



Australian Government

Comcare

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Beyond the office: Considerations and practical approaches for working safely at home

Literature Review

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The following is a summary of the latest available research and does not reflect an official Comcare position or policy. It is intended to assist employees and employers with general advice.

Executive Summary

The COVID-pandemic and associated lockdowns significantly changed the way we work. Working from home rapidly became the norm for many professionals, challenging traditional beliefs that working in the office was necessary for productivity and networking. Research indicates that employees and managers want to continue with some form of working from home arrangements, with many organisations implementing hybrid arrangements to meet these needs while ensuring key business functions are effectively maintained. However, this way of working requires several work, health and safety considerations to be addressed so that working from home does not increase the risk of negative health outcomes, such as pain, burnout, loneliness, and stress. While research on these arrangements is evolving, this review identifies seven key challenges to the health and safety of workers when working from home and in hybrid arrangements.

1. Work-life balance

The evidence on the impact of hybrid arrangements on work-life balance is mixed. While many report benefits, the blurring of boundaries between work and home can increase work-family conflict, and have implications for worker health, particularly for those with carer responsibilities. There are strategies that organisations can implement to support work-life boundary management and reduce the risk of work-family conflict. This could include setting clear work expectations around work hours and expected outputs, encouraging workers to have a dedicated working space in a location without interruption, and supporting individual preferences for boundary management.

2. The physical environment

A poor physical environment such as an unergonomic working space, low air quality, or thermal discomfort has implications for worker physical and mental wellbeing so it's important that workers have access to safe working spaces when at home, particularly workers recovering from an injury. This means a dedicated workspace, ergonomic equipment, and good indoor environmental quality, including temperature, air quality and lighting. Organisations should also consider the physical spaces of shared offices to optimise the benefits of hybrid arrangements. For example, activity-based working spaces provide employees with different workspace settings that can be adapted to the activities they are undertaking.

3. Organisational support

A high degree of organisational support - including effective communication, social support from colleagues and managers, having a strong sense of community, and technical support - can help to mediate the negative impacts involved with working from home. Some researchers argue that organisational support can influence worker health and wellbeing more than work location or arrangement. Improved organisational support might include encouraging informal catch ups, peer buddy systems, regular wellbeing check ins, and a clear and purposeful approach to hybrid work.

4. Work demands

When working from home, workers may feel obliged to spend more time at the workstation, with typical triggers to take a break or log off often absent, which can contribute to longer working hours. Work-home interference and perceptions of being monitored can also create increased demands on workers. To minimise this risk, organisations should encourage good work, including taking regular breaks, and implement a management approach focused on delivering outcomes rather than time spent at the computer.

5. Health behaviours

Working from home can have both a negative and positive influence on individual health behaviours. Working from home has been shown to increase sedentary behaviours, as well as alcohol and tobacco consumption. Though, the impact on physical activity and diet are more mixed – and may depend on an individual's pre-existing habits. Organisations should promote healthy behaviours for working at home, such as sharing resources and encouraging short active breaks.

6. Incivility and violence

Working from home can in some circumstances increase the likelihood of workplace incivility and violence, such as cyberbullying and family and domestic violence (FDV). It can also decrease the ability for workplaces to address issues as they occur. Organisations are responsible for creating a safe and respectful working environment. They can do this by raising awareness around how to identify and address incivility, bullying and FDV, empowering employees to look out for each other and detect early warning signs, and providing support services for workers who have experienced or witnessed incivility or violence.

7. Inequality and discrimination

Exposure to inequality and discrimination can increase the risk of developing physical and mental health issues. A significant concern for the future of working from home and hybrid arrangements is the possibility that it could worsen inequalities and increase discrimination towards already marginalised groups, including women, younger workers, junior workers, and workers on low wages. To ensure the health and safety of these at-risk groups, organisations need to implement inclusive practices, such as ensuring equal access to working from home arrangements, redesigning reward and recognition systems to ensure equal opportunity regardless of work location and establishing viable options to overcome work-life conflict, lack of home office equipment and isolation when working from home.

These challenges are not completely new, however, they require nuanced controls to ensure that hybrid working arrangements can have a positive influence on workers' lives. Organisations that accommodate individual differences, set effective systems and frameworks, enable workers to effectively manage their workspace, and prioritise outcomes-focused management will fully realise the benefits of hybrid working.

While this review provides valuable insights, further research on the health and safety of workers in the context of large-scale and ongoing hybrid arrangements is needed – including the effectiveness of different strategies. Similarly, there is benefit in better developing the evidence around the utilisation of working from home as a suitable modification for workers recovering from injury or illness.

Glossary

Activity-Based Working – an approach to office design that focuses on providing workers with a variety of workspace settings that can be used flexibly based on what work activity is being undertaken (Falkman, 2021).

Family and Domestic Violence – any behaviour within an intimate or domestic relationship that is violent, abusive, controlling and/or threatening (Australian Bureau of Statistics, 2013).

Flexible work arrangements – arrangements between an employee and employer that may include changes to hours, patterns, or location of work (Buick et al., 2022).

Family-work conflict – when the demands associated with family activities interfere with work responsibilities (Allen et al., 2013).

Hybrid arrangements – arrangements where employees work some of the time in the office, and some of the time from home (Microsoft, 2021).

Outcomes-Based Management – a management style that focuses on delivering outcomes rather than the time spent working (Buick et al., 2022).

Technostress – stress related to excessive technology use due to the increased reliance on online communications and increased work demands (Johnson et al., 2020).

Work demands – the level of mental or emotional demands required to do a job. High demands may include excessive workloads, task conflicts and time pressures (Comcare, 2023).

Work-family conflict – refers to when the demands of and time devoted to work interferes with family life, however, the literature often uses this as an umbrella term for general interference between work and family, where workers find it difficult to perform both work and non-work roles (Allen et al., 2013).

Work from home arrangements – arrangements where employees work some or all of their working days from home facilitated through the use of ICTs such as email, video conferencing and instant messaging (Safe Work Australia [SWA], 2022).

Workplace cyberbullying – repeated, unreasonable behaviour directed at a worker through the use of technology or online platforms such as social media, email, or messaging services (SWA, 2022).

Introduction

In recent decades, advances in technology allowed many professional jobs to be conducted from home, though very few employees took advantage of this possibility (Messenger, 2017). The arrival of the COVID-19 pandemic, however, triggered a large and rapid shift towards working from home. In 2019, only 8% of Australian workers were working from home at least once per week (Productivity Commission, 2021). In contrast, up to 40% of the Australian population, and over 50% of Australian Public Service employees, were working from home at least some of the time in 2020 (APSC 2021a; Productivity Commission, 2021). This shift towards work from home demonstrated that many professional jobs could be performed effectively this way, with substantial benefits for employees - reduced commuting time, cost and stress; greater autonomy over when and where to work; and an improved ability to manage work and personal demands (Productivity Commission, 2021). However, this 'new normal' also raises new work, health and safety factors that are not yet fully understood. The purpose of this review is to identify the physical, mental, and social risks associated with working from home arrangements and provide insight into potential strategies for employers to mitigate these risks and leverage the benefits.

Prior to the pandemic, those who had work from home arrangements were more likely to be female, older, working part time, providing care for children or people with disability, living in regional or remote areas, working in the private sector, or in management or executive positions (Hopkins & Bardoel, 2020; Productivity Commission, 2021). Findings from this period offer insight into the characteristics of people that chose to work from home, and some indication of the typical individual impacts of those arrangements.

Research conducted during the COVID-19 pandemic reflects a unique context in which employees were mostly forced into predominantly working from home, with little experience or preparation, and with employers being unprepared for supporting such arrangements. While results from this period may have been shaped by general worries about the pandemic, social isolation, financial stress, and greater family interferences, it provides valuable insight into the organisational effects of large-scale arrangements.

