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GUIDANCE

Covid-19 public health road map: Physical activity

AIM OF THIS DOCUMENT

This roadmap aims to support health officials to consider changes to physical activity that may have occurred during the Covid-19 pandemic and to use psychologically-informed behaviour change approaches to optimise health improvement and mitigate a reduction in activity levels. This guidance should be used alongside the [*Achieving Behaviour Change \(ABC\) guide*¹](#) for local government and partners, and the [*Improving People's Health behavioural and social science strategy*²](#).

BEHAVIOURAL SCIENCE RECOMMENDATIONS

Physical activity can benefit both physical and psychological health. Being physically active each day can be influenced by what we know and what we can do (capability), the people around us and our physical environment (opportunity) and our beliefs, what we want, how we see ourselves, how we regulate our emotions, and our habits (motivation).

To support possible changes since Covid-19:

Consider whether any disruption to daily routines, finances, access to usual places to be active, and/or social support (e.g. that may have arisen from working from home, school closures, changes to commuting, sports and leisure facility closures and/or restrictions) may have influenced physical activity behaviour.

Where needed, develop strategies to mitigate influences on physical activity behaviour (e.g. educating and promoting how to be physically active at home or in local outdoor spaces, creating social support while physically distant such as via social media).

Promote ways to be physically active safely (e.g. while maintaining physical-distancing, creating a safe space to be active).

Facilitate planning of how to continue to be physically active in the event of unpredictable circumstances (e.g. needing to self-isolate/quarantine).

Promote physical activity for the benefit of physical health and psychological wellbeing, particularly in relation to boosting the immune system.

We recommend following the British Psychological Society's [*Behavioural Science and Disease Prevention Psychological guidance*³](#) to shape any policy and/or communications strategy.

TARGET BEHAVIOUR: PHYSICAL ACTIVITY PARTICIPATION

The [World Health Organisation \(WHO\)](#)⁴ and [UK government](#)⁵ recommend that children and young people (WHO = 5–17 years; UK = 5–18 years) should achieve 60 minutes of moderate to vigorous physical activity (MVPA) every day and that adults should perform 150 minutes of MVPA or 75 minutes of vigorous physical activity (VPA) per week. Muscle strengthening activities, such as lifting weights or heavy shopping bags, are recommended on at least two (adults) to three (children and young people) days of the week. Physical activity should be spread across the week and can be accumulated in blocks of 10 minutes or more.

Being **physically inactive** e.g. classified by Sport England⁶ and WHO⁴ as gaining less than 30 minutes of MVPA per week for adults and less than 30 minutes of MVPA a day for children, is different from being **sedentary** (e.g. time spent sitting, laying or in a reclined posture during the waking day). An individual can meet the recommended guidelines for physical activity and still be considered as engaging in high levels of sedentary behaviour. Both physical activity and sedentary behaviour should be considered important for health and wellbeing and we have produced separate guidance on [sedentary behaviour](#).

WHY IS PHYSICAL ACTIVITY IMPORTANT?

Meeting the recommended physical activity guidelines can help to reduce the risk of long-term conditions such as, obesity, type 2 diabetes, cardiovascular disease, stroke, cancer and poor mental health while also being beneficial to those living with these conditions^{4,5}. Inactivity is the fourth leading risk factor for mortality worldwide, and is related to one in six UK deaths⁷. The wider benefits of participating in physical activity include physical and mental wellbeing, and economic, social, and community development⁶.

POSSIBLE CHANGES TO PHYSICAL ACTIVITY SINCE COVID-19

Taking one form of exercise per day was one of the only reasons individuals were permitted to leave their homes during the lockdown period. Covid-19 saw the closure of sporting activities and facilities such as gyms and swimming pools. Restriction measures due to lockdown and physical-distancing (also known as social-distancing), meant for many, a change in regular physical activity routines, such as commuting, attending community exercise provision, and loss of social support that would have been achieved through exercising with others outside of the household (e.g. parkrun).

