

MONITORING & TRACKING THE FIELD



CFLRI'S BULLETIN SERIES MONITORING SPORT AND RECREATION IN CANADA

Impact of pandemic on physical activity in key settings

Public Health regulations related to COVID-19 resulted in reduced access to key settings in which individuals are frequently active (e.g., closure of recreation facilities, parks, and playgrounds). The restrictions have the potential to influence population levels of participation, at least in the short-term. Addressing these challenges requires an assessment to determine how movement behaviours have changed during the pandemic and which segments of the population are most affected by these restrictions. The Canadian Fitness and Lifestyle Research Institute (CFLRI) conducted a survey in 2020 and 2021 called the *Impact of COVID-19 on Physical Activity and Sport* survey. In comparison to typical levels of physical activity prior to COVID-19 (prior to March 2020), adults in this survey were asked ratings of change in their level of physical activity in various key locations. Table 1 describes current levels of participation in key settings compared to pre-pandemic levels.

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Table 1: Perceptions of current levels of activity in key settings compared to the pre-pandemic period

	Perceptions of current levels of activity compared to pre-pandemic period (%)			
	Somewhat or much less	Same	Somewhat or much more	Not applicable/ Don't know
At or around home	19%	46%	34%	2%
In local neighbourhood	25%	36%	36%	3%
At outdoor venues beyond neighbourhood	32%	34%	24%	10%
At work or school	34%	26%	7%	33%
At sport and recreation facilities	48%	20%	4%	28%

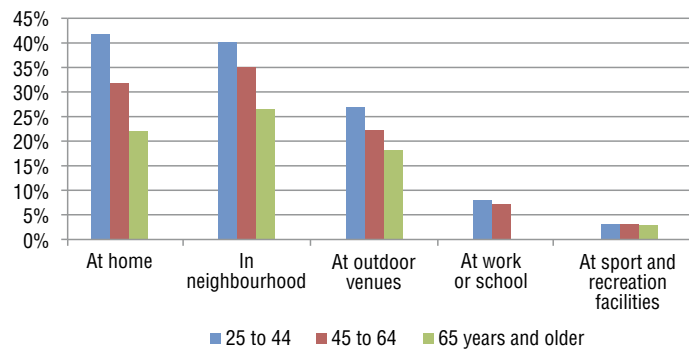
Source: CFLRI, 2020-2021 *Impact of COVID-19 on Physical Activity and Sport* survey

Differences by populations

Certain groups varied in their perceptions about their current activity levels compared to the pre-pandemic period, in key locations. For example, there are significant relationships with age (see Figure 1). A lower percentage of older adults (65 years and older) indicate that they are currently *more active at home or in their neighbourhood* compared to their younger counterparts (aged 25 to 64 years). In a similar way, fewer older adults report that they are *more active at outdoor venues* beyond the

neighbourhood compared to 25 to 44 year olds. Older adults are also the least likely age group to say that they are currently *less* active at *sport and recreation facilities* compared to pre-pandemic, whereas 25 to 44 year olds are most likely to say that they are currently less active at these facilities. There is a general age-related decrease in the percentage of adults reporting that they are *less* active at *work or school* compared to the pre-pandemic period.

Figure 1: Spending *more* activity in key settings compared to the pre-pandemic by age



Source: CFLRI, 2020-2021 Impact of COVID-19 on Physical Activity and Sport survey

Compared to adults living in some lower income households, adults living in the highest income households are more likely to say that they are *more* active at *home*, *in the neighbourhood* and at *outdoor venues* beyond the neighbourhood now versus prior to the pandemic. On the contrary, a greater proportion of adults living in the highest income households report being *less* active at *work or school*, or at *sport and recreation facilities* now versus

