

If you have completed Incident Cause Analysis Method (ICAM), Root Cause Analysis (RCA), Tap Root or similar systemic incident investigation training courses but are looking for a more in depth and highly practical approach to human factors analysis for incident investigation - then this is the program for you.



Regardless of industry type or sector, accident statistics appear to be dominated by the contribution of human error. Human error was a factor in every major publicised accident in recent memory, including the 1986 Chernobyl nuclear disaster, 1986 NASA Space Shuttle Challenger accident, 1988 Piper Alpha offshore platform explosion and 1998 Esso Longford gas plant explosion.

While human error is a normal part of our human makeup, the consequences of errors in safety critical industries such as transport, energy, mining, construction, utilities and healthcare service delivery can be disastrous and the subject of public outrage, exhaustive inquiries and drawn out legal action. While you may not work in nuclear power or for NASA, errors can still cost your company thousands in direct expenses and millions in reputational damage.

This program will teach you the skills to conduct more in-depth human factors analysis of significant incidents based upon established systemic investigation methods like ICAM, RCA, Essential Factors, Tap Root etc. You will be provided with a practical, step by step approach, including easily applied take away tools, forms and templates, that can be replicated back in your workplace.

WHAT YOU WILL LEARN?

Upon completion of this course, you will be able to:

- Understand the relationship between human factors and human reliability.
- Understand human error within the context of event investigations within large and complex socio-technical systems.
- Identify a range of Error Producing Conditions (EPC's) that have the potential to contribute to human error(s).
- Understand the relationship between human error, loss of control and the failure of prevention and mitigation critical controls.
- Understand that errors are not a hazard but are the result of hazardous EPC's that go unchecked.
- Identify a comprehensive set of error control measures designed to prevent the error (error prevention), identify, trap and recover the error (error recovery) and mitigate/reduce the consequences of the error (error mitigation) before potentially harmful consequences are realised.

- Address human performance limitations that may impact effective decision making and increase the probability of error occurrence.

WHAT IS COVERED?

- The Challenge of Human Factors:
 - The scope and challenge of human factors within any workplace.
- Practical Error Management:
 - Human reliability, error and violation types and the error normalisation principle.
 - Practical error management checklist for incident investigators and auditors.
- Identifying **Error Producing Conditions (EPC's)** in Incident Investigation:
 - Human performance limitations and their relationship to specific error types.
 - Environment/location conditions.
 - Social/group/cultural factors impacting performance.
 - Equipment/plant/material conditions.
 - Human factors management/organisational influences on safety behaviour.
- A practical approach to Human Factors Analysis for Incident Investigation:
 - Limitations of current systemic investigation methods in analysing human factors contributions.
 - Hindsight bias - the tenuous causal link between distant latent conditions and accidents.
 - **Loss of Control Analysis (LOCA)** – a practical human factors method for improving critical control effectiveness.
 - Maintaining control – a step by step approach for strengthening critical risk controls.
 - Identifying a comprehensive set of **Prevention Critical Controls** designed to prevent the error (error prevention) and identify, trap and recover the error (error recovery).
 - Identifying improvements in **Mitigation Critical Controls** to reduce the consequences of the error (error mitigation) as part of organisational learning activities.
- Team Investigation Activity:
 - Practical application of event based LOCA.
 - Postscript: **Conducting LOCA proactively (P-LOCA)**.
- Course summary:
 - Familiarisation with take home tools, templates and examples



LEARNING ACTIVITIES

- Interactive presentations
- Team Based Case Study work
- Provision of USB drive with comprehensive human factors, tools, resources, templates and checklists that can be applied back in the workplace

WHO SHOULD ATTEND?

This training program is designed for those individuals seeking a comprehensive understanding of how to conduct consistent human factors analysis in event investigations. Expected participants include:

- Executives and Senior Managers
- Team leaders and supervisors
- Human Resource Managers
- Environmental managers
- WHS and injury management personnel
- Safety Investigators/Auditors
- Safety Regulators
- Quality, risk, compliance and assurance managers
- Safety Data Analysis Specialists
- Learning & Development/Training Managers

TESTIMONIALS

"Good use of real and thought-provoking case studies by the instructor".

Assistance Vice President, SBS Transit Rail, Singapore

"Excellent. Have a much better understanding of human factors than when began for investigations"

HSE Advisor, Citipower, Powercor & United Energy



DURATION

2 days

COURSE LOCATIONS

Various Asia and Australia locations

FEE

USD\$999 per person

DISCOUNT

- Group Discount – Three or more participants registered for the same course, from the same organisation and billing source:
 - Three to six: 10%; Seven or more: 20%

ABOUT GLOBAL SAFETY TRAINERS

We provide public and client focused practical training programs throughout Australia, New Zealand, Asia, North America, South Africa and Latin America, customised to national culture and language requirements. All our training programs utilise industry focused case studies via 3D animation and other multi-media delivery methods. Our course facilitators have both formal vocational training qualifications and second to none experience in practically applying their field of expertise in a variety of industrial settings.



COURSE FACILITATORS

For the past 25 years our expert course facilitators have worked with many organisations in conducting independent investigations and facilitating systemic incident investigation and human factors management training programs.

Dr Graham Edkins is a qualified Organisational Psychologist and internationally regarded human factors and safety management systems expert with broad experience as a transport safety regulator, group safety manager and independent investigator. As a former Air Safety Investigator (Human Performance) with the Australian Transport Safety Bureau (ATSB), Manager Flight Safety Investigations for Qantas Airways, Executive Director of Public Transport Safety Victoria and Group General Manager of the Civil Aviation Safety Authority (CASA), he brings a wealth of experience and detailed knowledge of contemporary safety regulation, major event investigation and human error management practices. Dr Edkins is regularly retained as an independent safety investigator and human factors expert witness for various civil and criminal matters. Additionally, he provides ongoing safety and human error management coaching services to several company boards and executives.



CLIENT FOCUSED PROGRAMS

Contact us at www.globalsafetytrainers.com or send an email to admin@gstrainers.com if you would like more information on how this program can be tailored to your specific organisational or industry requirements.