

Our commitment

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"Nothing is more important than the safety and health of the people who work in the steel industry."

worldsteel Board of Members

Definitions and calculations related to this publication are available in the Safety and health section of worldsteel.org.

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Nothing we do is more important than ensuring that everyone in our industry goes home safe and well, every day. The safety and health of our people is not just a priority — it is a core value that must never be compromised.

This commitment applies to everyone in the steel industry: employees, contractors, business leaders, suppliers, visitors, and customers alike.

Creating and maintaining safe, healthy, and resilient workplaces is a responsibility shared across our global industry. Through *visible felt leadership* (see the definition below), open engagement, and a relentless focus on risk prevention, we can reduce harmful incidents and promote wellbeing at every level of our organisations.

This guidance supports that commitment. While our principles have stood the test of time, our understanding of safety and health management continues to evolve. New insights — from incident learning, human and organisational performance, and emerging risks — allow us to provide additional context and guidance. This enhanced version reflects those advances, without changing the core values that unite the global steel industry.

Our aim is to help all companies — regardless of size or maturity — to take practical, meaningful steps to improve safety and health outcomes. Individual companies have different goals and procedures.

The principles can be adapted to meet specific contexts (internal and external) and corporate environments.

Visible felt leadership (VFL) in safety refers to leaders actively demonstrating their commitment to safety by being present, engaging with employees, and showing genuine concern for their wellbeing. It's more than just talking about safety; it's about leading by example and making safety a tangible and visible value.

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Six safety and health principles for the steel industry

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worldsteel's Board of Members believes that clearly defined principles result in an enhanced safety and health culture, as well as improved business results across the industry.

Through the adoption of the principles by the leaders of the member organisations, worldsteel and its members demonstrate their commitment to an injury-free and healthy workplace.

The principles are based on the experience, knowledge, company policies and values of worldsteel members.

Safety culture and leadership

The safety culture of an organisation is the product of individual and group values, attitudes, competencies, and patterns of behaviour that determine how people and systems act and respond in relation to risks and opportunities. Safety culture and leadership evolve gradually over time as people go through various changes, adapt to environmental conditions and solve problems. To create a truly robust safety culture, organisations need to proactively position safety as an integral value for all workers. Continuous learning — from both successes and setbacks — is essential to this process. To attain this level of safety culture, significant commitment and a drive towards continuous improvement are required (More here).

Occupational safety management

Occupational safety management promotes the safety of employees, contractors and visitors by preventing personal injuries in the workplace, and has a strong focus on primary prevention of exposure to hazards. It requires not only identifying hazards, but continuously anticipating how work is done, where it may vary, and what might go wrong. Prevention is most effective when people closest to the work are actively involved, and when lessons from everyday operations — not just incidents — are used to improve systems and controls.

Occupational health management

In its widest definition, occupational health management encompasses the physical and mental wellbeing of the people working in the company. Focus should be placed on the long-term effects of exposure to hazards. The health of workers has several determinants, including risk factors at the workplace leading to cancers, musculoskeletal diseases, respiratory diseases, hearing loss, circulatory diseases, stress-related disorders and others.

Equally critical are risks, such as chronic stress, fatigue, isolation, or lack of control over one's work, which can significantly affect mental health, engagement and performance. These risks must also be actively identified, monitored and addressed through a combination of

workplace design, organisational support, leadership behaviours, and access to appropriate support services. Promoting resilience and an environment where workers can share their concerns freely without fear of blame or punishment is fundamental (More here).

Process safety management

Process safety is a blend of engineering, operations and management skills focused on prevention of, preparedness for, mitigation of, response to, and restoration from catastrophic releases of hazardous substances or energy from a process.

The manufacturing of steel involves processes with intrinsic hazards that need careful management. The measures needed to control these hazards are often complex. The focus of process safety management is not limited to protecting the people within the company but also includes the environment, assets and surrounding community from events such as structural collapse, explosions, fires and toxic releases associated with loss of containment of energy or dangerous substances such as toxic gases, molten metal, chemicals and petroleum products (More here).









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Our safety and health principles



All injuries and work-related illness can and must be prevented.

