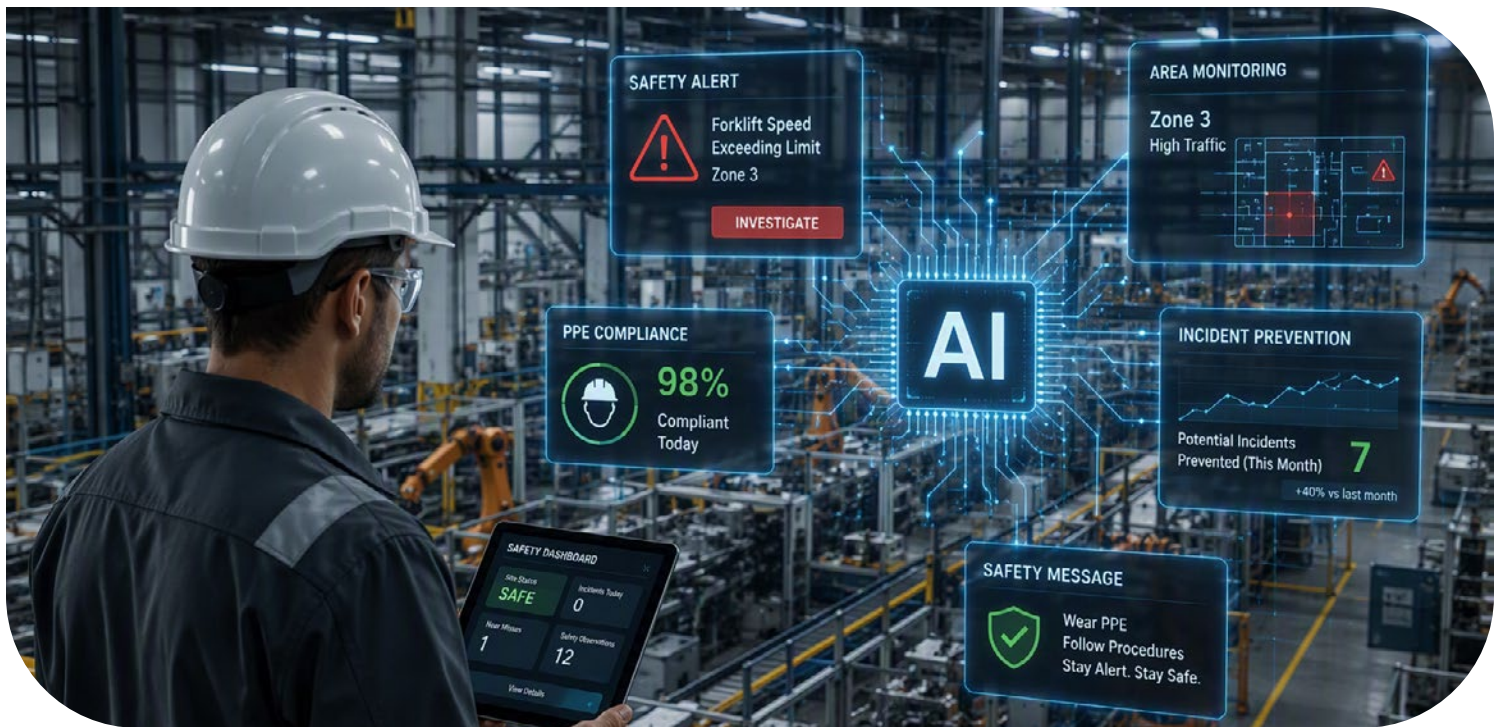




WHITE PAPER

# EHS Software

# Hazard Recognition and Observation Management

How connected hazard and observation reporting closes the gap between spotting a risk and stopping an incident.



# Executive Summary

Every organization that talks about being proactive instead of reactive on safety is really talking about one thing: what happens the moment someone notices a hazard. A blocked exit, a frayed cord, a missing guard, a worker without the right PPE. These moments happen constantly across every industry. The overwhelming majority of them are never reported.

This white paper looks at why that gap exists, what the research and leading safety voices say actually closes it, and how a connected hazard and observation workflow, from [AI-assisted recognition](#) through corrective action, training, and toolbox talks, turns a single noticed risk into an organization-wide improvement in safety performance.

