

## Occupational Hazards and Risk Management in Canada's Mining Industry

The mining industry has long-since served as a principal catalyst for economic growth at both the national and global level, but has recently surged in importance as a key supplier of raw materials essential to the green energy transition. Nevertheless, **findings suggest that this vital organ is at risk of collapse**, with **deadly work conditions**, a **'persistent' skills shortage**, and a **tarnished reputation** among the forces at play.

To strengthen their market positioning in 2024 and beyond, many industry experts have called for the adoption of a **risk mindset** and the advancement of a **safety culture** at work. This involves not only the traditional aspects of risk management (e.g., identification, analysis, response) but also the **active involvement and cooperation of one's workforce**. It necessitates a more **collaborative and comprehensive approach to employee health, safety, and wellbeing**: one in which:

- Risks are openly and effectively communicated to employees from the top-down
- Employee concerns are heard and heeded from the bottom-up
- Employees feel well-informed and empowered to protect their own and their peers' wellbeing
- Leaders demonstrate a strong commitment to workplace safety and wellbeing
- Continuous learning, active listening, and adaptability are valued and exhibited by all

What this approach ultimately appeals to is the idea that occupational hazards—even in a workspace such as the mining industry's—demand **cultural changes** as much as if not more so than environmental ones. For the fact of the matter is that occupational risks cannot ever be completely eliminated; just as risk management is a continuous process, so, too is the development or evolution of risk. As such, a focus on policies and procedures without a dual focus on people and their perceptions will fail to make a dent in harm reduction in the long run.

People need to be aware of the risks to their health and safety. Moreover, they need to be made aware of what they can *do* in response—and be reassured that there *are* things they can do to manage and mitigate risk. When employees, inspired by their peers and leaders, feel **in control** of their environment and wellbeing and feel **supported** in their efforts to protect and maintain their health and safety, *that's* when the risk of occupational hazards and harm can be reduced.

### Cultivating a Risk-Aware and Safety Culture in the Workplace: Outlining the Role and Benefits of a Holistic Wellbeing Program

That said, for a safety culture to evolve in the workplace, researchers posit that several actors need to be involved. Specifically, this includes:

- **Leader/managers**
- **Employees/employee representatives**
- **External parties, e.g., health professionals and wellbeing solutions providers**

In order for a workforce to be truly risk-aware and capable of responding to said risk, employees and their leaders need to be **properly informed and educated**; need to **feel confident in and trusting toward their teams and management**; they need to be **open, honest, and transparent with one another**; and they need to have **access to the tools or resources** necessary to meet their **mental, physical, and practical needs**—lest they create new or augment existing disruptions in the workplace.

With that understanding, the need for partnering with a **wellbeing solutions provider** becomes clear. Through such a partnership, organizations—and their staff—gain access to both individual and organizational support services that aim to:

- Build resiliency
- Strengthen internal bonds
- Create clear lines of communication
- Identify risks and hazards in the workplace
- Promote awareness of potential or existing risks or hazards
- Enhance employees' coping skills
- Collaborate with leaders on effective prevention and response strategies tailored to their worksite

In the context of the mining industry, specifically, essential services include:

*Educational Support: Training, Learning, & Development Solutions*

**Employee/Management/Leadership Training:** Crucial to the establishment of a safe workplace environment is the awareness of what factors make the workplace safe or unsafe. Within mining worksites, some of the most prominent types of occupational risks or hazards include:

1. **Acute or late-onset disease** caused by long-term exposure to harmful chemicals or particles (e.g., cyanide, mercury, lead, silica, dust, methane, and smoke)
2. **Sensory impairment** from long-term exposure to loud noises, artificial lighting, heat stress
3. **Musculoskeletal disorders** brought on by ergonomic risks (e.g., awkward posture, repetitive motion, lifting heavy loads, prolonged crouching or bending)

4. **Physical injuries** sustained from accidents or falls, fire outbreaks, falling rocks, flooding, electrocution, trapping hazards, heights, and more
5. **Psychological trauma** sustained from workplace accidents or tragedies; violence, harassment, or assault (especially sexual); social or political unrest; and other toxic cultural conditions