Research into the current context of hybrid working arrangements is limited, and more time is needed to understand the long-term impacts of hybrid arrangements on work health and safety. This review therefore considers research from prior to the pandemic and during the pandemic to gain a broader understanding of the work health and safety implications for working from home under different contexts. These contexts together can assist in understanding the key challenges employees can face when working from home and inform strategies to mitigate the risks and leverage the benefits.

Methodology

This review was undertaken to gain a more comprehensive understanding of the work, health and safety challenges related to working from home arrangements (including hybrid work), as well as to identify strategies that organisations might implement to mitigate any associated health risks. Publications from a range of dates were included in the review to gain a broader understanding of the impacts of working from home under different contexts.

EBSCO host and Google Scholar were used to find articles for analysis. Search terms included *work from home*, *hybrid work*, *telework*, *remote work*, *work health and safety*, *work-related injury*, *wellbeing*, *health*. In addition to database searching, literature was also identified using a snowball method in which reference lists were used to identify additional sources.

Both academic and grey literature were included in the search. The following considerations were used to determine the relevance of the sources and whether they were included in the review:

1. Date of publication – Literature with a publication date earlier than 2000 was excluded since advancements in technology since then have allowed working from home to become more easily adopted, and literature prior to this date may have limited applicability.
2. Relevance to the research question – Only literature that measured health or wellbeing outcomes was included. Studies that primarily looked at other outcomes such as productivity, or economic outlook were excluded.

A thematic analysis was conducted to classify the research into broad themes and patterns that would form the structure of the review. Themes were determined bottom-up based on topics evident in the research.

A separate literature search was conducted on the benefits and challenges of utilising working from home as a modification to support the recovery and return to work for workers with an injury or illness. Limited research was found on this topic, however, the themes that emerged were similar to those in the main literature review. The findings have therefore been included in this literature review in Appendix A.

Health Related Outcomes

Working from home can have a number of benefits for worker health and wellbeing. These include having greater autonomy over when and where the work is undertaken, reduced time and stress associated with commuting, and an improved ability to manage work and personal demands (Ter Hoeven & Van Zoonen, 2015; Chung & Van der Lippe, 2020). However, it can also present risks to physical and psychological health.

Research on whether the increased occurrence of working from home has influenced the number and severity of workers' injuries is limited. Workers' compensation claim statistics from Safe Work Australia (SWA) show that claims for mental health conditions rose by 12% from 2019-20 to 2020-21, and injuries for claims caused by body stressing increased by 6% (SWA, 2022). While there is no evidence to indicate this increase is caused by working from home, several studies have found working from home can impact health-related outcomes including musculoskeletal pain, burnout and fatigue, loneliness and social isolation, and work-related stress Bosma et al., 2023; Deloitte & Swinburne, 2022; Griffiths et al., 2022; Ingusci et al., 2021; Oakman 2021; Oakman et al., 2022a; Tavares, 2017; Wang et al., 2022; Xiao et al., 2021).

Musculoskeletal Pain and Injuries

The risk of musculoskeletal injury is high among white collar workers (Silva et al., 2016), and can have a significant impact on a worker's quality of life, work ability and job satisfaction (Moretti et al., 2020). Working from home introduces a number of contextual factors related to the design and location of work that could impact the risk of musculoskeletal pain. Working from home has been found to increase sedentary behaviour, as employees lose incidental exercise that comes with commuting to the office, socialising with colleagues, and moving between meetings (Oakman et al., 2022a). Many home workers also spend more time at their screens and desks, have higher workload, take fewer health breaks, have poor ergonomic conditions, and often do not have a dedicated workstation. All of which are linked to an increased risk of musculoskeletal issues (Allen et al., 2015; Oakman et al., 2022a; Tavares, 2017; Xiao et al., 2021).

Research into the impacts of working from home on musculoskeletal issues is limited, however a couple of studies have aimed to gain a better understanding of the topic. In the Employees Working From Home (EWFG) study, a survey of 924 Australians working from home at least two days per week during the COVID-19 pandemic, 70% of respondents reported musculoskeletal pain or discomfort (Oakman et al., 2021). In a follow up longitudinal study, the researchers analysed the growth trajectories of multi-site musculoskeletal pain associated with working from home and found 1 in 10 employees reported a rapid increase in the number of pain sites over their time working from home (Oakman et al., 2022a). Similarly, in a survey of 988 US office workers that had transitioned to working from home most of the time due to the pandemic, two thirds of participants reported having at least one new physical health issue, such as musculoskeletal pain, since beginning working from home (Xiao et al., 2021). Furthermore, in a longitudinal study of over 40,000 Dutch workers, during 2020 – 2021, working from home or hybrid arrangements was associated with a higher risk of having musculoskeletal pain in the upper back, neck, shoulders and/or arms (Bosma et al., 2023). It's worth noting, much of the research on working from home and musculoskeletal injury were conducted under the context of the pandemic when workers were forced to work from home without preparation or proper equipment, and were limited in their ability to exercise due to lockdown restrictions. As hybrid arrangements become the 'new normal', organisations will have a greater opportunity to provide the appropriate support and equipment to help prevent physical injury.

Burnout and Fatigue

Burnout is a response to chronic job stress characterised by fatigue, cognitive weariness and emotional exhaustion (Barriga Medina et al., 2021). Role overload, lack of organisational support, long working hours and work-family conflict are all risk factors in the development of burnout and fatigue (Meyer et al., 2021; Oakman et al., 2020; World Health Organisation [WHO], 2022). Working from home increases the risk of these hazards occurring, with increased time spent on screens, long working hours and blurring of boundaries between home and work. Further, virtual meetings can be more demanding than face-to-face meetings due to increased difficulty in reading body language and cues, and understanding humour and irony in conversation (Williams, 2021). While fatigue related to commuting and travelling to the office are reduced when working from home, this does not outweigh the negative impacts from the blurring of boundaries between work and home (Palumbo, 2020).

In an international survey of over 5,000 government and corporate workers working from home during the pandemic, over 60% of Australian workers reported feeling at least somewhat burnt out (Alexander et al., 2021). Burnout was especially prominent for workers that felt anxious due to a lack of organisational communication around the future, with these employees being three times more likely to report being burnt out (Alexander et al., 2021). Similarly, in a survey of more than 2,000 Australian workers, 45% of workers reported feeling burnt out at the end of 2021 (Deloitte & Swinburne, 2022). Organisations can prioritise clear communication around future plans and policies related to remote work and hybrid arrangements to ensure the wellbeing of their employees and reduce the risk of burnout and fatigue. It's also possible that fatigue and stress related to the pandemic, lockdowns and social isolation contributed to these results. Alexander et al (2021) likely found a higher burnout rate compared to Deloitte & Swinburne, given it was conducted in December 2020 – January 2021 during the peak of the pandemic in Australia when organisations were still newly adapting to this way of working. As organisations and workers adopt hybrid arrangements, the burnout associated with working from home during the pandemic is likely to recede (Williamson & Colley, 2022).

Loneliness and Social Isolation

Another potential negative health outcome of working from home is loneliness and social isolation. Loneliness can have significant physical and mental health outcomes. Prolonged loneliness is a key risk factor for mental health issues such as depression, and is associated with an increased risk of stroke, coronary-artery disease, and even death (Holt-Lunstad et al., 2015; Valtorta et al., 2016).

Loneliness and social isolation were a key challenge for remote workers during the COVID-19 pandemic (Griffiths et al., 2022; Wang et al., 2021). In a survey of 615 working adults in Wales, 45% of those working from home during the COVID-19 pandemic reported a worsening in their mental wellbeing and loneliness (Griffiths et al., 2022). This is most likely due to lockdown restrictions that also prevented social opportunities with friends and family (Wang et al., 2022). However, loneliness remains a significant concern, even now that restrictions have eased and workers have moved into hybrid arrangements as many teams are continuing to work remotely, limiting opportunities for face-to-face interaction (Knight et al., 2022). Even workers who work from an office may be at risk of social isolation if team members are not frequently attending the office (Buick et al., 2022).

