

ROOT CAUSE ANALYSIS

Imagine water collecting on a walkway. Then imagine someone slipping and falling in the water. Although the fall is caused by the water, the water is only the symptom of the main problem. Root cause analysis is an approach used during an incident investigation to determine the underlying causes of a problem. In this example, the analysis examines the underlying causes of why the water collected on the walkway and identifies what actions should be taken to correct the problem. By conducting the analysis and addressing the root causes, the same or similar type of incident may be substantially or completely prevented from recurring.

Root Cause Analysis Tools

Techniques

The following is a list of techniques that may be used in identifying a root cause:

- Brainstorming
- Checklists
- Cause/Effect Trees
- Timelines
- Process Maps

Ideally, a combination of these techniques will be used.

Who, What, How, Why?

The investigation process should always ask and answer who, what, how, and why questions, which should lead to corrections:

- Who is affected?
- What happened?
- How did it happen?
- Why did it happen?
- What needs to be corrected?



Consult with Affected Employees

Discussions with affected employees should also be included in the investigation process. The employees have working knowledge of the issue and can offer solutions that might not be apparent to investigators.

With effective practice, a thorough root cause analysis investigation can take place fairly quickly and will identify the main causes of problems to help prevent similar events from happening again keeping staff, students and the public safe.