



Root Cause Analysis Procedure

Employee / Incident Information:

Employee Name: _____

Date of Hire: _____ Job Title: _____

Total Years in Job classification: _____ Shift Start Time: _____ Shift End Time: _____

Exact location of incident (Bldg/Level/Area):

Type of activity at time of incident (i.e., concrete cleanup):

Specific task at time of incident (i.e., finishing, sweeping):

How long had the worker been performing specific task:

Typical task for the week:

Typical task for the day:

Injury / Illness Information:

Date of Incident: _____ Day of Week: _____ Time of Incident: _____

Type of Injury: _____ Part of body injured: _____

Employee's Direct Supervisor: _____

Working on a crew? Yes No

Name of Witnesses

(list): _____

PPE worn at time of incident

(list): _____

Include Pertinent Photos of Incident Scene

Interview Forms

Interviewee # ____:

Name (Interviewee): _____

Job Title: _____

Date of Interview: _____

Name (Interviewer): _____

Job Title: _____

Note: Interviews should be structured to allow full discussion of incident and to provide as much information as possible, relevant to defining root causes. The following questions should be used as guidelines to encourage discussion during the interview.

Incident Timeline:

Describe in detail the sequence of events involving this incident in as much detail as possible. The timeline should include when the incident started and what constituted the start and include information on the activities prior to the incident, and any information that may be relevant (for example, activity assigned, tail-gate discussions [if any] on the activities, directions or actions directly or indirectly related). It is better to include too much detail than risk leaving something out that could be relevant. For example, many incidents have multiple factors, each of which would not necessarily lead to an incident, but together make an incident very likely.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Equipment:

This is to find out possible causes resulting from equipment or materials used.

| | | Yes | No |
|------------------------------|---|--------------------------|--------------------------|
| 1. | Was there an equipment failure? If yes, what caused the equipment to fail? Comments: | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | Was all personal protective equipment used? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | Were proper materials, tools or equipment being used? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. | Was the incident related to the tool or tool selection? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. | Was the incident related to the equipment or equipment selection? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. | Did any condition in equipment, tools or materials contribute to the incident? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. | Was the employee informed of the potential or existing conditions and the job procedures for completing the task? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. | Was there an equipment inspection to detect the conditions? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. | Was the correct equipment or tools readily available? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. | Did the employee know where to obtain equipment required for the job? | <input type="checkbox"/> | <input type="checkbox"/> |
| Contributing Factors: | | | |

| Environment: | | Yes | No |
|---|--|--------------------------|--------------------------|
| This is used to find out what the physical conditions in the environment were like during the time of the accident. | | | |
| 1. | Did temperature or weather have an effect on the incident? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | Was poor housekeeping a problem? If yes, explain: Comments: | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | What were the physical conditions of the area when the accident occurred? Comments: | | |
| 4. | Was there another activity in the area that contributed to the way the work was conducted, how work was scheduled, or altered the way tasks were done, etc.? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. | Was the work area congested? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. | Did noise, lighting, dust etc. have any effect on the incident? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. | Were there any other hazards from the surrounding area that played a part in the incident? | <input type="checkbox"/> | <input type="checkbox"/> |
| Contributing Factors: | | | |

| Personnel: This section is to examine the condition of the injured worker. | | Yes | No |
|---|---|--------------------------|--------------------------|
| 1. | Was the injured worker familiar with the job and procedures? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | Was the employee properly trained? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | Was fatigue a factor? How many hours have they worked in the past day and past week? If yes, please explain. Comments: | <input type="checkbox"/> | <input type="checkbox"/> |

| | | | |
|------------------------------|--|--------------------------|--------------------------|
| 4. | Was the injured worker authorized and qualified to do this operation? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. | Did the way the work was conducted result in awkward postures, excessive stress or other musculoskeletal risk factors? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. | Was there enough time to do the task safely? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. | Assuming there was enough time to do the task safely, was there external pressure to cut costs, cut time etc. that would have impacted safety? | <input type="checkbox"/> | <input type="checkbox"/> |
| Contributing Factors: | | | |