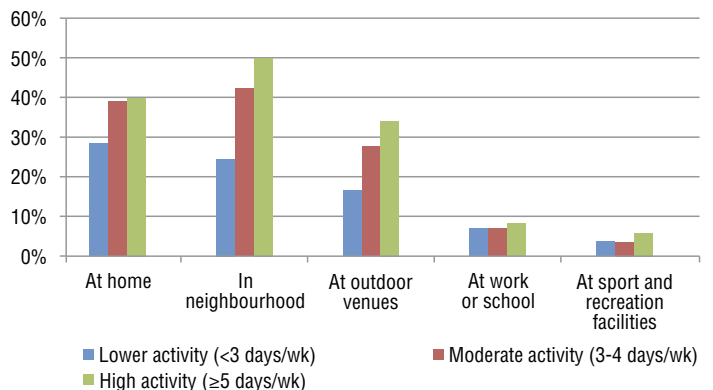
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pre-pandemic, when compared to adults in some lower income households.

Compared to individuals living in the smallest communities, a greater proportion of adults living in the largest communities say that they are *more* active at *home* or *in the neighbourhood* now compared to pre-pandemic. Conversely, a higher percentage of residents living in the largest communities say that they are currently *less* active than the pre-pandemic period at *work or school* or at *sport and recreation facilities* compared to residents living in the smallest communities.

There is also a relationship between activity in key settings and actual activity level. A larger percentage of the most active adults indicate that they are currently *more* active than the pre-pandemic period at *home*, *in the neighbourhood*, and at *outdoor venues* beyond the neighbourhood compared to those who are least active. Compared to the most active adults, the least active adults are more likely to say that they are *less* active now at *work or school* versus before the pandemic.

Figure 2: Spending *more* activity in key settings compared to the pre-pandemic by activity level



Source: CFLRI, 2020-2021 Impact of COVID-19 on Physical Activity and Sport survey



Discussion

As expected, findings from the CFLRI's *Impact of COVID-19 on Physical Activity and Sport* survey seemed to follow provincial and territorial restrictions which limited activity of Canadians to proximal locations such as their homes and local neighbourhoods, yet restricted or limited access to gyms, sport and recreation facilities, and workplaces. For example, the majority of Canadian adults report that they are *less* active to some degree at *sport and recreation facilities* (48%) or *work or school* (34%), compared to pre-pandemic levels. Given many provinces and territories were implementing “stay-at-home” orders and increased telecommuting, it is not surprising that the majority of adults either remain the same or more active (80%) around their home.

Supporting this CFLRI research, other studies have shown that location of participation during the pandemic is influenced by various characteristics. According to the findings from Statistics Canada's *Canadian Perspective Survey Series-Impacts of COVID-19* (CPSS1), the majority of Canadians participated in physical activity outdoors during the pandemic (>60%),¹ however, more women reported exercising indoors during this time compared to men (63% vs. 55% respectively). This study also found a link between location of activity and perceived general health. Specifically, a greater proportion of older men (aged 55 years and older), reported better general health if they were active outdoors compared to men who were not, whereas for women, a high level of general health was associated with participation both indoors and outdoors, though age-related differences were noted.¹ More specifically, women, aged 35 years or older, reported better general health if they participated outdoors, whereas greater general health was associated with being active indoors among women between the ages of 35 to 54 specifically.¹ Another interesting finding was the link between outdoor activity and mental health, although this relationship varied by gender; reported mental health did not differ for men by location of exercise, whereas women in the study were more likely to report having ‘very good’ or ‘excellent’ mental health if they were exercising outdoors.¹

In another national study which examined the impact of the pandemic on physical activity behaviours, researchers reported similar findings, whereby the majority of participants reported participating in physical activity in or around their



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home.² In this study, preferences in location varied by activity level. Specifically, inactive participants were more likely to report participating outdoors compared to active participants.²

The pandemic has prompted the need to rethink the design of urban environments and consider the importance of restructuring to allow for increased accessibility of basic needs and services.³ The findings in this and other studies seem to indicate a shift in physical activity practices since the pandemic, where more individuals are being active in and/or around their home or in their neighborhoods. Given the potential long-term implications of shifting patterns of Canadians such as the increased desire to seek out opportunities close to home, understanding which key supports are needed for engaging adults to purposively incorporate physical activity into their daily routines will be critical.

