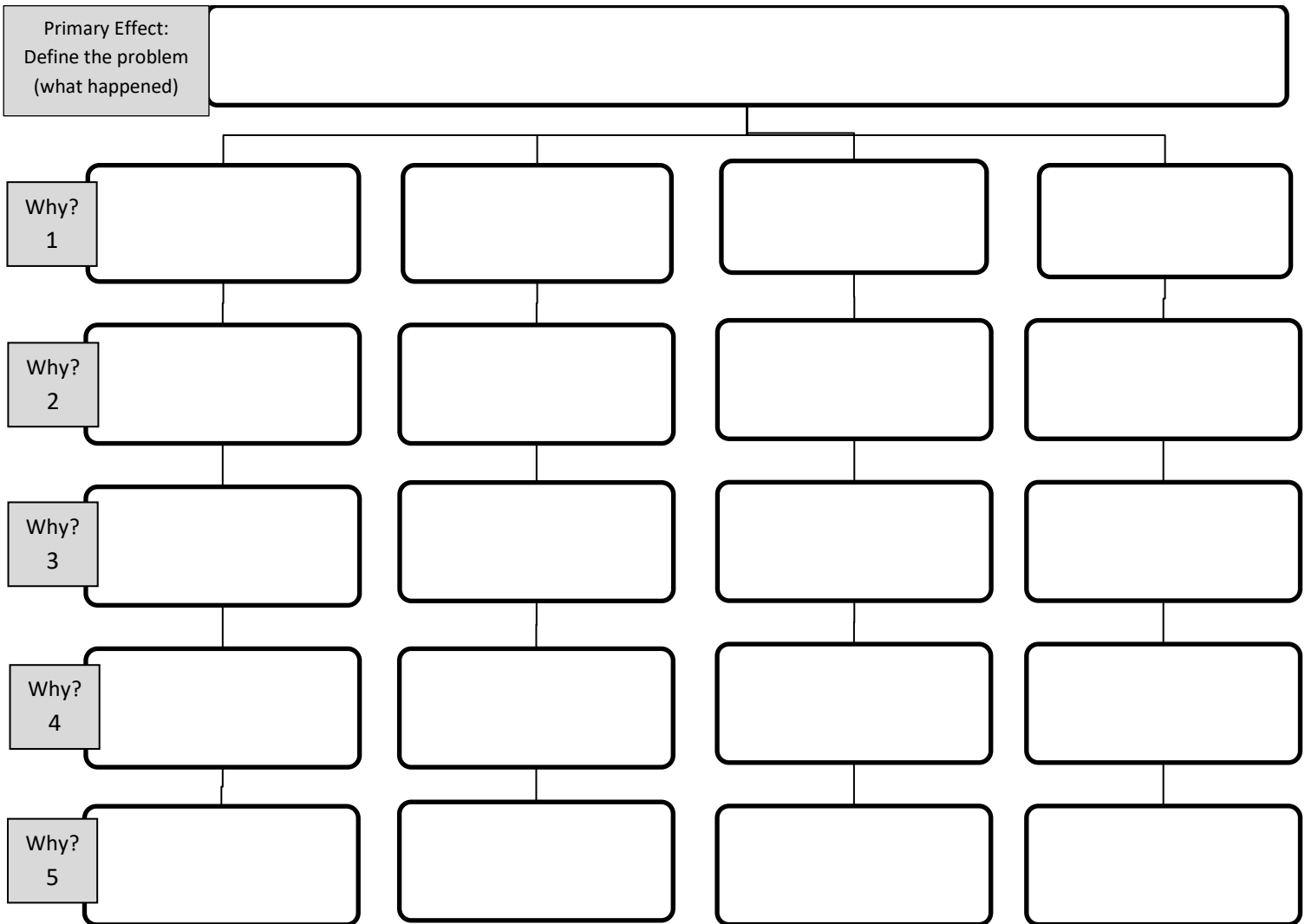




ROOT CAUSE ANALYSIS FORM The 5 Whys - Goal is to find effective solutions

Individuals involved in 5 Whys:	
Form prepared by:	Date of incident:
Description of incident:	

1. Determine the contributory and root causes.



Note: Systematically evaluate the causes and determine which are most likely to be the “root causes”. Highlight these root causes and transfer them to section 2





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2. Identify effective solutions		
No.	Identified cause (contributing factors) The incident would not have occurred if not for the presence/absence of these factors	Identified control (effective solution) The identified causal factor would not have occurred if the following control had been in place
1		
2		
3		

Note: Transfer the effective solutions to section 3 below and assign accountability.