| Job Procedure: | | Yes | No |
|---|--|--------------------------|--------------------------|
| This pertains to the actual work being performed at the time of the accident. | | | |
| 1. | Was a safe work procedure used? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | Was there a written procedure? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | Had conditions changed to make the normal procedure unsafe? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. | Was there a job hazard analysis? Were the protective measures identified by the job hazard analysis? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. | What was the injured worker doing at the time of the accident? | | |
| 6. | Were approved procedures being followed? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. | Could the location of the work area or access to the work area been improved? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. | Was the hazard identified in safety inspections? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. | Did the worker(s) identify the hazards? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. | Was training conducted? | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. | Were safety procedures reviewed prior to the start of the activity? | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. | Was there adequate safety signage present? | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. | Were the protective measures identified in safety inspections? | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. | Were written plans or procedures for protection present or available? | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. | Were the protective measures readily available? | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. | Did the worker follow the established procedures or requirements? | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. | Did the worker obey safety signs or barricades? | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. | Did the worker use tools or equipment in a safe manner? | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. | Was there an inadvertent error or not paying attention? | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. | Did the worker recognize the hazard? | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. | Did the worker perceive production pressures? | <input type="checkbox"/> | <input type="checkbox"/> |
| Contributing Factors: | | | |

| Management: | | Yes | No |
|---|--|--------------------------|--------------------------|
| Management holds the legal responsibility for the safety of the jobsite; therefore we need to examine the role of both the supervisors and management systems in place. | | | |
| 1. | Were safety rules pertinent to work performed communicated to and understood by all employees? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. | Were they being enforced? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. | Was there adequate supervision? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. | Was sufficient time allocated to perform the job/task safely? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. | Were workers trained to do the work? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. | Had hazards been previously identified? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. | Had procedures been developed to overcome them? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. | Were unsafe conditions corrected? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. | Are daily tailgate/tailboard topics and hazards being communicated in tailgate/tailboard meetings? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. | Is safety being fully discussed in the lead meetings or are these meetings being held at least weekly? | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. | Is information from the lead meeting making it to staff? | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. | Are site orientations not being conducted, not effective or otherwise not addressing the hazard? If yes to any, comment. | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. | Are high hazard pre-task meetings being held? | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. | Are sub pre-construction meetings being held for every subcontractor and safety adequately discussed? | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. | Are items addressed in the safety inspections being addressed in a timely manner or otherwise being communicated to the correcting supervisor/manager? | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. | Are workers taking the necessary steps to communicate hazards to supervisors or coworkers? | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. | Are hazards being communicated to all affected parties in a timely manner? | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. | Are there any other barriers to hazard communication on the project? | <input type="checkbox"/> | <input type="checkbox"/> |
| Contributing Factors: | | | |

