

# ADVANCED SAFETY INCIDENT INVESTIGATION, ANALYSIS & REPORT WRITING

11-week online course | 2 hours per week | 15 March - 28 May 2021

11-week online course | 2 hours per week | 6 September - 19 November 2021



## Our Expert Course Instructor



**Dr Graham Edkins** has more than 30 years experience in conducting major incident investigations across a range of high risk industries and advising accident authorities, coroners and organisations on complex risk, safety management and human factors matters.

## Key Learning Objectives

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

- ▶ Plan and prepare to conduct safety incident investigations based on specific risk criteria
- ▶ Identify a structured human factors approach to witness interviewing
- ▶ Clearly distinguish between contributing and noncontributing factors via a practical data collection checklist
- ▶ Develop a timeline of events and conditions to provide logic to the analysis
- ▶ Recognise the human factor contribution to safety incidents in complex circumstances
- ▶ Effectively determine contributing factor types to aid in system wide trend analysis
- ▶ Identify practical and reasonable improvement opportunities and key learning's
- ▶ Produce quality incident investigation reports based on a highly structured repeatable format

# ADVANCED SAFETY INCIDENT INVESTIGATION, ANALYSIS & REPORT WRITING

11-week online course | 2 hours per week | 15 March - 28 May 2021

11-week online course | 2 hours per week | 6 September - 19 November 2021

## ABOUT THE COURSE

*"A ship in harbour is safe, but that is not what ships are built for."*  
- William G.T. Shedd

For many years Dr Graham Edkins has worked with organisations in developing incident management systems, skilling staff in internationally regarded incident investigation methodologies, and conducting independent safety investigations into fatalities, major injuries, environmental harm, high potential and production loss events across a range of high risk industries and cultural backgrounds.

From this experience, Dr Graham Edkins has a unique understanding of the specific competencies required of incident investigators and how best to develop and sustain these competencies in organisations that operate in fast paced, challenging environments. While, the vast majority of organisations have adopted systemic incident analysis methods in line with international standards, there remains a distinct variability in the quality and robustness of the investigation analysis for several reasons:

- Not all organisations have a clearly defined risk-based approach to classifying safety occurrences and may not investigate to a comprehensive standard;
- Often investigators have difficulty in distinguishing between contributing and non-contributing factors;
- The point at which control is lost is not always well defined, leading to a poor understanding of the efficacy of existing prevention and mitigation critical risk controls;
- The distinction between human failures and latent systemic conditions can be inconsistent because organisations' do not provide a well defined and structured list of contributing factor types; and
- Because contributing factor types are not always clearly defined, there are lost opportunities to identify repeat failure trends from which to direct more strategic accident prevention activities.

## WHO WILL BENEFIT

This program is designed for those individuals with some experience in incident investigation or for those accountable managers responsible for reviewing incident investigation reports. This advanced incident investigation and analysis program will provide participants with a more structured, repeatable and transparent approach to conducting more effective investigations, consistent with international standards and to compliment organisational zero harm target objectives. This course is beneficial to the following personnel:

- Legal experts and government officials involved in investigation-related matters
- Safety Investigators/Auditors
- Safety Regulators
- Those responsible for Safety Information Analysis
- Human Resource Managers
- General and line managers
- Environmental managers
- WHS and injury management personnel

## EXPERT COURSE INSTRUCTOR



**Dr Graham Edkins** is the Chief Executive Officer of Leading Edge Safety Systems, a qualified Organisational Psychologist and has in excess of 30 years experience in conducting major incident investigations in high risk industries and advising authorities and organisations on complex risk, safety management and human factors issues.

He has broad operational experience as a transport safety regulator, airline safety manager and government air safety investigator, having held previous roles with Qantas Airways, Australian Civil Aviation Safety Authority, Public Transport Safety Victoria and the Australian Transport Safety Bureau. Dr Edkins is regularly retained as an independent investigator and expert witness for various civil matters.

