with the STFC logo and navigation links: Fire Risk Management Strategy, Fire Policy & Codes, Fire Safety Training, Building Fire Coordinator, and Advice & Newsletters. The main content area includes a welcome message, a section for site-specific fire risk management information with links to Rutherford Appleton Laboratory, Daresbury Laboratory, Royal Observatory Edinburgh, and Boulby Underground Laboratory, and a section for further information, useful links, and forms. The footer includes a QR code and a Mental Health First Aider logo.

# Conclusions for STFC – Improvement?

- No long term improvement in injury rates
  - Injury rates are around UK industrial averages
  - A majority of incidents are “no injury” – opportunities for learning
  - Improvement of SoPS incidents back toward historic rates (high hazard environments are not uncommon in STFC)
- Danger of complacency?
- However, plenty of scope for improvement remains and STFC’s SHE management system is the primary tool to achieve this
- Success in its use will always depend critically on the attitude and commitment of staff and managers at all levels - culture



## Regulatory Framework and the STFC’s Safety Management System

# The legal requirement for a safety management system

- An explicit legal requirement from the Management of Health and Safety at Work Regulations 1999 Regulation 5:
  - “Every employer shall make and give effect to such arrangements as are appropriate having regard to the nature of his activities and the size of undertaking for the effective planning, organisation, control, monitoring and review of the preventative and protective measures”
- HSE Guidance is within HSG 65 ‘Managing for health and safety’

# Management system requirements summary

- Written health and safety ‘policy’
- Provision of information on risks and means of protection
- A documented safety management system
- Instruction and training
- Risk assessment
- Adequate and appropriate supervision
- Access to competent H&S Advice
- Consultation

# UKRI Health & Safety Policy

- Top level aspirational statement and summary of goals and standards signed off by the CEO
  - SHE management delegations to all UKRI managers – emphasis on SHE management being integral to project and line management
- UKRI have a set of top-level H&S Codes
- STFC has its own H&S Management Arrangements
- STFC SHE codes will remain the primary implementation for STFC SHE management



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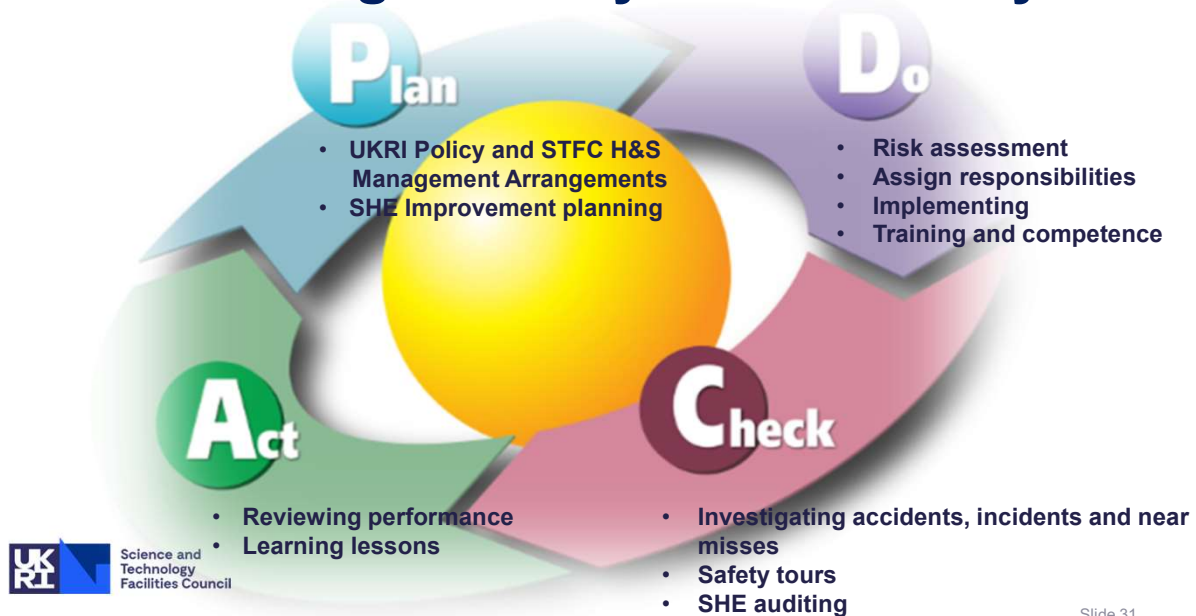
## Exercise 2: H&S Management arrangements

- Review of structure and content of the H&S Management Arrangements document
- Consider the Responsibilities of Managers (Section 3.2) in the context of your own work
- Assess the strengths and weaknesses relating to these responsibilities in your own work environment.
- Use the handout to make notes against each one
  - The management responsibilities tell you what you have the right to expect from your line manager
  - The staff responsibilities apply to everyone – including you



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# SHE management system PDCA cycle



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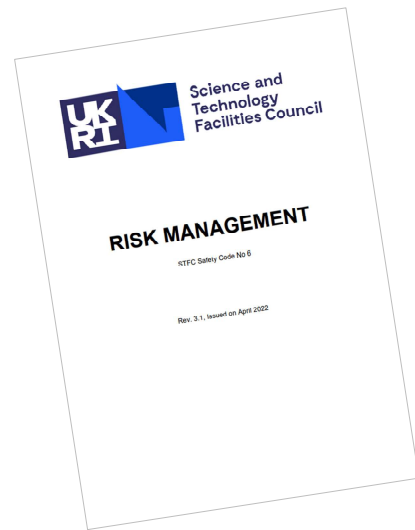
# STFC SHE management system components

- **UKRI Policy and STFC Management Arrangements**
  - Overview and standards, responsibilities and arrangements
- **STFC SHE Codes**
  - A reference library of over 40 codes covering all aspects of SHE management at STFC
- **Site and Departmental specific safety arrangements**
  - Department SHE Committees
  - Project and activity specific requirements e.g. safety handbooks, safety instructions, specialist safe systems of work, permit to work systems etc.
- **Line Manager interaction for every individual in the organisation**
  - Risk assessment, training and SHE leadership

