Global levels of physical inactivity in adults

Off track for 2030







Regular physical activity can improve both mental and physical health in people of all ages and abilities. Conversely, too little physical activity increases the risk of noncommunicable diseases (NCDs) such as heart disease, stroke, cancer and diabetes – all leading causes of premature death (1). It is never too late to start being more active and the benefits are particularly important for healthy ageing and the management of chronic diseases.

The WHO *Global action plan on physical activity 2018–2030 (2)* responded to the need for updated policy guidance on how countries could support people of all ages and abilities to be more regularly active. In the World Health Assembly resolution¹ supporting the action plan, all countries agreed to aim for – and importantly, track progress toward – a global target of a 15% relative reduction (against a 2010 baseline) in insufficient physical activity² by 2030. This extended the 10% target established in 2013 as part of the nine voluntary targets for reducing the leading risk factors of NCDs by 2025. Put simply, this means tracking levels of physical *inactivity* at global, regional and national levels. This is core to evaluating the impact of policy aimed at reducing physical inactivity, reporting progress and ensuring accountability.

The value of enabling more people to be more active go beyond disease prevention and improved health and well-being, to include positive social, economic and environmental benefits for individuals and communities. But despite common understanding of these wider impacts, and knowledge of effective policy solutions, previous estimates have shown little change in global levels of physical inactivity over the past 15 years (3). Furthermore, a recent global stocktake of policy implementation by countries (4) revealed widespread gaps in delivery of effective policy responses and persistent fragmentation in multisector and multistakeholder action. The new data summarised in this report provides a timely update to estimates reported in 2018 and supports WHO's mandate to report on progress to the World Health Assembly in 2025 and 2030.¹

¹ WHA71.6 WHA Resolution 71.6. (2018). WHO global action plan on physical activity. 2018–2030 (https://apps.who.int/gb/ebwha/pdf_files/WHA71/A71_R6-en.pdf)

² Defined in adults 18 years and over as not meeting the WHO recommendations of at least 150 minutes of moderate- to vigorous-intensity physical activity per week.

³ Country groupings based on epidemiological profile, geography, culture and aligned with data reporting used for other NCD risk factors conducted by NCD-RisC (see https://www.ncdrisc.org).

⁴ Data from digital wearable devices (such as pedometers or accelerometers) were excluded due to the differences between measurement compared to self-report instruments, and the absence of standardized methods for combining data. Very few national data sets using a wearable device were identified (n < 10).

⁵ Estimates for Monaco and Taiwan, China, are used in regional estimates but are not presented.

⁶ See https://www.who.int/data/gho/data/themes/topics/noncommunicable-diseases-risk-factors.



This report provides a summary of the main findings from the latest global assessment of levels of physical inactivity globally, regionally and by country in adult populations.

These new comparable estimates are presented globally, and by six WHO regions, nine country groupings;³ four World Bank categories; and by age and sex for year 2022; and as trends from 2000. In addition, and for the first time, this analysis identifies which countries are estimated to be "on track" to achieve the 2030 target for reducing physical inactivity. The implications of these data for governments and stakeholders are presented as six key policy actions, each consistent with the WHO Global action plan on physical activity.



For this analysis, data were sourced from 507 eligible surveys assessing population levels of physical inactivity conducted between 2000 and 2023 in 163 WHO Member States and territories. These data cover 93% of the global population (5). Surveys were included if they collected total weekly duration of activity across four domains of physical activity (at work, at home, for transport, or for recreation and leisure) and were representative of at least three areas within a country or territory.

The most frequently used survey instruments were the Global physical activity questionnaire (GPAQ; n = 228) and the International physical activity questionnaire (IPAQ; n = 137) with the remaining surveys (n = 142) being adaptations of GPAQ or IPAQ or a regional- or country-specific national survey. This study included data only from self-report instruments and data sources using wearable digital devices were excluded.⁴

Data that covered only urban areas or that reported activity using an alternative definition than that used by WHO for physical inactivity were adjusted. Data analysis was undertaken using hierarchical Bayesian probit regression models to estimate the prevalence of insufficient physical activity in each country, by year, from 2000 to 2022, and by age group for males and females, separately. Bayesian regression modelling allows data from similar countries and the same countries at other points in time to inform the estimates. The Bayesian model included methods to adjust for differences between survey instruments.

