

Leadership Matters

Managing Fatal Risk Guidance



The prevention of illness and injury occurs concurrently in two distinct "spheres of control": one that combats those events of low consequence but high frequency; the other that focuses on the elimination of high consequence, low frequency lifechanging events – specifically those that may result in loss of life. The second of these "spheres of control" is the context for this document, which focuses on the pro-active actions and behaviors that may be exercised by managers of operations and site leadership teams to help eliminate the risk of fatalities.

Leadership Matters expresses the intent that leaders set the tone and direction of "What is Important" through visible and felt leadership. The visible actions and demonstrated behaviors of leaders reverberate much louder and longer than words. Modeling desired behaviors and "walking the talk" is an embodiment of the core values that proclaim to employees that "neither production nor anything else is more important than safety".

What is visible and felt leadership?

- Being authentic in your belief about every person going home safe and healthy everyday show you care about them.
- Engage and interact frequently with people and processes.
- Understanding your role as a listener, teacher, trainer, coach, motivator and mentor.
- Being committed and tenacious about spending time in the workplace.
- Actively coach others on behaviours and processes.
- Being clear about your expectations regarding safe work.
- Showing passion for what you are doing in the workplace.
- Recognizing individuals, teams or groups at every opportunity.
- Removing barriers for safe work and strong morale.
- Walking the talk your behaviours reflect the values of the organization.

Successful leaders communicate and actively support the belief that all injuries and illnesses are preventable, and that fatalities are unacceptable. Our aim is that the ICMM Leadership Matters will provide operations with practical leadership guidance on the condition of initiatives, processes and systems to realize the vision of zero fatalities.

Dr R. Anthony Hodge, President

Leadership Matters Managing Fatal Risk

Despite the implementation of comprehensive safety management systems by many companies in the mining and metals industry, fatal and potentially fatal events continue to occur with unacceptable frequency.

This document is intended for managers of operations, and aims to provide a tool to help reduce such events. A series of self-diagnostic prompts, built around an internationally recognized risk management framework, may assist in identifying gaps in safety management systems.

Leadership Matters: Managing Fatal Risk Guidance should be read in conjunction with ICMM's earlier report aimed at Chief Executives and corporate leaders – Leadership Matters: The elimination of fatalities.

Both reports provide checklist-based advice on three key themes:

- Live the vision of zero fatalities
- Focus on high potential events
- Recognize the fallibility of people and systems

In addition to the guidance provided here, separate issues around contract staff and change management must be considered. The reader is reminded that injuries and fatalities should be treated as separate parts of an overall drive to zero harm – a low or decreasing injury rate does not guarantee that fatal risks are being adequately managed.

This report does not provide a comprehensive guide to safety and risk management systems, but we believe it will help managers build upon their existing processes to enhance their management of fatal risk.

The structure of the document is consistent with *ISO 31000 Risk Management – Principles and Guidelines*, a six-step framework providing a uniform structure and ensuring the process is an integral part of management, embedded in the operation's culture and practices and tailored to the business process of the organization.

The six elements are:

- Communication and consultation
- Establishing the context
- Risk identification
- Risk analysis and evaluation
- Risk treatment
- Monitoring and review

The consistent use of this methodology enables people, at each level of the operation, to make informed decisions on risk treatment options.

By working through the risk management framework and answering the questions posed within each prompt, the operation manager can review current efforts to eliminate fatalities and address gaps in resources, staffing and systems – continuing the drive towards a goal of eliminating fatalities.