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# SHE Codes

- Written to be compatible with current legislation
- Contain the definitive information on responsibilities and processes adopted by STFC to ensure compliance with SHE legislation
- Are designed to provide STFC staff with all the information they need without interpreting the legislation themselves – a ‘one stop shop’
- They are Mandatory



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# SHE management system

- The SHE safety management system also provides:
  - SHE Office Essentials - a short and simple SHE guide for managers of staff (and non-staff) who work in offices
  - Departmental safety committees, which play an important role in the overall management of SHE by providing a forum to develop and monitor improvement actions and departmental performance
  - Clarification on the responsibilities for SHE, such as the design and maintenance of the management system by SHE Group, and implementation by line management



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# Project/Facility/Experimental arrangements

- SHE Handbooks
- Health and Safety Committees
- SHE Instructions
- Specialist safe systems of work
- Customised permit to work systems



## Hazard and Risk

- Hazard
  - Something with the potential to cause harm
  - Physical, chemical, biological, ergonomic, psychological
- Risk
  - Likelihood of something happening
  - Consequences if it happens
- Likelihood x Severity

## Exercise 3: Personal safety review (Part 1)

- Using the proforma provided, make a list of three activities associated with your work and the associated hazards, and consider which of STFC's SHE Codes apply
  - Use the definitive list of codes on the SHE website
  - Which are the most important codes for your work area?
  - If appropriate, consider 'SHE Office Essentials' e.g. if you work in an office-based environment

## Exercise 4: SHE Code Review

- In groups, look at a single SHE Code and prepare a 5 minute presentation highlighting the most important information for managers, supervisors and YOU
- Group 1 : Safety and the Safe Use of Work Equipment (SHE Code 4)
- Group 2 : Working at Height (SHE Code 9)
- Group 3 : Manual Handling (SHE Code 12)





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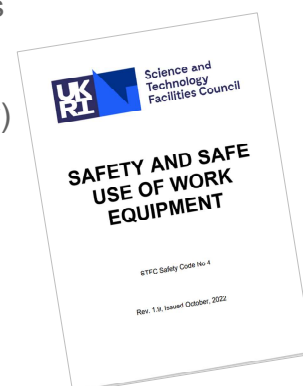
# SHE Code Summary, IT System Introduction

## Common elements of hazard codes

- All STFC SHE Codes are underpinned by a requirement for competence - this includes “actively” understanding the hazards and understanding you and your team’s individual limitations
- If in doubt take specialist advice:
  - The specialist may be appointed (see SHE Directory)
  - If not look internally/externally as necessary
- Get trained
  - Requirements specified in the codes
  - Courses listed in SHE training catalogue
  - Know the limits of your competence



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# Common line manager responsibilities

- Line managers are responsible for the SHE Code implementation – training, maintenance, record keeping etc. and staff (you) are required to co-operate and assist
- The line manager is always responsible for the production of the risk assessment - with input from their staff who do the job (you), and external experts as necessary
- The line manager is responsible for implementation of risk assessment controls and their staff (you) are required to adopt them and to co-operate in implementing them

# Common staff responsibilities

- Co-operate in the production of risk assessments – see later
- Work in accordance with the control measures identified
- Draw attention to any perceived shortcomings
- Report incidents and near misses
- Look after colleagues and visitors

## Main contacts for specific hazards

Hazard	SHE Codes	Main contact
Radiation	29,28,21,14	Radiation Protection Advisor
Laser	22	Laser Responsible Officer
Pressure/Vacuum system	33	Nominated Engineer
Biological	16	Biological Safety Officer
Electrical	34	Authorising Electrical Engineer
Chemical	37	CoSHH Assessor
Lifting	26	LOLER Manager
Any uncertainty	??	Line Manager, SHE Group or SHE Directory ( <a href="https://staff.she.stfc.ac.uk/Pages/Staff/SHE-Directory-and-appointments.aspx">https://staff.she.stfc.ac.uk/Pages/Staff/SHE-Directory-and-appointments.aspx</a> )

## Exercise 5: SHE Code 8 bite size

- Use the laptops to complete the bite size introduction to SHE Code 08 : Travel on Council Business
- In reported road collisions in Great Britain in the year ending June 2024 there were an estimated:
  - 1,607 fatalities, -2% compared to the year ending June 2023
  - 29,540 killed or seriously injured, slight increase compared to the year ending June 2023
  - 128,920 casualties of all severities, -4% compared to the year ending June 2023



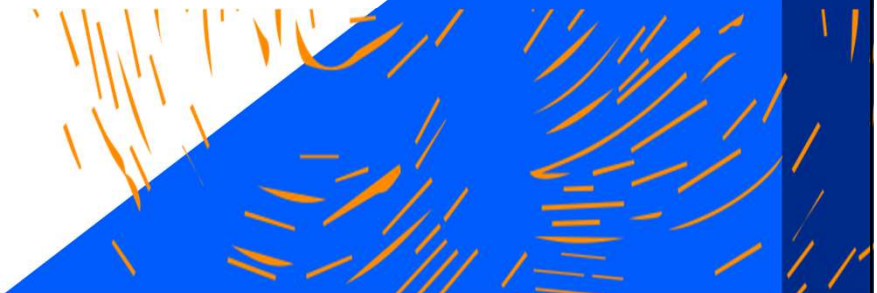
[Reported road casualties in Great Britain, provisional estimates: year ending June 2024 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/reported-road-casualties-in-great-britain-provisional-estimates-year-ending-june-2024)

## Exercise 6: SHE Website familiarisation

- Take a brief guided tour of the STFC SHE Website
- Totara including the SHE Training catalogue
- SHE Directory
- Evotix Assure
- Complete the SHE Website quiz



