



Root Cause Analysis (RCA) Checklist

Problem Definition & Data Gathering

Focuses on clearly defining the problem, identifying symptoms, and collecting relevant data to understand the situation.

Detailed Problem Description

Write something...

Quantity of Affected Units/Batches

Enter a number...

Date Problem First Noticed

Enter date...

Time Problem First Noticed


Observed Symptoms and Impacts

Write something...

Affected Processes/Departments

- ☐ Production
- ☐ Quality Control
- ☐ Maintenance
- ☐ Supply Chain
- ☐ Engineering

Relevant Photos/Videos of the Problem

 Upload File

Description of the environment when the problem was observed (temperature, humidity, etc.)

Write something...

Team Formation & Roles

Ensures the RCA team has the right expertise and defined responsibilities for thorough investigation.

Team Lead Assigned?

- ☐ Yes
- ☐ No

Team Lead Name

Write something...

Key Functional Areas Represented (Select all that apply)

- ☐ Production
- ☐ Engineering
- ☐ Quality
- ☐ Maintenance
- ☐ Supply Chain
- ☐ Process Engineering

Team Member 1 Name & Role

Write something...

Team Member 2 Name & Role

Write something...

Number of Team Members

Enter a number...

Brief Description of Team Member Roles & Responsibilities

Write something...

Has the Team Received RCA Training?

- ☐ Yes
- ☐ No
- ☐ Not Applicable

5 Whys & Cause-Effect Diagram (Fishbone)

Utilizes common RCA techniques to explore potential causes and their relationships to the problem.

Describe the Problem Statement in Detail (as understood so far)

Write something...

Number of 'Whys' Asked for the Initial Problem

Enter a number...

Record the First 'Why' and the Answer

Write something...

Record the Second 'Why' and the Answer

Write something...

Record the Third 'Why' and the Answer

Write something...

Record the Fourth 'Why' and the Answer

Write something...

Record the Fifth 'Why' (or subsequent 'Whys' if needed) and the Answer

Write something...

Potential Categories for Fishbone Diagram (e.g., Man, Machine, Method, Material, Measurement, Environment)

- ☐ Man
- ☐ Machine
- ☐ Method
- ☐ Material
- ☐ Measurement
- ☐ Environment
- ☐ Other

List Potential Causes within Each Category of the Fishbone Diagram

Write something...

Data Analysis & Verification

Involves analyzing gathered data, testing hypotheses, and verifying potential root causes.

Statistical Process Control (SPC) Data Points Analyzed

Enter a number...

Description of Statistical Analysis Performed (e.g., Regression Analysis, Hypothesis Testing)

Write something...

Control Chart Type Used (if applicable)

- ☐ X-Bar and R Chart
- ☐ X-Bar and S Chart
- ☐ Individual Measurements Chart
- ☐ C Chart
- ☐ U Chart
- ☐ Other (Specify)

Summary of Data Trends & Anomalies Observed

Write something...


Data Sources Verified for Consistency

- ☐ ERP System
- ☐ MES System
- ☐ Quality Management System
- ☐ Machine Logs
- ☐ Manual Records
- ☐ Calibration Records
- ☐ Other (Specify)

Hypothesis Testing Outcome (If Applicable)

- ☐ Hypothesis Supported
- ☐ Hypothesis Rejected
- ☐ Inconclusive

Supporting Data Files (e.g., Excel Spreadsheets, Charts)

 Upload File

Description of how data was verified and cross-referenced

Write something...

Root Cause Identification & Validation

Definitively identifies the root cause(s) and validates this determination through evidence.

Describe the identified root cause(s) in detail. Provide supporting evidence and data.

Write something...


Which of the following categories best describes the root cause?

- ☐ Equipment Failure
- ☐ Process Variation
- ☐ Human Error
- ☐ Material Defect
- ☐ Design Flaw
- ☐ Environmental Factor
- ☐ Supplier Issue

Assign a risk score (1-10, 10 being highest) to the likelihood of the identified root cause recurring if no corrective action is taken.

Enter a number...

Upload any supporting documents, charts, or graphs that validate the identified root cause(s).

 Upload File

Explain the methodology used to validate the identified root cause(s). (e.g., statistical analysis, simulation, observation, experimentation)

Write something...

Is the identified root cause validated by the team?

☐ Yes

☐ No

If the root cause is not validated, explain why and what further investigation is needed.

Write something...

Corrective Actions & Implementation Plan

Develops and documents specific corrective actions to address the root cause and prevent recurrence.

Detailed Description of Corrective Action(s)

Write something...

Estimated Cost of Implementation

Enter a number...

Planned Start Date of Implementation

Enter date...

Planned Completion Date of Implementation

Enter date...

Responsible Department/Team

- ☐ Production
- ☐ Maintenance
- ☐ Engineering
- ☐ Quality Assurance
- ☐ Supply Chain

Implementation Priority (High, Medium, Low)

- ☐ High
- ☐ Medium
- ☐ Low

Resources Required (Check all that apply)

- ☐ Personnel
- ☐ Equipment
- ☐ Software
- ☐ Training
- ☐ Materials

Potential Risks/Challenges in Implementation

Write something...

Verification & Monitoring

Establishes a process to verify the effectiveness of corrective actions and monitor for long-term stability.

Baseline Performance Metric Value (Before Action)

Enter a number...

Target Performance Metric Value (After Action)

Enter a number...

Actual Performance Metric Value (Post-Implementation)

Enter a number...

Date of First Verification Measurement

Enter date...

Frequency of Verification Measurements (e.g., weekly, monthly)

Enter a number...

Verification Measurement Status

- ☐ Within Tolerance
- ☐ Outside Tolerance
- ☐ Data Not Available

Notes on Verification Measurement (e.g., deviations, anomalies)

Write something...

Date of Next Scheduled Verification

Enter date...

Documentation & Lessons Learned

Records the entire RCA process, findings, and corrective actions for future reference and continuous improvement.

Summary of RCA Process & Findings

Write something...

Detailed Description of Corrective Actions Implemented

Write something...

Estimated Cost of Corrective Actions

Enter a number...

Date of RCA Completion

Enter date...

Lessons Learned & Recommendations for Future RCAs

Write something...


Categories of System/Process Impacted by the Root Cause?

- ☐ Equipment
- ☐ Process
- ☐ Material
- ☐ Training
- ☐ Design
- ☐ Other

Contact Person for Follow-up & Verification

Write something...

Supporting Documentation (e.g., data reports, diagrams)

 Upload File