Finding a hazard is only the first step. Preventing someone from getting hurt requires visibility, follow-through, and accountability. This paper walks through what it takes to build all three into an EHS program.



# The Reporting Gap: Why Hazards Go Unreported

Safety professionals rarely need to be convinced that hazard and observation reporting matters. The harder problem is participation. They see risk every day, but a combination of friction, fear, and unclear ownership keeps most of it from ever reaching a safety team.

The most common barriers to reporting include:

**Effort:** if submitting a report takes several minutes and multiple steps, most employees will not bother, especially for something that seems minor.

**Fear of blame:** employees hesitate to report a near miss or unsafe condition if they believe it could implicate themselves or a coworker.

**Invisible outcomes:** when nothing visibly changes after a report is submitted, employees stop submitting them.

**Unclear ownership:** safety can feel like a separate department's responsibility rather than something everyone contributes to.

A 2026 industry report covered by EHS Today found the persistent challenges facing EHS teams are less about convincing leadership that safety matters and more about execution: sustaining consistent practice amid limited time, competing priorities, and regulatory change. Reporting participation is exactly the kind of practice that erodes first when execution is strained.



# What Actually Drives Employees to Report

Two themes recur across interviews with safety leaders and industry research: reduce the friction of reporting and make sure people can see what happens after they do it.

## Reduce the Friction

Kay Yoder, Senior Vice President of Environmental Health and Safety at Southern Glazer's Wine and Spirits, described this directly in a recent interview with ISHN. Her approach centers on two things working together: streamlining reporting tools so participation requires minimal effort, and visible leadership from executives and managers who conduct regular safety walks and engage directly with the incidents employees raise.

*User-friendly tools that streamline near-miss reporting and hazard observation systems, paired with visible leadership presence, are what keep safety programs inclusive and engaging.*

— Kay Yoder, SVP of EHS, Southern Glazer's Wine and Spirits (ISHN)

**WORKFLOW MANAGEMENT**

HAZ9778  
AI Image Hazard Recognition

Details

Hazards Identified by AI

| HAZARD                                                                                                 | DESCRIPTION                                                                                                                                                                       | STATE        | REGULATORY REFERENCES                                                          |
|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------|
| <a href="#">Fall Protection Absence on Ladder</a>                                                      | Worker on the ladder is not using fall protection, which is necessary when working at heights, increasing the risk of falls.                                                      | Needs Review | • OSHA 1926.501(b)(1): Duty to have fall protection                            |
| <a href="#">Fall Protection Absence on Structure</a>                                                   | Worker on the structure is not using fall protection, which is necessary when working at heights, increasing the risk of falls.                                                   | Needs Review | • OSHA 1926.501(b)(1): Duty to have fall protection                            |
| <a href="#">Improper Footwear on Structure</a>                                                         | The worker on the structure is not using proper footwear for grip, increasing the risk of slipping.                                                                               | Needs Review | • None Applicable                                                              |
| <a href="#">Ladder user carrying and handling a large solar panel compromising three-point contact</a> | Ladder user carrying and handling a large solar panel, which can compromise three-point contact and ladder stability, increases the likelihood of losing balance and falling.     | Needs Review | • OSHA 1926.1053(b)(2): Maintaining three-point contact and safe ladder use... |
| <a href="#">No visible guardrails, midrails, or toe boards on elevated structure</a>                   | No visible guardrails, midrails, or toe boards on the elevated structure where work is being performed exposes workers to falls from height and potential falling object hazards. | Needs Review | • OSHA 1926.502(b): Guardrail systems<br>• OSHA 1926.501(b)(1): Duty to ha...  |

