

# Counteracting the Inactivity Epidemic: Should We Ring-Fence Paid Work Time for Physical Activity?

Mark P. Funnell,<sup>1,2</sup> Aiden J. Chauntry,<sup>3</sup> Mark J. Hutson,<sup>4</sup> William P. Tyne,<sup>5</sup> Kamlesh Khunti,<sup>1,2</sup> and Ash Routen<sup>1,2</sup>

<sup>1</sup>Diabetes Research Centre, Leicester General Hospital, University of Leicester, Leicester, United Kingdom; <sup>2</sup>NIHR Applied Research Collaboration East Midlands, Diabetes Research Centre, University of Leicester, Leicester, United Kingdom; <sup>3</sup>Department of Exercise and Sport Science, The University of North Carolina at Chapel Hill, Chapel Hill, NC, USA; <sup>4</sup>School of Sport and Exercise Science, Faculty of Life and Health Sciences, Ulster University, Coleraine, United Kingdom; <sup>5</sup>School of Life Sciences, Faculty of Medicine and Health Sciences, University of Nottingham, Nottingham, United Kingdom

## Physical Inactivity Is a Problem

Physical inactivity is one of the most persistent public health challenges, with inactivity rates among the global population increasing from 23% in 2000 to 31% in 2022.<sup>1-3</sup> As modern society is irrevocably geared toward making life more convenient, the physical demands of daily living have been diminished.<sup>4</sup> This shift has contributed to the rise of long-term conditions including cardiovascular disease, type 2 diabetes, musculoskeletal disorders, and depression.<sup>5,6</sup> Subsequently, the burden on healthcare services is large,<sup>7</sup> with many individuals now spending more years in poor health.<sup>8</sup> In the United States, physical inactivity is associated with 11% of aggregate healthcare expenditures, costing an estimated \$117 billion per year.<sup>9</sup>

Evidence shows that small increases in physical activity can have substantial health benefits.<sup>10</sup> However, one of the most commonly reported barriers to increasing physical activity is a perceived lack of time.<sup>11</sup> Whether due to genuine constraints—such as inflexible work schedules, caregiving, and commuting—or a lower prioritization of physical activity during leisure time,<sup>11</sup> the outcome is the same—physical activity is consistently sidelined. Pragmatic solutions to introduce physical activity into daily life are essential and must complement a busy lifestyle. We argue that ring-fencing time for physical activity during paid work time could provide a mutually beneficial opportunity, for both employees and employers, to achieve this.

## Why Target Work Time?

A full-time employee from ages 18 to 65 years will accumulate over 75,000 working hours—more than a tenth of a typical lifetime.<sup>12</sup> Around half of weekday sitting time occurs while working,<sup>13</sup> and office workers are sedentary for up to 71% of their working hours.<sup>14</sup> Work provides structure, predictability, and social community, all of which can support habit formation and long-term physical activity behavior change.<sup>15</sup> In addition, the rise of flexible work models, particularly since COVID-19, has removed many logistical barriers. For example, time saved from commuting can free up more time in

the day to incorporate physical activity, and the greater autonomy in managing one's schedule can allow for small bouts of physical activity throughout the day. Moreover, working from home can reduce the social pressures or perceptions of “not working” that might otherwise discourage activity in traditional office settings. Working time, whether in office, at home, or in hybrid settings, clearly presents a valuable opportunity to rethink and integrate physical activity into evolving daily work patterns.

## Ring-Fencing Work Time as a Solution

Relying on individual initiative and willpower is failing to increase population level physical activity levels. Instead, ring-fencing paid work time could provide employees with the opportunity and structure to engage in physical activity. Workplace health programs that rely on voluntary participation during unpaid breaks (eg, lunch breaks) often show low engagement and have mixed outcomes.<sup>16-18</sup> In contrast, movement behavior interventions implemented specifically as breaks during paid working time have largely shown positive effects on a variety of health outcomes,<sup>19</sup> including physical and mental well-being and reductions in musculoskeletal pain—one of the most prevalent issues among workers and the second leading cause of sickness absence in the United Kingdom in 2024.<sup>20</sup> It appears that when employees are provided dedicated paid time to be active, physical activity participation increases,<sup>21</sup> while common barriers, such as guilt, scheduling conflict, stress, and workload pressure, are likely to be reduced.<sup>22</sup> Ring-fencing work time for physical activity could help shift cultural norms and send a strong signal from employers that efforts to maintain health and well-being are valued.