## Risk Assessment



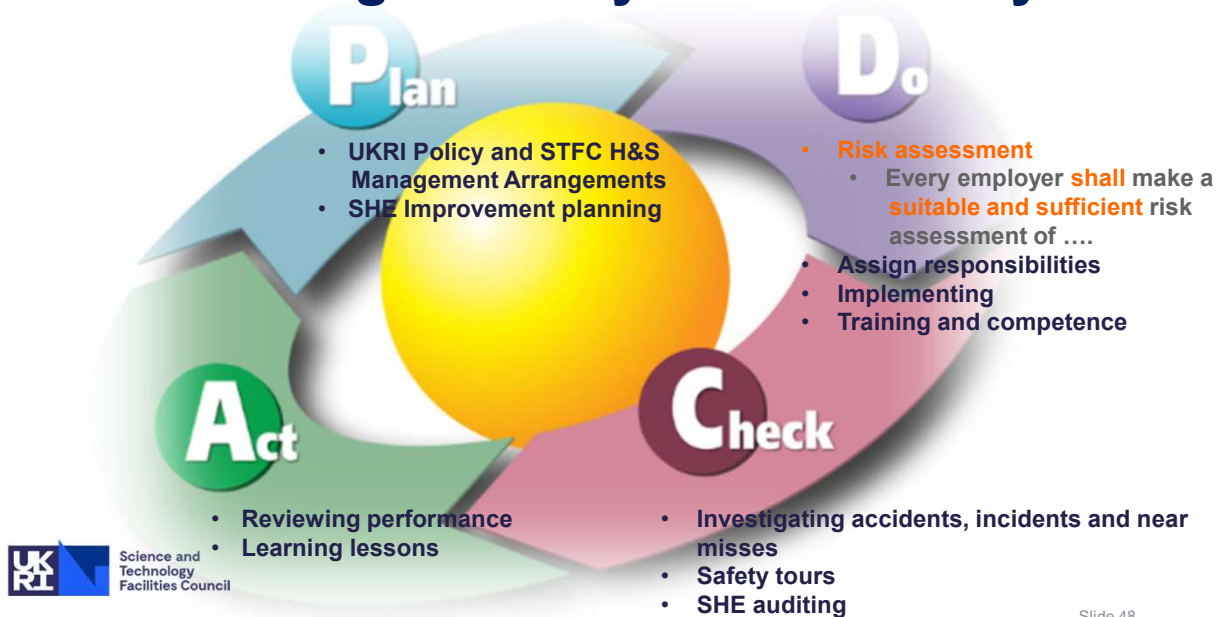


# The importance of risk assessment (RA)

- We all perform risk assessments on a daily basis, e.g. crossing a road or when driving a car - we work out mentally what can go wrong and which actions we will take to avoid this happening
- At work, this process must be documented as it is a **legal requirement**, and STFC can be prosecuted by the HSE for either having no RA or the RA not being 'suitable and sufficient'
- RA is about foresight and planning, what can go wrong and how will I prevent this from happening - a good RA will prevent incidents
- For this reason, RA is the basis of the STFC SHE management system.
- There are many different types of Risk Assessment, e.g. Activity, On-The-Job, CoSHH etc.



# SHE management system PDCA cycle



## How does STFC 'make it so'?

- STFC SHE Code No 6: Risk Management
- Training: Any staff involved in either writing or reviewing the quality of RAs must attend the RA Awareness course (2hr duration) provided by SHE Group
- STFC have a proforma on their website which all staff should use to complete a risk assessment
- RA works best when it is a group activity so all hazards are identified and staff have 'buy in', however, the **Line Manager** has overall responsibility



## HSE 5 steps to risk assessment



# Definitions - Hazard

- A hazard is any activity or object that has the **potential** to cause **harm** to people or the environment.

- Examples:

- Working at height
- Manual handling
- Working with syringes
- Driving a fork lift truck
- Operating 3D printer
- Use of mains electricity to power 'x' equipment
- Working with liquid nitrogen
- Working 'out of hours'
- Working from home

**Clue:** A hazard never sounds painful!



You will need to research your hazards to identify all significant hazards. You can use: observation of activity; operator consultation; websites, e.g. HSE; Manufacturer's instructions; internal/external experts; incidents/near misses; etc.

# Who might be harmed and how?

- Staff (trained and untrained)
- Contractors
- Visitors
- Members of the public
- Apprentices
- Children (under 18s – gold plated)
- People who share the workplace
- People with disabilities (PEEP?)
- Pregnant ladies or New Mothers
- Night shift workers or 'out of hours' workers



- How the hazard could cause injury. In order to be **specific**, detail the pathway to the body, e.g.:
- Skin contact causing burns
- Hit by projectile after explosion
- Asphyxiation after inhaling nitrogen
- Cut by sharp object
- Absorbed through skin, etc.



# Risk prioritisation

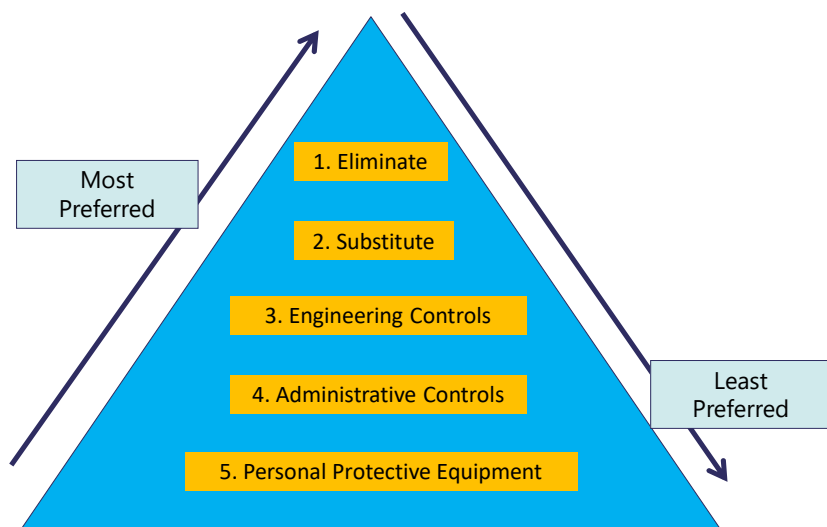
- Risk is the likelihood that a person may be harmed or suffers adverse health effects if exposed to the hazard.
- Risk is a function of both the **harm** and **likelihood** of a specific hazard being realised

