Measuring Health and Safety Performance with KPIs Training Course

23 - 27 Nov 2026

Boston

7500 € (Per Person)

Ref: #HSE5586_107879

Course Introduction / Overview:

This training course provides a comprehensive framework for developing, implementing, and managing effective Key Performance Indicators (KPIs) to drive health and safety excellence. Moving beyond traditional reactive metrics, this program emphasizes a modern, proactive approach to safety management. Participants will learn to create a balanced set of leading and lagging indicators that not only ensure compliance but also foster a genuine culture of safety within the organization. As discussed by authorities like David L. Goetsch in his seminal work, "Occupational Safety and Health for Technologists, Engineers, and Managers," the true measure of safety performance lies in preventing incidents before they occur. This course, offered by BIG BEN Training Center, translates that academic principle into practical application. We will explore how to align safety KPIs with overall business objectives, use data analytics for predictive insights, and effectively communicate performance to all stakeholders. This journey from A to Z will equip professionals with the skills to transform their safety monitoring from a simple data collection exercise into a strategic tool for continuous improvement and risk reduction, ensuring a safer and more productive work environment.

Target Audience / This training course is suitable for:

- Health and Safety (HSE/EHS) Managers and Specialists.
- Operations and Production Managers.
- Site Supervisors and Team Leaders.
- Human Resources Professionals.
- Quality Assurance and Control Managers.
- Risk Management Professionals.
- Project Managers and Engineers.
- Corporate Executives and Senior Leadership.
- Compliance Officers and Auditors.
- Anyone responsible for workplace safety performance and reporting.

Target Sectors and Industries:

- Construction and Engineering.
- Manufacturing and Industrial Production.
- Oil, Gas, and Petrochemicals.
- Healthcare and Pharmaceuticals.
- Logistics, Warehousing, and Transportation.
- Power Generation and Utilities.
- Hospitality and Facilities Management.
- Governmental bodies and public sector organizations.
- Mining and Heavy Industry.
- Aviation and Maritime.

Target Organizations Departments:

- Health, Safety, and Environment (HSE/EHS) Department.
- Operations and Production Department.
- Human Resources Department.
- Quality Assurance and Quality Control (QA/QC).
- Project Management Office (PMO).
- Risk Management and Compliance Department.
- Facilities and Maintenance Department.
- Corporate Strategy and Planning.
- Internal Audit Department.
- Supply Chain and Logistics.

Course Offerings:

By the end of this course, the participants will have able to:

- Develop a strategic framework for health and safety performance measurement.
- Distinguish effectively between leading and lagging safety indicators.
- Design meaningful KPIs that align with organizational goals and risk profiles.

- Implement data collection systems for accurate and timely KPI tracking.
- Analyze safety data to identify trends, root causes, and areas for improvement.
- Create compelling safety performance dashboards and reports for management.
- Utilize KPIs to drive proactive safety initiatives and behavioral changes.
- Benchmark safety performance against industry standards and best practices.
- Integrate safety KPIs into the overall Safety Management System (SMS).
- Communicate safety performance effectively to all levels of the organization.
- Evaluate the effectiveness of safety interventions using performance data.
- Foster a culture of continuous improvement through data-driven decision-making.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be highly interactive, practical, and engaging, ensuring that participants can immediately apply their learning in the workplace. We move beyond traditional lectures to foster an environment of experiential learning and collaborative problem-solving. The course heavily utilizes real-world case studies and industry-specific scenarios, allowing participants to analyze complex safety challenges and develop robust KPI solutions. Group discussions, workshops, and hands-on exercises are central to the learning process, encouraging the exchange of ideas and experiences among peers from diverse backgrounds. Participants will work in teams to design a complete safety KPI framework for a hypothetical organization, from initial strategy to final dashboard presentation. Our expert instructors facilitate these sessions, providing personalized feedback and guiding participants through a structured process of discovery and application. This immersive approach ensures a deep understanding of not just the theory behind safety performance measurement, but also the practical skills required to implement and sustain an effective KPI system.

Course Agenda (Course Units):

Unit One: Foundations of Safety Performance Measurement

- Introduction to Key Performance Indicators (KPIs) in Health and Safety.
- The strategic importance of measuring safety performance.
- Understanding the difference between leading and lagging indicators.
- Linking H&S objectives to overall business strategy.
- Regulatory requirements and standards for safety reporting.
- Common pitfalls in safety performance measurement.
- Establishing a baseline for safety performance.

Unit Two: Developing and Implementing Leading Indicators

- Identifying proactive safety activities to measure.
- Developing KPIs for safety training and competency.
- Metrics for safety inspections, audits, and observations.
- Measuring employee engagement and participation in safety programs.
- KPIs for behavior-based safety (BBS) programs.
- Tracking the closure of corrective and preventive actions (CAPAs).
- Quantifying the effectiveness of risk assessments and hazard identification.

Unit Three: Mastering and Analyzing Lagging Indicators

- Understanding key lagging metrics (TRIR, DART, LTI, Severity Rate).
- Proper incident classification and investigation techniques.
- Conducting effective root cause analysis (RCA).
- Analyzing incident data for trends and patterns.
- Calculating and interpreting frequency and severity rates.
- The limitations and appropriate use of lagging indicators.
- Reporting on near misses and first aid cases.

Unit Four: Data Management, Analysis, and Reporting

- Establishing effective data collection processes and systems.
- Ensuring data quality, accuracy, and integrity.
- Introduction to safety data analytics.
- Designing effective safety performance dashboards.
- Techniques for data visualization to communicate insights.
- Preparing and presenting safety performance reports to senior management.
- Communicating safety performance to the workforce.

Unit Five: Advanced Strategies and Continuous Improvement

- Integrating KPIs into the Safety Management System (SMS).
- Benchmarking safety performance against industry peers.
- Using KPIs for predictive analysis and risk forecasting.
- Driving continuous improvement through KPI reviews.
- The role of KPIs in fostering a positive safety culture.
- Auditing and refining your KPI framework over time.
- Future trends in health and safety performance analytics.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can an over-reliance on lagging indicators inadvertently discourage the reporting of near-misses and minor incidents, and what KPI strategies can counteract this effect?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by moving beyond the mere mechanics of KPI calculation to instill a strategic mindset for safety performance management. While other programs may focus narrowly on defining metrics, our curriculum emphasizes the critical link between safety indicators and core business objectives, transforming safety from a cost center into a value-adding function. We dedicate significant time to the art and science of developing leading indicators, empowering participants to build proactive, predictive safety systems rather than simply reacting to failures. The course's strong emphasis on data analysis and visualization provides practical skills for turning raw data into actionable intelligence, enabling participants to craft compelling narratives that drive decision-making at the executive level. Unlike purely theoretical courses, our hands-on workshops and case study-driven approach ensure that participants leave with a tangible framework they can adapt and implement immediately within their own organizations. This holistic perspective, which integrates strategy, proactive measurement, data analytics, and cultural impact, provides a far more comprehensive and effective learning experience.