Pre-pandemic research has similar findings, with home workers reporting more feelings of social and professional isolation than their office-based colleagues, as a result of less face-to-face interaction and social stigmatisation (Allen et al., 2015). The opportunity to interact with colleagues and supervisors face-to-face is lost when working from home, which can lead workers to feel deprived of close relationships and to lack a sense of belonging (Wang et al., 2022). Non-verbal cues provide a significant proportion of meaning in daily interactions and can be difficult to interpret when using digital communication platforms. This can create ambiguities and increase misunderstandings which can cause an employee to feel rejected by others and trigger loneliness.

Young workers are also more likely to experience difficulties related to loneliness, social isolation, and networking when working remotely. This may be because they are receiving less support from colleagues, are more likely to live alone, and/or are new workers who have not had the opportunity to develop meaningful working relationships (Griffiths et al., 2022; Knight et al., 2022; Microsoft 2021; Williamson et al., 2021). For example, in a study of 615 Welsch working from home during the COVID-19 pandemic, respondents in their 30s were over three times more likely to report feelings of loneliness compared to those in their 40s (Griffiths et al., 2022). Other individuals that are particularly at risk of experiencing loneliness when working from home are those living alone (Tavares, 2017), people with poorer general health (Griffiths et al., 2022), and those with less self-discipline (Wang et al., 2022).

A lack of support from colleagues and managers, and lack of job autonomy are significant factors influencing loneliness amongst remote workers (Allen et al., 2015; Knight et al., 2022; Wang et al., 2022). There are several strategies outlined later in this review that organisations can implement to support meaningful communication and reduce the risk of loneliness for hybrid workers.

Work-Related Stress

Work-related stress can occur when employees are exposed to psychosocial risks (SWA, 2022). Prolonged workplace stress can contribute to an increased risk of many health problems including anxiety, depression, sleep disorders, fatigue, musculoskeletal pain, and autoimmune and cardiovascular diseases (Schneiderman et al., 2005).

Working from home can put workers at great risk of stress due to the role conflicts, increased workload and difficulties balancing work and family that are associated with working from home (Hayes et al., 2021; Ingusci et al., 2021). Working from home can also increase stress related to excessive technology use (often referred to as technostress), due to the increased reliance on online communications and increased work demands (Ingusci et al., 2021). In contrast, some studies have found working from home to reduce stress related to commuting (Buomprisco et al 2021). Less time travelling and working away from the distractions of the office allows workers more time to focus on work tasks, and increases autonomy over their work, which can help to reduce stress and improve wellbeing (Buomprisco et al 2021; Ingusci et al., 2021). Despite these mixed findings it's important for organisations to be aware of the risks and implement strategies to prevent and reduce the occurrence of workplace stress when working from home or in hybrid arrangements. Some evidence-based strategies will be outlined later in this paper.

Key Challenges for Work Health and Safety

1. Work-Life Balance

Working from home has been increasing since the development of telecommunications software such as mobile phones and laptops. Prior to this, the boundaries between work and home were very clear for white collar workers. The workplace was distinguished by the office setting and work hours, with limited spill over into home life. However, with the increase in working from home exacerbated by the COVID-19 pandemic and the subsequent normalisation of hybrid work arrangements, these boundaries have often become more blurred, increasing the risk of work-family conflict. Work-family conflict occurs when the demands of work and non-work roles interfere with one another, making it difficult to perform both roles (McCloskey, 2020). Work-family conflict can have implications for work, health and safety, as high levels can lead to fatigue, emotional exhaustion, burnout, conflict with colleagues, stress, anxiety and other negative physical and mental health outcomes (Oakman et al., 2020; Oakman et al., 2022b; Meyer et al, 2021). In contrast, reduced work-family conflict can improve worker wellbeing, happiness, productivity and reduce absenteeism (Safe Work SA, 2022). Organisations can influence the risk of work-family conflict by implementing strategies that support and encourage work-life balance and flexibility.

Evidence on the effects of working from home for work-life balance are mixed, with both risks and benefits. Work-life balance is often cited by workers as a significant benefit of remote working (Ferreira et al., 2021; Oakman et al., 2021). This is largely due to reduced time and stress associated with commuting to the workplace, allowing workers to coordinate work more easily around their family lives and carer responsibilities (Deloitte & Swinburne, 2022; Oakman et al., 2021; Ferreira et al., 2021). Working from home can also benefit workers with injuries, as it makes it easier to balance their workday and the need for rest, recovery and rehabilitation (Lis, 2022). (See Appendix A for a discussion of the specific benefits and challenges when working from home during recovery from injury or illness). In the Deloitte & Swinburne (2022) survey of 2,000 Australian workers, 63% indicated a better work-life balance as a benefit of flexible work. Contrastingly, however, some studies have found that remote working can increase work demands, taking away time from family activities and exacerbating work-family conflict. This is particularly the case for those with carer responsibilities (Wang et al., 2021; International Labor Organization [ILO], 2020; Oakman, 2021; Graham et al., 2021). Work-family conflict was also exacerbated during the pandemic as the abrupt shift to working from home, school closures and other pandemic related factors increased challenges in setting work-life boundaries (Oakman et al., 2021). Another way of viewing work-family conflict is to separate work-family conflict from family-work conflict. Work-family conflict occurs when the demands of and time devoted to work interferes with family life, whereas family-work conflict occurs when the demands associated with family activities interfere with work responsibilities (Oakman et al., 2021). Studies which have separated the two, generally find that remote work reduces work-family conflict, but increases family-work conflict (Allen et al., 2015; Allen et al., 2013; Delanoeije et al., 2019; Dockery & Bawa, 2018). For example, a meta-analysis of studies that used directional measures for work-family and family-work conflict found that the availability of flexible location arrangements, regardless of their utilisation by workers, increased work-family conflict, while having a small effect in reducing family-work conflict (Allen et al., 2013). This suggests that the benefits of working from home arrangements are at best mixed when it comes to work-life balance, despite more positive perceptions.

An important consideration in work-life balance is individual preferences. Research shows that preferences around which strategies are used to support the development of work-life boundaries will depend on whether the worker prefers to keep roles separated (segmenters) or integrated (integrators) (Allen et al., 2014). Segmenters will often use physical strategies such as having a dedicated office where personal activities do not take place to build strong boundaries between work and home life. In contrast integrators will have weaker boundaries and require flexibility to support frequent transition between the roles (Basile & Beauregard, 2016). No differences in productivity have been found between the two preferences, but a mismatch between employees' preferences and their work environment can increase work-family conflict and reduce wellbeing (Basile & Beauregard, 2018). Organisations should ensure flexible arrangements are in place to support both preferences, and that workers have autonomy and control over the strategies they use to support boundary management (Basile & Beauregard, 2016). Organisations may consider implementing measurement tools that verify workers' abilities to manage their work and personal lives (Ferreira et al., 2021). There are several reliable and valid self-assessment scales that measure work-life balance (Smeltzer et al., 2014). These can be used to identify issues in relation to work-life balance, understand worker priorities in work-life balance, and detect where policies, practices and workplace cultures need to be improved (Smeltzer et al., 2014).



Take action – practical steps for employers and workers

Work-Life Boundary Management

The blurred boundaries between home and work can make it difficult to psychologically detach from work. It's important to support and train workers to develop clear boundaries between work and home. Boundary management strategies have been found to reduce work-family conflict (Allen et al., 2014; Jostell & Hemlin, 2018; Leduc et al., 2016). There are several ways organisations can support boundary management for home workers including:

- > Set clear work expectations around the hours that must be worked, and the expected outputs (ILO, 2020; Oakman et al., 2020).
- > Encourage workers to communicate their hours of availability to colleagues to ensure work communications are not disrupting personal time (Basile & Beauregard, 2016).
- > Encourage workers to have a dedicated working space in a location where interruptions will be minimal or the use of physical barriers to separate the workspace, such as closing a door (Oakman et al, 2022b).
- > Reinforce the importance of disconnecting from work and reserving time for rest and assure workers this won't have negative consequences for their career (ILO, 2020).
- > Support autonomy and control over when and where work is performed (Basile & Beauregard, 2016).
- > Ensure flexible work policies support individual preferences for segmenting or integrating work and life responsibilities.
- > Provide training options to support workers in developing boundaries, and adapt to changing roles and demands (Juchnowicz, 2021).
- > Foster a workplace culture that supports work-life balance (Baird et al., 2021).
- > Consider implementing measurement tools to identify issues in relation to work-life balance, and understand worker priorities.

