

SOP Template: Incident Investigation and Root Cause Analysis Methodology

This SOP details the **incident investigation and root cause analysis methodology**, outlining systematic procedures for identifying the underlying causes of incidents. It includes steps for incident reporting, data collection, evidence preservation, conducting thorough investigations, analyzing contributing factors, determining root causes, and implementing corrective actions. The goal is to prevent recurrence, enhance safety, improve operational processes, and ensure compliance with regulatory requirements.

1. Purpose

To provide a structured approach for investigating incidents, identifying root causes, and implementing effective corrective actions that prevent recurrence and ensure compliance.

2. Scope

This SOP applies to all reported incidents including accidents, near-misses, property damage, safety breaches, and environmental releases across the organization.

3. Definitions

Term	Definition
Incident	Any unplanned event that results in or could have resulted in injury, illness, damage, or loss.
Root Cause	The fundamental underlying reason for an incident, which if addressed will prevent recurrence.
Corrective Action	Measures taken to eliminate identified root causes and prevent recurrence of incidents.

4. Responsibilities

- Supervisors/Managers:** Ensure all incidents are reported and investigated promptly.
- Investigation Team:** Conduct incident investigations, document findings, and recommend corrective actions.
- Employees:** Report incidents immediately and cooperate with investigations.
- Safety/Compliance Officer:** Oversee the investigation procedure and ensure the implementation of corrective actions.

5. Procedure

- Incident Reporting**
 - Immediately report the incident via the designated reporting system or form.
 - Notify relevant personnel and supervisory staff.
- Initial Response & Evidence Preservation**
 - Respond to the incident to secure the site and provide assistance as necessary.
 - Preserve the scene and collect evidence (photos, samples, witness statements) before any disturbance, unless necessary for safety.
- Data Collection**
 - Gather detailed information including: time, location, people involved, equipment, sequence of events, and

environmental conditions.

- Interview witnesses and involved persons promptly.

4. Incident Investigation

- Assemble an investigation team with relevant expertise.
- Conduct thorough analysis using recognized methods (e.g. 5 Whys, Fishbone/Ishikawa Diagram, Fault Tree Analysis).

5. Root Cause Analysis

- Identify direct, indirect (contributing), and root causes of the incident.
- Document all causal factors and supporting evidence.

6. Corrective Actions

- Develop specific corrective and preventive actions addressing each root cause.
- Assign responsibilities and deadlines for implementation.

7. Reporting & Documentation

- Prepare an investigation report summarizing events, findings, root causes, and action plans.
- Submit report to relevant stakeholders and retain records as per policy.

8. Follow-up & Verification

- Monitor corrective actions for timely implementation and effectiveness.
- Review similar processes and communicate findings to prevent recurrence organization-wide.

6. Documentation

- Incident Report Forms
- Investigation Records
- Root Cause Analysis Worksheets
- Corrective Action Plans and Checklists

7. References

- Company Safety and Health Policy
- Relevant Local and National Regulations
- ISO 45001 Occupational Health and Safety Management Systems

8. Review

This SOP shall be reviewed annually or after significant incidents, regulatory updates, or process changes to ensure ongoing effectiveness and relevance.