3. Corrective actions: Assign responsibility for the effective solutions				
No.	Remedial action plan for each effective solution	Action by who (Name)	Action by when (Date)	Action Completion sign off (Manager)
1				
2				
3				





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Additional questions (lost time incidents only)

1. People's positions - if this had been done right, it would have prevented the incident (check all that apply)

- Alignment Line of fire Overreaching Over exertion Repetition N/A

2. Attention to work – if this had been done right, it would've prevented the incident (check all that apply)

- Awareness of surroundings Eyes on task Mind on task Pace N/A

3. Communication – if this had been done right, it would have prevented the incident (check all that apply)

- JHA Plan Recognize change Task coordination N/A

4. Using PPE – was it...

- | | | |
|----------------------|-----|----|
| • In good condition: | yes | no |
| • In use: | yes | no |
| • The right type: | yes | no |

5. Execution of work – did you...

- | | | |
|-------------------------------------|-----|----|
| • Select right tool: | yes | no |
| • Follow policies: | yes | no |
| • Work safely: | yes | no |
| • Use tool properly: | yes | no |
| • Verify tool is in good condition: | yes | no |

6. Working conditions – if this had been done right, it would've prevented the incident (check all that apply)

- Ambient conditions Clean/clear of clutter Footing Guards & barriers
 Tools/equipment put away Work plan design N/A

7. Number the top 3 root causes from the following lists, with 1 being the most influential cause:

Following procedures (planning)

- Poor/inadequate/improper planning
- No SOP/SWP/JHA
- SOP/SWP/JHA did not identify hazard
- Not following SOP/SWP/JHA
- Deviated from SOP/SWP/JHA: plan changed/not communicated
- Failure to identify change
- No pre-inspection
- Inadequate/no permit, permit not followed
- Manufacturer recommendations not followed
- Operation of equipment without authority
- Improper position of posture for task
- Overexertion/Overreaching of physical capability
- Improper lifting
- Improper loading
- Shortcutting/rushing – correct way takes more time/effort

Tools, equipment and vehicles

- Improper use of equipment, tools, devices
- Modifying or altering tools/equipment improperly
- Use of defective equipment
- Use of defective tools
- Electrical issue with tool or equipment
- Improper placement of tools, equipment, or materials
- Operation of equipment at improper speed
- Servicing of equipment in operation
- Inadequate equipment
- Improperly prepared equipment/tools/vehicles
- Inadequate tools
- Not performing an adequate inspection
- Dropped tool/object
- Defective vehicle
- Inadequate vehicle for the purpose
- Wrong selection of equipment
- Wrong selection of tool(s)





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<p><u>Inattention/lack of awareness/training</u></p> <p>No training/non-designated/not qualified Improper/inadequate training Improper decision making or lack of judgement Distracted by other concerns Inattention to footing and surroundings Inattention to body/hand position (crush point) Inattention to body position (line of fire) Inattention to stored energy/Horseplay Acts of violence/Failure to warn Use of drugs or alcohol Routine activity without thought Physical capability (fatigue, vision, hearing, disability) Improper assignment of personnel Inadequate communication Lack of knowledge of hazards present</p>	<p><u>Use of protective methods & systems</u></p> <p>PPE not used Improper use of PPE Servicing of energized equipment Equipment or materials not secured Disabled guards, warning systems or safety devices PPE not available Inadequate guards or protective devices (barricades) Defective guards or protective devices Inadequate PPE Defective PPE Inadequate warning system Defective warning system Inadequate isolation of process or equipment Inadequate safety devices Defective safety devices</p>
<p><u>Work exposure to:</u></p> <p>Fire or explosion Noise Energized electrical systems Energized systems other than electrical No utility locate Radiation Temperature extremes High winds Hazardous chemicals Mechanical hazards Storms or acts of nature</p>	<p><u>Work Place/environment/layout</u></p> <p>Congestion or restricted motion (arrangement/placement) Inadequate or excessive illumination Inadequate ventilation Unprotected height Inadequate workplace layout Inadequate access/egress Inadequate walkways Inadequate housekeeping Uneven ground Wet or slippery surfaces Tripping hazard</p>

