



2025 Safety & Risk Management Review

Strategic Action Plan for **2026**

Safety & Risk Management

Executive Summary

TRANSITIONING TO PROACTIVE RISK MITIGATION

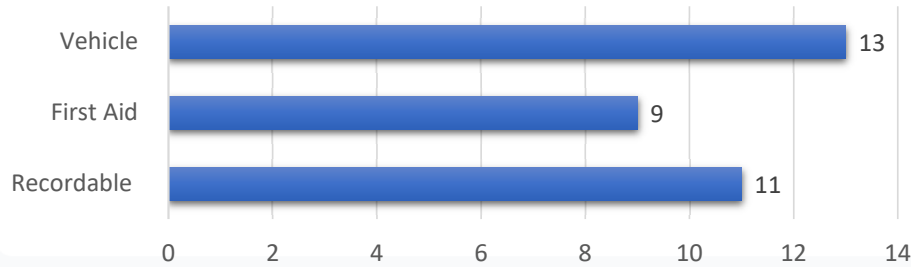
Lehigh County Authority
2025 Review & 2026 Strategy



2025 Incident Snapshot

DATA REVIEW

33 Total Incidents



The Strategic Shift

PHILOSOPHY



Reactive Reporting

Responding to incidents after they occur



Proactive Risk Mitigation

Data-driven decisions enabled by system integration

2025 Achievements

SUCCESSSES



Fire Resistant Clothing

Upgrade for live pump work (120V)



SMS System

Early gap ID & action tracking



Insurance

Shared-cost to Self-Insured model



Contractors

Qualified Program & ERM focus

2026 Strategic Focus

PRIORITIES

4 Safety Pillars

Hazard ID	Driver Training
Tool Standards	PPE & Visibility

Risk Management



Policy Development & Claim Management Integration



2025 Safety Results Overview

KEY PERFORMANCE INDICATORS & IDENTIFIED PATTERNS

Lehigh County Authority
Reviewing 2025 Performance



Total Injuries

20

Employee Incidents



Recordable

11

Requires Attention



First Aid Only

09

Minor Incidents



Fleet Incidents

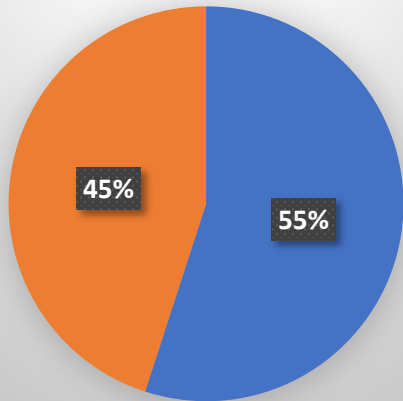
13

Vehicle / Asset Contact



Incident Composition

Recordable Incidents First Aid Incidents



Fleet vs. Safety

While total employee injuries tracked at 20, fleet incidents reached 13, highlighting a significant area for vehicle safety intervention in 2026.

Identified Risk Patterns

Analysis Findings



Ergonomic Strain Highs

~50% of recordable injuries were attributed to upper-extremity strains.

→ Root Cause: Manual handling & tool usage



Hidden Secondary Hazards

Several incidents occurred due to a lack of hazard awareness.

→ Root Cause: Incomplete hazard identification



Visibility Deficits

A primary driver for vehicle-asset contact events, where drivers failed to see stationary objects during maneuvering.

→ Root Cause: Blind spots & lack of spotters

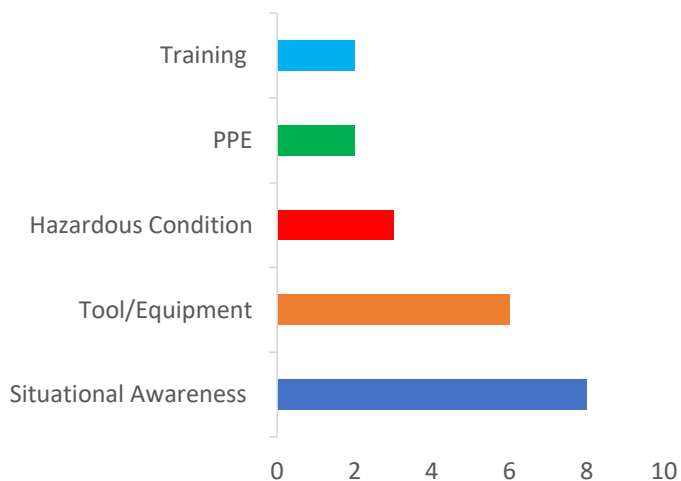


Root Cause Analysis - 2025 Employee Incidents

DATA-DRIVEN INSIGHTS FROM 20 INCIDENTS

Root Cause Categories

20 Total Incidents



Primary Driver
Situational Awareness

40% of Incidents

Secondary Driver
Tools / Equipment

30% of Incidents



Key Insight: Over 70% of employee incidents stem from human factors (awareness) and equipment suitability.