FUTURE CONSIDERATIONS



Restoring confidence

As restrictions lift it will be important that Canadians feel safe to participate in their environments. This includes the confidence in the use of public health-related procedures and management of the number of patrons within facilities. To this end, financial support may be required to ensure that recreation and sport facilities are safe and remain operational. For example, funding support will help to facilitate adequate training of new and existing staff to ensure they are aware of new protocols/policies and have the confidence to implement them.⁴ Additional support may also be necessary to help off-set the costs of hiring additional staff to combat shortages due to illness or loss thereby minimizing disruptions to services. Changes to the design of facilities such as improving ventilation systems may be necessary to enhance air quality and reduce the risk of transmission while participating.⁴ These are key considerations for service delivery and facility operators. Communicating to the public the measures that providers are taking to mitigate the risk will be important for helping to reassure patrons that these programs and services are being offered in a safe environment.



Consider the outdoors

While being active in any environment is important for overall health and well-being, research has shown that participating outdoors offers benefits for mental health as well as general health, and this was evident during the pandemic. The finding reported in this bulletin is harmonious with other published studies, which showed that outdoor spaces (e.g., parks, green or open spaces and trails) became increasingly popular venues for physical activity during the pandemic.^{3,4} Moving forward it will be important to encourage outdoor activity by effectively communicating the benefits of participating outdoors; examples of these benefits include improved mental health, connecting with the nature, reduced risk of transmission,

cost-effectiveness, and accessibility.⁵ Given these known benefits, and shifts towards more unstructured participation, program deliverers may need to adapt current programming or consider offering more programming that can be done in an outdoor setting. To facilitate outdoor participation year round, governments may need to consider investing in the maintenance of outdoor facilities (such as parks and trails) particularly during the winter months to ensure that they are safe and accessible.⁴



Consider new ways to stay active

Many Canadians (80%) in this study maintained or exceeded levels of physical activity while at home. Conversely, a much smaller proportion indicated they were less active in the home environment. Research has shown that participation in home-based physical activities (e.g., virtual programming/training) helped some Canadians maintain or increase their activity levels during periods of restrictions, but certain barriers such as lack of access, availability or knowledge may have prevented others from utilizing on-line services. Virtual programming may continue to be a preferred avenue for participating among some Canadians in the post-pandemic era, and as such, assistance in the training of coaches and instructors on how to provide quality programming online, purchasing or updating equipment and development of marketing strategies may help organizations to promote and increase participation. Going forward sport and recreation providers may need to consider the adoption of a hybrid model which includes both in-person and home-based programs.⁴



Return to work/school

The loosening of restrictions will provide much needed additional opportunities for Canadians to be active. School closures resulted in reduced opportunities for physical activity and sport as many service providers, who rely on these facilities for the delivery of their programs, were

unable to access them. Government investments have been made in some jurisdictions to allow schools to make necessary improvements to ventilation systems.⁶ Additional support may be needed to ensure that many more schools can make these same changes to improve ventilation and filtration in physical activity areas to help to reduce the risk of transmission of the virus within their facilities. Increases in teleworking and decreases in public transit were observed at the height of the pandemic due in part to workplace closures and/or concerns with safety.⁷ Consideration is needed to determine what measures can be implemented to make public transportation as perceived safe choices for both staff and riders. Examples of these measures may include revising schedules to spread ridership to prevent crowding, physical barriers to allow for physical distancing, disinfection of high-touch surfaces between trips.⁸



Re-think urban design of neighborhoods

As research has shown, Canadians are spending more time at home or in their local neighborhoods as a result of the pandemic. Going forward, municipal planners and policy makers may need to consider restructuring neighbourhoods to improve proximity to essential needs and services. A concept gaining increased attention is the idea of the “15-minute city” which states that urban environments should be designed in such a way that allows people access to basic and essential services at distances that could be accessed within 15 minutes from their home by foot or bicycle.³ When planning the design of neighborhoods, planners could aim to make them less car-dependent and include features such as walking trails, bicycle lanes, parks and playgrounds which will encourage residents to be more active.

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