All data in this report are age-standardized estimates and have been rounded to nearest whole number. Estimates were made for 194 Member States and three territories and are presented here for 195 countries and territories.⁵

Full details of the study methods and results are available at The Lancet Global Health (6) and country, regional and global estimates are available through the WHO Global Health Observatory.⁶

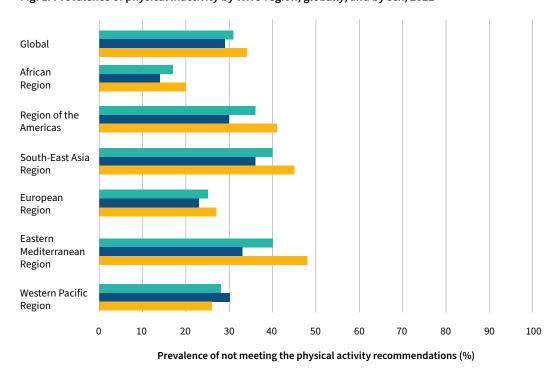
Main findings

31% of adults are physically inactive

Globally, nearly one third of adults (31%) were not meeting WHO-recommended levels of physical activity in 2020 (see Fig. 1). This equates to 1.8 billion adults. In 32 countries, levels of physical inactivity were more than 40% and in 10 countries over half of adults did not meet the WHO global guidelines, thereby missing out on the benefits of reduced risk of NCDs and improved mental health.

Women are less active than men by at least 5 percentage points

Globally, more women (34%) compared to men (29%) fell short of global recommendations on physical activity — a difference of 5 percentage points. However, in 61 countries (31%), the difference between women and men exceeded 10 percentage points. The prevalence of physical inactivity in women was over 40% in three WHO regions (Eastern Mediterranean Region, 48%; South-East Asia Region, 45%; Region of the Americas, 41%) and under 30% in the remaining three WHO regions (European Region, 28%; Western Pacific Region, 26%; African Region, 20%) (see Fig. 1). The differences between women and men in levels of physical inactivity was largest in the Eastern Mediterranean Region (14 percentage points) and lowest in the Western Pacific Region (4 percentage points) (see Fig. 1).



Male

Female

Both sexes

Fig. 1. Prevalence of physical inactivity by WHO region, globally, and by sex, 2022

03

After 60 years of age physical inactivity rises rapidly

Globally, levels of physical inactivity increase with age, meaning fewer adults over the age of 60 years meet global recommendations compared to younger adults (see Fig. 2). In general, levels of physical inactivity gently increased with age among men, with a steep rise after the age of 60, while among women, levels of inactivity were flat or even slightly fell until the age of 60 years, and then increased sharply among those aged 60 years and over. Patterns of inactivity by age also varied by region and country.

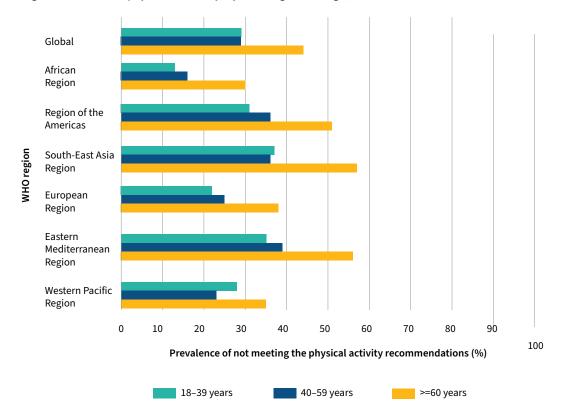


Fig. 2. Prevalence of physical inactivity, by WHO region and age, 2022

04

Levels of physical inactivity vary by region

Levels of physical inactivity vary across WHO regions. The highest rates were observed in the Eastern Mediterranean Region and South-East Asia Region, both at 40%. In contrast, the lowest levels of inactivity were found in the Western Pacific Region (28%), European Region (25%) and African Region (16%) (see Fig. 1). Among country groupings, "high-income Asia" (comprising Japan, Republic of Korea, and Singapore) had the highest level of physical inactivity at 48%, followed by South Asia (comprising Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan, Sri Lanka) at 45%. The lowest levels of physical inactivity were in the Oceania and sub-Saharan Africa groups.