Today

Can you assess this image and add it to the hazard recognition modules

Hazards Identified: 4

1. Fall Protection Absence on Structure

Worker on the structure is not using fall protection, which is necessary

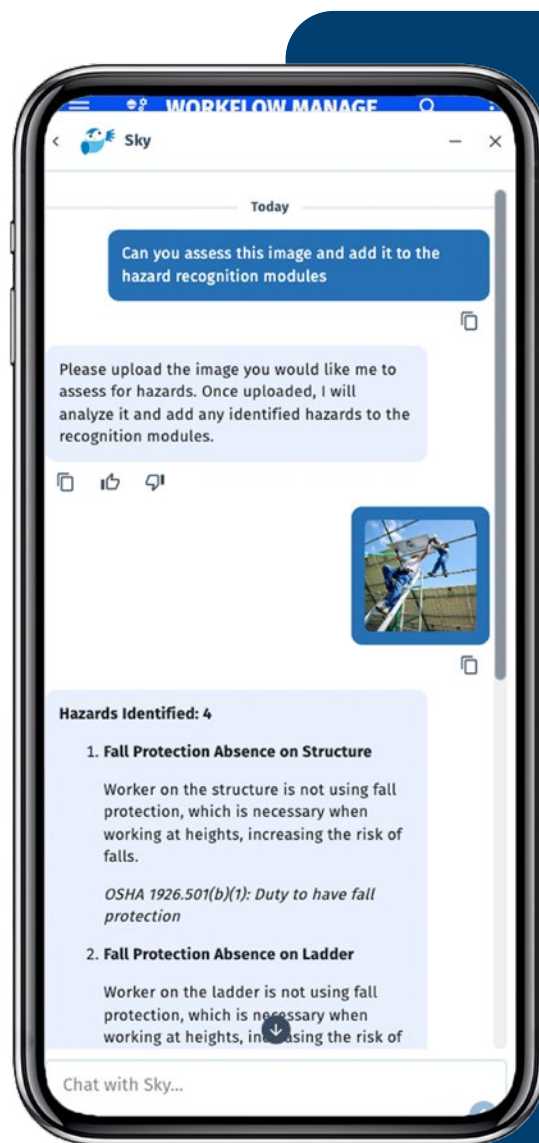
## Widen What Counts as Reportable

David Eherts, former Vice President of Global EHS at Allergan and a 2019 NAEM Lifetime Achievement Award recipient, took this reporting a step further with a program he called Good Observation. Rather than separating near misses, unsafe conditions, unsafe processes, and general suggestions into different reporting categories, he combined them under a single umbrella.

*Combining the reporting categories communicates to employees that we desperately want their knowledge, whatever form it takes. Once employees believe the organization is a learning organization, it stops mattering whether they are reporting a near miss, an unsafe condition, or just a good idea.*

— Dr. David Eherts, former VP of Global EHS, Allergan (NAEM)

The lesson here is one many programs overlook: employees often hesitate not because they do not want to report, but because they are unsure which category their observation belongs in. Removing that decision removes a barrier to reporting at all.



# Proof in Practice

This pattern shows up directly in organizations that have built engagement into their daily operations. At [Kirby Group Engineering](#), an engineering and construction contractor operating across Ireland, the UK, and mainland Europe, Associate Director of EHS Barry O'Brien built the company's Zero Harm program around the same principle of direct interaction with frontline workers.

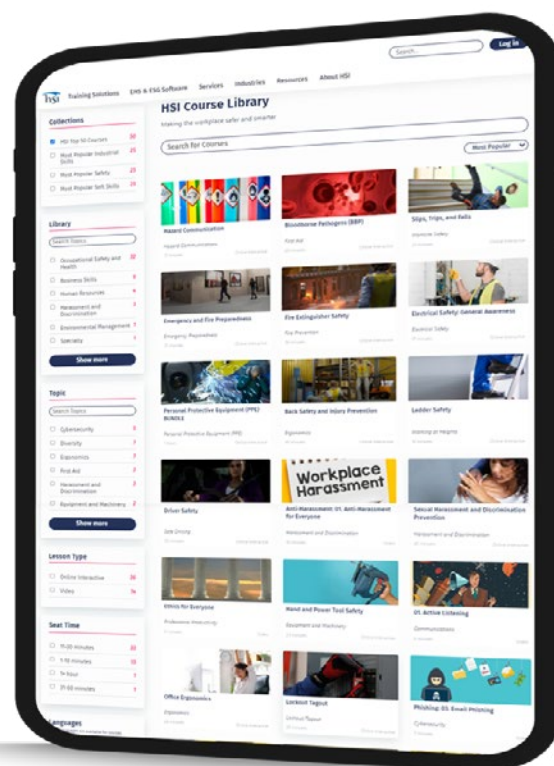
*It's about getting out and talking to people, interfacing and interacting with the guys on the ground. They're the ones most exposed to risk. If we're not engaging with them, understanding the job, and having those real conversations, then we're not truly managing safety.*