## WHAT PAST PARTICIPANTS SAID

*"Very satisfied with workshop. Really learned a lot and looking forward to apply it if needed".*

Senior Executive Bus Safety, SBS Transit, Singapore

*"A highly practical and repeatable process that encourages consistency in event investigation"*

Investigator/Auditor, Energy Queensland

*"Instructor has good practical knowledge of incident investigations"*

Safety Manager, Civil Aviation Authority, Nepal

## BENEFITS OF LEARNING ONLINE

Informa Corporate Learning's online courses are new digital, interactive and engaging educational experience designed to maximise learning for professionals with busy schedules and/or small training budgets.

Our online courses are perfect opportunity for busy professionals as they require just 2 hours per week of your time and include an interactive forum for you to ask direct questions about challenges you are facing to expert course leaders. Modules are released on a weekly basis, so you can pace yourself alongside your peers and you will have access to a comprehensive set of assets to support your learning such as video content, quizzes and case studies.

# ADVANCED SAFETY INCIDENT INVESTIGATION, ANALYSIS & REPORT WRITING

11-week online course | 2 hours per week | 15 March - 28 May 2021

11-week online course | 2 hours per week | 6 September - 19 November 2021

## Course Outline

### WEEK 1 - INTRODUCTION TO INCIDENT INVESTIGATION

- Incident investigation and its relationship to WHS management system requirements
- Distinguishing between hazards, near misses, incidents and accidents
- What 'triggers' an incident investigation - identifying the level of risk
- Different types of investigation (regulatory, company and legal) and their purpose
- People versus systemic approaches to incident investigation

### WEEK 2 - INTRODUCTION TO HUMAN FACTORS AND HUMAN ERROR

- Human factors in context
- A systems model of human factors - the Optimum Human Work Performance Model (OHWP)
- Understanding human error types, causes and consequences
- Organisational error management strategies and the role of error tolerant systems
- Practical error and violation remedy checklist for investigators and auditors

**Activity:** *Identify the error type.*

### WEEK 3 - A HUMAN FACTORS ANALYSIS METHOD FOR INCIDENT INVESTIGATION

- Human factors analysis methods
- Errors and error producing conditions
- The role of Critical Control Management (CCM) in identifying prevention and mitigation critical risk controls
- The Loss of Control Analysis (LOCA) model for assessing the efficacy of critical risk controls
- Case Study: Application of LOCA to a significant safety incident.

### WEEK 4 - INITIAL INCIDENT RESPONSE ACTIONS AND PLANNING FOR THE INVESTIGATION

- Immediate actions
- Securing the site and controlling the hazards
- Notifying relevant authorities and internal managers
- Reporting requirements and WHS legislative obligations
- Completing a notification report - a suggested format
- Incident investigation planning considerations.

**Activity:** *Completion of a notification report*

### WEEK 5 - FINDING FACTS - PART 1

- 'FOCAR' (to focus on a problem) - A 5 step approach to incident investigation: Find Facts, Organise Data, Contributing Factors, Agreed Actions & Report
- Step 1: Finding the facts via a structured data collection method
- Asking the right question using the OHWP model checklist
- Case Study: Example data collection process

**Activity:** *Brainstorming data sources using the OHWP checklist*

### WEEK 6 - FINDING FACTS PART 2 - WITNESS INTERVIEWING

- A structured approach to witness interviewing
- Progressive interview questioning techniques, probing and behavioural cues
- Dealing with reluctant witnesses
- Documenting the discussion: Example witness interview template
- Example interview

**Activity:** *Interview assessment*

### WEEK 7 - ORGANISE DATA VIA A TIMELINE

- Determining the incident and loss of control point
- Identifying post incident events
- Identifying pre-incident events
- Identifying conditions

**Activity:** *Timeline practice.*

### WEEK 8 - CONTRIBUTING FACTORS

- Identifying Contributing and Non Contributing factors from data collection
- The rule of 3 to determine voracity of evidence - triangulation
- Application of the Loss of Control Analysis (LOCA) model for assessing the efficacy of critical risk controls

**Activity:** *Analysing data and application of LOCA to identify contributing factors*

### WEEK 9 - AGREED ACTIONS

- How to develop reasonable agreed actions using the SMARTER principle
- Applying the hierarchy of controls
- Strategies to get your corrective actions accepted
- Developing Key Learning's