		If control measures are not adhered to potential harm is likely to be:				
Harm	Major	Fatality	High	High	V High	V High
	High	Fatality or life changing injuries or serious health effects	Med	Med	High	V High
	Moderate	Time off work, e.g. broken bones, stress or musculoskeletal injury	Low	Med	Med	Med
	Slight	Minor injury which may or may not require First-aid treatment	Low	Low	Low	Low
			Very Unlikely	Unlikely	Likely	Very Likely
			Conceivable but difficult to realise. Would require a combination of several failures	Can be envisaged but is unlikely. Never previously happened in STFC	Can be anticipated to happen. Has previously been known to happen in STFC	Can be anticipated to happen. Has previously been known to happen on site
			Likelihood			

Low Risk	No additional controls are necessary unless they can be implemented at very low cost (in terms of time, money and effort) or there is a mandatory requirement within legislation. Actions to further reduce these risks can be assigned low priority.
Medium Risk	Consideration should be given as to whether the risks can be lowered, where applicable, to a low risk level, but the costs of additional risk reduction measures should be taken into account. The risk reduction measures should be implemented within a defined time period.
High Risk	The controls put in place are critical and it is imperative that they are monitored by a line manager (or equivalent) on a regular basis to ensure they are in place. Risk reduction measures should be contemplated as per the hierarchy and favour engineering controls over administrative controls and PPE. Additional controls may require extra resources and these would be justifiable.
Very High Risk	Additional control measures <b>must</b> be implemented to reduce the risk, regardless of cost, or a decision taken to terminate the activity until the risk level can be reduced.

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# Hierarchy of control measures



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# The importance of a risk control

- You should not take part in any activity in the workplace without reading the risk assessment first, signing it to show you understand it and agree to follow the control measures listed
- The 'control measures' column is the most important, these are intended to prevent the hazards being realised
- The level of detail in the RA will be proportional to the level of risk so more info should be available for the higher risks



# What might you see in STFC?

- 'On The Job' (OTJ) pad (which supplement existing RAs), and are only to be used when adjusting or changing an existing risk assessment



- 'Evotix Assure'

Reference	Department/Division	Assessment date	Assessor name	Assessment title	Record is Unassigned
1867	Digital Infrastructure	27/04/2016	Stephen Johnson	Tower Computer Room Control Measures	Record is Unassigned
1864	IT, Estates Management and Operations	24/03/2019	Jimmy McCabe	Transportation of Pressurised Gases on site and the De-Carbons...	Record is Unassigned
1212	Vacuum Solutions	15/06/2022	Adrian Hannah	VISTA Laboratory Backout Method Statement	Record is Unassigned

# Questions on workplace risk assessments

- Have you read the risk assessments which apply to your work?
- If yes, were they easy to understand? Did you sign it?
- Have you been consulted and briefed?
- Is there a folder of RA's in each room?
- Have you been on Evotix Assure?



## SC 5: Incident Reporting and Investigation

- Safety Code 5 defines the processes to be used for the reporting and investigation of incidents and the responsibilities of individuals and managers
- All staff:
  - Raise the alarm and call for assistance immediately
  - Report any incident, near miss, ill health, vehicle incident etc.
  - Inform the line manager of any incident
- Managers:
  - Ensure that any incident in your area is reported through SHE website
  - Using the guidance in appendix 4, conduct a local investigation of the incident within two weeks of the incident occurring

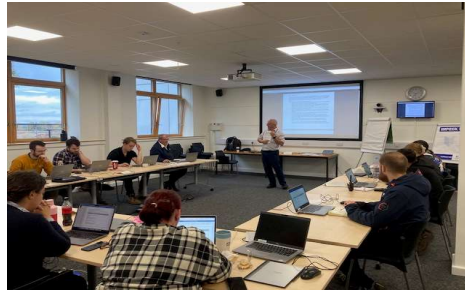


## Exercise 3: Personal safety review (Part 2)

- Using the proforma which lists the main activities associated with your work and the SHE Codes which apply, now determine the risk assessments associated with these activities and SHE Codes on the proforma
- As per the previous slide, have you read the risk assessments which apply to your work?
- If yes, were they easy to understand? Did you sign it?
- Have you been consulted and briefed?
- **If not, make a note to talk to your line manager!**

# SHE Training

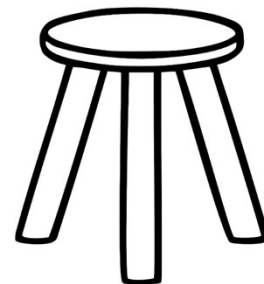
# SHE Code 10 - Provision of SHE training



*“If you do nothing else, ensuring your staff are effectively trained is perhaps THE most important action a manager can undertake to assure their safety”*

## Training scope

- The provision of information, instruction and training is a core legal requirement
- Training is linked to the competence needed by all employees to do the work required
- Competence is made up of:
  - Knowledge/training (Qualifications)
  - Skills/Experience (Knowledge and Experience)
  - Attitude/Behaviours (Personal skills and Qualities)



# Mandatory SHE training

- Induction training must be delivered on first arrival
- Followed by a suite of 5 mandatory training courses for all staff, refreshed 5 yearly:
  - SHE Induction
  - Fire Safety
  - DSE training
  - DSE self-assessment
  - Safe Manual Handling
- Plus, an additional 3 mandatory training courses for all staff within 6 months, all are available on-line and no refreshers are required:



- STFC Health and Safety Management Arrangements Bite Size
- Electrical Safety Essentials
- Asbestos Essentials

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# Mandatory SHE training

- Early Careers Trainee SHE Training
- Location/activity specific training as set out in the HR Induction Check Sheet
- Management training on appointment to a first managerial role in STFC with SHE responsibility for others:
  - **SHE Management for Non-Technical (Office based ) Managers** (1/2 day course, refreshed 5 yearly), or
  - **STFC SHE Training for Technical Managers** (3 days, refreshed 5 yearly with 1 day course)



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## Job or hazard specific SHE training

- Role/project related training is identified by Line Managers for staff through a **Training Needs Analysis** conducted on appointment (or within 4 weeks), and reviewed annually through the appraisal process (APDR) or more frequently when required
- Two components:
  - Mandatory training as set out in the SHE Codes.
    - This training is summarised in the **STFC SHE Training Catalogue** and organised through SHE Group
  - Any other job/hazard related training.
    - Organised by line management in conjunction with SHE Group