## The Business Case

Supporting employee health should be considered an investment, not a cost. Poor workforce health drives up running costs through increased absenteeism, presenteeism, staff turnover, and decreased productivity. Absenteeism is estimated to account for ~29% of health and productivity costs,<sup>23</sup> and the costs associated with presenteeism, when employees are physically present but working below full capacity due to health issues, are likely much higher.<sup>24</sup> In 2024, in the United Kingdom, an estimated 149 million working days were lost because of sickness or injury.<sup>20</sup> In 2023, the UK economy lost an estimated £26 billion due to sickness absence and a further £57 billion from impaired productivity due to work-related mental health conditions.<sup>25</sup> Moreover, there are nearly 2 million people out of work due to sickness, many of whom would like to return to work with appropriate support.<sup>26</sup>

Chauntry  <https://orcid.org/0000-0001-6927-4737>

Hutson  <https://orcid.org/0000-0003-0064-6314>

Tyne  <https://orcid.org/0000-0001-6531-5669>

Khunti  <https://orcid.org/0000-0003-2343-7099>

Routen  <https://orcid.org/0000-0001-5651-4228>

Funnell (mpf13@leicester.ac.uk) is corresponding author,  <https://orcid.org/0000-0001-7473-5999>

Though employers may raise concerns about productivity, costs, workplace disruption, and cultural fit,<sup>22,27,28</sup> emerging evidence suggests the opposite. Studies have shown that replacing a small number of working hours with physical activity reduces absenteeism by up to 11%,<sup>29</sup> saves up to \$15 for every \$1 of associated cost,<sup>30</sup> and improves work performance and productivity.<sup>31</sup> These are likely a direct result of the well-evidenced health benefits of physical activity on mental and physical health. Employers already have legal obligations to protect workers from physical hazards like chemicals, machinery, or environmental risks under health and safety regulations. This raises the question: should employers also share responsibility in mitigating the well-documented health risks of prolonged sedentary behavior?

This responsibility is echoed in various national and international guidance. Public health agencies, such as The National Institute for Health and Care Excellence, actively recommend that employers support physical activity through formal policies.<sup>32</sup> The Royal Society for Public Health recommends a mandatory national Health and Work Standard, setting minimum levels of support for employee well-being.<sup>12</sup> Ring-fencing time for physical activity could form part of this standard. There is a clear, tangible benefit, such that investing in workplace physical activity initiatives can lead to higher productivity, reduced absenteeism, and lower staff turnover. This direct return on investment makes a strong business case for employers to support and prioritize physical activity during work time.

## Not All Occupations Are the Same

Implementing ring-fenced time will look different across sectors and regions. In office settings, 20 to 30 minutes of daily movement may involve walking, resistance training, or structured physical activity. For more physically demanding “blue-collar” jobs, like construction or logistics, the target may be to introduce low-intensity stretching exercises, in an effort to address injury risk and musculoskeletal pain (a common condition in such professions). Importantly, a one-size-fits-all approach will not work, and flexibility and inclusivity must guide implementation. Offering a range of options and adapting interventions based on role/profession, shift pattern, physical ability, and cultural differences, while grounding initiatives in behavior change theories, such as the socioecological model and self-determination theory, will improve uptake, adherence, and ultimately effectiveness.<sup>4,33,34</sup>

To date, the vast majority of physical activity interventions conducted during work time have taken place in high-income countries and among white-collar employees.<sup>19</sup> Barriers across sectors and geographical regions such as limited resources, cultural attitudes, infrastructure constraints, and rigid work schedules, as well as organizational factors like lack of managerial support, financial limitations, and unsupportive workplace culture, can all hinder implementation and uptake, and impact the success of such initiatives.<sup>22</sup> For instance, deeply embedded beliefs about productivity, as well as high workloads or a culture of skipping breaks, will disrupt even the most well-designed and co-created workplace health promotion initiatives.