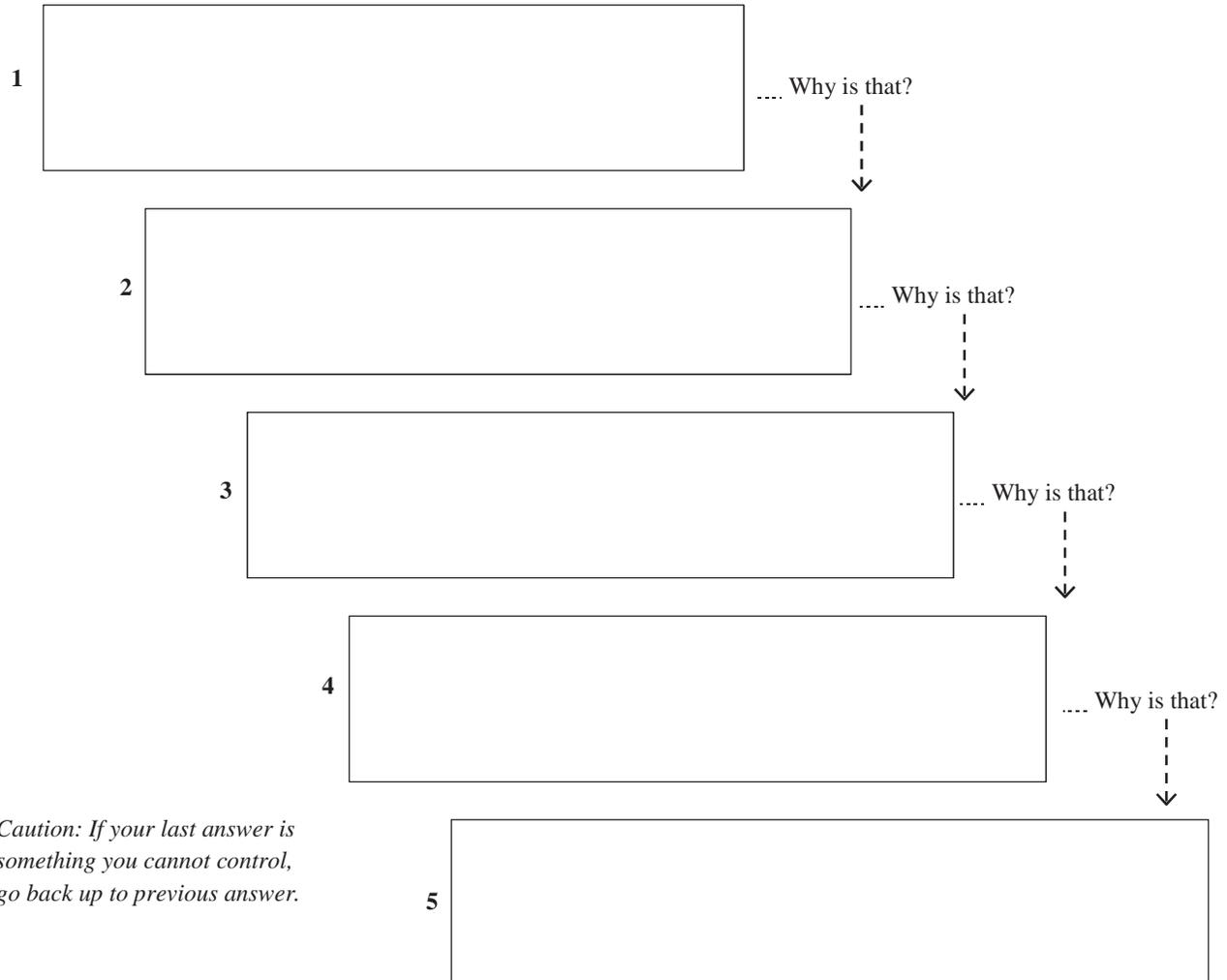
Root Causes - How to Complete the 5 Whys

1. Write down the specific problem. Writing the issue helps you formalize the problem and describe it completely. It also helps a team focus on the same problem.
2. Ask Why the problem happens and write the answer down below the problem.
3. If the answer you just provided doesn't identify the root cause of the problem that you wrote down in Step 1, ask Why again and write that answer down.
4. Loop back to step 3 until the team is in agreement that the problem's root cause is identified. Again, this may take fewer or more times than five Whys.

5 Why's

| |
|---------------------------|
| Define the problem |
|---------------------------|

Why is it happening?



Root Cause Analysis Roll Up

| Summary: | | | | |
|--|-----------------------------|--------------------------|---------------------------|-----------------|
| Please go through the last five sections of the Root Cause Analysis Worksheet and summarize all of the contributing factors to the incident. | | | | |
| | Contributing Factors | Corrective Action | Person Responsible | Due Date |
| 1. | Equipment: | | | |
| 2. | Environment: | | | |
| 3. | Personnel: | | | |
| 4. | Job Procedure: | | | |
| 5. | Management: | | | |

| Root Cause: | |
|--------------------|--|
| 1. | |
| 2. | |

Root Cause Analysis Final Report

Department: _____

Date: _____

Jobsite of the Injured Worker: _____

Occupation of Injured/Impacted Worker: _____

Nature/Severity:

Incident Summary:

Interviewee(s) (and title(s)):

Interviewer(s) (and title(s)):

Person(s) injured:

Contributing Factor(s):

| Corrective Action Plan: | Person Responsible: | Due Date: |
|--------------------------------|----------------------------|------------------|
| | | |
| | | |
| | | |
| | | |
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