A preventive focus on safety and health should be part of the organisation's strategic goals. Some important components of this are:

 Risk management is crucial to prevent work-related injuries and illness. All safety and health hazards should be identified, risks should be assessed and appropriate preventive and mitigative safeguards should be determined using technology and the hierarchy of controls. For new facilities, risk should be mitigated in the planning stage by incorporating effective safeguards.

Companies need to remember that we work in an inherently hazardous industry where safety and health risks can never be fully eliminated.

Risk management should evolve constantly and never be static. Companies should focus on identifying highrisk scenarios based on potential consequences.

Risk of events which have not yet occurred should not be underestimated, and their likelihood of occurrence should be considered based on the probability of failure of existing controls.

Health risks should be identified with consideration of the individual worker (for example, their physical capacity, existing health conditions, or level of experience), the nature of the activity, and the work environment.

Workplaces and processes should be designed to prevent or minimise exposure to adverse environmental conditions (extremes of temperature, excess or shortage of light, humidity, etc.), substances (dusts, toxins, fumes, etc.) and stressors (noise, vibrations, etc.).

 Safety performance cannot be assessed solely by the number of injuries. Consequence is frequently a matter of chance depending on many factors and lower numbers don't always indicate good performance. Management of leading indicators and preventive actions towards potential high consequence scenarios can contribute to preventing serious injuries and illness.

Effective barrier management throughout the process lifecycle ensures that barriers function as they are intended to, when needed, and includes taking early action when their effectiveness begins to degrade. In addition to injury data, organisations should track the condition of preventive controls and other leading indicators to assess safety performance more comprehensively.

Human and organisational performance (HOP)-based approaches are essential for excellence in safety and health. Human mistakes are inevitable. Systems should be made resilient with capacity to fail safely (with minimum consequences) when a mistake does occur.

When incidents do happen, investigations should go beyond identifying broken rules — they should seek to understand how work was done, what shaped people's decisions, and where systems or assumptions may have failed. Investigations should strive to find systemic root causes.





Management is responsible and accountable for safety and health performance.

Leaders need to be role models and consistently demonstrate visible felt leadership.

This lends credibility to each task, builds trust among all stakeholders and reinforces safety and health as an integral value.

Leaders should ensure a safe and healthy workplace by empowering and supporting people to identify and freely report potential risks and develop effective controls to keep them safe.

Priorities and objectives should be set based on risk, with leaders ensuring that the necessary resources are provided for effective safety and health management.

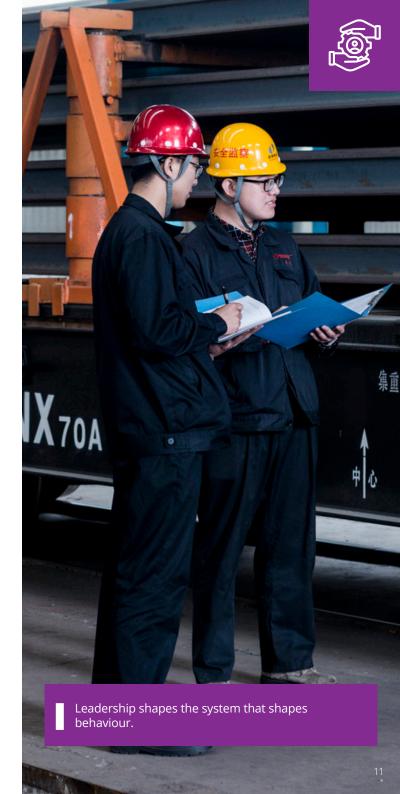
Leaders should use continuous encouragement and recognition to reinforce positive behaviours and initiatives.

By consistently recognising and reinforcing actions that contribute to reducing risks and caring for others, leaders help to sustain a proactive safety culture.

A psychologically safe environment — one where people feel free to speak up, ask questions and report concerns without fear of blame — should be provided to all employees and contractors

Employees and contractors should have easy access to platforms where they can share any concerns and suggestions for improvement without fear of repercussions.

While managers carry the ultimate accountability for safety and health performance, creating a safe and healthy workplace is a shared responsibility — one that depends on the active participation, insight and care of everyone.



