

Root Cause Analysis Chart

Immediate cause	Examples	Possible underlying causes	Possible management failures/Inadequacies
1. Improper housekeeping, and/or no housekeeping	<ul style="list-style-type: none"> ➤ Employee trips & falls over equipment/supplies left in an aisle/walk path; ➤ Material poorly piled/stored on a high shelf falls off; ➤ Material left on stairs or near fire door blocking fire exit or egress path 	<ul style="list-style-type: none"> ➤ Hazards not recognized; ➤ Facilities inadequate for storage; ➤ Inadequate training; ➤ Not following procedures; lack of procedures; no procedures 	<ul style="list-style-type: none"> ➤ Supervisory training; ➤ Supervisory safety indoctrination; ➤ Planning, layout, SOPs
2. Improper use of tools, equipment, facilities	<ul style="list-style-type: none"> ➤ Using the side of grinding wheel instead of the face and the wheel breaks; ➤ Someone using a forklift truck to elevate personnel-they fall of; ➤ Someone using compressed air to clean dust-off clothes -eye injury occurs 	<ul style="list-style-type: none"> ➤ Lack of skills and/or experience; ➤ Lack of proper procedure and/or no procedures provided ➤ Not following established guidance or using short cuts 	<ul style="list-style-type: none"> ➤ Employee training; ➤ Established operational procedure; ➤ Enforcement of proper procedure; ➤ Supervisory safety indoctrination; ➤ Employee safety
3. Unsafe or detective equipment, facilities	<ul style="list-style-type: none"> ➤ Portable electrical drill without ground wire; ➤ Axe or hammer with loose head/handle; ➤ Vehicle with defective brakes, steering, horn, light etc. 	<ul style="list-style-type: none"> ➤ Not recognized as unsafe; ➤ Poor design or selection; ➤ Poor maintenance 	<ul style="list-style-type: none"> ➤ Supervisory safety indoctrination; ➤ Employee training; ➤ Employee safety consciousness; ➤ Planning, layout, design, SOP
4. Lack of proper procedures	<ul style="list-style-type: none"> ➤ No requirement to check for gas fumes before starting engine possibly causing an explosion; ➤ No definite instructions requiring power to be locked out before maintenance is done (LOTO); ➤ No requirement to check for hydraulic leaks prior to using a lift; ➤ Not checking PPE prior to usage; ➤ Cap left off chemical container causing fumes to plume into the workspace 	<ul style="list-style-type: none"> ➤ Inadequate training; ➤ Omissions; ➤ Errors in design; and/or set-up; ➤ Errors by supervisor; ➤ Failure to follow procedures and/or polices; ➤ Lack of procedures in place 	<ul style="list-style-type: none"> ➤ Operational procedures; ➤ Planning, layout, design, SOP; ➤ Supervisory proficiency
5. Improvising unsafe procedure	<ul style="list-style-type: none"> ➤ Taking short cuts instead of following written guidance; ➤ Not using written guidance; ➤ Not developing guidance 	<ul style="list-style-type: none"> ➤ Inadequate training; ➤ Deliberate action(s) 	<ul style="list-style-type: none"> ➤ Established operational procedure; ➤ Enforcement of proper procedure; ➤ Supervisory safety indoctrination; ➤ Employee safety consciousness; ➤ Employee selection/placement
6. Failure to follow designated procedures	<ul style="list-style-type: none"> ➤ Short cuts bypassing safety precautions; ➤ Operation will only be done once; ➤ Not communicating intentions 	<ul style="list-style-type: none"> ➤ Enforcement of proper procedures; ➤ Supervisor safety indoctrination; ➤ Operational procedures; ➤ Deliberate action(s) 	<ul style="list-style-type: none"> ➤ Enforcement of proper procedure; ➤ Supervisory safety indoctrination; ➤ Operational procedures
7. Job not understood	<ul style="list-style-type: none"> ➤ Employee uses wrong method; ➤ Doesn't understand or follows Instructions, procedures, policies 	<ul style="list-style-type: none"> ➤ Instructions to complex; ➤ Inadequate comprehension; ➤ inadequate instructions or training; ➤ Lack of training 	<ul style="list-style-type: none"> ➤ Planning, layout, design, SOP; ➤ Operational procedures; ➤ Employee selection/placement
8. Lack of awareness of hazards involved	<ul style="list-style-type: none"> ➤ Not realizing rotating shaft was dangerous; ➤ Not realizing fumes were dangerous; ➤ Not realizing 	<ul style="list-style-type: none"> ➤ Inadequate instructions; ➤ Inadequate warnings; ➤ Inadequate training 	<ul style="list-style-type: none"> ➤ Supervisory safety indoctrination; ➤ Employee training; ➤ Employee safety consciousness; ➤ Planning, layout, design, SOP; ➤ Safety rules, measures, equipment; ➤ Operational procedures
9. Lack of proper tools, equipment, facilities	<ul style="list-style-type: none"> ➤ Cart too small for hauling large items; ➤ Auto maintenance done without proper tools; ➤ Repair or maintenance work at a poor location not suited for the equipment 	<ul style="list-style-type: none"> ➤ Need not recognized; ➤ Inadequate supply; ➤ Deliberate action(s) 	<ul style="list-style-type: none"> ➤ Planning, layout, design, SOP; ➤ Supervisory safety indoctrination; ➤ Equipment, materials, tool; ➤ Morale, discipline
10. Lack of guards, safety devices	<ul style="list-style-type: none"> ➤ Machine has exposed belt and gear possibly severe cut; ➤ No warning horn on vehicle possibly hitting pedestrians; ➤ No guard rail on a scaffold 10 feet high – fall hazard 	<ul style="list-style-type: none"> ➤ Need not recognized; ➤ Inadequate available; ➤ Deliberate action(s) 	<ul style="list-style-type: none"> ➤ Planning, layout, design, SOP; ➤ Safety rules, measures, equipment; ➤ Supervisory safety indoctrination; ➤ Employee safety consciousness; ➤ Equipment, materials, tool; ➤ Operational procedures; ➤ Morale, discipline, laziness