To that end, employers could collaborate with providers to offer training on relevant topics like:

- Coping with critical illness
- Disability awareness
- Behavioral safety
- Stress management
- Hazard identification, communication, and response
- First aid
- Teamwork
- Respiratory protection
- Health monitoring
- Practicing healthy habits in the workplace
- Practicing healthy habits at home
- The importance of sleep, healthy eating, exercise, and rest
- Responding to bullying and harassment
- Sexual harassment in the workplace

And for managers and leaders, topics like:

- Leading through crisis
- Managing psychosocial risks at work
- Recognizing signs of trouble (and what to do)
- Resolving conflicts
- People-centric leadership

- Sustaining resilience during/after traumatic events
- Providing accommodations, support to distressed staff
- Effective communication
- Active listening
- Collaborative goal setting

**Wellbeing Ambassador Program:** Implementing a wellbeing ambassador program—in which exemplary employees are trained to identify signs of distress or danger, converse with or advocate on behalf of struggling peers, signpost other employees to the right support, and establish a clear line of communication between the C-suite and the ground floor—can also prove highly effective in mitigating risks on a mining worksite.

*Risk Identification, Assessment, and Monitoring Support*

**Biometric Health Screenings:** As mentioned, one of the most prominent risks inherent to the mining industry is that of occupational diseases caused by exposure to harmful substances. Oftentimes, these diseases will develop later in life, and/or will develop asymptotically until they progress to more advanced stages—**posing a serious threat to employees' health and wellbeing as they fail to receive a timely diagnosis and treatment needed to ward off severe consequences.**

That said, crucial to the prevention or effective mitigation of these diseases is the use of biometric health screenings, which can provide organizations with valuable insights on current and potential medical issues, workers' risks for preventable diseases, and possible strategies for improved health.

**Wellbeing Assessments:** In tandem with health screenings, workplace assessments, like a Workplace Stress Check or Resiliency Assessment are also essential for employers hoping to build a culture of safety as they measure the *impact* that various working conditions may be having on employees' mental and behavioral health—or even just the state of employees' mental and behavioral health as a whole. This allows employers to highlight major issues based on *employees' perceptions and lived experiences*, rather than generalized research which may not accurately represent the conditions of their specific worksite. This not only helps leaders to determine which interventions or solutions they should prioritize, but it also paints a clear picture of how employees can be involved in the process, highlighting strengths and opportunities for improvement when it comes to individual coping strategies, skills, and competencies.

**Compliance Line:** Further helping to foster a culture of safety—both physically and psychologically—compliance lines allow employees the opportunity to *safely* and *confidentially* raise concerns about ethical problems in the workplace to a trusted third party. This not only helps to further identify hazards like environmental issues, health violations,

violence or harassment, or interpersonal conflicts, but it also helps to boost morale and workplace culture by reaffirming leaders' commitment to transparency, safety, and integrity.

### *Mental, Physical, and Practical Health Solutions*

\*Once organizations have fostered employee awareness surrounding occupational risks and have identified hazards in their workplace, they can proceed to implement **targeted solutions** for improving and protecting employees' health, safety, and wellbeing, some of which may include:

- **Wellness Coaching:** To promote employees' overall lifestyle improvement, including in key areas like nutrition, physical fitness, sleep, stress management, tobacco cessation, and recovery from illness or injury.
- **Rehabilitation and Return-To-Work Support:** To address common psychosocial hazards like fatigue, burnout, chronic stress, injury, and illness, and help affected employees make a full recovery and complete return to work.
- **On-site Counseling Support:** To provide employees with a direct and easy way of accessing short-term, drop-in, and ongoing counseling support, along with meaningful referrals to their employer's full suite of wellbeing services.
- **Critical Incident and Trauma Response Teams:** To provide trauma-informed counseling and consulting support to employees and their managers during and following a traumatic workplace event, including in-the-moment support, community referrals, tip sheets, and post-incident planning.