

White Paper

The Safe Choice Under Pressure: How Leadership Signals and System Conditions Influence Risk

Introduction

A background image showing a close-up of a factory conveyor belt system. A large white arrow is superimposed on the image, pointing from the bottom left towards the top right. In the foreground, there are orange and yellow safety barriers. The background is slightly blurred, showing industrial machinery and a warm, orange-toned lighting.

Bill, an experienced maintenance technician, is called to troubleshoot the main conveyor belt, which has been repeatedly shutting down during peak production. Because of output demands, the equipment has not been taken out of service to address the issue properly. When Bill arrives, he notices that the belt guards have been removed and placed off to the side. No one is sure who removed them or when. Production is already behind schedule, and operators are anxious to get the line running again. Several are watching him and quietly saying, “It’s just a quick fix” and “We really need this back up.” Bill notices that the work area is cramped, increasing the risk of contact with moving parts. He also knows that replacing the guards and following full lockout/tagout procedures would add at least 20 to 30 minutes to the task. He pauses. The right thing to do is to stop, reinstall the guards and perform a proper lockout. At the same time, he feels the urgency and frustration around him. Bill decides to quickly reach into the unguarded area to realign the belt. As he adjusts the tensioner, his hand slips close to a nip point, narrowly avoiding a potential amputation.

This event could easily be described as an individual shortcut or a failure to follow procedure. But that explanation is incomplete. Bill’s decision did not occur in isolation. It was shaped by production pressure, the level of psychological safety, de-

ferred maintenance, missing guards, unclear priorities, team members’ expectations and a system that made the safe way harder to follow. The near miss was not simply the result of one technician’s decision. It was the product of multiple organizational and human factors converging in a single moment. This is what many incidents look like: A myriad of variables converge on a given day to expose people to harm. Leadership teams that are serious about protecting their people invest time in understanding and addressing systemic barriers to safe work. Doing so represents the pinnacle of safety leadership, a hallmark of organizational excellence.

Why Good People Make Risky Decisions

Incidents like Bill’s occur every day across industries. While many organizations oversimplify a team member’s decision in the moment, the Human and Organizational Performance (HOP) view of safety encourages us to examine the broader system and conditions that shaped Bill’s decision. In many organizations, Bill would be explicitly or subtly blamed for bypassing lockout/tagout requirements. The operators might be criticized for pressuring him. Bill could be disciplined or terminated for violating procedure. While this response may appear reasonable on the surface, it

overlooks the deeper forces that influenced his behavior. HOP principles begin with a different assumption: People do not come to work intending to make mistakes, take unnecessary risks or get hurt. Most people want to do a good job. However, their decisions are influenced by the conditions and context around them, including time pressure, competing goals, equipment design, staffing levels, leadership cues and informal expectations (Dekker, 2004). Dekker's work on human error emphasizes that people's actions generally make sense to them at the time, given the goals, pressures, knowledge and constraints they are experiencing. In Bill's case, the shortcut was not simply a matter of poor judgment. It made sense in that moment because the system around him was signaling urgency, production recovery and the need to "get it done." The same was true for the operators. Their anxiety and pressure were not simply personal impatience. They were also shaped by the same organizational conditions: Production was behind, the equipment had failed repeatedly and getting the line running again appeared to be the most immediate priority.

To understand why serious exposure was created, we must look beyond individual behavior and examine how organizational priorities, leadership signals, work design and human limitations influence frontline decisions. leagues who help our client companies improve organiza-

tional safety day in and day out, with input from top Safety and Health leaders from many of those same client organizations.

To begin with, we can state with certainty that achieving a rate of injuries below a certain threshold does not, in and of itself, qualify an organization for world-class status. We say this because achieving a number means nothing without regard to how that number is achieved. A low injury rate is one outcome that results from creating the conditions that qualify an organization for world-class status. And in our view, organizations don't lose that distinction if they suffer a one-time catastrophic safety incident.

Indeed, we have found that those organizations that are on the path to world-class safety put into effect a set of measures and metrics, including injury rate data, that not only confirm safety success but also create a sense of discomfort and unrest when certain leading metrics begin to show an undesirable change, even if the lagging results are exceptional.