In general pre-Covid-19, more men (65%), than women (61%) met the physical activity guidelines⁸. This is also in the case for children with boys (51%) more active (meeting the 60 minutes of MVPA per day recommendations) than girls (43%)⁸. However, there is no real difference in inactivity levels (less than 30 minutes MVPA per week) between men (Sport England data = 24%; Health Survey for England data = 26%) and women (Sport England data = 25%; Health Survey for England data = 27%), with approximately a quarter of UK adults classified as inactive^{8,9}.

[Data from Sport England](#)¹⁰ suggest that since Covid-19, people view physical activity as important for their physical (71%) and mental (65%) health. Physical activity levels remained relatively stable over the pandemic period, dropping slightly in July 2020, with the biggest drop seen in those over 55 years old¹⁰. The biggest concern that people expressed about being physically active (24%) was in relation to physical-distancing, with 64% agreeing that they would feel uncomfortable exercising close to other people and would feel safer exercising at home than in a public place¹⁰. However, in a study¹¹ of UK adults launched in March 2020, 75% of respondents ($N=911$) met the recommended physical activity guidelines during 'social-distancing', with most notably women (64% of the sample), older adults and those with a higher income reporting being more active.

Measures taken to contain Covid-19 may have resulted in reduced physical activity for those in vulnerable or clinically at-risk groups asked to shield; and for young people who would not have usual school-based activities. In addition to the long-term negative health effects of physical inactivity, for some there may be more immediate negative consequences. For example, older adults and those living with long-term conditions may experience deconditioning¹² (e.g. decline in muscle strength and bulk) due to reduction in physical activity and mobility, and this may exacerbate existing inequalities and risk to health. The impact of a reduction in physical activity on health outcomes and the deconditioning that may have occurred during the recovery from Covid-19 may also have health and wellbeing consequences that should be taken into consideration.

WIDE-SCALE PUBLIC HEALTH INTERVENTION

Health officials have the opportunity to support national behaviour change through a number of policy levers. Table 1 highlights existing approaches and suggestions for future development. Using this document, alongside the [ABC guide](#)¹ and support from experts in behaviour change, such as health psychologists, can help to optimise reach and impact of public health efforts.

Table 1: Policy categories from the Behaviour Change Wheel^{1, 13,14} that could support physical activity during the Covid-19 pandemic and beyond.

Policy categories	Definition	Examples and suggestions
Communication/ marketing	Using print, electronic, telephonic or broadcast media.	Use clear messaging about the benefits of physical activity in general (e.g. Moving Medicine and We Are Undefeatable) and during Covid-19.
Guidelines	Creating documents that recommend or mandate practice. This includes all changes to service provision.	The CMO guidelines for physical activity should be promoted and Covid-19-specific physical activity guidelines should be created for all settings (e.g. schools, workplaces, general community).
Fiscal measures	Using the tax system to increase or reduce the financial cost.	Physical activity should be incentivised through tax cuts for people who are physically active. Reduce cost for things that will support physical activity (e.g. trainers, gym wear, equipment, memberships).
Regulation	Establishing rules or principles of behavioural practice.	Require companies to have a policy to encourage physical activity during the working day (both in the workplace and those working from home). Develop a code of practice to ensure that physical activity can be performed safely in public settings. Local authorities should co-create and share a 'Physical activity lockdown plan'.
Legislation	Making or changing laws.	Ensure that the right to be physically active outside for a minimum of one hour is made a legal requirement of any future legislation (e.g. future potential lockdowns).

Environmental/ social Planning	Designing and/or controlling the physical or social environment.	<p>Ensure that footpaths, cycle lanes and training areas/facilities allow for physical-distancing.</p> <p>Build more 'outdoor free gyms' to enable physical activity and muscle strengthening activities free-of-charge.</p>
Service Provision	Delivering a service.	<p>Create national provision of physical activity services for all. Promote existing exercise referral and/or other physical activity programmes informed by behavioural science (e.g. Active Herts) that can support physical activity and recovery from the impact of Covid-19 (directly and indirectly). Programmes should include behaviour change techniques known to be effective in changing physical activity behaviour, such as those found here.¹⁵</p> <p>Promote apps such as One You Active 10 and Couch to 5K. A review of physical activity interventions can be found here.¹⁶.</p>

UNDERSTANDING INFLUENCES ON BEHAVIOUR USING A COM-B DIAGNOSIS

To help in understanding behaviour and behaviour change, the COM-B model^{13-14, 17}, suggests that there must be considerations made for the target population in relation to their:

Capability to enact the Behaviour, that relies on both psychological (e.g. knowledge and skill) and physical (e.g. ability and strength) capability factors;

Opportunity to enable the Behaviour, that considers both social (e.g. norms, support) and physical (e.g. resources, environment) opportunity facilitators; and

Motivation to perform the Behaviour, that involves both reflective (e.g. attitudes, confidence, intentions, identity) and automatic (e.g. emotion, habit) motivational processes.