2. The Physical Environment

The physical environment is another important consideration in the work, health and safety of hybrid workers. This includes ergonomic and dedicated workspaces, and indoor environmental quality (IEQ) factors such as lighting, temperature, air quality and noise. A poor environment, both at home and in traditional offices, can lead to increased risk of negative physical and mental health outcomes (Oakman et al., 2022a; Xiao et al., 2021).

Home Offices

Working from home can increase the risk of musculoskeletal pain. A longitudinal study of over 40,000 Dutch workers during the first year of the COVID-19 pandemic found employees working from home or in hybrid arrangements had a higher risk of self-reported pain in the upper back, neck, shoulders and/or arms compared to those working on location (Bosma et al., 2023). The risk of musculoskeletal pain was also higher for those working exclusively from home compared to those working in hybrid arrangements, indicating that the duration of working from home can impact the presence of musculoskeletal pain (Bosma et al., 2023). It is therefore important for workers to have a safe physical environment when working from home including a dedicated and ergonomically appropriate workspace.

During the pandemic, workers were forced to unexpectedly work from home, with many not having a dedicated or appropriate workspace. This resulted in shared office spaces with partners or children, and makeshift desks such as using the dining table, kitchen bench or couch (Oakman et al., 2022a). In the Employees Working From Home (EWFH) study of Australians working from home at least two days per week during the COVID-19 pandemic, only 60% of respondents reported having a dedicated office space in a secluded room without distractions (Oakman et al., 2021). Not having a dedicated or appropriate workspace can increase pain, discomfort and the risk of musculoskeletal injury (Oakman et al., 2022a; Xiao et al., 2021). Additionally, working in a location with frequent interruptions can also increase work-family conflict and is a predictor of poor mental health (Oakman et al., 2021; Xiao et al., 2021).

Another important consideration for the physical home office is desk ergonomics. An improper workstation can lead to poor body mechanics, increased discomfort and pain and can exacerbate existing injuries (Lis, 2021; Moretti et al., 2022). (See Appendix A for a discussion on the benefits and challenges relating to the utilisation of working from home during recovery from injury or illness). A 2021 survey of almost 1,000 US workers working from home during the COVID-19 pandemic found that respondents who reported having a good workstation set-up for their health, wellbeing and productivity, and knowledge on how to adjust it, were less likely to report experiencing new physical and mental health issues after commencing working from home arrangements (Xiao et al., 2021). Similarly, a study of Italian administrative officers that moved to working from home during the pandemic found that workers who used laptops without any height adjustments were more likely to experience frequent and worsening neck pain (Moretti et al., 2022). These findings demonstrate the importance of ensuring workers have an appropriate workstation when working from home, especially since some workers do not routinely monitor and adjust their work environment at home (Messenger et al., 2017; Xiao et al., 2021). For example, a survey conducted prior to the pandemic found more than half of respondents do not pay attention to ergonomics when working from home (Messenger et al., 2017).

There are also several indoor environmental quality factors, such as temperature, humidity, lighting, noise and air quality, that can impact the physical and mental wellbeing of workers (Xiao et al., 2021). Poor conditions can have physical health implications such as sensory irritation in the eyes and airways, as well as mental health implications (Boegheim et al., 2022; Buomprisco et al., 2021). When working from home, workers may have increased control over their environmental conditions which can improve wellbeing; and in some instances home offices have better environmental quality than traditional offices (DeFilippis et al., 2020). Regardless of location (home or office) it's important that workers understand and have access to good quality atmospheric conditions.

Shared Workspaces

In addition to the home office, organisations must also consider the physical environment for hybrid workers in the office and configure working spaces and buildings to support employee wellbeing. This approach can help organisations to encourage and facilitate access to the benefits of shared workspaces (Buick et al., 2022). Activity-based working (ABW) is one approach to workplace design that could support meaningful hybrid working (Buick et al., 2022; Hoendervanger et al., 2022). ABW compliments the principles of hybrid arrangements as it revolves around the idea that work is defined by the activities, not the location or time (Falkman, 2021), and provides employees with different workspace settings based on the activities they are undertaking (Williamson et al., 2021). In activity-based offices workers may not have allocated desks, instead a range of shared workspaces designed for different tasks are provided, such as quiet areas for individual work, meeting areas for collaborative work, and social areas for informal catch ups (Williamson et al., 2021). Activity-based offices can have a positive effect on the health and wellbeing of workers. Providing employees with autonomy to decide how, when and where they work allows them to manage their work and personal life demands better, which positively impacts their wellbeing (Williamson et al., 2021). It also encourages employees to move around the office, resulting in more movement, changes in posture and less sedentary behaviours (Jindo et al., 2020; van Meel, 2019). However, ABW can negatively impact wellbeing through problems such as social disconnection from co-workers, inability to adjust desks/chairs, increased stress due to difficulty finding a desk, and increased distractions and work demands due to a lack of privacy (Buick et al., 2022; Candido et al., 2021). These negative outcomes are also more likely to impact female and older workers (Marzban et al., 2022). To determine whether ABW is appropriate for the workplace, organisations need to assess the benefits and challenges and consider factors such as physical configuration of the environment, availability of workstations, suitability to job roles, technologies, and workforce demographics (Candido et al., 2021; Marzban et al., 2022). There are however several actions employers can take to increase the likelihood of employee satisfaction with an ABW environment.



Take action – practical steps for employers and workers

The Home Office

To ensure workers are working in a safe physical environment when at home, employers can:

- > Clarify for workers what constitutes an appropriate workstation, including the need for a dedicated space, and having an ergonomically correct work desk.
- > Share the financial responsibility for setting up an appropriate workstation between employers and workers, and ensure workers are aware of their rights and responsibilities for health and safety when working from home.
- > Provide workers with training and resources on ergonomic issues and indoor environmental quality.
- > Encourage workers to be aware of their environmental conditions and adjust them when needed.
- > Consider using IEQ sensors to determine the quality of home offices.
- > Encourage workers to have a dedicated working room.
- > Consult with workers about health and safety issues, often workers will be the only person that understand the risks associate with their home office.
- > Organise ergonomic assessments of the home office for worker with injuries.

Activity-Based Working

Strategies to assist in implementing a supportive Activity-based working (ABW) environment include:

- > Offer several activities to involve and consult with workers early in the implementation process such as providing information, workshops, and seminars, and encourage participation (Bergsten et al., 2022).
- > Understand that the change to ABW will impact workers differently and provide the appropriate guidance and support before and after implementation (Bergsten et al., 2022).
- > Set explicit and unambiguous office rules and policies, and clearly communicate them with workers (Bergsten et al., 2022; Marzban et al., 2022). Examples may include, implementing a policy for open spaces to minimise noise distraction, or allowing workers to modify their workspace to increase feelings of ownership (Marzban et al., 2022).
- > Conduct continuous evaluations after implementing ABW to understand the changing needs and preferences of workers, and tailor the ABW environment to those needs, involving workers in the modification process (Marzban et al., 2022).
- > Encourage healthy behaviours, such as using sit-stand desks or having walking meetings.
- > Ensure there are a variety of spaces for different types of work and personalities, including private, focus, social and collaborative spaces. (Bergsten et al., 2022)
- > Encourage workers to meet face-to-face in the office for collaborative activities (Marzban et al., 2022)
- > Provide training for managers on how to support employees when ways of working are changed and how to manage a team in an ABW (Larsson et al., 2022; Bergsten et al., 2022).