STFC Safety, Health and Environment (SHE) Training catalogue

Code	Activity	Frequency	Duration	Responsible
1	Initial safety and health induction	On appointment	1 day	Line Manager
2	Fire safety awareness	Annually	1 day	Line Manager
3	Manual handling	Annually	1 day	Line Manager
4	First aid	Annually	1 day	Line Manager
5	Health and safety awareness	Annually	1 day	Line Manager
6	Confined space entry	Annually	1 day	Line Manager
7	Working at height	Annually	1 day	Line Manager
8	Heavy machinery operation	Annually	1 day	Line Manager
9	Electrical safety	Annually	1 day	Line Manager
10	Vehicle safety	Annually	1 day	Line Manager
11	Public safety	Annually	1 day	Line Manager
12	Security awareness	Annually	1 day	Line Manager
13	Information security	Annually	1 day	Line Manager
14	Equality and diversity	Annually	1 day	Line Manager
15	Anti-bribery	Annually	1 day	Line Manager
16	Anti-fraud	Annually	1 day	Line Manager
17	Anti-money laundering	Annually	1 day	Line Manager
18	Anti-terrorism	Annually	1 day	Line Manager
19	Anti-smuggling	Annually	1 day	Line Manager
20	Anti-proliferation	Annually	1 day	Line Manager
21	Anti-racketeering	Annually	1 day	Line Manager
22	Anti-human trafficking	Annually	1 day	Line Manager
23	Anti-slavery	Annually	1 day	Line Manager
24	Anti-smuggling of goods	Annually	1 day	Line Manager
25	Anti-smuggling of people	Annually	1 day	Line Manager
26	Anti-smuggling of weapons	Annually	1 day	Line Manager
27	Anti-smuggling of drugs	Annually	1 day	Line Manager
28	Anti-smuggling of cultural property	Annually	1 day	Line Manager
29	Anti-smuggling of wildlife	Annually	1 day	Line Manager
30	Anti-smuggling of antiquities	Annually	1 day	Line Manager
31	Anti-smuggling of art	Annually	1 day	Line Manager
32	Anti-smuggling of books	Annually	1 day	Line Manager
33	Anti-smuggling of documents	Annually	1 day	Line Manager
34	Anti-smuggling of electronic equipment	Annually	1 day	Line Manager
35	Anti-smuggling of vehicles	Annually	1 day	Line Manager
36	Anti-smuggling of aircraft	Annually	1 day	Line Manager
37	Anti-smuggling of ships	Annually	1 day	Line Manager
38	Anti-smuggling of cargo	Annually	1 day	Line Manager
39	Anti-smuggling of passengers	Annually	1 day	Line Manager
40	Anti-smuggling of crew	Annually	1 day	Line Manager
41	Anti-smuggling of cargo and passengers	Annually	1 day	Line Manager
42	Anti-smuggling of cargo and crew	Annually	1 day	Line Manager
43	Anti-smuggling of cargo and passengers and crew	Annually	1 day	Line Manager
44	Anti-smuggling of cargo and passengers and crew and equipment	Annually	1 day	Line Manager
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49	Anti-smuggling of cargo and passengers and crew and equipment and vehicles and aircraft and ships and cargo and passengers	Annually	1 day	Line Manager
50	Anti-smuggling of cargo and passengers and crew and equipment and vehicles and aircraft and ships and cargo and passengers and crew	Annually	1 day	Line Manager

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## Exercise 3: Personal safety review (Part 3)

- Using the proforma which lists the main activities associated with your work and the SHE Codes which apply, now determine the training associated with these activities and SHE Codes, and note these on the proforma
  - Have you had the training which applies to your work and these SHE Codes?
  - If not, make a note to talk to your line manager!

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# Staff, facility users, visitors and tenants

- Are required to:
  - Attend all training and associated refresher training identified for them
  - Utilise and apply SHE training at all times
  - Raise any perceived shortfall in SHE training with their manager at the earliest opportunity
  - Ensure that all visitors for whom they are responsible are aware of:
    - The SHE hazards to which they could be exposed
    - Local safety control measures
    - Relevant emergency procedures (If not, you must stay with them)

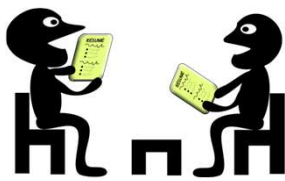
# Line manager & supervisor responsibilities

- Training Needs Analysis (TNA):

Step	Person	Action
1	Employee and Line Manager	Jointly complete a risk assessment identifying hazards and risks of the proposed work or role. The pro-forma in SHE Code 06 should be used to structure this assessment.
2	Line Manager	Identify and document required SHE training by referring to: <ul style="list-style-type: none"><li>• Relevant SHE Code or SHE Training Catalogue; or</li><li>• Specialist / equipment specific training required.</li></ul>
3	Line Manager	Record these in your Annual Performance Development Review (APDR) 'Learning and Development' log.
4	Employee and Line Manager	Ensure training in the SHE Catalogue is booked through SHE Group. Other job related training is organised by line management.
5	Employer and Line Manager	Ensure training is completed, recorded and reviewed for effectiveness. In the case of significant hazards, training must be completed prior to starting the work

# Exercise 7: Training Needs Analysis (TNA)

- Review your training needs using headings provided and the personal safety review
- Prepare a summary of issues identified and actions required to discuss with your Line Manager