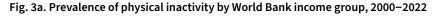
05

Levels of physical inactivity are highest in lower-middle-income countries

Levels of physical inactivity differ between and within country-income groups, as measured using the World Bank income classification (7) (see Fig. 3). Although earlier reports have suggested that, generally, levels of physical inactivity increased alongside rising World Bank income classification, these new data reveal a steep increase in physical inactivity in lower-middle-income countries over time (see Fig. 3a). In 2022, levels of inactivity in lower-middle-income countries stood at 38% compared to high-income countries (33%) and low-income countries (18%). Fig. 3b shows the distribution of countries by level of physical inactivity within income groups and over time (2010 and 2022). This figure shows how, over this time, the prevalence of inactivity has diverged in each income group, with populations of some countries becoming less inactive, and those of others becoming considerably more inactive.

Low-income World Bank income group Lower-middle-Upper-middleincome High-income 0 10 30 40 50 70 100 20 60 80 90 Prevalence of not meeting the physical activity recommendations (%) Both sexes Males Females

Fig. 3. Prevalence of physical inactivity by World Bank income group and sex, by 2022



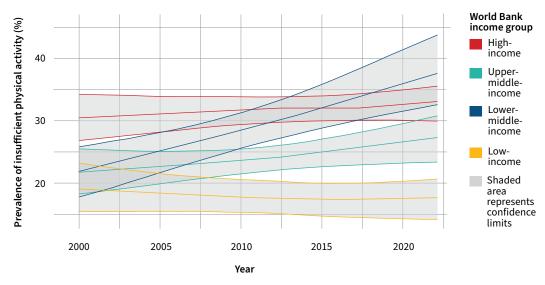
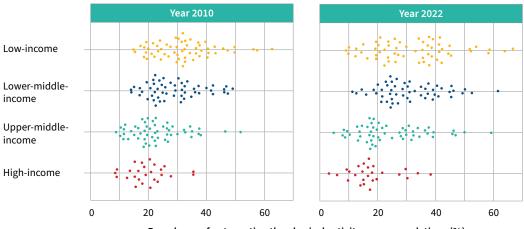


Fig. 3b. Prevalence of physical inactivity by World Bank country-income group, 2010 and 2022



Prevalence of not meeting the physical activity recommendations (%)

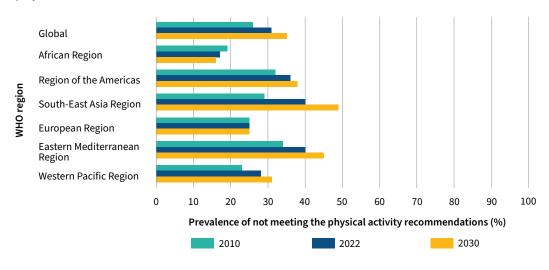
06

Globally, physical inactivity is rising, and we are off track for meeting the target

Globally, there was an increase of 5 percentage points in levels of physical inactivity between the baseline year of 2010 (26%) and 2022 (31%). If this trend continues, global levels of physical inactivity are projected to rise to 35% by 2030 (38% in women and 32% in men) (see Fig. 4). These data reveal the world is off track to meet the global target of a 15% relative reduction in physical inactivity by 2030.

However, there is some cause for optimism. Data indicate a declining trend in physical inactivity levels in just under half of countries. In addition, 22 countries were identified as on track, with a higher level of certainty⁷ if trends persist. These 22 countries span three WHO regions, and 12 are in the European Region. Although the trend in the WHO European Region is downwards, it was estimated to be insufficient to reach the 15% relative reduction from 2010 baseline by 2030. Only the WHO African Region is on track to meet the 2030 target, albeit with a lower level of certainty.