3. Organisational Support

Organisational support includes factors such as effectiveness of communication with workers, social support from managers and colleagues, and technical support. The degree of organisational support provided to employees in hybrid and work from home arrangements can have a strong impact on health outcomes. For example, it can positively or negatively affect work-related stress, exhaustion, isolation and psychological wellbeing, and can help to mediate the negative effects of work from home challenges such as work-life balance, loneliness, and procrastination (Oakman et al., 2020; Graham et al., 2023; Bentley et al., 2016; Wang et al; 2022).

There is evidence that organisational support may have a greater impact on hybrid worker wellbeing than their work location or arrangement. A longitudinal study of over 650 Australian workers across one year of the COVID-19 pandemic investigated the impact of working arrangement (home, office, hybrid) on social support. It found that an increased sense of community and social support – measured using the Copenhagen Psychosocial Questionnaire – was associated with higher self-rated general health (Graham et al., 2023). Importantly, almost 75% of all participants reported high and stable levels of social support, 13% of participants experienced a decrease in social support over time, and 14% experienced an increase over time (Graham et al., 2023). However, these differences in social support were not related to working arrangement or demographic characteristics. The researchers argue that the differences were therefore due to workplace characteristics, such as the implementation of social support strategies and less use of unsupportive approaches such as increased monitoring, surveillance, and micromanaging (Graham et al., 2023). Similarly, a survey of over 350 Swedish white-collar workers who were offered the option to work from home over the previous 10-12 months, found no difference in general wellbeing, or stress among those who chose to mainly work from the regular office compared to those mainly working from home (Lundqvist et al. 2022). However, perceived support from their supervisor was related to better self-reported wellbeing and less work-related stress for both groups (Lundqvist et al., 2022).

Having effective communication is crucial for providing social support for workers working from home, or in hybrid arrangements (Graham et al., 2023; Wang et al., 2022). Effective social support in the workplace can help to reduce the risk of negative health outcomes such as stress, loneliness and musculoskeletal pain, and is associated with better mental and physical health and wellbeing (Böckerman et al., 2012; Wang et al., 2022; Graham et al., 2023). Teams working virtually face significantly greater communication challenges than face-to-face teams, as it can lead to fewer interactions between colleagues and decreases in knowledge sharing (ILO, 2020). In a study investigating how the Australian Capital Territory (ACT) Public Service can better support effective flexible working arrangements, Buick et al. (2022) found that teams with less frequent online engagement were more likely to report experiencing social isolation when working at home and more likely to have disengaged and unmotivated staff. In contrast, teams that had effective communications, and supportive behaviours and practices prior to the pandemic were able to successfully transfer this to the online working environment. Similarly, the Xiao et al. (2021) study of almost 1,000 home workers reported that when current communication with co-workers was higher than communication before commencing working from home, respondents were significantly more likely to also report having higher mental and physical wellbeing since beginning working from home. Organisations can foster communication among colleagues to maintain better mental health status among workers (Xiao et al., 2021). This is also the case for pre-Covid findings. A study of over 800 New Zealand workers found perceived organisational social support and support from peers and supervisors to be related to reduced perceptions of social isolation and psychological strain (Bentley et al., 2016). This impact on social isolation was greatest for low intensity teleworkers, those who worked one day or less per week from home, indicating that organisational support is important even when workers are working mostly from the office (Bentley et al., 2016). To optimise social support when working from different locations, a purposeful approach can be implemented (Buick et al., 2022). A purposeful approach manages hybrid workforces in a way that highlights the importance of when and why teams work in the same space, such as for team planning days or solving complex problems.

Encouraging face-to-face interactions can improve physical and mental wellbeing, as well as improve relationship quality and social connectedness (Marinucci et al., 2022; Simone et al., 2019; Rains et al., 2019). Buick et al. (2022) found that many ACT public sector managers and employees are willing to embrace working from the office if it is clearly communicated why it is important, and how it adds value to their work and team.

Another important aspect of organisational support is providing effective technical support. The influence of technology on health-related outcomes depends on how it is implemented and organisational norms around its use (Johnson et al., 2020). 'Technostress' is a term used to describe the experience of stress by an individual due to the work-related use of technology and can contribute to fatigue, frustration, reduced wellbeing, physical discomfort, and a reduced ability to switch off from work (Johnson et al., 2020; ILO 2020; Singh et al., 2022). Technostress can manifest from excessive use of technology, technology work demands invading non-work time, and from uncertainty or lack of confidence and competence in using new technologies (Singh et al., 2022; Ragu-Nathan et al., 2008). Home workers are particularly at risk of technostress due to reliance on technology to communicate. Technostress was particularly a challenge during the pandemic lockdowns due to the sudden and enforced remote working which required employees to quickly adapt to new digital platforms and communications practices (Singh et al., 2022). It's possible however, that as workers adapt to this new way of working, the stress of learning new technologies will reduce. In a study on the impact of technostress on wellbeing and exhaustion during pandemic-enforced home working, researchers found in a sample of 300 employees that workers with previous experience working from home were better at adjusting to the change and had reduced technostress and better wellbeing than those that did not have previous experience (Singh et al., 2022). The use of a buddy system, provision of effective equipment, and high-quality technology support and training may assist in reducing this risk (Oakman et al., 2020).



Take action – practical steps for employers and workers

Effective Communication and Social Support

Organisational strategies to keep workers informed, updated and promote social interaction between colleagues can effectively support hybrid workers. For example:

- > Set up a dedicated space, such as on the organisation's website or intranet, to provide all updates, information and resources regarding teleworking policies and procedures (ILO, 2020).
- > Clarify and establish communication norms, such as the expected level of detail in messages, and workers preferred response times (ILO, 2020).
- > Ensure workers are aware of how and when they can contact their supervisor.
- > Encourage regular chat and wellbeing check-ins between workers and managers.
- > Encourage and increase informal catch ups during work hours such as online water cooler catch ups (Van Zoonen & Sivunen, 2022; ILO, 2020; Ferreira et al., 2021).
- > Encourage team members to have a regular 'anchor day' in the office to connect with colleagues and maintain networks (Oakman et al, 2020).
- > Provide employees with the autonomy and flexibility to decide when and where they work (Knight et al., 2022).
- > Create open channels for communication amongst teams such as a shared chat group (PWC, 2021).
- > Focus on communicating with motivational language, building trust and sharing information, rather than monitoring (Wang et al., 2020).
- > Train workers and managers on how to maintain open communication when working in hybrid teams (Van Zoonen & Sivunen, 2022).
- > Provide access to resources and support services that address isolation and help employees manage predictable stressors associated with working in hybrid teams (Van Zoonen & Sivunen, 2022).
- > Implement peer buddy systems, particularly for at-risk workers such as younger workers, new workers, or those with limited experience in working from home. Partner a trusted colleague with these employees to have weekly check-ins, introduce them to others, and provide additional support (Knight et al., 2022).

Purposeful Approach to Hybrid Arrangements

To establish a purposeful approach to hybrid arrangements, team leaders could consider creating a framework to identify a set of work characteristics, activities and/or socio-cultural based reasons where face-to-face interaction is better for outcomes. This may include:

- > collaborating to solve complex challenges.
- > holding stakeholder meetings.
- > team planning days.
- > onboarding new employees.
- > activities to strengthen relationships and cohesiveness within teams.

Technical Support

Organisations can also increase practical organisational support to workers by ensuring they have technical support to prevent technostress and be confident and capable in using technology effectively. Strategies include:

- > Providing training for staff in using all available software and systems.
- > Involving employees in the decision-making process and design of the technology-work interface (Johnson et al., 2020).
- > Implementing high quality technology services and provisioning of equipment needed for the software and systems (Oakman et al., 2020).
- > Ensuring workers have well-functioning technology.