Leadership Matters Managing Fatal Risk

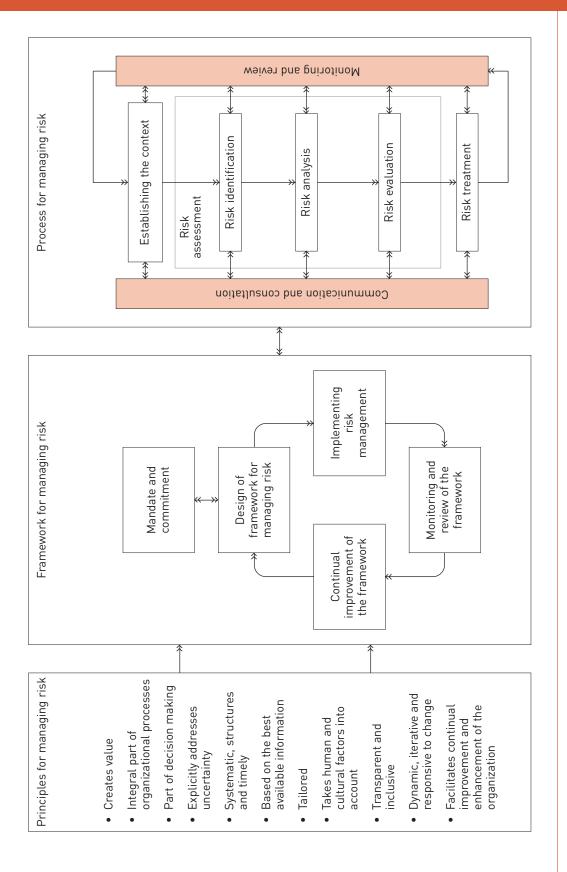


Figure 1: Relationships between the risk management principles, framework and process [after ISO13001]. Risk Management – Principles and Guidelines ISO 31000

What do we need?

A mechanism for all levels of the organization to be engaged in the identification of hazards and the elimination, control and mitigation of fatal risk.

What should I check?

- How have you involved operational expertise from different levels in the organization in analyzing fatal risk?
- How does the mechanism differentiate fatal risk from less severe risks?
- How do you know personnel undertaking the task are complying with the identified controls to manage potential fatal risk?
- How are individuals held accountable for implementation of fatal risk controls?

What do we need?

A system for providing ongoing education about fatality prevention.

What should I check

- What systems are in place to ensure personnel have received sufficient training and competency assessment for fatality prevention?
- How do you ensure the ongoing education of personnel such that they consistently understand the controls for the prevention of fatal events?

What do we need?

Defined, measurable fatality prevention actions for all senior levels that are communicated to the workforce.

- How are leaders made aware of their accountabilities for fatality prevention?
- How are these accountabilities communicated to the workforce?
- What metrics are in place to measure the quality and effectiveness of the actions taken by leaders responsible for fatality prevention activities?

Establishing the context

What do we need?

The right people, in the right jobs – with the competencies, intellect, passion and experience for leading fatality prevention.

What should I check?

- How do you ensure that a competent person is responsible for the process, and involves suitably experienced personnel, in identifying and analyzing risks and developing control measures?
- What processes are in place to select and train leaders to ensure they have the competencies, skills, intellect, commitment and experience to eliminate fatal risk in their area of responsibility?

What do we need?

A system that encourages full and accurate reporting without fear of consequence.

- How do you know that all potentially fatal events are reported?
- How does the way you respond to news of potentially fatal events encourage further reporting of such events from within the operation?
- What system is in place to facilitate and support an open reporting culture?

What do we need?

Systems that capture and classify events that have high potential, even if there is no injury or damage.

What should I check?

- How does the system capture and classify exposures to events having high potential for fatalities?
- How is it determined that the methodology applied at your operation to identify and control fatal risks is appropriate and adequate?
- How does the system avoid common failures such as:
 - overlooking a potential fatal risk in the assessment;
 - having a control that is inadequate;
 - manipulating the assessment outcome?

What do we need?

A mechanism to identify and learn from mistakes that regularly and openly shares the lessons learnt.

- When a fatal risk control action fails how is the information shared throughout the organization?
- How are risks identified through the fatality prevention program communicated and shared throughout the organization?
- How does the operation report and investigate minor incidents with the potential for fatal consequences?
- How are the preventative actions identified in potential fatal event investigations tracked to completion and reviewed for effectiveness?