Worker engagement and training is essential.

Everyone must be involved in a meaningful way, daily, to support prevention of injury and occupational illness.

Through constant exposure to safe practices, people will develop behaviour that ensures each task is performed safely. It is essential to learn from both what went wrong, and what went well.

Engaged and empowered employees will choose to work safely themselves and ensure others do as well. They will also feel comfortable contributing their ideas for safety and health improvement and act on safety incident risks and opportunities.

Workers' experiences and daily learnings should be considered when designing processes/workplaces, developing procedures and work instructions, and conducting risk assessments and investigations.

All employees and contractors should receive the necessary training to be competent in managing the safety and health risks associated with their jobs and know how to identify and report problems early on.

Training should reflect how work is done — including variability, trade-offs, and the realities people face — so that people are equipped to recognise and manage risks in the real world, not just the ideal one.

Organisational memory should be actively maintained through accessible repositories, mentoring, and structured onboarding processes, ensuring that lessons learned from past events are not lost across generations or geographies.





Everyone must take personal responsibility for the safety and health of themselves and others.

Safety and health management systems should apply the same expectations, rights and responsibilities for all individuals at the workplace, whether they are employees or contractors.

Every worker is empowered to stop any work or process if they believe it to be unsafe or unhealthy. In some companies, this could imply overcoming substantial cultural barriers to encourage such actions. It is a management responsibility to make sure that employees feel empowered and confident to take such a step. Safe behaviours and actions should be recognised.

Human error is normal, a part of our nature and usually reflects organisational or system weaknesses, not individual negligence. Learning from how work is done — including adaptations — helps us improve our processes and controls. At the same time, there must be clear expectations: deliberate, reckless, or malicious violations of safety rules must not be tolerated and must lead to transparent and fair consequences [see just culture definition on next page].



A just culture balances accountability with learning by creating a climate of trust and transparency which encourages people to speak freely. Instead of asking "Who caused the problem?", organisations look at what went wrong and how systems can be improved. It encourages organisations to view mistakes as opportunities for improvement rather than reasons to punish. While honest human errors might lead to extra training or system redesign, reckless behaviour that puts others at risk still has consequences.

Two foundational principles of a just culture are:

- The acceptance that human error is inevitable and organisations must review their practices, policies, and processes to manage the risk of mistakes.
- 2. Individuals within an organisation should be held accountable for their actions if they knowingly disobey safety protocol or procedure.

It describes three categories of behaviours:

- Human error refers to slips or lapses where someone is genuinely trying to do the right thing but makes a mistake.
- At-risk behaviour occurs when a person takes a shortcut or makes a choice without fully realising that it increases risk.
- Reckless behaviour is more serious and involves a conscious decision to ignore substantial and known dangers.

By distinguishing between these behaviours, organisations can respond fairly: coaching and training where appropriate, but firm consequences if risks are deliberately ignored.

[Source: What is Just Culture in HSE? Principles and Benefits | HSE Network]



Prevention of injuries and occupational illnesses creates a competitive advantage by having our most valuable resource – our people – at work.

Caring about the wellbeing of our people is the essence of successful leadership.

A safe and healthy workforce makes a better performing organisation. To invest in safety and health is to improve productivity and performance.

Potential serious injuries and fatalities and their root causes should be identified, and the allocation of resources for their prevention should be prioritised.

All employees and contractors should have easy access to physical and mental health support services. A healthy work environment and lifestyle should be promoted at all levels to enhance productivity, innovation, and trust in the organisation.



Safety and health must be integrated into all business management practices.

Safety and health should not be treated as being separate from business, or an overhead, but should be included and integrated into all new and existing business processes, for example, managing assets, production, projects and administration.

Safety and health-related goals must be defined for all functions and every individual must be held accountable for matters within their own sphere of influence.

Risk should be reassessed before any changes are applied, by cross-functional teams involving people with different levels of experience to ensure a thorough appraisal following a management of change (MoC) process.

Organisations' safety and health management systems should recognise that contractors may have their own safety and health management systems and should ensure that the organisations' requirements are practical and avoid unnecessary duplication with contractors' systems.