4. Work Demands

Work demands can refer to overwhelming workloads, long working hours, and close monitoring. These demands can have significant implications for the health and safety of workers, and are linked to an increased risk of health problems including exhaustion, burnout, chronic fatigue, work-related stress, sleep disorders, musculoskeletal pain and other physical health issues (Tavares, 2017; Xiao, 2021; Buomprisco et al., 2021; Deloitte & Swinburne, 2022; Oakman et al., 2022a; Majumdar et al., 2020).

Working from home can increase the risk of high work demands as workers develop habits of working extra hours or not taking breaks. These habits may be triggered by a lack of the usual prompts to take breaks and log off (SWA, 2022), commute times being replaced with work activities, blurring boundaries between work and personal life, increased time in meetings, and consecutive online meetings making it difficult for workers to take health breaks. The pandemic also contributed to longer working hours and feelings of overwhelm for those working from home (Oakman et al., 2022c; Deloitte & Swinburne, 2022; Xiao et al., 2022; Buick et al., 2022; DeFilippis et al., 2020; Palumbo, 2020; Wang et al., 2021; Felstead & Henseke, 2017). The average workday during the pandemic increased by 49 minutes, and the number of meetings by 13%. In a survey of Australian government sector workers, 1 in 3 workers indicated they were working more hours since the pandemic began, with most identifying an increased workload as the cause (Deloitte & Swinburne, 2022). These findings are consistent with pre-pandemic research findings that home workers work longer and more intensive hours, impairing their ability to 'switch off' from work (Charalampous et al., 2018; Felstead & Henseke, 2017; Kelliher & Anderson, 2010; Tavares, 2017). These working habits when working from home can have negative outcomes on worker health. For example, Xiao et al. (2020) found that respondents who reported having a higher workload and increased time spent at their workstation after beginning working from home were also more likely to report having new physical health issues arise after beginning working from home.

Employees' perceptions of micromanaging and attendance monitoring, and a lack of autonomy can also impact their work demands. Buick et al. (2022) found that some ACT Public Servants perceived that they were expected to be unreasonably available and responsive, and work through personal and family illness when working from home. This perception of increased monitoring can increase work-home interference by preventing employees from meeting their family responsibilities and contribute to an 'always-on' culture where workers feel they need to respond to work-related correspondence at all hours of the day (Buick et al., 2022; Wang et al., 2021; Kossek et al., 2006; Lautsch et al., 2009; Harkiolakis & Komodromos, 2023). Conversely, an outcomes-based approach to management, focused on effectively achieving tasks and results, rather than on the amount of time that is spent on tasks, or when and where the work is achieved can minimise issues of overwork, time pressures, micromanagement, and presenteeism (Buick et al., 2022). Focusing on outcomes, rather than close monitoring and the time spent working has also been found to reduce work-family conflict, improve employees' health related behaviours (e.g. more sleep and exercise, less likely to work when sick, more likely to seek medical attention when sick, etc.), reduce staff turnover, provide employees with greater autonomy, and assist managers to adapt to a hybrid team (Centre for Transformative Work Design, 2020; Moen et al., 2011a; Moen et al., 2011b; Buick et al., 2022; Harkiolakis & Komodromos, 2023).



Take action – practical steps for employers and workers

Designing Good Work

To minimise the harmful impacts of overwork when working from home, it is important that workers are encouraged and reminded to establish good patterns of work, there are a number of ways this can be done, such as:

- > Have workers and their supervisors agree on and establish individual Teleworking Workplans (ILO, 2020).
- > Explain the importance of having regular breaks and support workers to take them, reassuring them that these breaks won't have negative consequences (SWA, 2022).
- > Provide extra assistance and follow up workers who might be prone to working long hours (SWA, 2022).
- > Have a consistent approach for workers to signal whether they are available, such as through Microsoft Teams statuses (available, busy, do not disturb, away) (ILO, 2020).
- > Discuss with employees, their best way of working, when they feel most productive and focused, and encourage them to work this way as much as possible (ILO, 2020).
- > Encourage workers to be open about feeling overworked and speak up when tasks need to be reassigned (ILO, 2020).
- > Set achievable deadlines, clarify priorities, and communicate realistic expectations that consider the working from home context (ILO, 2020).
- > Offer training sessions that teach employees skills such as time management (ILO, 2020).
- > Encourage the use of wellness applications such as Headspace which teaches mindfulness and meditation, and can help to prevent burnout at work (Headspace, 2023).
- > Recognise that offline time is needed for workers to be productive and effectively do their jobs.
- > Implement boundary management strategies such as encouraging workers to take sick leave and rest and recover when they are unwell, rather than working from home.
- > Encourage to have a dedicated day of no meetings where possible (Oakman et al., 2022b).

Outcomes-Based Management

Implementation of an outcomes-based approach may require a shift in culture to embed the practice organisation wide. For example, the Western Australian (WA) public sector has developed an Outcome Based Management Framework (Department of Treasury WA, 2023). The framework is a mandatory requirement for all WA state government agencies to ensure the approach is consistently applied throughout the whole of the state government. Implementing an organisational culture change can be challenging, but Buick et al. (2022) suggest it can be achieved through an action plan involving:

- > Establishing what an outcomes-based approach looks like in the context of the organisation, what is expected to change, and how it supports the organisation's purpose.
- > Identifying and describing the leadership behaviours that need to be evident, such as rewarding the effective delivery of tasks.
- > Implementing strategies to support behaviour change such as incorporating an outcomes perspective when setting criteria for promotion and recruitment, redesigning rewards and recognition to encourage the desired change, and creating management plans to ensure expectations are clear.
- > Providing ongoing learning and workshops to enable an outcomes orientation.

5. Health Behaviours

Working from home can affect a worker's health behaviours, including their physical activity, diet and alcohol intake. Prolonged sedentary behaviour can increase the risk of health problems including musculoskeletal disorders, fatigue, obesity, and lower back and neck pain from poor posture, working in one position over long periods, repetitive movements and excessive screen time (Buomprisco, et al., 2021; Mahdavi & Kelishadi, 2020; Minoura et al., 2022; Moretti et al., 2020). Employees working from home during the COVID-19 pandemic had increased sedentary activity and decreased physical activity (Griffiths et al., 2022; Roger et al., 2021; Xiao, 2021). This is largely due to the loss of incidental exercise related with commuting to the office, moving between meeting rooms, and socialising face-to-face (Tavares, 2017). In contrast, some workers indicated that increased time for physical activity is a benefit of working from home (Deloitte & Swinburne, 2022).

The impact of working from home on diet is mixed. Some studies have found working from home can increase food intake, particularly junk food (Majumdar, 2020; Griffiths et al 2022; Roger et al., 2021). This can result in weight gain, decreased mental wellbeing, and other health issues such as digestive symptoms and fatigue (Majumdar, 2020; Griffiths et al 2022; Roger et al., 2021). In contrast, other studies have found a positive effect or no effect on diet (Ammann et al., 2022; Xiao, 2021). For example, in a survey of over 1,000 Swiss workers during the COVID-19 pandemic, participants reported an improvement in healthy food choices, increased vegetable consumption and decreased snacks consumption (Amman et al., 2022). One explanation for these mixed findings is in individual differences, where workers who have a general propensity to eat well are more likely to continue to do so when working from home and vice versa. Griffith et al. (2022) found that workers with poorer general health prior to the pandemic were more likely to experience negative health impacts and behaviours after beginning working from home.

Working from home can also increase alcohol and tobacco consumption (Griffiths et al., 2022). In a survey of 299 Welsh workers working from home, over 25.7% reported an increase in alcohol consumption and 6% reported an increase in smoking (Griffiths et al., 2022). This was particularly the case for workers who had poorer general health. Similarly, a pre-pandemic Norwegian study that collected data from over 14,000 employees working from home between 2004 and 2019 found working more than 15 hours from home per week to be associated with increased self-reported alcohol use (Nielsen et al., 2021). These studies did not investigate whether alcohol consumption increased specifically during work hours, however, it's also possible that the increased privacy of working from home opens the opportunity for workers to engage in these behaviours and habits that would typically be reserved for after work (Griffiths et al., 2022).