Corrective Actions Response Strategy

01 Employee Training

Enhanced curriculum focusing on situational awareness and decision-making in dynamic environments.

Addresses: 2 Incidents

02 Tool Assessment

"Right Tool for the Task" initiative ensuring equipment suitability before work begins.

Addresses: 6 Incidents

03 PPE Standardization

Unified personal protective equipment requirements across all operational units.

Addresses: 2 Incidents

04 Hazard Identification

Mandatory point of work assessments to identify risks before they become incidents.

Addresses: 8 Incidents

Strategic Alignment

These corrective actions directly support our **2026 Goal** of moving from reactive reporting to proactive prevention, specifically targeting the high volume of situational awareness incidents.



Prevention Focus



Key Gaps & Targeted Responses

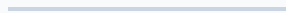
CONNECTING FINDINGS TO STRATEGIC SOLUTIONS



2025 Identified Gaps

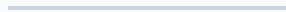
Ergonomic Strain

High frequency of upper-extremity injuries indicates manual handling risks were missed.



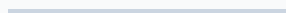
Hidden Secondary Hazards

Several incidents occurred due to a lack of hazard awareness.



Visibility Deficits

Vehicle-asset contact events driven by poor visibility and lack of spotter awareness.



Strategic Responses



Pre-Task Safety Assessment

Launch Point of Work Assessment to formally identify physical constraints before lifting.



Formalized Hazard ID

Mandatory secondary hazard checks integrated into daily workflow start-up procedures.



Visual Safety Baseline

Standardize PPE with 5-point breakaway vests and mandatory head/eye protection policies.



2026 Strategic Emphasis

We will close the loop by directly addressing **Training Content** and **Hazard Analysis** gaps identified in our root cause analysis process.

2026



Achievement #1: FR Clothing Program

ENHANCING WORKER PROTECTION

Lehigh County Authority

2025 Success Stories



Uniform Upgrade

Investing in advanced protective gear for our frontline operators to mitigate electrical hazards.

Risk Reduction Initiative



The Challenge (Context)

Plant operators are frequently required to perform maintenance work on live pumps operating at **120 volts**. Previous uniforms offered insufficient protection against potential electrical arcs or thermal incidents in these high-risk zones.



The Solution

Implemented a comprehensive upgrade to **fire resistant everyday wear clothing** for all Plant Operators. This shifted safety from "task-specific add-ons" to a "passive, always-on" protection model embedded in daily uniforms.



The Impact

- ✓ Drastically reduced risk of injury from burn and arc-flash exposure.
- ✓ Strengthened PPE compliance by removing the barrier of changing gear.
- ✓ Achieved full alignment with updated electrical equipment standards.



Achievement #2: Safety Management System

PROACTIVE OVERSIGHT & TRACKING

Lehigh County Authority
2025 Success Stories



EHS Insight

By digitizing our safety reporting process, we have turned raw data into a faster way to prevent future incidents.

System Improvement



The Challenge (Context)

Historically, identifying systemic gaps required lagging indicators and manual review. Leadership lacked real-time visibility into open action items, making it difficult to spot vulnerabilities in the safety system before an incident occurred.



The Solution

Implemented a digital **safety data management system (EHS Insight)** to centralize data. This platform provides leadership with tools to identify gaps early, assign clear ownership for corrective actions, and monitor due dates through automated tracking.



The Impact

- ✓ Early warning system where incident data flows directly into database.
- ✓ Increased accountability with transparent action tracking for all leadership levels.
- ✓ Supports critical strategic shift from reactive reporting to proactive risk mitigation.



Achievement #3: Insurance Transformation

STRATEGIC RISK ALIGNMENT

Lehigh County Authority
2025 Success Stories



Self-Insured Model

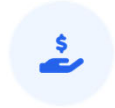
Transitioning from a shared-risk pool to a tailored insurance program that focuses directly on LCA's specific profile.