**Activity:** *Identifying Agreed Actions and Key Learning's*

### WEEK 10 - REPORT AND DOCUMENT

- How to develop structured, logical and quality assured incident investigation reports.
- Recommended investigation report structure
- Language and readability
- Example Incident Investigation Report templates based on incident severity

**Activity:** *Incident investigation report writing*

### WEEK 11 - ACCOUNTABILITY AND CONSEQUENCE MANAGEMENT

- No Blame, Accountability and Fair and Just Culture
- Determining the level of accountability - the notion of intention

**Activity:** *Finalisation and submission of investigation report for assessment*

# ADVANCED SAFETY INCIDENT INVESTIGATION, ANALYSIS & REPORT WRITING

11-week online course | 2 hours per week | 15 March - 28 May 2021

11-week online course | 2 hours per week | 6 September - 19 November 2021

## Easy Ways to Register

**1 Web**  
www.informa.com.au/advancedsafety

**2 Telephone**  
+61 (02) 9080 4395

**3 Email**  
training@informa.com.au

## Learn Anywhere, Learn Anytime

Catering to meet all your learning needs:

- Get **high quality** practical training from our expert instructors
- From **Face To Face, Online** and **Blended Learning**, get a superior solution for your learning needs
- Learn **live online** in an interactive environment
- **Invest** in yourself. Invest in your team.

Register today for our **Live Online Training** courses and find out how they can help you transform the way you work. Contact one of our training consultants on [training@informa.com.au](mailto:training@informa.com.au) to find out more.

## Advanced Safety Incident Investigation, Analysis & Report Writing

Course Code	Location	Month	Standard Price	4+ Dels Discount
P21GR350N	Live Online Training	15 March - 28 May 2021	\$2,995 + \$299.50 GST	<b>\$3,294.50</b>
P21GR350N02	Live Online Training	6 September - 19 November 2021	\$2,995 + \$299.50 GST	<b>\$3,294.50</b>

**Great Savings:**  
When you book **4 or more** participants! **Call us** today on **+61 (2) 9080 4395** or email [training@informa.com.au](mailto:training@informa.com.au) to take advantage of the discount offer.

### Privacy Policy & Updating your Details:

Please visit us online at [www.informa.com.au/privacy](http://www.informa.com.au/privacy) for a full privacy policy. Database amendments can be sent to [database@informa.com.au](mailto:database@informa.com.au) or phone **+61 (0) 2 9080 4017. ABN: 66 086 268 313**

### Informa Corporate Learning – On-site & Customised Training

Informa Corporate Learning has a long-standing track record of delivering very successful customised learning solutions achieving real and measurable value for our clients through our senior training consultants.

If you have 8+ interested people, an on-site course can be the ideal solution – giving you the opportunity to customise our course content to your specific training needs, as well as attracting significant savings compared to public course costs.

### Why Choose On-site With Informa Corporate Learning?

- 1. Custom design** – Together, we will identify the best blended learning solution for your culture, your people and your training objectives.
- 2. Quality assured** – We design market-leading training programs, concepts and methodologies, with a 400+ course portfolio. Our rigorously selected 900+ instructor faculty are recognised experts in their field. Quality of their content and delivery methods is assured through continuous monitoring and evolution.
- 3. On-site training** is a cost effective way to train your people and achieve your defined outcomes.

### Our Long Standing Clients Include:

ActewAGL, Ajilon, Ambulance Victoria,, ANU, Arrow Energy, Australian Super, Barrick, BHP, Chevron Australia, Coffey International, ConocoPhillips, CSIRO, Dalrymple Bay Coal Terminal, Department of Education, Department of Planning, Electricity Generating Authority of Thailand (EGAT), ENI Australia, EY, Fortescue Metals Group, Health Purchasing Victoria, IBM, IP Australia, Jemena, Litmus Group, Metro Trains, Office of the National Rail Safety Regulator, Origin Energy, Pacific National, PT Freeport, Public Transport Authority – WA, QGC – BG Group, Queensland Rail, Rio Tinto, Romgaz, SA, South Australia Health, Telstra, Transport & Infrastructure, UBS, Woodside and more...

Speak with **Anton Long** or **Holly Baldwin** on **+61 (02) 9080 4455** to discuss your customised learning solution, or email [training@informa.com.au](mailto:training@informa.com.au)