Winter Hazards in NCC TD Operations

While Saudi Arabia's winters are relatively mild compared to other countires, NCC T&D maintains a rigorous focus on safety during cooler months, especially for projects in elevated or desert environments prone to sudden temperature extremes. Though the winter season in KSA is brief, lasting only a few months, the risks associated with cold weather—such as thermal stress, reduced visibility, and equipment malfunctions—demand proactive mitigation. Even transient cold spells can introduce hazards, including rapid shifts between daytime heat and nighttime frost, which necessitate tailored strategies such as enhanced worker training, dynamic risk assessments, and the implementation of climate-responsive controls. By prioritizing preparedness and adaptability, NCC T&D ensures the well-being of all personnel, safeguarding operations against seasonal challenges while fostering a resilient safety culture year-round.

Common Hazards

Cold Stress:

Exposure to cold conditions can lead to health issues such as:

- > Frostbite: When exposed body parts come into contact with very cold temperatures or cold objects, tissues may freeze.
- > Hypothermia: When the body is unable to maintain its core temperature, symptoms such as persistent shivering, confusion, and impaired coordination can occur.
- Slips and Falls:
 - ➤ Icy, snowy, and wet surfaces, as well as mud during a thaw, can increase the risk of slips and falls. Even a minor slip on the ground might lead to days off work, while a fall from height can have far more serious consequences.
- Carbon Monoxide (CO):
 - Fuel-fired heaters may emit CO, a colorless and odorless gas that interferes with the body's ability to use oxygen. Even in small amounts, exposure to CO can be extremely dangerous.

NCC T&D Leaders Responsibilities

Under the client and NCC T&D HSE management system, leaders are required to take all necessary precautions to protect workers. Key measures include:

- Policy Development:
 - Develop a written health and safety policy specifically addressing protection from winter hazards.
- Work Practice Adjustments:
 - Adjust work practices to reduce exposure to cold conditions.
- Worker Education and Training:
 - Provide training that covers the identification of winter hazards and safe work practices in cold environments.
- Workplace Monitoring:
 - Regularly monitor environmental conditions to determine when cold weather poses a risk.
- Exposure Assessment:
 - Evaluate whether workers are exposed to harmful levels of cold and determine appropriate work/rest cycles.
- First Aid Preparedness:
 - Ensure that workers receive first aid training that includes responses to cold-related emergencies.

Worker Responsibilities

Workers must follow all instructions and training provided by the employer to safeguard their own health and safety. In particular, workers should:

- Stay Informed:
 - Be aware of the signs and symptoms of frostbite and hypothermia in themselves and their colleagues.
- Follow Safe Work Practices:
 - Adhere to all established safe work practices and procedures during cold conditions.
- Wear Appropriate Clothing:
 - Use the proper clothing and personal protective equipment as directed to minimize the risk of cold-related injuries.



Recognize Risk Factors:

Understand and identify the risk factors that can increase the impact of cold exposure, and report any concerns immediately.

Key Takeaways

- Preparedness: Despite milder winters, NCC T&D remains vigilant about seasonal hazards
- Adaptation: Tailor global winter safety practices to Saudi Arabia's specific conditions
- Continuous Monitoring: Regularly assess and update winter safety measures based on project experiences

For more information, refer to NCC T&D's relevant IMS procedures or consult our HSE Department for expert guidance and training resources.