Figure 4. Prevalence of physical inactivity by country groupings and WHO regions for 2010, 2022 and projected for 2030



In this report "certainty" indicates (based on available data and assumptions) the estimated probability of a certain outcome being true.

Conclusion and key actions

The main findings in this summary report convey a clear message: without investment in effective policies, the world will remain off track for meeting the 2030 target.

Governments and stakeholders must commit to creating a more active, healthier world. This can be done through effective partnerships and resource allocation that prioritize investments in policy to enable all adults to be regularly physically active in convenient, safe and enjoyable ways. And while the overall global trend shows we are heading in the wrong direction, progress in countries with declining levels of physical inactivity must be assessed and shared to support all countries in accelerating their efforts to reach the 2030 target.

These new data provide valuable insights into global physical inactivity trends in adult populations and underscore the urgent need for the following actions.

Strengthen cross-government prioritization

Develop and implement policies across key sectors such as health, transport, urban planning, sports, community services, and workplaces. These policies should promote physical activity through enhanced active transport options and create physical activity friendly environments that encourage people to be active in their daily lives, including where they work, live, and recreate.

102 Align resources and vision

Governments and stakeholders must ensure that policy commitments are supported by adequate human and financial resources, monitored, and that their progress is transparently reported.

03 Build a stronger workforce

Support and train health and social care providers, sport and exercise professionals, educators, urban and transport planners, and recreation providers to implement effective physical activity policies.



Focus on women and older adults

Persistent disparities in physical activity levels are of concern. Develop policies and programmes to increase participation among women and older adults; address inequities in access to local, accessible opportunities for physical activity; overcome barriers and shift social norms to increase participation among women and older adults.

O5 Implement community-wide communication campaigns

Launch communication campaigns to shift societal and cultural norms, encouraging all adults to be active in enjoyable ways.

Encourage employer support and promote active workplaces

Stimulate employers to foster regular physical activity among employees by implementing context-appropriate policies and programmes tailored to their specific workplace environment.

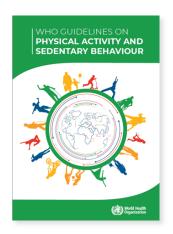
Further resources

WHO has developed comprehensive global resources to support all countries in shaping effective policies and implementation strategies. Additional regional resources are also available.



Global action plan on physical activity 2018–2030 (GAPPA) provides 20 key policy actions, endorsed by all WHO Member States under World Health Assembly Resolution 71.6 in 2018. GAPPA set the target for a 15% relative reduction in population levels of physical inactivity by 2030.

https://iris.who.int/handle/10665/272722



WHO Guidelines on physical activity and sedentary behaviour provide recommendations on how much and what type of physical activity people of all ages should do to attain the greatest health benefits. WHO guidelines updated in 2020 reviewed the latest evidence to develop recommendations on physical activity and sedentary behaviours for all children and adults, including those living with chronic conditions or disability, and pregnant and postpartum women.

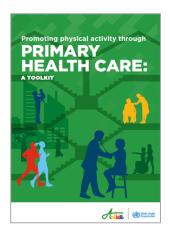
https://apps.who.int/iris/handle/10665/336656



ACTIVE: a technical package for increasing physical activity is the first of several WHO implementation tools to help countries plan, implement and evaluate GAPPA implementation. It outlines four policy action areas that directly reflect the four GAPPA objectives.

https://apps.who.int/iris/handle/10665/275415

ACTIVE toolkits are evidence-based implementation tools that provide information and guidance on planning, designing, implementing and evaluating policies to support physical activity across the life course (from young children to older people) and settings (from early childcare and schools to primary health care). Additional toolkits are under development on, for example, walking and cycling and mass media communications campaigns