— Barry O'Brien, Associate Director of EHS, Kirby Group Engineering

At [Sabert Corporation](#), a global food packaging manufacturer, Global EHS Director Jeff Nelson tied engagement to a daily practice – requiring safety teams at every site to walk the floor and talk with employees. The result showed up directly in Sabert's own employee engagement survey, which recorded its highest safety scores as a direct result of that increased engagement, and near miss reporting rose even as recordable injuries fell.

*Our approach is an 'I care' philosophy. We care that the employees are safe, and everything else follows... Everybody's involved now. Everyone has ownership of safety.*

— Jeff Nelson, Global EHS Director,  
Sabert Corporation



# Closing the Loop: The Step Most Programs Skip

Collecting a report is only half the process. Safety and risk management guidance consistently identifies the same follow-up sequence: review the report, investigate if warranted, correct the hazard, document what was done, then close the loop by telling the original reporter what happened.

**That final step, closing the loop, is frequently the one that gets dropped, and it is also the one with the most influence over whether people report again.**

*Visible follow-through is the single strongest motivator for continued reporting. An incident report that gets filed and forgotten is worse than useless, because it creates a false sense of security while patterns repeat and risks grow.*

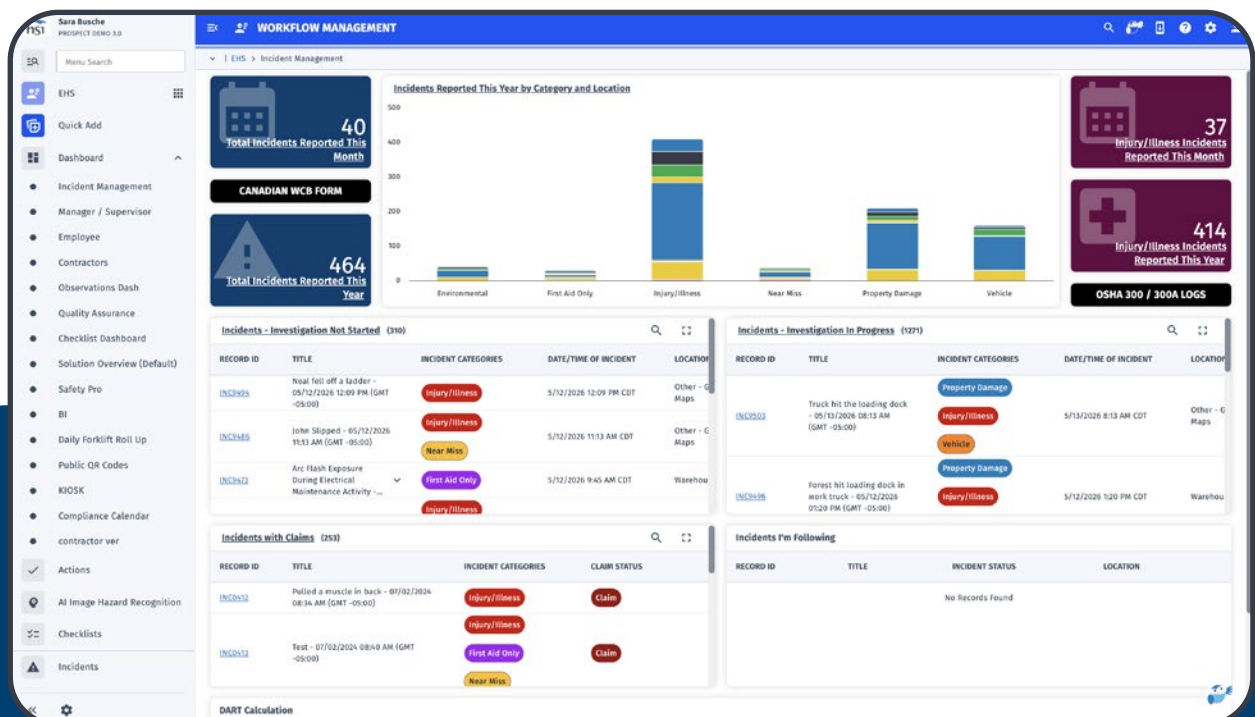
— Industry best-practice guidance on incident and hazard reporting programs