Financial Control



The Challenge (Context)

The previous shared-cost program exposed LCA to the risk profiles of other agencies, including those with higher degrees of risk associated. This model diluted our ability to control costs based on our own safety performance.



The Solution

We completely revamped our insurance program, shifting to a **self-insured process**. This strategic move aligns our coverage directly with Lehigh County Authority's actual operations rather than a blended average of multiple municipalities.



The Impact

- ✓ **Direct Cost Focus:** Financials now reflect LCA-specific risks only.
- ✓ **Improved Control:** Greater transparency in financial management.
- ✓ **Risk Alignment:** Insurance strategy now matches our operational reality.



Achievement #4: Contractor Qualification Program

Lehigh County Authority

2025 Success Stories



VENDOR PARTNERSHIP & RISK CONTROL



Third-Party Oversight

Strengthening our contractor ecosystem through rigorous qualification standards and insurance management.

External Risk Management



The Challenge (Context)

Managing third-party risk requires more than just trust. We identified a critical need to strengthen oversight of contractors to ensure they meet our safety standards and carry adequate insurance, reducing LCA's liability exposure.



The Solution

Partnered with a specialized vendor to revamp our qualification program. The new system focuses on **enterprise risk management principles**, tracking key risk indicators, and automating insurance certification management.



The Impact

- ✓ Significantly reduced third-party risk exposure through improved vetting.
- ✓ Improved compliance rates with automated insurance tracking.
- ✓ Enhanced quality control by ensuring only qualified partners work on LCA sites.



2026 Strategic Priorities

FOUR PILLARS OF SAFETY TRANSFORMATION

01



Enhanced Hazard ID

Proactive Detection

- Launch Pre-Task Safety Point of Work Assessment.
- Implement mandatory secondary hazard checks before work begins.
- Specialized focus on valve-turning risks and isolation.



Driver & Vehicle Safety

Fleet Excellence

- Deploy "Precision Maneuvering" driver training courses.
- Standardized tie-downs for heavy equipment on trailers.
- Specific controls for tail-swing and tight-quarter backing.

02



Equipment Standards

Reliability & Safety

- Standardize Monthly Tool Inspection protocols.
- Apply safety-first filters to all new equipment procurement.
- Transition to ergonomic tools to reduce strain injuries.

03



Visibility & PPE

Personal Protection

- Mandate 5-point breakaway vests for all field operations.
- Strict enforcement of head and eye protection policies.
- Establish "Visual Safety Baseline" for all work zones.

04



2026 Strategic Priorities

RISK MANAGEMENT FOCUS AREAS



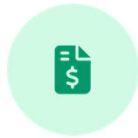
Policy Development

GOVERNANCE FRAMEWORK

Formalize risk management frameworks and documentation.

Clearly define roles, responsibilities, and accountability structures.

Establish specific risk thresholds and tolerance levels.



Claim Management

FINANCIAL CONTROL

Deploy enhanced tracking for all incident claims.

Direct tie-back of claims to root cause analysis data.

Develop and utilize mitigation playbooks for common claims.



Safety Management

SYSTEM OPTIMIZATION

Continuous tuning of the Safety Management System (SMS).

Conduct regular system audits to ensure data integrity.

Implement dashboards focused on leading (preventive) indicators.



Risk Reduction

STRATEGIC ALIGNMENT

Identify and remove barriers to lowering LCA exposure.

Align risk reduction strategies directly with safety pillars.

Execute targeted programs to address high-liability areas.



Data-Driven Decision Framework

CONTINUOUS IMPROVEMENT MODEL



Enabling Technologies



EHS Insight

Centralized data hub



Contractor Quals

Vendor risk portal



Claims System

Financial tracking



Dashboards

Real-time analytics



Conclusion & Commitment

BUILDING A SAFER FUTURE

2025 STARTING POINT

20 Incidents

Reactive Reporting

TRANSFORMATION
JOURNEY



Proactive
Mitigation

2026 DESTINATION

Systematic
Prevention



Our 2026 Vision

A proactive, integrated approach where safety and risk management create durable barriers against harm.



Call to Action: Next Steps

Leadership Reinforcement

Champion the shift from reactive to proactive. Model safety behaviors and validate new policies in the field.

Team Engagement

Utilize EHS Insight and Pre-Task Safety tools daily. Improve reporting on hazards before they become incidents.

Disciplined Follow-Through

Monitor and adjust strategies based on real-time data.