

# COVID-19 PANDEMIC: A STAIR FALL PANDEMIC IN OLDER ADULTS?

Our long-term aim is to prevent home stair falls in vulnerable older adults.



## Authors

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This study would not have been possible without all the older adults taking part. School of Sport and Exercise Science, Faculty of Science, Liverpool John Moore's University, Liverpool, UK; NIHR ARC NWC, Liverpool, UK; Department of Primary Care & Mental Health, University of Liverpool, Liverpool, UK; Sefton Older People's Forum, Sefton, UK; Liverpool University Hospital NHS FT, Liverpool, UK

## INTRODUCTION

Stair falls in older people have dire consequences for the faller, their carer's, and the NHS [1].

The inactivity linked to home-confinement recommendations due to COVID-19 is a potential risk for home stair falls. This may be particularly severe for those from poorer socio-economic backgrounds [2], as they are more likely to have chronic diseases [3] and live in a home that poses significant threat to their health and safety [4, 5].

## OBJECTIVE

1. Explore the extent to which home confinement and inactivity due to COVID-19 impacted home stair fallers.
2. Understand whether socio-economic status explained some of the variance in home stair fallers.



## METHODOLOGY

An online and telephone survey was conducted with 164 UK residents aged  $\geq 50$  years between June and October 2021.

The online survey included:

- Postcodes to generate an Index of Multiple Deprivation (IMD) quintiles.
- Falls and near-falls before (June 2019 - 23 March 2020), since (23 March 2020 - October 2021), and after (12 April 2021 - October 2021) COVID-19 UK lockdown.

## ANALYSIS

Descriptive statistics were used and the main results were presented as percentages of studied variables.



A Kruskal-Wallis H test was used to test for differences in home stair falls between participants with different socio-economic backgrounds.

**MAIN FINDING**  
COVID-19 lockdown resulted in an increase in home stair fallers!

**NIHR**  
REFERENCES



Applied Research Collaboration  
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## RESULTS

70% of stair falls and near stair falls were experienced inside the participant's home environment (70%).



30% outside  
the home



70% inside  
the home

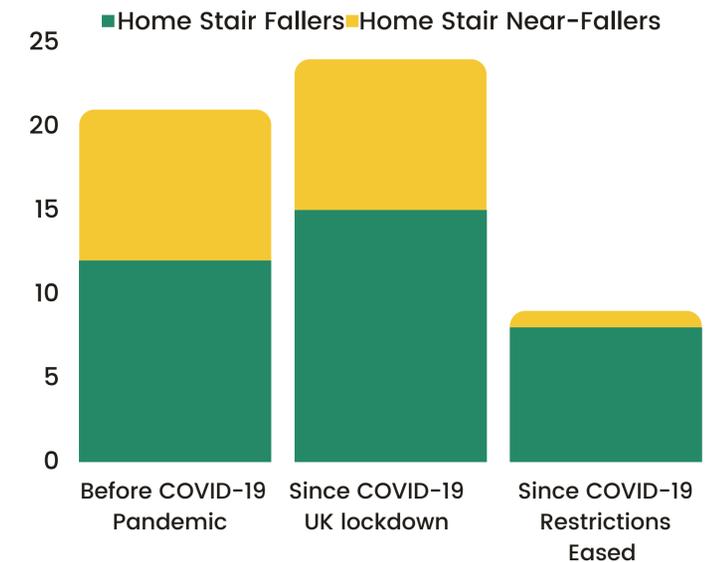


Figure 2. Number of home stair fallers and home stair near-fallers within three time periods

Figure 2 shows the number of home stair fallers and home stair near-fallers in the surveyed period:

- There was an increase of 25% in home stair fallers during the first UK lockdown.
- There was a decrease of 33% in home stair fallers since the UK lockdown restrictions eased.

There was no difference,  $p > 0.05$  in home stair fallers between the IMD quintiles (Figure 3).

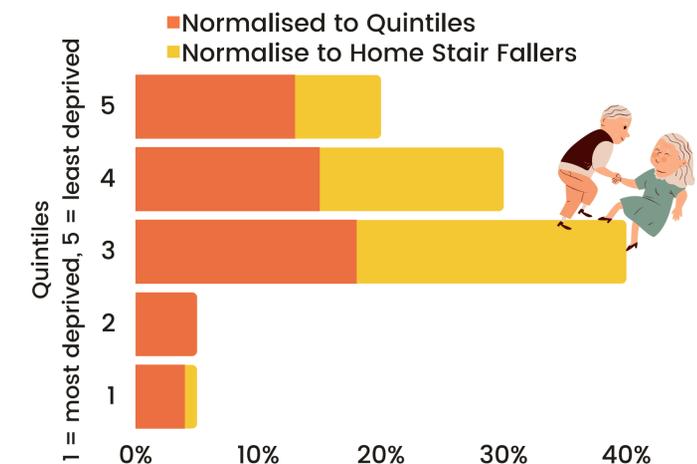


Figure 3. Sum of index of multiple deprivation (IMD) quintiles for home stair fallers

## CONCLUSION

We predicted that there would be more stair falls during COVID-19, especially in low socio-economic areas. We showed that COVID-19 did result in an increase in home stair fallers. However, no difference in stair fallers between the IMD quintiles. Therefore, further investigation is required to establish the specific circumstances under which the home stair falls occurred and the impact of housing-stock quality [4] on these falls during COVID-19.