

Industrial Safety Intelligence

Executive Summary – EHS Performance Review

Business Context

The organization recorded **200 workplace incidents**, including **156 lost-time injuries**, indicating a **material safety and operational risk** across multiple sites and departments. While formal audit scores remain relatively strong (average **84/100**), frontline safety performance is not aligned with compliance results.

The **Lost Time Injury Frequency Rate (LTIFR) of 12.25** and an average **severity score of 2.28** show that incidents are not only frequent, but increasingly severe — creating exposure to productivity loss, legal risk, and higher insurance and compensation costs.

Key Safety Indicators

Metric	Current Value
Total Incidents	200
Lost-Time Injuries	156
LTIFR	12.25
Average Severity Score	2.28
Near-Miss Ratio	0.43

Training Completion	41%
Non-Compliances	120
Follow-Up Closure Rate	78%
Average Audit Score	84 / 100

Risk Interpretation

More than **54% of all incidents are high-severity**, meaning injuries are more likely to result in lost workdays, medical treatment, or long-term health impact. The critically low Near-Miss Ratio (0.43) suggests a culture of under-reporting; hazards are likely only being captured once an injury occurs, missing opportunities for proactive prevention.

The **Production department** contributes the largest share of **incident volume and lost time**, with **Plant A** emerging as the highest overall risk location despite relatively strong audit performance. This indicates that **formal compliance is not translating into safe behavior on the shop floor**.

Primary Drivers of Risk

The leading causes of incidents are operational and behavioral in nature:

- **Unsafe lifting**
- **Missing machine guards**

Built with: Power BI Desktop | **Data Source:** Excel | **Modeling:** Star Schema with 3 Fact Tables | **Key Techniques:** DAX Time Intelligence, Forecast Modelling, and Cross-Report Drill-through.

- **Wet or slippery floors**
- **Failure to wear PPE**

These factors explain why serious injuries continue even when audit scores are high.

Training & Compliance Gap

Only **41% of employees currently hold valid safety training**, and a Data modelling indicates a 'Training Cliff' in Q3/Q4, where certificate expiry will exceed renewal rates, potentially increasing incident frequency if not addressed immediately.

This means a large portion of the workforce is operating without up-to-date authorization for high-risk tasks — a direct contributor to both injuries and non-compliance findings.

Management-Level Recommendations

To reduce injury risk and financial exposure, leadership should prioritize:

- **Targeted safety intervention in Production at Plant A**
- **Mandatory training completion before high-risk work**
- **Stronger enforcement of PPE and machine guarding**
- **Focused audits on unsafe lifting and housekeeping**
- **Active tracking of training expiry and near-miss trends**

Conclusion

The organization's current risk profile is not driven by lack of policy, but by **gaps between compliance and frontline execution**.

By integrating audit, training, and incident data into a single risk view, management can shift from reactive reporting to **proactive accident prevention**.