

## LETTER

## Working from home in the time of COVID-19: how to best preserve occupational health?

In response to the COVID-19 pandemic, many countries have adopted a broad spectrum of containment measures, from recommendations to stay at home to quarantines of large geographic regions. As part of this response, corporations and governments alike have strongly encouraged workers to telecommute where possible. More than 3.4 billion people in 84 countries have been confined to their homes, as estimated in late March 2020, which potentially translates to many millions of workers temporarily exposed to telecommuting. Since 2000, the emergence of digital and broadband internet has facilitated the development of home telework. Despite limited research interest on its impact on occupational health, several health benefits and risks of telework have been identified in academic or grey literature (table 1) (for a review see Ref. 1).

Assessing how health risks and benefits of telework are affected by its sudden, large-scale uptake in the context of COVID-19 is key to best preserve occupational health. The current pandemic context carries several specificities. First, the sudden shift to teleworking could not have been anticipated by workers or employers, so the safety of the home working environment has not necessarily been ensured. However, for many the uptake of telework will be temporary, so a limited duration of exposure may

mitigate risks of injury or pain associated with the home environment, or risks of musculoskeletal disorders associated with unergonomic workstations.<sup>2</sup> Second, in many organisations telework has temporarily switched from the exception to the rule. This may reduce isolation risks associated with social distancing in the workplace setting that teleworkers face in normal times. Conversely, widespread school closures have forced many parents to telework and mind their children at the same time, including having to plan for schooling at home or online. These overlapping responsibilities amplify psychosocial risks associated with unstructured working time.<sup>3</sup> Third, the current uptake of telework has occurred in an anxiety-provoking context linked to the pandemic. This is likely to worsen telework-associated psychosocial and behavioural risks, especially those associated with addictions. Among workers with psychological frailties, isolation may also lead to decompensation with more difficult psychiatric care. Taken together, these suggest that the COVID-19 pandemic may exacerbate occupational hazards beyond the more obvious examples of healthcare settings or other jobs on the front line.<sup>4</sup>

For employers, maximising health benefits of teleworking in times of containment while minimising its negative impacts constitutes a continuity in their duty to preserve the health of their employees. To do so, they should provide key messages specifically tailored to an unanticipated and anxiety-provoking context in which employees may struggle to adapt their homes and lifestyles to telework.<sup>5</sup> They

should also allow teleconsultations as well as systems for listening to employee complaints with occupational practitioners to provide employees with optimised working conditions despite the pandemic circumstances. Companies are increasingly recognised as an integral player in outbreak management.<sup>6</sup> They also have a role to play in minimising the unintended health consequences of outbreak control measures.

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**Table 1** Health impacts of telework, specificity of pandemic COVID-19-related containment and key prevention measures for employers

Family of risk	Effect of telework	Amplification or reduction in the context of COVID-19-related containment	Key prevention measures for employers
<b>Risks associated with transportation</b>			
	Decreased	None	–
<b>Risks associated with home working environment</b>			
	Increased risks associated with housing (fire, and slip, trip and fall hazards, temperature conditions)	Amplified (lack of anticipation)	Diffusion of simple, pragmatic security messages
	Increased risks associated with workstation (musculoskeletal pain)	Ambiguous (potentially amplified due to the lack of anticipation, poorly suited home working environment and reduced physical activity, but short duration of exposure)	Diffusion of simple, pragmatic messages on ergonomics <sup>5</sup> ; financial contribution to adapted equipment (adjustable chair and computer station); promotion of physical activity
<b>Psychosocial risks</b>			
	Increased risks of social isolation in the professional sphere	Reduced (universalisation of telework)	Adoption of virtual collective working periods (teleconferences)
	Increased risk of blurring of boundaries between work and home time	Potentially amplified by the multiplication of non-work-related tasks such as caring for children and facilitating home schooling	Adapt working time and schedule for workers ensuring home childcare
<b>Behavioural risks (diet, sleep, addiction)</b>			
	Ambiguous	Amplified (confinement, covid-linked anxiety)	Allow and promote teleconsultations with occupational practitioners

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**REFERENCES**

- 1 Tavares AI. Telework and health effects review. *Int J Healthc* 2017;3:30.
- 2 Montreuil S, Lippel K. Telework and occupational health: a Quebec empirical study and regulatory implications. *Saf Sci* 2003;41:339–58.
- 3 Standen P, Daniels K, Lamond D. The home as a workplace: work-family interaction and psychological well-being in telework. *J Occup Health Psychol* 1999;4:368–81.
- 4 Sim MR. The COVID-19 pandemic: major risks to healthcare and other workers on the front line. *Occup Environ Med* 2020;77:281–2.
- 5 International Labour Organization. Ergonomic tips when teleworking - COVID-19 : Protecting workers, 2020. Available: [https://www.ilo.org/global/about-the-ilo/multimedia/video/institutional-videos/WCMS\\_740265/lang-en/index.htm](https://www.ilo.org/global/about-the-ilo/multimedia/video/institutional-videos/WCMS_740265/lang-en/index.htm)
- 6 Fadel M, Salomon J, Descatha A. Coronavirus outbreak: the role of companies in preparedness and responses. *Lancet Public Health* 2020;5:e193.