# A Counterintuitive Data Point

There is a pattern worth watching closely on any hazard and observation dashboard, and it runs opposite to what most people assume. When the volume of reported near misses and observations declines, the natural assumption is that safety is improving. But a drop in reporting can signal the opposite: weakening employee engagement and a fading safety culture, not fewer actual hazards. Comparing observation counts against incident rates over time, rather than looking at either number alone, is what separates a genuine improvement from a quiet decline in participation.

As a result, the reporting layer of an EHS platform matters as much as the collection layer. Organizations need to see the trend behind the numbers, not just the count, to know whether a decline in reports reflects genuine improvement or quiet disengagement.



# Closing the Loop, in Practice

The [Charles County Department of Health](#) saw this dynamic play out directly. For years, staff had informally raised concerns about needing on-site security, but without a system to capture and quantify those reports, the concern never became a documented pattern leadership could act on. Once hazard and incident reporting moved into a centralized platform, the volume of client-related incidents and safety threats became visible, and leadership deployed security guards for the first time in the department's history.

*People now see safety differently. When incidents are reported and actions are taken, like adding security guards, it builds trust in the system. That's the power of visibility.*

— Ranston Harvey, Public Health Emergency Preparedness and Response Administrator, Charles County Department of Health

A similar dynamic played out at [BESIX](#), a global construction and infrastructure group operating in 26 countries. After moving from disconnected spreadsheets to a centralized platform, one of the company's first measurable outcomes was an increase in reported incidents and observations, a result their team considered a win rather than a warning sign, because it meant real risks that had previously gone undocumented were now visible enough to act on.

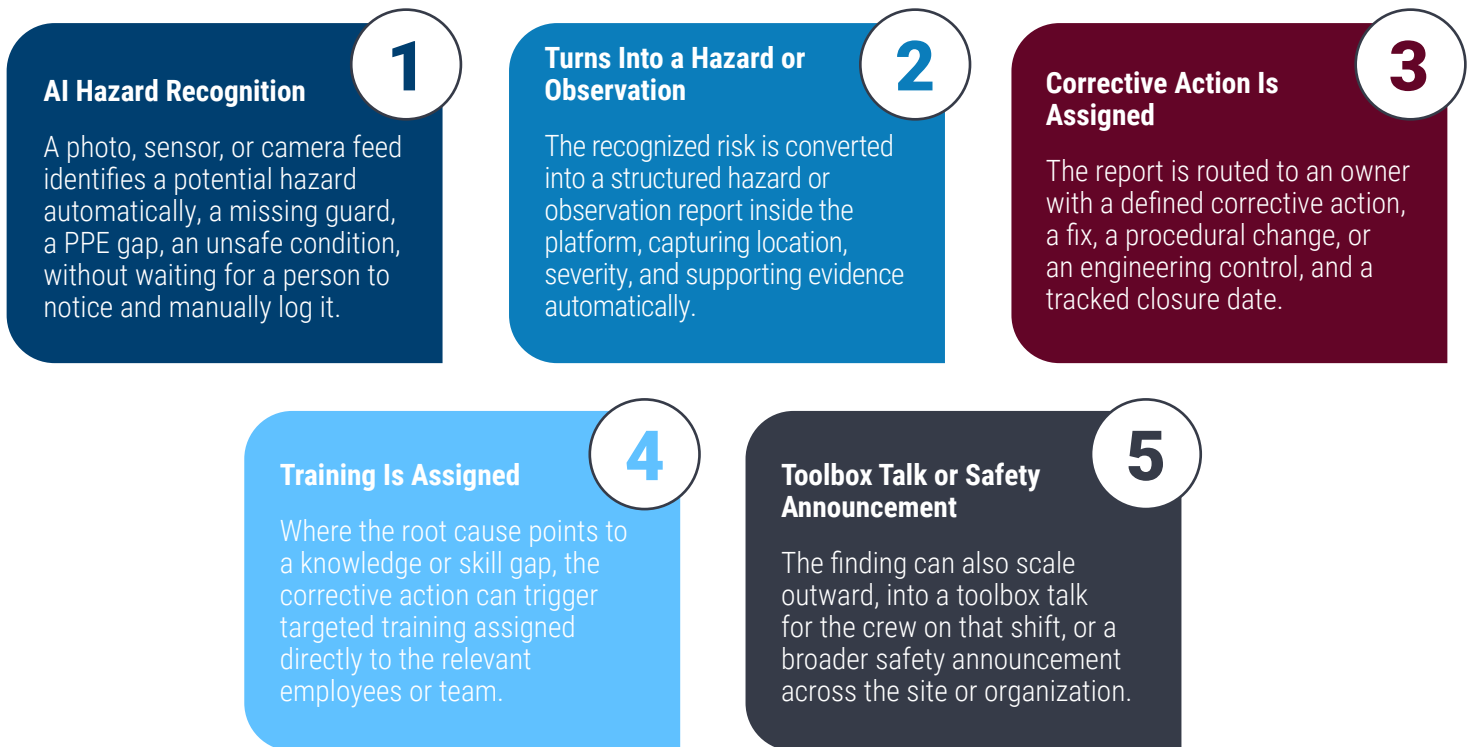
*Now that we have this treasure trove of information from all our projects, we can process that data in real time, identify our problem areas, and proactively put our focus on the highest risks before incidents happen.*