Take action – practical steps for employers and workers

Encouraging Healthy Behaviours

Healthy behaviours when working from home can reduce the risk of many physical and mental problems (Sitthipornvorakul et al., 2015; Xiao, 2021). There are many efforts by organisations that can support and encourage uptake of healthy behaviours when working from home, such as:

- > Sharing links to factsheets, videos, and other resources that provide information on the importance of physical health, exercise and healthy eating habits when working from home (ILO, 2020; Griiths et al., 2022).
- > Encouraging the use of fitness apps and services that help employees set wellness goals, track their fitness levels and share photos, exercise tips and health recipes with one another (ILO, 2020).
- > Implementing prompts for workers to stand and move around when working from home, such as through ergonomic applications (SWA, 2022). Ideally workers should stand and move around for 2 minutes every 30 minutes (Davis et al., 2020).
- > Encouraging workers to take short active breaks for walking, yoga, or playing with children, when in the office or working from home (Xiao, 2021).
- > Implementing hybrid approaches can help to decrease alcohol misuse, as being in the office reinforces norms around drinking, and face-to-face support from peers in times of crisis can help alleviate stress and alcohol-based coping (Kniffin et al., 2021).

6. Incivility and Violence

Another work health and safety consideration when staff are working from home is the potential for increased workplace incivility and violence, including workplace cyberbullying, and domestic and family violence (ILO, 2020; Buick, et al., 2022). These behaviours can have significant implications for the victim's physical and psychological safety and wellbeing, even when carried out online or using technology (SWA, 2022).

Online incivility including cyberbullying is highly prevalent in the workplace and is not new to hybrid working. In a 2016 study of over 600 Australian public servants, 72% of respondents reported experiencing or observing cyberbullying in the workplace over the previous six months (Queensland University of Technology, 2016). Working from home may reduce face-to-face forms of violence and harassment (Bollesstad et al., 2022), however the increased reliance on online communication may lead to incivility due to a lack of visibility weakening social norms, and a decreased ability to address issues as they occur (Buick et al., 2022). Recent research on the impact of working from home on incivility is limited, however one study of 1,200 Japanese workers during the COVID-19 pandemic found frequency of working from home to be associated with an increased risk of cyber bullying victimisation (Ikeda et al., 2022). Workplace bullying and cyber bullying can have a significant impact on the victim's physical and mental wellbeing, including increased anxiety, depression, loneliness, alcohol usage and blood pressure (Bollesstad et al., 2022; Oksanen et al., 2020; Ikeda et al., 2022). For example, Ikeda et al. (2022) found both in-person bullying and cyberbullying increased the risk of psychological distress, sleep disorders and loneliness. Additionally, in-person bullying and cyberbullying often go hand-in-hand (Ikeda et al., 2022; Privitera & Campbell, 2009), with victims often having no refuge from bullying, regardless of their work location (Ikeda et al., 2022). It is therefore just as important for workplaces to manage the risks of incivility when working from home, as it is to manage in face-to-face environments.

Domestic and family violence (DFV) is defined as "any behaviour within an intimate or domestic relationship that is violent, abusive, controlling and/or threatening" (Pfitzner et al., 2022, pg 30). Workers experiencing DFV may be at greater risk when working from home (SWA, 2021). Throughout 2020, Australia saw an increase in the prevalence and severity of domestic family violence (DFV) as a result of the pandemic lockdowns and stay at home orders (Boxall et al., 2020; Carrington et al., 2020; Pfitzner, Fitz-Gibbon, Meyer, & True, 2020). DFV can significantly impact the victim's wellbeing in the workplace and ability to perform their job (McNicol et al, 2022). DFV becomes a work health and safety issue if the behaviour takes place in the workplace, including when working from home or when the victim and perpetrator work together (SWA, 2022). In a survey of over 3,000 Australian victim-survivors of DFV, 50% of respondents had experienced workplace interference in which the abusers tactically impeded the victim's ability to undertake their role. Additionally, 1 in 5 survey respondents worked in the same workplace as their abuser (McNicol et al, 2022). Organisations have a duty to raise awareness, offer support and assistance to potential victims of domestic violence, and consider if workers are more vulnerable to domestic violence when working from home (ILO, 2020; PWC, 2021). Organisations should also strive to empower employees to look out for each other and detect early warning signs (PWC, 2021).



Take action – practical steps for employers and workers

Online Incivility

Organisations are responsible for creating a safe and secure environment for workers that prevents and responds to both online and face-to-face incivility and bullying (SWA, 2022). Safe Work Australia (2022) recommends the following strategies to manage online abuse in the workplace:

- > Create awareness of what cyberbullying looks like, specific to the organisation, and how it is different to in-person bullying.
- > Add cyber bullying and harassment, including acceptable standards of behaviour and a code of conduct, into existing policies.
- > Support and encourage staff to maintain their privacy online.
- > Use security settings and tools to block and remove abusive content.
- > Provide information on the mechanisms for workers to report online abuse, and support workers to raise their concerns.
- > Clearly outline disciplinary measures for online abuse and address inappropriate behaviour early.
- > Provide information and training on dealing with difficult people, conflict resolution, online safety, reporting incidents and available support services.

Additional measures that can be considered include:

- > Focusing on reducing job demands and increasing job resources to create a psychologically safe environment, as a poor working environment can increase the risk of bullying (Rosander, 2021).
- > Reinforcing expectations around online behaviour, and how to be civil and respectful online.
- > Providing clarification around job roles and responsibilities, and having a clear division of tasks (Rosander 2021).
- > Implementing emotional intelligence training. Higher emotional intelligence can help to reduce the emotional damage inflicted by workplace bullying (Ifikhar et al 2021).
- > Training managers on the difference between conflict and bullying, as conflict-resolving strategies may not be suitable for addressing bullying (Nielsen et al.,2018).

Domestic-Family Violence

Safe Work Australia (2021) recommends the following strategies to manage the risks of family and domestic violence when workers are working from home:

- > Identify and manage the risks of individuals working from home. Consulting with workers will be essential for this, given the limited knowledge of their home environment.
- > Encourage workers to discuss any concerns they have about their health and safety, including if proposed control measures may impact them.
- > If a worker has disclosed DFV, consider developing a safety plan for working from home in consultation with their treating medical or health professional.
- > Maintain regular communication with workers. However, avoid directly asking workers about violence as this may put them at serious risk of harm.
- > Have an action plan in place for if the worker is unable to be contacted for a defined period.
- > Ensure the worker has a specific contact person they can talk to about their concerns.
- > Provide workers with a work phone and laptop to enhance digital security.
- > Provide access to Employee Assistance Programs and other support programs.
- > If working at home is not a safe option, ensure the worker has an alternative location to work from, such as the office.

7. Inequality and Discrimination

Inequality and discrimination can put exposed employees at greater risk of developing physical and mental health issues including psychological distress, anxiety, depressions and cardiometabolic diseases (Clark et al., 2021; Pascoe & Smart-Richman, 2009). A significant concern for the future of working from home and hybrid work arrangements is the possibility that they could worsen inequalities and discrimination against certain groups including women, younger workers, lower-level workers, and workers living in low socioeconomic conditions (Griffiths et al., 2022; Bonacini et al., 2022); Iometrics, 2020; Microsoft, 2021; Williamson & Colley, 2022; Buick et al., 2022).

