Home care workers are safer in winter weather with better footwear

Slides and falls on ice and snow are major occupational hazards for home care workers. They can cause pain and suffering for the workers, loss of continuity of care for home care clients, and large costs for employers. This study investigated whether footwear proven to be slip-resistant would reduce these kinds of injuries.

Wearing footwear proven to be slip-resistant drastically reduced home care workers’ slips and falls.

Home care workers feel the difference with better footwear: “I only [received] my boots yesterday . . . . So far, they have been a God send! . . . . As I had to hold onto & balance my [client], I was very thankful for my new boots. They gripped well and I had no difficulty navigating the otherwise unsafe areas.”

Project Overview
In the winter, home care workers face snowy and icy conditions as they travel between clients’ homes. These weather conditions pose a significant health and safety risk since the workers are at risk of slips and falls. These incidents are, unfortunately, fairly frequent. In addition to the pain and suffering from injuries that can result from a slip or fall on ice or snow – and the loss of income to workers when off work to recover – home care clients experience loss of continuity of their healthcare providers, and employers hear financial costs – estimated to be up to $25,000 for an injury resulting from a fall.

Wearing weather-appropriate footwear is therefore a significant factor for improving the safety of home care workers. However, other than marketing information provided by manufacturers and retailers, little information is available to workers when they are purchasing boots. Workers often end up with inadequate footwear for winter conditions.

Fortunately, in highly-controlled circumstances indoors, researchers at Toronto Rehabilitation Institute tested many different kinds of winter footwear, and rated their ability to resist slipping on ice and snow (see www.ratemytreads.com).

This study investigated whether highly-rated footwear from ratemytreads.com would be effective in preventing slips and falls in home care workers’ daily work.
What did we do?
In January 2018, 110 Personal Support Workers (PSWs) volunteered to take part in the study. Half the PSWs were offered the choice of one of two styles of top-rated footwear at the beginning of the study, and the other half were offered a cash payment at the end of the study equivalent to the cost of top-rated footwear.

Over eight weeks, both groups tracked their experiences with their winter footwear, how often they had walked on icy surfaces, and the number of slips and falls they had.

What did we find?
PSWs who wore the top-rated slip-resistant footwear reported some slips and falls during the test period, but overall, their risk of slipping was reduced by 68% compared to the other group, and their risk of falling was reduced by 78%. PSWs with slip-resistant footwear also reported positive experiences wearing them, and said they felt safer and more confident when working in icy conditions.

What is the impact?
This project built on previous winter footwear research to demonstrate that proper slip-resistant footwear can significantly reduce the rates of slips and falls in winter weather. This can not only reduce the risk of occupational injury for home care workers, but can also decrease the costs employers face when supporting worker rehabilitation and managing staffing shortages.

Future research will explore what factors may affect the uptake of an employer-sponsored initiative to implement slip-resistant footwear in the workplace.

Who are our collaborators?
Toronto Rehabilitation Institute – University Health Network

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This research was funded by the Ontario Ministry of Labour – Prevention Office, Toronto Rehabilitation Institute, and by SE Health.

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