But while numbers and hard data are important, they are only a reflection of a critically few characteristics that shape an organization's safety results. In our experience, what distinguishes the best safety companies from all the other orga-

nizations are four distinct pillars. These pillars lie below the organizational and safety foundation. This paper is devoted to describing the pillars and explaining why they are vital factors in creating and sustaining a world-class safety organization.

Production Pressure and Organizational Signals

Organizations and leaders constantly balance quality, speed, cost, customer expectations and safety. During upset conditions or urgent production demands, these objectives can compete for attention. When these trade-offs are not explicitly managed, the system leaves frontline workers to reconcile them in real time, often under pressure and sometimes leading to critical errors. Workers learn what matters most not only from formal safety messages but also from what gets measured, recognized, discussed, tolerated and reinforced. If production is consistently celebrated while the conditions used to achieve it are not examined, workers may reasonably conclude that output is the true priority when multiple core values seem to conflict in the moment.

Consider a frontline leader walking the production floor at the end of a difficult shift and saying, "Great job today." What is actually being reinforced? For many team members, the message may not be, "We worked safely." It may be, "We met the production target." Unless leaders ask what it

took to meet that target, they may unintentionally reinforce risk-taking, workarounds and degraded conditions. This is especially important because organizational messages are often subtle. Metrics, schedules, staffing decisions, maintenance deferrals, supervisor reactions and informal praise all communicate priorities. If team members perceive production as the sole priority, leaders should assume the organization is broadcasting that message in powerful ways. A useful question for preventing team misalignment is: How does our daily communication foster safe work, and what will that look like today? No one intends for risky decisions to proliferate, so a consistently intentional message from everyone is an important protective component.

How Systems Create Exposure

Production pressure does not act alone. It is often amplified by work design, equipment problems, resource constraints and chronic operational issues that force workers to choose between getting the job done and getting it done safely. A reactive leader responds after an incident occurs. A proactive leader identifies and addresses system weaknesses before someone gets hurt. This distinction matters because serious or catastrophic injuries are rarely caused by a single unsafe act. They usually emerge when multiple weak signals, degraded controls and human decisions align (International Association of Oil & Gas Producers, n.d.). In Bill's case, a stronger system would have protected

timely maintenance, ensured guarding was in place, made lockout/tagout practical and addressed repeated conveyor failures before peak production. Instead, deferred maintenance and competing priorities created conditions in which a shortcut felt necessary and the potential for serious injury escalated. A well-maintained speak-up culture pairs well with a well-maintained facility.

Consider another example: A task requires team members to access an elevated area, but the design provides no safe tie-off point, no guardrail and no practical way to complete the task from a protected position. In that moment, risk is not created by attitude or a person's decision. It is built into the work. The team member may still make a choice, but the system has already narrowed the available safe options. This is where the distinction between work-as-imagined and work-as-done becomes important. Procedures often describe how tasks are expected to be performed under ideal conditions; however, the team must adapt to real-world variability. Understanding these adaptations provides critical insight into where the system is not making the safe choice the obvious choice. When leaders have a high tolerance for stacking exposures to harm, they assume the team will always select the safest path forward, overlooking or dismissing competing prompts for risky work. A proactive, HOP-aligned leader would say, *"Let's plan today's work so that the safe way is the right way."* The goal is

to reduce reliance on luck, heroics and improvisation as standard work by creating conditions that support reliable and safe execution.

The Impact on Risk Perception

When work is carried out under pressure, leaders and team members may make decisions that prioritize timely completion over exposure control. This does not mean they are careless. It means they are human.

Research on stress, urgency and production pressure shows that people under pressure can experience narrowed attention, reduced working memory and greater reliance on mental shortcuts. In practical terms, high levels of urgency can make it harder for people to pause, fully evaluate risk, consider alternatives or challenge expectations. From this perspective, Bill's near miss was not simply a personal failure. It was a predictable response to the conditions in which he was working (Hashemian & Triantis, 2023).