STFC Safety, Health and Environment (SHE) Training catalogue

SHE Code	Course Code	Title	Role	Ref / Course Title	Duration	Refresh Frequency
1	SC0101	Love and hate of house working		No specific training course recommended - see <a href="#">STFC website</a>		
2	SC0201	Safe movement of vehicles on STFC sites		No specific training course recommended - see <a href="#">STFC website</a>		
3	SC0301	Safe use of cryogenic materials	Cryogen users	3.1 Basic introduction to Cryogenic Safety	1 hr	5 years
3	SC0302	Safe use of cryogenic materials	Cryogen users	3.2 Cryogenic Safety - case study	3 hrs	5 years
3	SC0303	Safe use of cryogenic materials	Cryogen users	3.3 Use of cryogenic safety course - incident examples	1 day	5 years
4	SC0401	Safety and safe use of work equipment	MSOP users	4.1 MSOP (online, refresh only)	1 day	5 years
4	SC0402	Safety and safe use of work equipment	FLT users	4.2 Fork Lift Truck users (initial 4 days (SC0402), 1 day refresh)	4 days	5 years
4	SC0403	Safety and safe use of work equipment	Patrol truck users	4.3 Powered Patrol Truck	1 day	5 years
4	SC0404	Safety and safe use of work equipment	Design/maintenance of equipment used for or serviced to third parties	4.4 CE Marking Awareness	1 day	5 years
4	SC0405	Safety and safe use of work equipment	Ladder users	4.5 Safe Use of ladders	1 hr	5 years
4	SC0406	Safety and safe use of work equipment	Ladder inspectors	4.6 Ladder and Step Ladder Inspection	1.5 hrs	5 years
4	SC0407	Safety and safe use of work equipment	Users of Scaffold Towers	4.7 Users of Mobile Access Towers	1 day	5 years
4	SC0408	Safety and safe use of work equipment	Abrasive wheel users	4.8 Abrasive Wheels	0.5 day	5 years
4	SC0409	Safety and safe use of work equipment	Staff processing of roof/fall arrestors	4.9 Scaffold Accessories Training	0.5 day	5 years
5	SC0501	Incident reporting and investigation		No specific training course recommended - see <a href="#">STFC website</a> Incident investigation is included within the 3 day Technical SHE Managers course, see SHE Code 10, below High Risk and Quality Staff guides for SHE Awareness see the <a href="#">STFC website</a>		
6	SC0601	Risk management	Line managers and staff	6.1 STFC Risk Management Awareness Course	1.5 hrs	5 years
6	SC0602	Risk management	Line managers	6.2 Risk management is included within the 3 day Technical SHE Managers course, see SHE Code 10, below		
7	SC0701	SHE improvement planning		No specific training course recommended - see <a href="#">STFC website</a>		
8	SC0801	Travel on council business	High mileage drivers or 5000+ miles annually Professional Drivers	8.1 Driving Development	0.5 hrs	5 years
8	SC0802	Travel on council business	Intermediate/young drivers	8.2 Online <a href="#">Driver Training Safety</a>	As required	
9	SC0901	Working at height	Staff working at height	9.1 Working at Height	1 day	5 years
9	SC0902	Working at height	Staff using ladders	9.2 Harness and Fall Arrest	1 day	5 years

October 2020

Course titles in bold are mandatory

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## Safety Culture and Leadership

# Motivations for safety management

A “Life Changing Experience” :

Hindsight : The Ken Woodward Story

Lattitude Productions Ltd

## Safety culture failings





# Safety culture failings



Grenfell Tower 2016

Smiler Rollercoaster 2015



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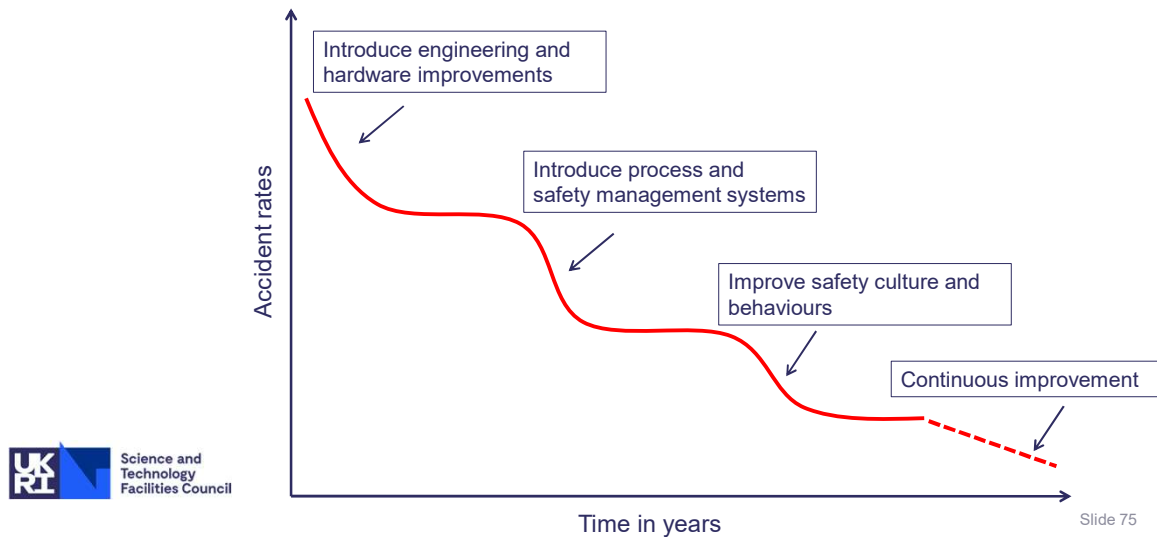
## April 17<sup>th</sup> 2025 Italy



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# Why improve safety culture?

A model for reducing accident rates



# What is safety culture



# STFC's Culture survey and results

- STFC has conducted a questionnaire based safety culture assessment based on the Fleming model
- The survey was first carried out in 2010, 2014, 2018 and again in 2023
- The measurement elements were modified to match specific STFC concerns



H&S Codes and Instructions	Communications	Environment
Incident reporting	Management commitment	Personal Commitment
Personal perception of safety in STFC	Rule breaking/Risk Taking	Training Competence

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# STFC climate survey results

Row Labels	2010	2014	2018	2023
Health and Safety Codes and Instructions	67%	68%	70%	69%
Communications	72%	73%	73%	71%
Environment 2023 (focus on env. compliance)				72%
Environment (2010-2018)	69%	70%	69%	
Incident Reporting		75%	77%	76%
Management Commitment	79%	81%	83%	83%
Personal Commitment	79%	79%	80%	80%
Personal Perception of Safety Within STFC	82%	83%	85%	84%
Risk Assessment			74%	74%
Rule Breaking / Risk Perception	77%	76%	77%	77%
Training Competence	77%	80%	80%	79%
<b>Average overall rating</b>	<b>75%</b>	<b>76%</b>	<b>77%</b>	<b>76%</b>

