



The AMTA has served as a resource to Alberta's transportation industry since 1938. Our training has been created by industry, for industry. Our AMTA instructors are selected based on their education, knowledge, and demonstrated expertise. Let the AMTA partner with you for your training and employee development needs.

## Fundamentals of Investigation (FOI)

### A description of the training course objectives:

Fundamentals of Investigation (FOI) delivers a basic introduction to the steps and processes undertaken as part of an incident investigation. The course content sequencing mirrors the order each step occurs within in a systematic investigative process and is designed to introduce you to the theory and practice of investigation. The content will explore the purpose and goals of investigation, investigative steps to take at an incident scene, information gathering techniques, cause analysis, and preparation of a final report. Successful completion of this course will prepare you to take additional investigation elective courses offered by the AMTA.

This is a 2-day classroom-based course delivered through interactive lectures and exercises. Practical activities are focused on developing basic skills for application across a variety of incident investigation types.

FOI introduces course participants to:

- Scene management
- Evidence collection
- Interview and questioning procedures
- Incident documentation
- Cause analysis
- Report preparation

*Fundamentals of Investigation is a prerequisite to the AMTA's Collision Investigation and Workplace Investigation courses.*

Fundamentals of Investigation is a required core course for the Certified Transportation Safety Coordinator (CTSC) and Certified Transportation Safety Professional (CTSP) designations.

### Module 1 - Purpose of Investigation – 2 hours

#### Outcome:

- Explain the purpose and goal of incident investigation
- Describe investigation
- Explain risk and liability in the context of investigation
- Describe how incident investigation impacts an organization's reputation
- Describe the impact of information and misinformation on the investigative process
- Explain how investigation helps identify opportunities for organizational improvement
- Explain an employer's legislated responsibilities with respect to incident investigation
- Identify the circumstances under which an investigation must be conducted





**Module 2 - Incident Response – 1.5**

**Outcomes:**

- Describe common methodologies used in investigation.
- Describe the preparation required to initiate an incident investigation
- Explain who should be part of an investigation
- Describe the knowledge, skills, and ethics appropriate for an investigator
- Describe the main steps/phases of an investigation
- Describe how to work with specialists and external investigators

**Module 3 - Investigating the Incident – 3.5 hours**

**Outcomes**

- Describe scene control and maintaining scene integrity
- Explain various scene hazards and the process of mitigating them
- Work with third parties to secure incident scenes
- Explain what evidence is and the process of collecting, securing, and maintaining continuity of same
- Describe methods for collecting and handling information at an incident scene
- Demonstrate taking measurements on scene
- Demonstrate creating a scene diagram

**Demonstrate basic interviewing skills**

**Module 4 - Identifying Cause – 3 hours**

**Outcome:**

- Explain the process of determining an incident’s root cause(s)
- Recommend corrective action
- Explain “sequence of events” and its importance in root cause analysis
- Discuss how root cause analysis is used to prevent further incidents
- List at least three (3) methods of root cause analysis
- Conduct a 5-Why root cause analysis

**Module 5 - Reporting Findings – 2.5 hours**

**Outcomes:**

- Explain what must be contained in a final incident investigation report.
- Explain the responsibility of the employer to provide reports to other parties and the nature of third-party reporting.
- Identify an employer’s legislated responsibilities with respect to incident reporting, including specific requirements related to:
  - Dangerous goods
  - Environmental incidents
- Describe best practices related to report writing (e.g., format, use of language, etc.)
- Differentiate between verbal and written reporting





**Total training hours:** 12.5 hours  
**Review/Final Exam:** 90 minutes  
**Total training duration/length:** 2 Days

**Description of how participant’s learning will be assessed/evaluated:**

Course Assessment

The course will be assessed with a final exam. The final exam will take place at the end of Day 2.

- 90 minutes
- Open-book exam
- Multiple choice, true/false, short answer
- 80% pass grade

Participants are required to pass Fundamentals of Investigation before moving on to any additional investigative training elective courses. The facilitator will advise participants of exam rewrite options, if required. Please note the rewrite exam cannot happen on the same day as the original exam was written.

**Total cost of the course per person:** Non-Member \$525 / Member \$262.50

**Name of instructor:** Tim Reteff, Brooke Ducharme

**Course capacity:** unlimited

**Dates of each training course:** Apr 16, 2024  
Jun 4, 2024  
Oct 1, 2024

**Credentials received at the end of the training:** Certificate of completion

