ENERGY TO HARM RESILIENCE

EHR 12-BLOCK

Energy Management Blueprint

For Serious Injury and Fatality potential



See the energy. Protect separation.

A connected method for finding serious exposure and keeping protection reliable in real work.

EHR LENS™ / BRIAN KING

01 / THE DECISION THAT BRINGS ATTENTION FORWARD

Two thresholds. One clearer decision.

THREE TERMS WITH DIFFERENT MEANINGS

SIF	Serious Injury and Fatality, the overarching subject.
pSIF	potentially Serious Injury and Fatality (pSIF), where serious or fatal Harm could occur.
Actual SIF	An outcome where serious injury or fatality has occurred.

01

Energy Decision Threshold

Does this require SIF-level attention?

Define the credible severe consequence and the value, operating condition or combination that changes the required level of planning and control.

02

Exposure Decision Threshold

Can the Energy reach a person?

Define the observable loss, defeat or bypass of Separation that opens a meaningful pathway following an Event.

SAME ENERGY. A DIFFERENT RELATIONSHIP.

A vehicle moving in a segregated route involves High Energy. A person able to enter its travel path after Separation is defeated has a different Exposure relationship. The pathway and person’s position determine the decision.

High Energy can be present while effective Separation protects people. Under this Blueprint, pSIF Exposure exists when High Energy and an Event create meaningful Exposure through sufficient loss of Separation, whether or not Harm occurs.

02 / ONE CONNECTED METHOD

From selection to learning.

Each stage produces something the next stage needs. Field evidence can send the team back to an earlier decision.

	STAGE AND PURPOSE	WHAT IT PRODUCES
01	**Select potential SIFs** Use the Energy Decision Threshold.	**SIF Energy register**
02	**Define meaningful Exposure** Set the Exposure Decision Threshold.	**Exposure definition**
03	**Locate the Exposure** Map tasks, locations and operating states.	**pSIF Exposure Profile**
04	**Understand the pathway** Use the EHR 12-Block.	**Priority 12-Blocks**
05	**Establish and sustain Separation** Define what must work and what supports it.	**Critical controls + resilience**
06	**Teach the relationship** Make the thresholds and protections usable.	**Topic learning material**
07	**Observe actual work** Use the EHR Lens with team members.	**Field findings**
08	**Verify critical controls** Test against performance requirements.	**Verification evidence**
09	**Learn before Harm** Change the system and check the result.	**Actions + Blueprint updates**

A learning loop: field evidence updates the Exposure Profile, controls, teaching and thresholds wherever the model needs to change.

03 / UNDERSTAND THE RELATIONSHIP

One scenario. Twelve connected blocks.

Start with the pSIF Exposure Profile: a specific task, location, operating state and exposed group. Then use the 12-Block to connect the pathway with its protection.

Energy	Event	Exposure	Harm
HAZARD CHAIN			
What source has the capacity to cause Harm?	What change releases, redirects or activates it?	Who can enter the pathway, and when?	What serious consequence is credible?
HAZARD BARRIERS			
What removes or reduces the Energy?	What prevents or controls the triggering change?	What prevents the person entering the pathway?	What limits the consequence after Exposure?
RESILIENCE			
What keeps the Energy barrier reliable?	What keeps the Event barrier reliable?	What keeps the Exposure barrier reliable?	What keeps the Harm barrier reliable?

KEEP THE LAYERS CLEAR

A guardrail interrupts the fall pathway. Inspection, repair and control of its removal keep that guardrail reliable. The physical barrier and its supporting resilience belong in different layers.

04 / DESIGN AND SUSTAIN THE PROTECTION

Separation protects. Resilience keeps it working.



ILLUSTRATIVE SCENE / EXAMINING GUARDING AND ITS SUPPORTING CONTROLS

THE SAFETY FUNCTION

State what the control must achieve. A guard must prevent access to hazardous movement. An isolation must prevent unintended energisation.

WHAT KEEPS IT DEPENDABLE

Connect inspection, maintenance, competence, planning and change control to the failure modes of that specific barrier.

FOR EVERY CRITICAL CONTROL

Define the owner, performance requirement, failure signs, resilience, verification method and response to failure. When protection is uncertain, pause and restore a safe state.

05 / BRING THE METHOD INTO REAL WORK

Teach. Observe. Verify.

People need to recognise the relationship. Leaders need to understand work as performed. Critical controls need evidence that they deliver their safety function.

06

TEACH THE RELATIONSHIP

Begin with a recognisable task. Show the Energy, Event, pathway and protection. Use changing conditions to practise judgement and the response to uncertainty.

Evidence: people can explain and demonstrate.

07

OBSERVE ACTUAL WORK

Use the EHR Lens to examine the complete task. Listen to the people doing it. Look for changing conditions, workarounds, strong protection and early signs of Drift.

Evidence: field findings linked to the Exposure scenario.

08

VERIFY PERFORMANCE

Test each critical control against a defined acceptance criterion, using competent people and an approved method. Act on failed or uncertain protection.

Evidence: the safety function works in the relevant conditions.

FIVE VERIFICATION TESTS

Present / Suitable / Used / Effective / Sustained

06 / FIVE OPERATING PILLARS

Leaders shape the conditions that protect people.



ILLUSTRATIVE SCENE / TEAM KNOWLEDGE INFORMS PRIORITIES AND ACTION

Leadership	Sets priorities, provides authority and protects resources.
Systems	Creates designed Separation and dependable support.
Behaviour	Supports how people use controls and respond to change.
Well-being	Protects Capacity, attention and sustainable workload.
Innovation	Uses evidence and redesign to strengthen protection.

Across every stage: Pressure, Change, Drift, Variation and Capacity.

07 / BEGIN WITH ONE REAL TOPIC

Build evidence. Then build scale.

Start with an operational team, technical competence and people who perform the work. Choose a SIF topic with recognisable Energy and a small set of representative scenarios.

A PRACTICAL STARTING POINT

Agree

Define both thresholds and the response they trigger.

Map

Locate the Exposure and complete priority 12-Blocks.

Protect

Define critical controls, resilience and a safe response to failure.

Test and learn

Teach, observe, verify and update the method from evidence.

WHAT GOOD LOOKS LIKE

- Priority scenarios mapped.
- Controls have owners and measurable performance.
- Verification identifies failures and protection is restored.
- Repeated Exposure patterns lead to design and system change.
- Learning transfers to similar work.

Take the conversation into your workplace.

Explore the EHR resources: energytoharmresilience.com

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