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.		

7. SOURCE AND SERIOUS-INJURY REPORTING

> The decision tree draws on the high-energy and direct-control approach of the Edison Electric Institute (EEI) Safety Classification & Learning (SCL) Model. This template is a simplified adaptation, not the EEI model. The SIF categories above are not legal definitions. Classify against your own definitions and report against the legislation.

JURISDICTION	LEGISLATIVE TRIGGER	SOURCE
Ontario	A person is killed or critically injured from any cause at a workplace: notify an inspector, committee, health and safety representative and trade union, if any, immediately, and send a written report within 48 hours. “Critically injured” is defined in O. Reg. 420/21 (life in jeopardy, unconsciousness, substantial blood loss, a fractured leg or arm, amputation of a leg, arm, hand or foot, burns to a major portion of the body, loss of sight in an eye). Written notice within four days if a person is disabled from usual work or needs medical attention after an accident, explosion, fire or workplace violence and nobody dies or is critically injured.	OHSA s. 51(1), s. 52(1); O. Reg. 420/21, s. 1(1)
Alberta	Report to a Director as soon as possible when a worker dies, or when there is reason to believe a worker has been or will be admitted to hospital beyond treatment in an emergency room or urgent care facility.	OHS Act, SLA 2020, c. O-2.2, s. 33(1)–(2)

Sources: EEI, Power to Prevent SIF; ontario.ca, OHSA; ontario.ca, O. Reg. 420/21; Alberta King’s Printer, OHS Act. Other provinces differ; check yours.

SIF Classification Record

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 _____

Want help applying this?

Our consultants (CRSP Certified · COR & ISO 45001 Lead Auditors) can adapt this to your workplace or review your safety program with you.

(647) 620-5278 · **info@hseadvisor.ca** · **hseadvisor.ca/contact**

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