Repeated exposure to risk without negative consequences can gradually increase risk tolerance. Over time, people may begin to see unsafe or degraded conditions as normal, not because they are ignoring risk, but because the system has allowed those conditions to persist. This can vary across teams when leadership expectations and safety standards are applied inconsistently. Teams led by leaders who maintain rig-

orous safe work practices are less likely to normalize deviation. Where variability is tolerated, risk-taking often increases, particularly in work with the greatest potential for serious injury. The same pattern can occur at senior leadership levels. What are often described as "pockets of excellence" may instead indicate that excellence has not yet become the organizational norm.

The Critical Role of Leadership

Because leaders influence the conditions under which work occurs, they play a critical role in shaping safe decisions. Good leaders strongly influence not only whether work gets done, but also how it gets done. A leader who seeks to understand work conditions, asks what is making the job difficult or unsafe, removes obstacles and acts with agility to correct system issues communicates a commitment to safety more powerfully than a slogan ever could. Conversely, a leader who focuses only on compliance with personal protective equipment requirements while leaving equipment problems, staffing constraints or design issues unresolved sends a contradictory message. Over time, this erodes trust and reinforces the belief that safety matters until it conflicts with production, cost or customer demands.

Within a HOP framework, leaders do not create safety by blaming workers after something goes wrong. They create

safety by shaping conditions before failure occurs and by responding to failure in ways that promote learning. This does not mean accountability disappears. Rather, accountability becomes stronger because it includes understanding and correcting the conditions that influence team decision making and safe execution.

A punitive response may appear decisive at first glance, but it often creates fear, resentment and silence, damaging psychological safety within the team or larger organization. If Bill is terminated without an examination of the system conditions that influenced his decision, the organization may simply place another technician in the same conditions and repeat the outcome. A learning-oriented response would sound different:

“Something in our system made this seem like the most efficient or reasonable option. Let’s understand what influenced that choice and fix those conditions together.” This type of response strengthens trust and psychological safety and supports true accountability. It encourages workers to report concerns, surface weak signals and participate in resolving the conditions that create risk.

A fundamental HOP principle is that human error is normal and inevitable. Because people will make mistakes, systems must be designed to anticipate error, minimize its conse-

quences through fail-safes and learn from it. Layers of protection are crucial because people often work safely despite the system, not because of it (Reason, 1997). Anyone working in an industrial environment understands that systems are flawed.

Leader Behavior Under Pressure

Leader behavior matters most when pressure peaks. Team members closely watch what leaders do when timelines tighten, equipment fails, customers are waiting or production falls behind. In these moments, leadership actions carry more weight than leadership messaging. Consistency and transparency are critical. Leaders must demonstrate alignment between what they say and what they do, especially during abnormal or upset conditions. Being present in the work area, addressing challenges, clarifying expectations and making real-time decisions that support safe work all reinforce a genuine commitment to safety. Collaborative exposure reduction beats safety cheerleading any day.