Promoting physical activity through primary health care: a toolkit aims to support all countries (especially low- and middle-income countries) in strengthening physical activity assessment and counselling as part of primary health care (a cost-effective intervention for tackling NCDs, and GAPPA policy recommendation 3.2).

https://apps.who.int/iris/handle/10665/350835



Promoting physical activity for older people: a toolkit for action outlines the key approaches to promote and enable older people to be physically active, regardless of who they are, where they live, or their intrinsic capacities.

https://iris.who.int/handle/10665/373332



Be he@lthy, be mobile: a handbook on how to implement mobile health for physical activity was designed as a population-based walking programme suitable for adults and older adults of all abilities, as well as adults living with chronic illness, to support and enable more people to be more active more often.

https://apps.who.int/iris/handle/10665/348214



WHO Health Economic Assessment Tool (HEAT) is an online tool to assess the associated health and economic impacts of increased walking and cycling. This has recently been adapted for use in low- and middle-income countries.

https://www.who.int/europe/tools-and-toolkits/health-economic-assessment-tool-for-walking-and-cycling



Global status report on physical activity 2022 is a first global stocktake of GAPPA policy implementation. The data it sets out also offer the first insight into the impact of COVID-19 on countries' capacity for, and progress towards, implementing policies related to physical activity.

https://iris.who.int/handle/10665/363607

Country-level data

To access country-level data on the prevalence of physical inactivity, please see the WHO data portal: https://www.who.int/data/gho/data/themes/noncommunicable-diseases.

References

- 1. Guidelines on physical activity and sedentary behaviour. Geneva: World Health Organization; 2020 (https://apps.who.int/iris/handle/10665/336656), accessed 12 June 2024).
- 2. Global action plan on physical activity 2018-2030: more active people for a healthier world. Geneva: World Health Organization; 2018 (https://apps.who.int/iris/handle/10665/272722, accessed 12 June 2024).
- 3. Guthold R, Stevens GA, Riley LM, Bull FC. Worldwide trends in insufficient physical activity from 2001 to 2016: a pooled analysis of 358 population-based surveys with 1.9 million participants. Lancet Glob Health. 2018;6(10):e1077-e86 (https://doi.org/10.1016/S2214-109X(18)30357-7, accessed 12 June 2024).
- 4. Global status report on physical activity. Geneva: World Health Organization; 2022 (https://apps. who.int/iris/handle/10665/363607, accessed 12 June 2024).
- 5. United Nations Department of Economic and Social Affairs. World Population Prospects 2022 [website] (https://population.un.org/wpp/, accessed 12 June 2024).
- 6. Strain T, Flaxman S, Guthold R, Semenova E, Cowan M, Riley LM et al. National, regional and global trends in insufficient physical activity among adults from 2000 to 2022; a pooled analysis of 507 surveys with 5.7 million participants. Lancet Glob Health. 2024. (Published online 26 June 2024 https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(24)00150-5/fulltext).
- 7. The World Bank Group. World Bank Analytical Classifications [website]. 2023 (http://databank. worldbank.org/data/download/site-content/OGHIST.xlsx, accessed 12 June 2024).

Acknowledgements

This report was prepared by Fiona Bull and Juana Willumsen, Physical Activity Unit, Department of Health Promotion, with support from Gretchen Stevens (consultant, Surveillance, Monitoring and Reporting Unit, Department for Noncommunicable Diseases) and Tessa Strain (University of Edinburgh, United Kingdom) for data analysis and review. WHO gratefully acknowledges support from the Qatar Ministry of Public Health.

Global levels of physical inactivity in adults: off track for 2030

ISBN 978-92-4-009690-5 (electronic version) ISBN 978-92-4-009691-2 (print version)

© World Health Organization 2024. Some rights reserved. This work is available under the <u>CC BY-NC-SA 3.0</u> IGO licence.

Design and layout: Rooftop Icons © Flaticon.com/Adrly/Freepik/fjstudio/Uniconlabs



For further information, contact:

Department of Health Promotion World Health Organization 20 avenue Appia 1211 Geneva 27 Switzerland

Website: https://www.who.int/