Hybrid arrangements may disadvantage women in a number of ways. Women are more likely than men to prefer working from home and in hybrid arrangements (Deloitte & Swinburne 2022; PwC, 2021; Dishman, 2021; Pelta, 2021; Williamson et al., 2021) and this gendered preference was evident both pre- and post-pandemic (Hopkins and Bardeel, 2020). While working from home can have benefits for women, including improved work-life balance and improved ability to undertake caring responsibilities (ILO, 2020; Griffiths et al; 2022), it also gives rise to the possibility of gendered proximity bias, in which managers have a preference for workers that are in their immediate vicinity (Williamson & Colley, 2022). This could have implications for women's career opportunities and promotions and puts the organisation at risk of discriminating against those who are less visible (Williamson & Colley, 2022). To avoid these outcomes and ensure the psychological safety of female workers, organisations must establish metrics and processes to equitably measure performance and allow opportunity for promotion regardless of location of work (PWC, 2021, Williamson & Colley, 2022). This will also help to create more inclusive work practices and improve retention of workers (Oakman et al, 2020).

Younger workers can face additional challenges as working from home becomes more common. Younger workers are more likely to experience challenges around networking and career development when working from home (Iometrics, 2020; Microsoft, 2021; Williamson & Colley, 2022), and are more likely to experience feelings of loneliness and a worsening in their psychological wellbeing (Griffiths et al., 2022). This may be because they are new workers or recent graduates who have not had the opportunity to develop meaningful working relationships (Griffiths et al., 2022; Knight et al., 2022; Microsoft 2021; Williamson et al., 2021). To avoid the exclusion of these groups and subsequent negative health outcomes, organisations need to prioritise support networks and services for young people and new recruits.

There are also equity concerns for lower-level staff and those living in low socioeconomic conditions, including being digitally excluded, and less well equipped with appropriate home office equipment such as computer monitors, office chairs, or desk space. Such staff may be required to attend the office more than they would prefer (Buick et al., 2022; Griffiths et al, 2022), leading to possible inequalities in access to the benefits of working from home. Organisations need to ensure their working from home policies are inclusive of all staff and account for discrepancies in the ability to work from home. To ensure the health and safety of at-risk groups, organisations need to implement inclusive practices that prevent inequalities arising out of working from home and hybrid arrangements.



Take action – practical steps for employers and workers

Supporting Equal Opportunity

Workplaces need to ensure that inequalities do not arise from working from home policies and that workers who choose to or must work from home, do not suffer negative career impacts (Oakman et al., 2020). Leaders and organisations can support equal opportunity through strategies including:

- > Ensuring new working arrangements offer women and men equal opportunities to work from home and have viable options to overcome work-life conflict.
- > Redesigning promotion criteria and reward and recognition systems to ensure equal opportunity regardless of working location and how often they work from home (PWC, 2021; Williamson & Colley, 2022).
- > When data is collected on working from home (e.g., through surveys), ensuring that information on gender, age, worker level, socioeconomic status, etc. is collected. This will assist in understanding the impacts on different subgroups and guide the development of appropriate strategies to address them (ILO, 2020; Williamson & Colley, 2022).
- > Developing and clearly communicating hybrid work policies to workers and ensuring they can be accessed without negative career repercussions (Oakman et al., 2020).
- > Training managers on the risk of proximity bias and the importance of implementing mitigating strategies (Williamson & Colley, 2022).
- > Providing managers with guidance and criteria for who can and cannot work from home and collecting data on requests to work from home to identify any inconsistencies in manager decisions (Williamson & Colley, 2022; APSC, 2021b).
- > Providing workers with flexible options to help manage their carer responsibilities, and avoiding them having to reduce their hours or quit their jobs, as these issues are likely to have disproportionate impacts on the careers of women (ILO, 2020).
- > Providing targeted social and health support for groups such as young people who are more likely to feel isolated or have detriments to their psychological wellbeing. This could be done through peer support groups, access to work networks, or advice and guidance (Griffiths et al., 2022).
- > Ensuring there is the option to work in a hybrid model, or the option to attend an office base or remote working hub.
- > Ensuring workers have equal access to home office equipment. This may include providing workers with equipment to prevent inequalities between higher and lower paid staff.

Conclusion

The rise in working from home and hybrid arrangements has led to new work health and safety concerns for workers. Working from home has the potential to increase the risk of negative health outcomes for workers including musculoskeletal pain, burnout and fatigue, loneliness and social isolation, and work-related stress. This review identified seven key challenges that employers need to consider, to ensure the health and safety of workers in hybrid arrangements: work-life balance, the physical environment, organisational support, work demands, health behaviours, incivility and workplace violence, and inequality and discrimination.

The risks associated with working from home arrangements are similar to those that are experienced in the office, however they require more nuanced approaches to controls. Well-managed hybrid working can have a positive influence on workers' lives in relation to reductions in time, cost and stress associated with commuting, greater autonomy over when and where to work, and an improved ability to manage work and personal demands. To leverage these benefits, strategies must accommodate individual differences and acknowledge the multiple intersecting personal and professional roles and obligations that workers take on. Leaders should also be aware that particular personal characteristics such as being young, a woman, a new recruit, having carer responsibilities, living alone, or being in a lower-level role can make workers more vulnerable to some of the risks associated with hybrid arrangements. To address this, employers need to focus on setting effective systems and frameworks that support safe and healthy hybrid arrangements and ensure these groups are not disproportionately affected. Although they may have less control over the workspace, employers can still influence and provide tools for workers and managers to support themselves. It's also important that organisations avoid monitoring hours and work practices and instead encouraging the setting and monitoring of mutually agreed expectations and standards around outcomes and behaviour.

This literature review provides important insights into the work health and safety challenges of hybrid working, despite limitations due to a reliance on research conducted prior to and during the COVID-19 pandemic. Future research should better understand the work health and safety risks and controls for the current working context, in which a large population is working in hybrid arrangements without the mandate of public health policies. There is also a need for more research on when, how, and for which workers different hybrid work arrangements can be most effective.

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Appendix A – Benefits and Challenges of Working from Home to Support Injured Workers Return to Work

Returning to work after injury can benefit workers and support health and recovery. Providing adjustments is a key aspect in supporting workers to return to work and to overcome the physical, psychological and attitudinal barriers associated with returning to work (Comcare, 2023). Working from home during recovery is one adjustment, which can support workers with an injury or illness return to work sooner and more permanently, although it also comes with some challenges (Barton, 2016).

There are some benefits to allowing working from home during recovery.

- > It allows the worker to carry out their duties flexibly, with control over their schedule, including the frequency and intensity of work, which can be crucial to recovery (Barton, 2016).
- > Working in the office can sometimes make workers recovering from injury feel pressured to mirror the work patterns of their colleagues, putting them at risk of burnout and reinjury (Barton, 2016).
- > Working from home makes it easier to incorporate rehabilitation, such as prescribed exercises or stretches, into their workday (Lis, 2022).
- > Working from home allows workers with injuries to avoid many of the disruptions in daily work life, such as potential physical difficulties of commuting to work, and can support better management of fatigue and working hours (Barton, 2016; Moradi et al., 2021).
- > Working from home can also help to reduce psychological distress associated with frustration and impaired cognitions for workers who have suffered strokes for example (Moradi et al 2021).
- > In cases where interpersonal conflicts or workplace relationships contributed to a worker's injury, working from home can reduce this interpersonal stress and allow space to better cope with frustrations and offer new perspectives or opportunities for intervention (Lis, 2022).

Although there are clearly benefits to working from home during recovery, there are challenges that need to be considered. The lack of face-to-face communication can increase feelings of isolation for workers (Barton, 2016; Lis, 2021). It can also make it more difficult for employers to gauge how the workers recovery is going and whether they need additional supports or modifications. Employers and managers will need to ensure they maintain open and regular communications with employees that includes conversations about their health and recovery (Barton, 2016). Additionally, employers should organise ergonomic assessments of the worker's home office to ensure the space is optimal for their recovery, as an ergonomically incorrect workstation can exacerbate injury (Lis, 2021). Work-life balance can also become challenging when working from home, so employers should encourage boundaries between work and home, such as switching off access to emails after working hours, which is especially crucial for rest and recovery (Lis, 2021)

Research and guidance on this topic is limited. Future research could investigate the efficacy of working from home to support the recovery and return to work of workers with different types of injury, for example.



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