Overall Response Rates	2010	2014	2018	2023
Number of people who submitted a response	866	925	879	1273
Response rate (compared to no. of staff)	44%	45%	40%	41%



Department	2010	2014	2018	2023
ASTeC	75%	75%	77%	78%
Business and Innovation	74%	75%	76%	79%
CLF	76%	78%	78%	79%
Corporate Services	77%	77%	79%	79%
DI			71%	72%
Estates			81%	77%
Finance	74%	71%	76%	78%
ISIS	76%	76%	78%	77%
NQCC				77%
PPD	77%	78%	80%	80%
Programmes	72%	73%	73%	72%
RAL Space	75%	77%	76%	77%
Scientific Computing	77%	77%	75%	77%
Strategy, Performance and Comms	76%	77%	77%	73%
Technology (incl. UKATC)	74%	77%	79%	77%
Other (incl. RC@H and CEO/COO)	78%	78%	79%	77%

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# STFC's Culture survey: Key findings

- The consistency in scores with performance remaining strong shows an embedded safety culture – even with staff turnover
- With significantly increased staff numbers, STFC has a strong SHE culture and either recruit's people who fit well into this culture or have a strong established SHE culture that new starters follow.

Most staff consider H&S to be important from both moral and economic point of view

Managers and staff recognise the wide range of accident causes and the likelihood that management decisions will be involved

Staff accept responsibility for their own H&S and that of others

The importance of all employees feeling valued and treated is recognised

Organisation puts significant effort into pro-active accident prevention

Safety performance is actively monitored using all data available

Non-work accidents are also monitored and a healthy lifestyle is promoted

## Exercise 8: Improving safety culture

- Look at the HSE Human factors and safety culture table
- Consider how the listed activities and behaviours might apply to your own role
- Can you identify strengths and weaknesses?
- Can you identify things you could change

## STFC Expectations

- You can and should expect the “Right Hand Side” (or positive) behaviours and beliefs from your line managers
- When and if you are concerned regarding safety management standards or any safety practice, you are empowered to raise questions, challenge and drive for improvement
- STFC expects:
  - To learn from you if you bring best or better practice
  - To persuade and teach you if you do not

## Significance of early career SHE training

- **YOU** are STFC's future Leaders
- **YOU** will define and generate STFC's future SHE Culture
- Early in your early career, the standards **you** develop are the standards **you** will keep



Science and  
Technology  
Facilities Council

# Thank you

## Things to do:

- Do the test!
- Fill in the course evaluation which will be sent to you.
- Submit your workbook to your SHE Training Administrator within 2 weeks from the date of the course for moderation.

**SHE website:** <https://staff.she.stfc.ac.uk/pages/staff/home.aspx>

# **STFC SHE Training for Technical Early Careers Course**

## **Supplementary Information**



## **Plan/Do/Check/Act - STFC Safety Management System**

### **STFC SHE Early Careers Technical Training**

	HSE GUIDANCE	STFC document	Title
<b>PLAN</b>			
<b>Policy</b>	Think about where you are now and where you need to be  Say what you want to achieve, who will be responsible for what, how you will achieve your aims, and how you will measure your success. You may need to write down this <b>policy</b> and your plan to deliver it	Policy  SHE Code 7	STFC Policy Foreword and Statement  SHE Improvement Planning
<b>Planning</b>		Policy  SHE Code 7	Responsibilities and arrangements  SHE Improvement Planning
<b>DO</b>			
<b>Identify risk</b>	Assess the risks, identify what could cause harm in the workplace, who it could harm and how, and what you will do to manage the risk  Decide what the priorities are and identify the biggest risks	SHE Code 6  SHE Codes	Risk Management  All hazard related codes
<b>Organise</b>	Involve workers and communicate, so that everyone is clear on what is needed and can discuss issues - develop positive attitudes and behaviours  Provide adequate resources, including competent advice where needed	Policy  Policy  Policy  SHE Codes	Responsibilities  SHE Committee terms of reference  Responsibilities  All hazard related codes
<b>Implement</b>	Decide on the preventive and protective measures needed and put them in place	SHE Code 6 SHE Codes   SHE Code 4	Risk Management All hazard related codes   Safe use of work equipment

<b>Implement</b>	Provide the right tools and equipment to do the job and keep them maintained	SHE Code 10	Provision of SHE training
	Train and instruct, to ensure everyone is competent to carry out their work	SHE Codes	All hazard related codes
	Supervise to make sure that arrangements are followed		
<b>CHECK</b>			
<b>Measure performance</b>	Make sure that your plans have been implemented, 'paperwork' on its own is not a good performance measure	SHE Code 30	SHE Auditing and Inspection
	Assess how well the risks are being controlled and if you are achieving your aims. In some circumstances formal audits may be useful	Policy	Safety committee arrangements
<b>Investigate incidents</b>		SHE Code 5	Incident reporting and investigation
<b>ACT</b>			
<b>Review performance</b>	Learn from accidents and incidents, ill-health data, errors and relevant experience, including from other organisations  Revisit plans, policy documents and risk assessments to see if they need updating	SHE Code 07	SHE improvement planning
<b>Take actions</b>		Policy	Responsibilities and arrangements
		SHE Codes	All hazard related codes

## STFC Office SHE Essentials

A short and simple SHE guide for staff and their managers who work in offices. It also applies to agency or other individuals that work in STFC offices with us. The SHE codes contain additional detail and guidance and can be found [here](#).