To ease concerns about implementation, businesses can begin with pilot programs, allowing organizations to evaluate impact and refine approaches before scaling. Policy support from government, local councils/bodies, and institutions, including through incentives, grants, or coproduced guidance, will help accelerate adoption. Importantly, technology can enhance delivery and engagement through wearables, gamified apps, and remote-access options. Not

## Ring-Fencing Work Time For Physical Activity

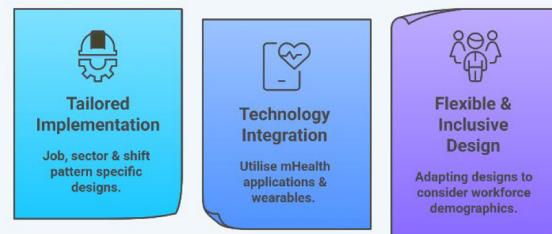
### The Problem

Sedentary lifestyles and work environments contribute to physical inactivity and chronic disease prevalence. Time constraints represent one of the primary barriers to physical activity participation amongst working populations.



### The Solution: Ring-Fence Paid Work Time

Systematic allocation of paid work time for physical activity. Work provides structured settings with established routines conducive to sustainable behaviour change.



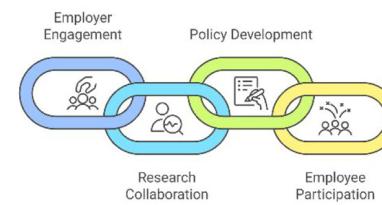
### What The Evidence Shows

Physical activity interventions conducted during work time demonstrate more consistent positive outcomes compared to traditional health promotion programmes that do not include allocated time.



### Implementation

Employers, researchers, policy makers and employees must collectively work together to develop sustainable, inclusive, and effective workplace health promotion programmes to reduce sedentary behaviour and promote a responsible, active lifestyle for the workforce.



**Figure 1** — Schematic illustration of the concept of ring-fencing paid work time for physical activity. The figure outlines the underlying problem of physical inactivity, proposes the allocation of work time for physical activity as a potential solution, and summarizes the current evidence supporting this approach.

all employees have the same preferences or physical capabilities, so offering autonomy and tailoring interventions to meet the preferences and needs of diverse populations, including considerations of age, gender, ethnic and cultural differences, will likely further enhance adoption and effectiveness.

## Summary

Workplace cultures that limit physical activity are contributing to the global burden of disease and imposing significant economic costs on employers. Health-related productivity losses are not inevitable, but they will not be solved through traditional health promotion strategies. Ring-fencing paid work time for physical activity is a pragmatic strategy that provides employees with the opportunity to be active, possibly without harming productivity. Evidence supports its effectiveness; however, such strategies are yet to be implemented across diverse occupational settings, and employers may need more robust evidence on the cost-effectiveness before widespread adoption.

Employees, employers, researchers, and policymakers must work collectively to develop sustainable, inclusive, and effective programs to increase physical activity levels (Figure 1). Investing in workforce health by ring-fencing time for physical activity is a sensible strategy for employers and has the potential to reduce long-term costs, improve employee health and well-being, increase staff retention, and enhance an employer's public image.

## Acknowledgments

M.P.F., K.K., and A.R. are supported by the National Institute for Health and Care Research (NIHR) Applied Research Collaboration East Midlands (ARC EM). K.K. is supported by the NIHR Global Research Centre for Multiple Long-Term Conditions, the NIHR Cross NIHR Collaboration for Multiple Long-Term Conditions, and the British Heart Foundation Centre of Excellence. A.J.C. is supported by the National Heart, Lung, and Blood Institute of the National Institutes for Health (R01HL162805A). The views expressed in this publication are those of the author(s) and not necessarily those of the NIHR, National Institutes for Health, National Health Service, or the UK Department of Health and Social Care.

