



Job Hazard Analysis (JHA) & Job Safety Analysis (JSA)

TOOLBOX TALK: Job Hazard Analysis (JHA) & Job Safety Analysis (JSA)

RATTLIR Safety Series – "Strike Before It Bites"

Purpose

This toolbox talk explains how a Job Hazard Analysis (JHA) and a Job Safety Analysis (JSA) work together to identify hazards, apply controls, and ensure safe work execution. Although these terms are often used interchangeably, they serve different but complementary functions in preventing incidents and supporting operational reliability.

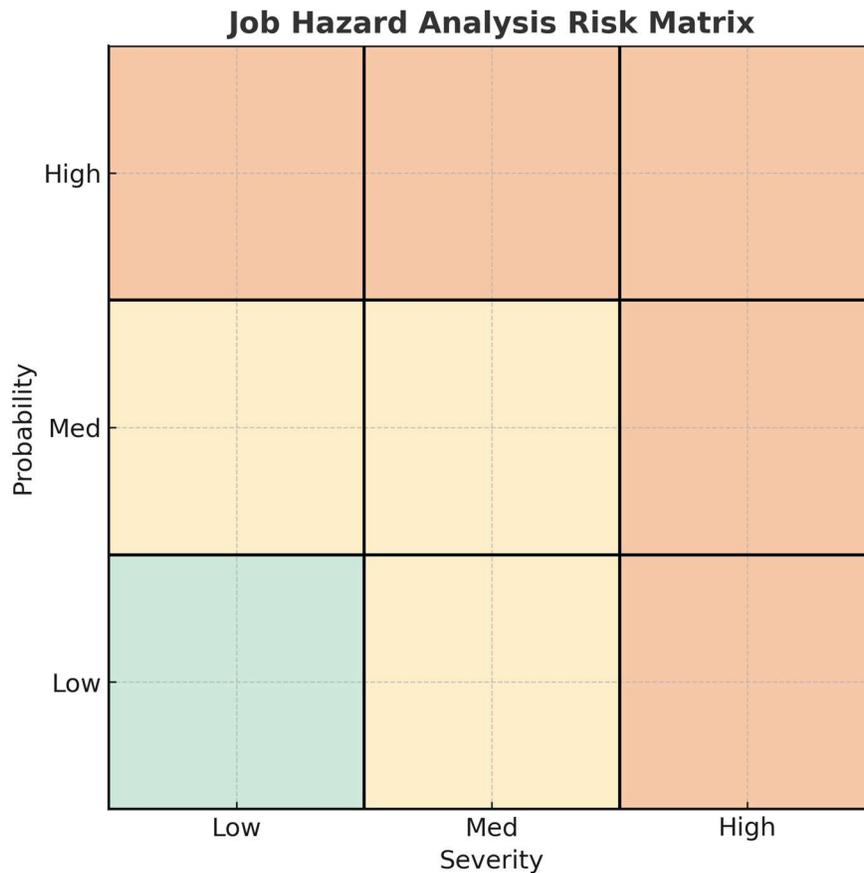


Figure 1 – JHA Risk Matrix



Job Hazard Analysis (JHA) & Job Safety Analysis (JSA)

What is a Job Hazard Analysis (JHA)?

- A JHA is the analytical process of breaking a job into steps, identifying hazards, and determining controls.
- It focuses on hazard recognition, severity, probability, and risk reduction.
- The JHA is performed before work begins and acts as the foundation for the JSA.

Using the JHA Risk Matrix

- Severity represents how serious the outcome of a hazard could be.
- Probability represents how likely the hazard is to occur under current conditions.
- High severity with moderate or high probability requires stronger controls or job redesign.
- Supervisory review is recommended when hazards reach the high-risk category.

What is a Job Safety Analysis (JSA)?

- A JSA is the documented form that captures the steps, hazards, controls, PPE, and permits needed for the job.
- The JSA includes job sequence, what could go wrong, specific hazards, and corrective actions.
- It also includes PPE requirements, permit needs, emergency contacts, and worker acknowledgment.

Clarifying the Difference Between JHA and JSA

A JHA is the hazard analysis that identifies risks. A JSA is the documented form that records those hazards, controls, and responsibilities.

Put simply: The JHA is the thinking. The JSA is the writing.

How the JHA Supports the JSA Process

- The JHA defines the job sequence to be documented in the JSA.
- Hazards identified in the JHA populate the hazard column of the JSA.
- Corrective actions and controls determined during the JHA fill the JSA's control column.
- PPE and permit requirements are assigned based on hazards identified during the JHA.
- Error precursors identified during the JHA are mitigated through controls documented in the JSA.



Job Hazard Analysis (JHA) & Job Safety Analysis (JSA)

Common Error Traps to Consider During JHA and JSA

- Time Pressure – Feeling rushed or behind schedule.
- Complacency – Being overly familiar with the task.
- Assumptions – Believing conditions are safe without verification.
- Distractions or fatigue – Reduced situational awareness.
- Changing Conditions – Work environments shifting during the job.

Emergency Response Considerations

- Identify emergency communication methods before starting work.
- Know the nearest muster point and emergency equipment.
- Ensure all workers understand how to stop work if conditions change.

Discussion Questions

- Do you understand the difference between a JHA and a JSA?
- Are you aware of the hazards and controls identified during today's JHA?
- Do you have the correct PPE and permits required by the JSA?

RATTLIR Takeaway

A JHA identifies hazards, evaluates risk, and determines controls. A JSA documents those controls so everyone understands the job, the hazards, and the expectations. When both tools are used together, workers anticipate risks before they develop, ensuring the job is completed safely and reliably. RATTLIR strikes before it bites by emphasizing strong planning, shared awareness, and control of changing conditions.