

SIF Classification Framework

Definitions and decision tree · Canadian employers

HSE ADVISOR CANADA

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Employer / organisation: _____

Scope: _____

Prepared by: _____

Position: _____

Effective date: _____

Review date: _____

1. WHY THIS IS SEPARATE FROM YOUR INJURY RATE

A falling recordable injury rate and a stable fatality rate can coexist for years, because the exposures that produce sprains are not the exposures that produce fatalities. Counting all injuries together lets a high-energy exposure hide inside a good-looking number. Classify separately, and manage the serious end on its own.

2. DEFINITIONS — ADOPT OR AMEND ONCE, THEN APPLY CONSISTENTLY

CATEGORY	DEFINITION	EXAMPLE
Actual SIF	An event that caused a fatality or a life-altering / life-threatening injury.	Fall from height resulting in permanent impairment.
Potential SIF	An event where a fatality or life-altering injury was a realistic outcome, but did not occur. Injury may have been minor or absent.	Load swings through a position a worker occupied moments earlier.
SIF precursor	A condition or practice with a realistic potential to produce a SIF if it recurs — no event required.	A missing machine guard found during inspection; a lockout routinely skipped.
Non-SIF	Everything else. Still investigated, but through the standard process.	Strain lifting a box; minor laceration.

3. THE DECISION TREE — APPLY TO EVERY EVENT, INJURY OR NOT

STEP	QUESTION	IF YES
1	Did the event result in a fatality or life-altering injury?	Classify Actual SIF . Stop.
2	Was a high-energy source present and released or uncontrolled?	Go to step 3.
3	Was a person in, or could a person reasonably have been in, the line of fire?	Go to step 4.
4	Was the control that prevented harm absent, failed, or a matter of chance?	Classify Potential SIF .
5	No event, but a condition or practice meeting steps 2–4 exists?	Record as SIF precursor .

Step 4 is where classification usually goes wrong. If nobody was hurt because the worker happened to have stepped away, that is chance, not a control. Chance is a Potential SIF.

4. HIGH-ENERGY SOURCES — THE PROMPT LIST

Use this to answer step 2 consistently. Tick every source present at the time of the event.

- ☐ Gravity — fall from height, falling or dropped object, collapse
- ☐ Motion — vehicle, mobile equipment, moving machinery
- ☐ Mechanical — rotating equipment, stored spring or hydraulic energy
- ☐ Electrical — contact with energised equipment or lines, arc flash
- ☐ Pressure — stored pressure release, pressurised fluid, explosion
- ☐ Temperature — fire, hot surfaces or fluids, extreme cold
- ☐ Chemical — toxic, corrosive, flammable or asphyxiant release
- ☐ Radiation — ionising or high-intensity non-ionising
- ☐ Biological — exposure with life-threatening potential
- ☐ Confined space or oxygen-deficient atmosphere
- ☐ Sound / other: _____

5. COMMON SIF PRECURSORS TO HUNT FOR DELIBERATELY

REQUIREMENT	WHAT GOOD LOOKS LIKE	Y / N / N-A	EVIDENCE OR GAP
Life-saving controls bypassed	Lockout skipped, permit not raised, guard removed, fall protection not clipped.		
Line-of-fire exposure normalised	Workers routinely under suspended loads, in swing paths, or between vehicle and structure.		
Energy isolation not verified	Locks applied but zero energy never proven at the point of work.		
Working at height without adequate control	Ladders substituting for a platform; anchorage improvised.		
Confined space entry outside procedure	Entry without testing, attendant or rescue capability.		
Mobile equipment and pedestrian interaction	No separation, blind areas uncontrolled.		
Emergency and rescue capability absent	A plan that relies on calling 911 with no on-site capability.		
Contractor working outside your system	High-energy work performed without your permit or oversight.		

6. WHAT CHANGES ONCE AN EVENT IS CLASSIFIED SIF

REQUIREMENT	WHAT GOOD LOOKS LIKE	Y / N / N-A	EVIDENCE OR GAP
Escalation	Notified to senior leadership within a defined time, regardless of injury outcome.		
Investigation depth	Full root-cause investigation by a trained lead, not a supervisor form.		
Control verification	Verify the failed control across every other location where it is relied on.		
Tracked separately	Reported as its own metric, never blended into the total recordable rate.		
Learning shared	Communicated organisation-wide, including to contractors.		
Closure verified	Corrective actions verified effective, not just marked complete.		

SIF Classification Record

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Complete for every event and every precursor identified

Event / reference number: _____

Date of event: _____

Location: _____

Classified by: _____

A. WHAT HAPPENED

B. CLASSIFICATION

- ☐ Actual SIF
- ☐ Potential SIF
- ☐ SIF precursor (no event)
- ☐ Non-SIF

High-energy source(s) present:

Was a person in the line of fire, or could they reasonably have been? _____

What actually prevented harm — a control, or chance?

C. CONTROL THAT FAILED OR WAS ABSENT

Control:

Where else is this same control relied on?

D. ACTIONS

ACTION	OWNER	DUE	VERIFIED EFFECTIVE

E. SIGN-OFF

CLASSIFIED BY

DATE

REVIEWED BY (SENIOR LEADERSHIP)

DATE