Code	Summary
<a href="#">Incident reporting</a>	Always report SHE incidents, whether they occur at STFC sites or while travelling on Council business. Incidents that should be reported: injuries; near misses (including hazardous conditions and failures of safe systems of work); vehicle incidents; radiation incidents; environmental incidents. Report incidents in <a href="#">Evotix Assure</a> .
<a href="#">SHE training</a>	There are four elements of <a href="#">STFC mandatory SHE training</a> each refreshed 5 yearly. They are: the SHE Induction (site specific and generally taken on your first day(s)); followed by <a href="#">on-line Display Screen Equipment (DSE) training</a> ; manual handling training (available on-line but preferably delivered through tutor led courses); and finally Fire safety.  SO based staff complete the UKRI Polaris House (PH) Site induction on Day 1, the SHE PH Induction (refresher), followed by UKRI DSE Agile training (administered by the UKRI H&S team ) and PH Annual Fire training ( available in Oracle).  Managers of office based staff should attend a general ½ day SHE Management for Non-Technical Manager’s course. All courses should be booked through <a href="#">SHE Group</a> .
<a href="#">Fire Safety</a>	Fire safety training ensures you know your site’s <a href="#">emergency arrangements</a> - telephone number and alarm sounders etc. Make sure you know how to get out of your building if there is a fire – there should be more than one route – and where your emergency muster point is.  Do not clutter offices with large volumes of combustible material, and do not obstruct emergency exits, fire detectors, fire call points or emergency lighting. Corridors and stairwells are escape routes and should be kept clear of obstacles and flammable materials at all times.
<a href="#">Display Screen equipment</a>	Non-SO staff: following completion of a DSE risk assessment discuss and address any issues with your line manager ( <a href="#">SHE SC25 - Display screen equipment (DSE)</a> refers ).  SO staff: following completion of DSE Agile the data is analysed and if there are any recommendations identified or additional advice required this will be communicated to the share with their line manager and implement any agreed actions.  Eye tests are available if you need glasses for DSE use.  Ensure that your workstation is set up correctly and that you take regular screen breaks.
<a href="#">Travel on Council business</a>	Driving is probably the most hazardous activity any STFC employee undertakes at work. Managers are still responsible for staff while they are travelling on Council business. The health and safety controls required when staff travel are detailed here - in the <a href="#">UK</a> and <a href="#">overseas</a> .  If you drive greater than 3000 miles/year on Council business you should attend a defensive driver training course which should be booked through <a href="#">SHE Group</a> .
<a href="#">Manual handling</a>	Your job should not normally require much lifting and carrying. Following completion of manual handling training, recognise where manual handling hazards exist and use safe lifting techniques. Manual handling remains a cause of many STFC injuries.
<a href="#">Portable electrical equipment</a>	All portable electrical equipment used on STFC sites must be Portable Appliance Tested (PAT) prior to use. Check that any electrical equipment looks safe prior to plugging it in, as you would at home. Typical office equipment: PCs; Monitors; Printers, fans etc should be tested 4 yearly and have a PAT testing label indicating when it was and needs re-testing.

Code	Summary
<a href="#">Lone working</a>	Lone Working is permitted for standard office working or IT use. Staff working out of normal office hours should ensure site security are aware that you are working out of hours and are alone.
<a href="#">General risk management</a>	This document summarises the typical hazards encountered by individuals working in offices. There may be others that managers need to consider - if this is the case a risk assessment might be needed. If in doubt consult your local <a href="#">SHE Group</a> for advice.
Environmental management	The environmental impact of general office work can be minimised in several ways: only print when it is really necessary and ensure waste paper along with printer cartridges etc. <a href="#">are recycled</a> ; minimise electricity use by ensuring that lights, monitors, printers are switched off when not needed – especially overnight; try not to have the heating on and windows open at the same time; and use Video Conferencing to avoid travel and if you need to travel use public transport to minimise your carbon footprint where possible.

## Environmental Essentials

A short and simple guide on Environmental matters for all managers and staff – what you need to know about environmental management in the STFC. It also applies to contractors, agency or other individuals that work on STFC sites with us. SHE codes contain additional detail and guidance and can be found on the [SHE Group website](#).

To see in more detail what legislative requirements STFC works to view our [Environmental Legal Register](#).

Code	Summary
Environmental Management - what you can do	<p>Through its <a href="#">Environment Policy</a>, STFC is committed to ensuring high standards of environmental management and the minimisation, within the constraints set by our scientific programme, of its environmental impact.</p> <p>You can help to achieve this by considering the waste hierarchy: Eliminate, Reduce, Re-Use and Recycle when using any resource.</p> <p>For example:</p> <ul style="list-style-type: none"> <li>• <b>Reducing</b> energy consumption by turning off lights, computer monitors and printers, or turning the thermostat on your radiator down a little.</li> <li>• <b>Reducing</b> the amount of waste we send to landfill by <b>Recycling</b> items such as printer cartridges and paper etc.</li> <li>• Using video conferencing facilities to <b>Eliminate</b> the need to travel.</li> </ul>
Disposing of waste. ( <a href="#">Controlled and Hazardous waste code</a> )	<p>STFC has a duty to store its waste securely and dispose of its waste safely and legally:</p> <ul style="list-style-type: none"> <li>• Use the <a href="#">correct disposal</a> route for wastes such as hazardous chemicals, broken glass, electronic equipment etc.</li> <li>• Store any waste securely prior to disposal.</li> <li>• If you store any liquid waste outside a building it should be in a bund ('tray').</li> <li>• Disposal of radioactive waste should be discussed with your site <a href="#">Radioactive Waste Advisor</a> before disposal.</li> <li>• If you need to move waste around or between STFC sites obtain advice from the <a href="#">SHE group</a>.</li> </ul>
<a href="#">Controlling Pollution to Air, Land and Water</a>	<p>STFC is required to control what we discharge to local sewers, local waterways or the atmosphere.</p> <p>If you need to discharge significant volumes of any chemical down a sink or drain or to atmosphere you should check with the <a href="#">local SHE Group</a> that we have <a href="#">authorisation</a> to do this.</p>
Environmental Risk Management	<p>Environmental issues and hazards should be included and considered alongside general Health and Safety hazards in undertaking a <a href="#">SHE Risk Assessment</a>.</p> <p>Additional environmental issues which should be considered in any assessment include:</p> <ul style="list-style-type: none"> <li>• What to do in the event of a spill;</li> <li>• Check for relevant discharge authorisations (see above) if you need to vent gases to air or discharge any liquid to a drain;</li> <li>• Maintain equipment to minimise any of these discharges; and</li> <li>• Should stored liquids be banded?</li> </ul>