## References

1. Guthold R, Stevens GA, Riley LM, Bull FC. Global trends in insufficient physical activity among adolescents: a pooled analysis of 298 population-based surveys with 1·6 million participants. *Lancet Child Adolesc Health.* 2020;4(1):23–35. doi:10.1016/S2352-4642(19)30323-2
2. Guthold R, Stevens GA, Riley LM, Bull FC. Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1·9 million participants. *Lancet Glob Health.* 2018;6(10):e1077–e1086. doi:10.1016/S2214-109X(18)30357-7
3. Strain T, Flaxman S, Guthold R, et al. National, regional, and global trends in insufficient physical activity among adults from 2000 to 2022: a pooled analysis of 507 population-based surveys with 5·7 million participants. *Lancet Glob Health.* 2024;12(8):e1232–e1243. doi:10.1016/s2214-109x(24)00150-5
4. Cheval B, Maltagliati S, Owen N. Effort minimization and the built environment: public health implications. *J Phys Act Health.* 2025; 22(7):772–777. doi:10.1123/jpah.2025-0194
5. Warburton DE, Nicol CW, Bredin SS. Health benefits of physical activity: the evidence. *Can Med Assoc J.* 2006;174(6):801–809.
6. Biddle S. Physical activity and mental health: evidence is growing. *World Psychiatry.* 2016;15(2):176–177. doi:10.1002/wps.20331
7. Lee IM, Shiroma EJ, Lobelo F, Puska P, Blair SN, Katzmarzyk PT. Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. *Lancet.* 2012;380(9838):219–229. doi:10.1016/S0140-6736(12)61031-9
8. Phelps NH, Singleton RK, Zhou B, et al. Worldwide trends in underweight and obesity from 1990 to 2022: a pooled analysis of 3663 population-representative studies with 222 million children, adolescents, and adults. *Lancet.* 2024;10:2750. doi:10.1016/S0140-6736(23)02750-2
9. Carlson SA, Fulton JE, Pratt M, Yang Z, Adams EK. Inadequate physical activity and health care expenditures in the United States. *Prog Cardiovasc Dis.* 2015;57(4):315–323. doi:10.1016/j.pcad.2014.08.002
10. Warburton DER, Bredin SSD. Health benefits of physical activity: a systematic review of current systematic reviews. *Curr Opin Cardiol.* 2017;32(5):541–556. doi:10.1097/hco.0000000000000437
11. Biddle SJH. Barriers to physical activity: time to change? A preventive medicine golden jubilee editorial. *Prev Med.* 2022;163:107193. doi:10.1016/j.ypmed.2022.107193
12. Royal Society For Public Health. A better way of doing business: securing the right to a healthy workplace. <https://www.rspah.org.uk/our-work/policy/a-better-way-of-doing-business-securing-the-right-to-a-healthy-workplace.html>
13. Miller R, Brown W. Steps and sitting in a working population. *Int J Behav Med.* 2004;11(4):219–224. doi:10.1207/s15327558ijbm1104\_5
14. Clemes SA, O'Connell SE, Edwardson CL. Office workers' objectively measured sedentary behavior and physical activity during and outside working hours. *J Occup Environ Med.* 2014;56(3):298–303. doi:10.1097/jom.0000000000000101
15. Holtermann A, Straker L, Lee IM, Stamatakis E, van der Beek AJ. Workplace physical activity promotion: why so many failures and few successes? The need for new thinking. *Br J Sports Med.* 2021; 55(12):650. doi:10.1136/bjsports-2020-103067
16. Bensa K, Širok K. Is it time to re-shift the research agenda? A scoping review of participation rates in workplace health promotion programs. *Int J Environ Res Public Health.* 2023;20(3):2757. doi:10.3390/ijerph20032757
17. Malik SH, Blake H, Suggs LS. A systematic review of workplace health promotion interventions for increasing physical activity. *Br J Health Psychol.* 2014;19(1):149–180. doi:10.1111/bjhp.12052
18. Ramezani M, Tayefi B, Zandian E, et al. Workplace interventions for increasing physical activity in employees: a systematic review. *J Occup Health.* 2022;64(1):e12358. doi:10.1002/1348-9585.12358
19. Funnell MP, Hutson MJ, Reynolds KM, et al. Movement behaviour interventions during paid working time in full-time employees: a scoping review. *Discover Public Health.* 2025;22:395. doi:10.1186/s12982-025-00786-1
20. Office for National Statistics. Sickness absence in the UK labour market: 2023 and 2024. 2025. Accessed June, 2025. <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/sicknessabsenceinthelabourmarket/2023and2024>
21. Ford K, Sharp C, Hughes K, Bellis MA. An evaluation of the Time to Move workplace physical activity intervention. *Eur J Public Health.* 2022;32(suppl 2):27. doi:10.1093/ejpub/ckac094.027
22. Ryde GC, Atkinson P, Stead M, Gorely T, Evans JMM. Physical activity in paid work time for desk-based employees: a qualitative study of employers' and employees' perspectives. *BMC Public Health.* 2020;20(1):460. doi:10.1186/s12889-020-08580-1
23. Goetzel RZ, Hawkins K, Ozminkowski RJ, Wang S. The health and productivity cost burden of the "Top 10" physical and mental health