— Pimmie Aendenboom, QHSE Manager for Business Unit International, BESIX



# The Connected Workflow: From Recognition to Resolution

A modern hazard and observation program is not a single form. It is a connected sequence, where each step feeds the next and nothing ends in a dead-end inbox.



This sequence reflects long-standing guidance from occupational safety bodies. ANSI/ASSP Z10, the occupational health and safety management system standard published by the American Society of Safety Professionals, calls for corrective actions to be matched to root cause and ranked using the hierarchy of hazard controls, prioritizing elimination and substitution over administrative controls and PPE. OSHA does not mandate a specific investigation form or method, but the General Duty Clause of the OSH Act requires employers to provide a workplace free of recognized hazards. A documented hazard or near miss that is never investigated or corrected can itself become evidence a known hazard was left unaddressed.

The value of connecting these steps in one platform, rather than managing them across separate spreadsheets, emails, and paper forms, is nothing gets lost between recognition and resolution. Each step carries a timestamp, an owner, and a status, so leadership can see not just that a hazard was reported, but exactly where it stands.

## Why Acting on Hazards and Observations Pays Off

The case for investing in this workflow rests on both cost and culture.

### The Cost of Inaction

Workplace injuries and illnesses carry a direct and ongoing financial burden. Industry estimates put employer-paid workers' compensation costs in the U.S. alone at close to one billion dollars per week. Every hazard corrected before it causes harm is a cost avoided, not just a statistic improved.

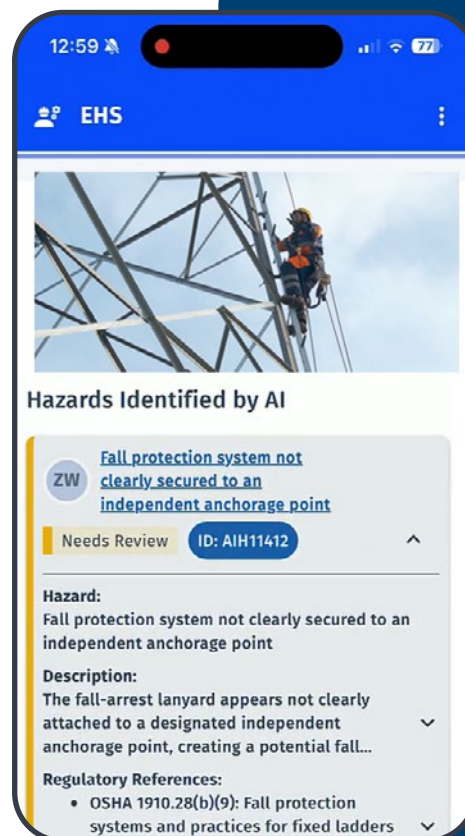
### Leading Indicators Over Lagging Ones

Traditional safety metrics, incident rates and lost-time injuries, are lagging indicators: they only reflect what has already gone wrong. Hazard and observation volume is a leading indicator. Comparing observation counts against incident rates over time reveals whether a program is working. A rise in observations alongside a decline in incidents is a strong signal that hazards are being caught and corrected before they cause harm. The reverse pattern, low observations and stable or rising incidents, is a signal that reporting participation, not workplace risk, needs attention.

