



Innovation Alert

Sector:

All

Developer:

Various

Task:

Walking on slippery surfaces

The safety issue we had impacted the following users:

Anyone working on or walking on slippery surfaces

The safety issue we had was:

During the winter months or the rainy season walking surfaces can be difficult to navigate. Workers in the bush or log haulers may experience freeze/thaw cycles which make road surfaces or block terrain slippery, workers at a mill yard may find the traction on grating and walkways around the job site may vary causing an unexpected slip or fall.

Our innovative approach was:

Educating workers about the conditions that cause a slip or fall

- Statistics show the 60% of falls happen from the same level, meaning a slip or trip. This can be caused by wet surfaces, weather hazards or surfaces that do not have the same degree of traction in all areas.
- The slip can result from an unintended or unexpected change in the contact between the feet and the walking surface.
- Changing weather conditions can create icy surfaces on compact roadways, on stairways and equipment surfaces or a crust on snow laden blocks.
- Properly fitting footwear with the right type of sole materials and lug pattern increases comfort and prevents fatigue. Footwear worn indoors in heated locations may be more apt to slip when suddenly shifting to a cold outdoor surface
- Ground conditions or equipment surfaces may pose a hazard when exiting a vehicle or equipment
- From a biomechanics perspective, slips and falls are a result of a combination of how quickly a person is moving, angle (either of the surface or the angle of the foot when pushing off from one foot to another) and the applied force (again, the force of pushing off from one foot to another, jumping or stepping up/down).



Provide information on products to minimize slippage

- Whenever possible, eliminate slippery surfaces by clearing snow, chipping away ice or sanding walkways.
- Add-on components such as YakTrax or studded slip-on traction devices can help stabilize a worker when moving across slippery surfaces. However, using this solution for preventing a slip or fall outdoors may become the problem when returning indoors or to clear surfaces as they can potentially cause instability on clear surfaces! Use these products as needed and remove when appropriate.



Give practical examples of how to reduce your personal risk

- Use RADAR when you know you are walking in, around up/down slippery surfaces or getting out of a vehicle or equipment. Consider how the ground conditions may impact balance and traction.
- Use a three point contact on stairs, four point on stairs with ice or snow accumulation
- Slow down, keep your knees loose, widen your stance and shorten your stride when moving across slippery surfaces. Avoid carrying heavy loads.



- Try the "Penguin walk" – turn your feet out slightly, keep the heel weighted to avoid rolling forward on to the front of the foot and keep your arms out to the side for balance
- Think of yourself as a front wheel drive where the foot out front 'pulls' you forward instead of the rear foot 'pushing' forward.
- Consider a fitness program to improve muscle tone, balance and coordination.



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The difference it made to our safety operations was:

- Minimizing risks to workers of injury due to slips/falls
- Creating awareness around potential hazards and using that awareness to better our systems (ie: a pre-emptive sanding program that targets trouble spots before workers are exposed to slippery surfaces)

Insert pictures, diagrams or design features



Supporting resources:

[Preventing Slips, Trips and Falls](#)

[Selecting proper footwear for cold weather work](#)

[Walking Safely on Ice](#)

If you are available to be contacted regarding this information by other users please include the details below.

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Safety Council staff is available to help you in completing the Innovation Alert template.
Please contact us for assistance.