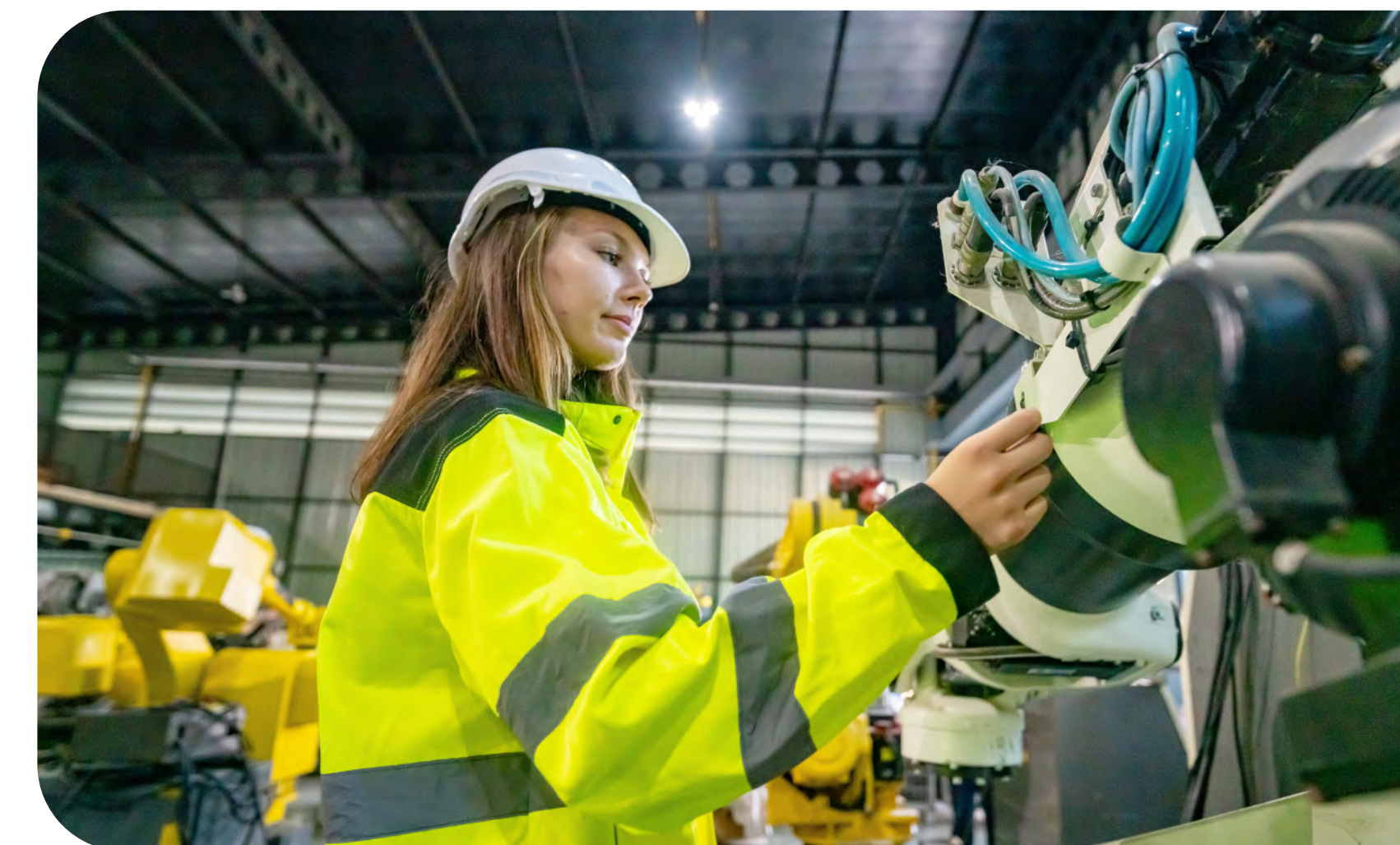
HOP-aligned leaders help balance operational goals and safety standards by engaging with the team where the work occurs, acting quickly to correct system issues and being explicit about how safe work will be performed when conditions are changing. They also engage team members by consider-

ing practical human performance factors likely to affect hazard recognition, error avoidance and safe decision-making. Most incidents reveal missed opportunities to detect critical errors in the making, and addressing those opportunities is the new frontier of safety excellence across industries.

Actions That Support Safe Work

Leaders strengthen safe work when they:

- Reduce error-prone conditions such as excessive overtime, time pressure, unclear expectations, equipment deficiencies, and unavailable tools.
- Clearly define with the team how work must be done during upset or abnormal conditions.



- Make it easier to do the job safely.
- Invite and praise team insights into real operating conditions.
- Actively support stop work authority without negative consequences.
- Act with agility to fix system issues and communicate progress.
- Model curiosity and learning rather than blame.
- Address root causes instead of forcing people to work around known problems.

Actions That Undermine Safe Work

- Signal unhelpful stress and urgency without clarifying how to do the work safely.
- Are absent from the work area during upset or abnormal conditions.
- Reward “getting it done” without understanding what it took to get it done.
- Treat deviations as personal failures rather than system indicators.
- Fail to ask workers what gets in the way of safe and reliable work.
- Allow degraded conditions to persist without visible action.

The path to a HOP-aligned organization is less about controlling individual behavior and more about shaping the

conditions that influence behavior. It requires leaders to stay focused on safety, especially when that value is tested by production pressure, customer demands, or operational disruption.

Creating a HOP-aligned organization requires more than system improvement. Workers also need practical skills to recognize exposure, pause before critical decisions and support one another in making safe choices. This is where a structured human performance approach helps translate HOP principles into daily practice rather than becoming a bolt-on program.

