Heat Awareness: Preparing for Summer Work in Canadian Workplaces



We have had a cold start to spring this year, but no matter how slowly temperatures rise across Canada, it is never too early for occupational health and safety (OHS) managers and HR directors to proactively address the risks associated with heat exposure during summer work. While Canadian summers are relatively short, they can bring intense and prolonged heat waves that pose serious health and safety concerns. Preparing for these conditions is a critical component of workplace safety, productivity, and regulatory compliance.

High-Risk Worksites: Where Heat Hits Hardest

Certain industries are particularly vulnerable to the effects of extreme heat. Construction and forestry worksites are among the most impacted due to prolonged outdoor exposure, physically demanding labour, and limited access to cooling infrastructure. Roadwork crews, agricultural workers, and utility maintenance teams also face elevated risks.

In construction, workers often operate heavy equipment or wear additional protective gear that traps heat, increasing the likelihood of heat stress. Forestry workers, frequently stationed in remote areas, may lack immediate access to

hydration stations or emergency services. These environments require tailored heat mitigation strategies, including adjusted work schedules and enhanced supervision.

Recognizing and Preventing Heat-Related Illness

Heat-related illnesses exist on a spectrum, from mild heat fatigue and cramps to more severe conditions like heat exhaustion and heat stroke. Early symptoms may include dizziness, headache, excessive sweating, nausea, and confusion. If left unaddressed, these can escalate rapidly into life-threatening situations.

Prevention starts with awareness and training. Workers and supervisors should be educated on the signs and symptoms of heat-related illness and understand the importance of early intervention. Employers should implement heat stress policies that include:

- Scheduled rest breaks in shaded or air-conditioned areas.
- Access to cool, potable drinking water.
- Acclimatization protocols for new or returning workers.
- Monitoring weather forecasts and adjusting workloads accordingly.

It is also essential to establish emergency response procedures, ensuring that workers know how to respond if a colleague shows signs of heat stroke, which requires immediate medical attention.

PPE and Practical Strategies to Stay Cool

Personal protective equipment (PPE) can both help and hinder

heat management. While necessary for safety, certain PPE, such as helmets, gloves, and high-visibility clothing, can reduce the body’s ability to dissipate heat. Selecting breathable, moisture-wicking materials and lighter-coloured garments can make a significant difference.

Cooling PPE options, such as evaporative cooling vests, neck wraps, and ventilated hard hats, are becoming more widely available and can be especially beneficial in high-heat environments. However, PPE alone is not enough. Employers should also consider administrative and engineering controls, such as:

- Rotating workers to limit exposure duration.
- Scheduling physically demanding tasks during cooler parts of the day.
- Installing fans or misting systems where feasible.
- Encouraging hydration with electrolyte-replenishing fluids.

Simple behavioural changes like wearing sunscreen, taking frequent breaks, and avoiding caffeine or heavy meals during peak heat can further support worker well-being.

Overlooked Work Environments: Hidden Heat Risks

While outdoor industries often receive the most attention, several indoor and less obvious worksites are also affected by summer heat. Warehouses, manufacturing plants, commercial kitchens, and even office spaces without adequate climate control can become heat traps during warmer months.

In warehouses and factories, machinery can generate additional heat, compounding the problem. Workers in these environments may not perceive themselves at risk, leading to delayed recognition of symptoms. Similarly, delivery drivers and

transit workers experience fluctuating temperatures throughout the day, often without consistent access to cooling.

HR and OHS leaders should conduct comprehensive risk assessments across all departments, not just those traditionally associated with heat exposure. This includes evaluating ventilation systems, workload intensity, and employee awareness levels. Tailored communication campaigns can help ensure all workers understand their risk and the steps they can take to stay safe.

Conclusion

Heat awareness is a shared responsibility that requires planning, education, and ongoing vigilance. By identifying high-risk worksites, implementing preventive measures, and addressing overlooked environments, organizations can significantly reduce the risk of heat-related illness. As climate patterns continue to evolve, integrating heat safety into broader occupational health strategies will be essential for protecting workers and maintaining operational resilience.