The likely influences to consider when developing policies, campaigns or messaging to support physical activity based on a COM-B behavioural diagnosis are presented in Table 2.

Table 2: COM-B behavioural diagnosis of the likely influences on physical activity.

Capability psychological/physical	Opportunity social/physical	Motivation reflective/automatic
Knowledge of the recommendations for physical activity. (Psychological)	Social support for physical activity from family, friends or workplace. (Social)	Belief that physical activity would be beneficial to health and/or a good/fun thing to do. (Reflective)
Having the cognitive ability (e.g. headspace) and interpersonal skills to be physically active. (Psychological)	Having somebody to be physically active with. (Social)	Having the confidence to be physically active despite challenges since Covid-19. (Reflective)
Remembering to be physically active when routine may have changed. (Psychological)	Family commitments influencing physical activity (e.g. home schooling). (Social)	Having strong intentions to be physically active. (Reflective)
Knowledge about how to be physically active and the rules and restrictions around being active safely. (Psychological)	Social and cultural norms to be physically active. (Social)	Having a goal to be physically active. (Reflective)
Ability to plan to be physically active (e.g. to get kit ready to wear). (Psychological)	Having appropriate resources (e.g. clothing and footwear) to be physically active. (Physical)	Holding an identity of a physically active person. (Reflective)
Having the skill to be physically active. (Physical)	Having access to the physical space (indoors and outdoors) to be active safely (e.g. maintaining physical-distancing). (Physical)	Overcoming emotion that may influence physical activity, such as anxiety (e.g. worried about infection), sadness, boredom. (Automatic)
Physical health restrictions that may limit physical activity. (Physical)	Financial restrictions to be physically active. (Physical)	Physical activity being part of each day without thinking. (Automatic)

DIFFERENT AUDIENCES TO CONSIDER

WHO NEEDS THIS INFORMATION

World Health Organisation, International partners and public health teams, Public Health England, Public Health Scotland, Public Health Wales, Public Health Agency Northern Ireland, Local Authorities, commissioners, Clinical Commissioning Groups, primary care, schools, Sport England, Sport Scotland, Sport Wales, Sport Northern Ireland, Active Partnerships, Football Community and Education trusts, relevant charities (e.g. British Heart Foundation, Versus Arthritis, Macmillan Cancer Support, Diabetes UK), mental health services, all agencies and organisations with a remit of physical activity.

WHO WILL BE INFLUENCED MOST BY COVID-19

There is a need for researchers and policy makers to address how these barriers and facilitators differ based on occupation, role and employment status, gender/sex, socio-economic group, ethnic group, experience of physical and/or learning disabilities, age group, differing levels of risk for Covid-19 and those in Covid-19 recovery.

USING A BEHAVIOURAL SCIENCE APPROACH

This document provides considerations for the initial stages of intervention development using the Behaviour Change Wheel^{13,14} approach described in the [\(ABC\) guide](#)¹ to support behaviour change. For further support on the full development and evaluation of interventions and the translation of this into practice using the whole system approach, you can contact the [BPS Division of Health Psychology](#) (with the subject title Covid-19). We would also encourage you to contact your local university or one with expertise in behaviour change, and/or [find a psychologist](#) via the Society's website.

RESOURCES

- [NHS](#)
- [British Heart Foundation](#)
- [Sport England](#)
- [Sport England Covid-19 data](#)
- [Public Health England](#)
- [Public Health England: Active At Home](#)
- [NIHR](#)
- [Local Government Association](#)
- [Active Herts](#)
- [Review of measuring physical activity and sedentary behaviour](#)

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