Risk analysis and evaluation

What do we need?

Comprehensive fatal risk assessment procedures, including the identification of critical controls and performance standards.

What should I check?

- What risk methodology is used to identify and evaluate critical controls for fatal risks and set appropriate performance standards?
- What assurance process ensures the fatal risk prevention strategies and actions are being applied consistently across the operation?

What do we need?

Business initiatives that include an assessment of the contribution to fatality prevention.

- How has the fatal risk tolerability criteria been developed and how is it being applied?
- What processes exist for integrating fatal event prevention decisions into operations initiatives?
- How is the effectiveness of fatal risk controls measured?

What do we need?

Use of the hierarchy of controls – a continuous process to increase systematic fatal risk controls.

What should I check?

- How is the hierarchy of controls applied to reduce fatal risks at the operation?
- How do planning and budgeting processes take into consideration the requirement for the implementation of engineering controls to reduce fatal risks?
- What education process is used to ensure the understanding of the hierarchy of controls?
- Does the process encourage the assignment of multiple layers of controls?

What do we need?

Transparent criteria and processes for determining the consequences of non-compliance with fatal risk critical controls.

- How do you know people understand the rationale for fatal risk controls, and their accountabilities for compliance?
- What criteria and processes are there for determining the consequences of non-compliance with fatal risk controls? Are these transparent?

Monitoring and review

What do we need?

Measurable indicators of fatality prevention that are regularly reviewed.

What should I check?

- What leading and lagging indicators have been established to measure fatality prevention activities?
- How are these indicators monitored and reviewed and actions fed back into fatality prevention measures?
- How are external sources cross referenced to validate fatality prevention assumptions and controls?

What do we need?

Quality investigation, analysis and communication about the causal factors and control of actual and high potential events.

What should I check

- How is the quality of investigations and root cause analysis of potential fatal events assessed?
- What process exists for ensuring investigation findings are fed back into the fatality prevention program?
- How do you ensure independent personnel are involved in the investigation of actual and high potential events?

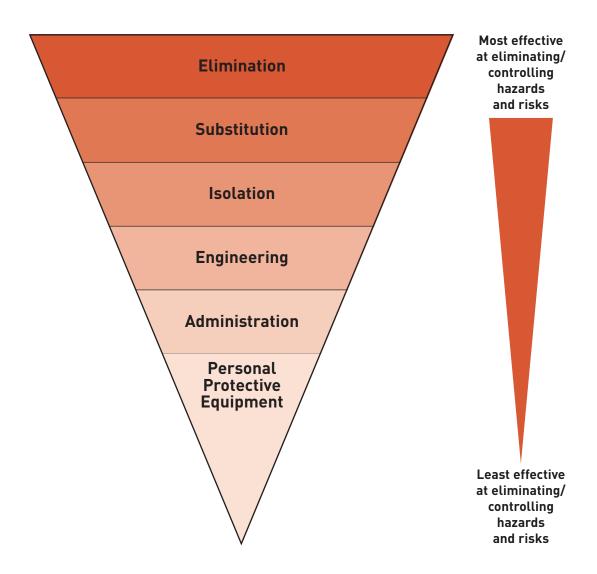
What do we need?

A verification process to validate that critical controls exist and are providing the intended benefit to our employees.

What should I check

 What process is in place to verify the critical controls identified in fatal risk assessments are providing the intended protection from fatal events?

Hierarchy of controls



The International Council on Mining and Metals (ICMM) is a CEO-led industry group that addresses key priorities and emerging issues within the industry. It seeks to play a leading role within the industry in promoting good practice and improved performance, and encourages greater consistency of approach nationally and across different commodities through its association members and member companies.

ICMM's vision is for a respected mining and metals industry that is widely recognized as essential for society and as a key contributor to sustainable development.

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