Turning HOP Principles into Practice: DEKRA's Making Safe Decisions® Model

While HOP provides a framework for understanding how systems influence behavior, organizations also need practical methods to help people apply these ideas in real time. Human performance improvement requires both system alignment and individual capability. One example of a structured approach to building these capabilities is DEKRA's Making Safe Decisions model

Making Safe Decisions is a neuroscience-based safety approach that operationalizes HOP principles by

The Making Safe Decisions® Approach



Seeing

- Noticing more exposures
- Detecting change

Thinking

- Interpreting implications
- Comprehending meaning

Doing

- Checking and verifying work
- Evaluating work

Moving

- Identifying and taking action on soft-tissue load factors

Teaming

- Validating team member's perceptions
- Approaching team members on exposures

strengthening organizational alignment and frontline decision-making. It unites frontline leaders and their teams around several core areas backed by the science of safe work execution. The integrated approach equips teams with practical tools to support best-practice hazard identification and safe decision-making while reinforcing a culture of learning.

Making Safe Decisions is grounded in several core beliefs about humans at work:

- People set out to do a good job and get things right most of the time.
- People are exposed to dangers in the environment and within themselves.
- As humans, we are prone to error, but we can learn skills and techniques that help reduce mistakes.
- Safe and reliable work requires a focus on the system rather than on fixing or blaming individuals.

The methodology for integration recognizes that people do not intentionally choose to work in an at-risk way. Rather, they are vulnerable to error because of how the brain works and how workplace conditions influence decisions and behavior. Stress, urgency, fatigue, distraction, cognitive biases, and other human factors can affect how people perceive risk and make decisions.

Importantly, Making Safe Decisions also includes leadership engagement. Through a HOP lens, leaders are engaged to

support efforts to control Brain-Centered Hazards, with a focus on how leadership behavior and organizational systems influence frontline decision-making. This leadership component aligns closely with HOP. Managers learn to identify and reduce error-prone conditions such as fatigue, distraction, time pressure, unclear expectations and equipment deficiencies. They are also encouraged to treat mistakes as opportunities to learn and improve the system rather than as opportunities to assign blame.

In this way, Making Safe Decisions helps bridge the gap between HOP philosophy and operational practice. It gives teams practical skills to recognize risks and manage human performance errors while helping leaders create conditions that make those skills easier to use. When these techniques are reinforced by leadership and embedded in teams' daily routines, organizations can achieve stronger risk alignment, prevent serious and catastrophic incidents, improve culture and engagement, and error avoidance. The stated value of safety is translated more consistently into actual decisions on the shop floor, even during production pressure, upset conditions and urgent customer demands.



References

Dekker, S. (2004). *Ten questions about human error: A new view of human factors and system safety*. CRC Press.

Hashemian, S. M., & Triantis, K. (2023). *Production pressure and its relationship to safety: A systematic review and future directions*. *Safety Science*, 159, 106045.

International Association of Oil & Gas Producers. (n.d.). *Human performance principles*.
<https://www.iogp.org/workstreams/safety/safety/human-performance>

Reason, J. (1997). *Managing the risks of organizational accidents*. Ashgate.

▶ Conclusion

Bill's near miss was not caused by a single risky decision. It emerged from a set of organizational and human factors that made a shortcut appear reasonable in the moment. Production pressure, deferred maintenance, missing guards, unclear expectations, work design limitations, and operator urgency all shaped the decision environment.

HOP teaches us that learning and improvement occur when we look beyond individual blame and examine the conditions that influence behavior. This does not remove accountability. It strengthens it by asking better questions: Why did this decision make sense at the time? What conditions made the unsafe work easier than the safe one? What signals were people receiving? What system weaknesses were allowed to persist?

Creating safe and reliable work requires two things: systems and equipment that support safe choices and people equipped with the skills to make those choices in real time despite internal and external prompts to the contrary. Ultimately, the goal is not simply to prevent people from making mistakes. The goal is to design work, lead work, and support people in ways that make the safe choice the best one, especially when pressure is highest.

Connect with Us:

Email us at osr.info.us@dekra.com
Call us: +1-805-646-0166 or visit
DEKRA.us/consulting