

Bridge SIF-Focused Prioritization Framework – Expanded

Purpose

The SIF-Focused Prioritization Tool is the fourth component of the Bridge Model. It is designed to help safety professionals and organizations identify and act on work conditions and exposures with the potential for Serious Injuries and Fatalities (SIFs). Unlike general risk scoring or incident count tracking, this tool emphasizes severity and predictability—aligning with modern SIF prevention methodologies and ANSI Z10 (2019) Sections 6.2 (Assessment and Prioritization) and 8.3 (Risk Assessment).

Why This Tool Matters

Traditional safety programs often over-prioritize based on frequency of events rather than potential for catastrophic harm. This can result in a false sense of control and the neglect of low-frequency, high-impact exposures. The Bridge Model recognizes that these blind spots undermine system resilience and lead to missed opportunities for prevention.

By focusing on severity and predictability as primary filters, this tool enables safety professionals to:

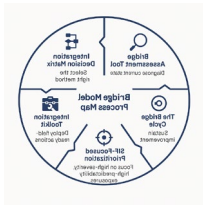
- Expose high-consequence hazards that may otherwise go unchallenged
- Deploy behavior and system interventions aligned with outcome risk
- Leverage both BBS and HOP tools based on the nature of exposure

Framework Structure

The tool uses a **2x2 prioritization matrix** built around two axes:

- **Severity** – What is the worst plausible outcome of the task or exposure? (Minor injury → Permanent disability/fatality)
- **Predictability** – Can the failure or breakdown be reasonably anticipated? Are there cues that can warn us?

2x2 Matrix Summary



Severity → \
Predictability ↓

Low Predictability

High Predictability

High Severity

Investigate urgently. Use HOP tools (learning teams, barrier analysis). Look for latent conditions. Treat as a potential precursor to SIF.

Prioritize for redesign and systemic control. Apply full Bridge Toolkit. Use BBS observation as a short-term support. Conduct management review.

Low Severity

Monitor using BBS trend data and informal feedback. Revisit task planning if incidents occur.

Use BBS coaching and micro-observations. Consider redesign only if frequency rises. Check for over-reporting or cultural fatigue.

Process for Using the Tool

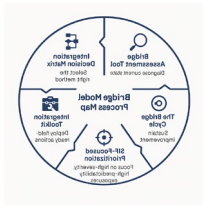
1. **Select a Task or Exposure:** Draw from field observations, prior incidents, or high-risk permits.
2. **Determine Severity:** Based on failure potential—not historical outcomes. Consult SMEs, JHAs, and organizational SIF criteria.
3. **Assess Predictability:** Can supervisors or workers anticipate failure? Is the exposure consistent?
4. **Place in Matrix:** Choose the appropriate quadrant and reference the strategic action suggestions.
5. **Act and Document:** Deploy Toolkit and Observation elements based on the quadrant. Use the Bridge Cycle to review long-term.

Example Application Scenarios

1. Confined Space Entry with Unverified Ventilation

- **Severity:** High
- **Predictability:** High
- **Bridge Strategy:** Immediate redesign. Lockout/tagout audits. Add proxy sensors. Pair with entry observation forms.

2. Improper Use of Utility Knife During Packing



- **Severity:** Low
- **Predictability:** High
- **Bridge Strategy:** Use BBS observation and retraining. Audit available tools. Add learning review only if repeated.

3. Overhead Work Performed Alone on Graveyard Shift

- **Severity:** High
- **Predictability:** Low
- **Bridge Strategy:** Review staffing policies, emergency response, supervisor access. Launch learning team and review fatigue policies.

4. Worker Consistently Steps Over Guardrail

- **Severity:** High
- **Predictability:** High
- **Bridge Strategy:** Combine BBS behavior correction with system-level guard design review. Consider fatigue, routine erosion.

Visual Companion (To Be Included)

This tool will be paired with:

- A **printable 2x2 matrix graphic** with quadrant definitions
- A **field worksheet** for ranking and documenting exposures
- Integration with Toolkit scenarios, Assessment data, and Bridge Cycle follow-up loop