DH Pace, a national door and dock provider with more than 3,300 employees, experienced this shift firsthand. Before connecting their safety data in one platform, the team could only judge performance after something had already gone wrong. After making a shift to real-time, leading-indicator data, DH Pace's Total Recordable Incident Rate fell from 4.8 to 1.46.

*The system provides data in real time, and more data than we ever had. This has allowed us to shift from assuming we were doing well based on lagging indicators, to knowing we're doing well because of leading indicators.*

— Chris Braamse, Corporate Safety Director, DH Pace



[Vigor Marine Group](#), a national shipyard operator working under U.S. Navy and Department of Defense contracts, used the same principle to validate a genuine safety milestone rather than assume it. When their Portland, Oregon shipyard reached 190 consecutive days without a recordable injury, a first for that location, Corporate Safety Director Robert Dearing was able to confirm the streak reflected real safety performance rather than reduced reporting, because near miss and first aid reporting had stayed high the entire time.

*For the first time, we could validate that the streak was real because our first-aids and near misses stayed high. Without that visibility, it would've taken hours to figure out if we were missing something.*

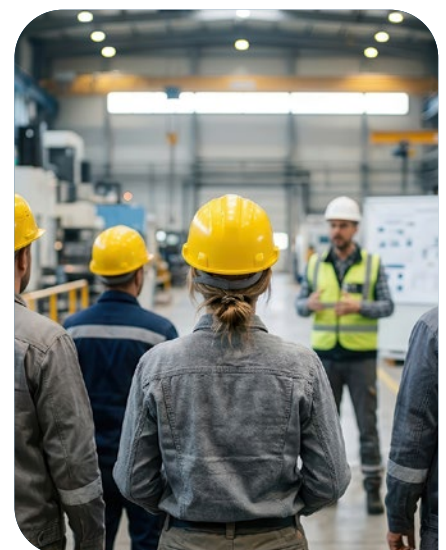
— Robert Dearing, Corporate Safety Director, Vigor Marine Group

## Training and Toolbox Talks Extend the Value of Every Report

A single hazard report does not have to end with one fix. Research from the CDC NIOSH on toolbox talk effectiveness has found that safety talks built around a narrative or real example, rather than a generic facts-only format, produce significantly greater knowledge gain among workers, particularly less experienced ones. A hazard or observation captured through [AI recognition](#) or employee reporting can become exactly that kind of narrative: a real, specific example that makes a toolbox talk or safety announcement more effective than a generic reminder.

At Vigor Marine Group, this connection between data and toolbox talks now happens weekly. Supervisors prepare their safety talks using live dashboards that show incident trends, action status, and risk patterns, turning what used to be a generic weekly reminder into a talk grounded in what is actually happening on their shipyard that week.

Connected this way, one observation can protect far more than the single worker or location where it was found. It becomes training content, a talking point for a shift briefing, and a data point in a trend analysis, all from a single input.



# Conclusion:

## Building This into Your EHS Program

The organizations that get the most value from hazard and observation reporting are not the ones running the most complex program. They are the ones that removed friction from the moment a hazard is spotted, and made sure every report visibly led somewhere.

That combination, low-friction reporting and visible follow-through, is what keeps a workforce engaged in its own safety. Bringing AI-assisted hazard recognition, observation management, corrective actions, training, and toolbox talks together in a single connected platform is how that combination becomes repeatable at scale, turning something a single employee noticed into a measurable, organization-wide improvement in safety performance.

Sources referenced in this paper include the [American Society of Safety Professionals \(ASSP\)](#), the National Safety Council, the National Association for Environmental, Health, Safety, and Sustainability Management (NAEM), ISHN, [OSHA](#) and the [CDC/NIOSH](#).

### About HSI



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