conditions affecting six large U.S. employers in 1999. *J Occup Environ Med.* 2003;45(1):5–14. doi:[10.1097/00043764-200301000-00007](https://doi.org/10.1097/00043764-200301000-00007)

24. Loepke R, Taitel M, Haufle V, Parry T, Kessler RC, Jinnett K. Health and productivity as a business strategy: a multiemployer study. *J Occup Environ Med.* 2009;51(4):411–428. doi:[10.1097/JOM.0b013e3181a39180](https://doi.org/10.1097/JOM.0b013e3181a39180)

25. AXA UK. AXA mind health study. 2024. Accessed May, 2025. <https://www.axa.co.uk/newsroom/2024/new-research-shows-poor-mind-health-in-the-workplace-costs-the-uk-economy-102bn-a-year/#substantiation-2>

26. Office for National Statistics. Economic inactivity by reason. 2025. Accessed May, 2025. <https://www.ons.gov.uk/employmentandlabourmarket/peoplenotinwork/economicinactivity/datasets/economicinactivitybyreasonseasonallyadjustedinac01sa>

27. Landais LL, Jelsma JGM, Dotinga IR, Timmermans DRM, Verhagen EALM, Damman OC. Office workers' perspectives on physical activity and sedentary behaviour: a qualitative study. *BMC Public Health.* 2022;22(1):621. doi:[10.1186/s12889-022-13024-z](https://doi.org/10.1186/s12889-022-13024-z)

28. Sigblad F, Savela M, Okenwa Emegwa L. Managers' perceptions of factors affecting employees' uptake of Workplace Health Promotion (WHP) offers. *Front Public Health.* 2020;8:145. doi:[10.3389/fpubh.2020.00145](https://doi.org/10.3389/fpubh.2020.00145)

29. von Thiele Schwarz U, Hasson H. Effects of worksite health interventions involving reduced work hours and physical exercise on sickness absence costs. *J Occup Environ Med.* 2012;54(5):538–544. doi:[10.1097/JOM.0b013e31824e11cd](https://doi.org/10.1097/JOM.0b013e31824e11cd)

30. Aldana SG, Merrill RM, Price K, Hardy A, Hager R. Financial impact of a comprehensive multisite workplace health promotion program. *Prev Med.* 2005;40(2):131–137. doi:[10.1016/j.ypmed.2004.05.008](https://doi.org/10.1016/j.ypmed.2004.05.008)

31. Grimani A, Aboagye E, Kwak L. The effectiveness of workplace nutrition and physical activity interventions in improving productivity, work performance and workability: a systematic review. *BMC Public Health.* 2019;19(1):1676. doi:[10.1186/s12889-019-8033-1](https://doi.org/10.1186/s12889-019-8033-1)

32. National Institute for Health and Care Excellence (NICE). Physical activity in the workplace. 2025. Accessed May, 2008. <https://www.nice.org.uk/guidance/ph13>

33. Stokols D. Translating social ecological theory into guidelines for community health promotion. *Am J Health Promot.* 1996;10(4):282–298. doi:[10.4278/0890-1171-10.4.282](https://doi.org/10.4278/0890-1171-10.4.282)

34. Teixeira PJ, Carraça EV, Markland D, Silva MN, Ryan RM. Exercise, physical activity, and self-determination theory: a systematic review. *Int J Behav Nutr Phys Act.* 2012;9(1):78. doi:[10.1186/1479-5868-9-78](https://doi.org/10.1186/1479-5868-9-78)