

3rd Set of Country Cards 2025

GoPA! Detailed Appendix



GoPA!
Global Observatory for
Physical Activity



GoPA! Data Collection Methods

To support national and global efforts to promote physical activity, GoPA! compiles a comprehensive set of standardized indicators that capture key aspects of each country's physical activity landscape (see Table 1).

Towards Equity and Impact: New Indicators for Global Physical Activity Monitoring Current Status and Needs in Global Physical Activity Surveillance, Policy, and Research: The Role of Continuous GoPA! Monitoring

In this edition, GoPA! introduces new indicators that expand the scope of analysis. These include country data, gender inequalities in physical activity participation and research, progress of country-level data on physical activity domains, trends in gender inequalities in participation and research, policy implementation, and progress in capacity-building for physical activity promotion. These indicators provide essential data to identify gaps, monitor progress, and support advocacy and decision-making.

The most recent GoPA! paper that assessed the status and trends in physical activity surveillance, policy, and research worldwide, comparing the 2015 and 2020 GoPA! surveys [1] found the following results on the three main GoPA! indicators:

- **Surveillance:** 92.1 % of GoPA!'s countries had at least one national survey that included physical activity questions, 66.5 % had at least two national surveys, and 18.3 % had three national surveys or more that included a plan to conduct future surveys.
- **Policy:** 37.8 % of countries had a standalone physical activity policy, 45.1 % had a non-communicable diseases plan that included physical activity, and 17.1 % did not have a physical activity policy.
- **Research:** From 2015 to 2019, 53.7 % of countries contributed above the average number of publications, 30.5 % contributed below the average, and 15.9 % had no physical activity research output.

- Although some arrangements of physical activity surveillance, policy, and research were common in most countries, establishing periodic national physical activity surveillance, standalone policies, and high research output in countries was rare and needed for physical activity monitoring worldwide. Despite progress, significant gaps and disparities persist within and across regions and income groups, primarily due to a decrease in capacity or a lack of data for surveillance in 11.3 % of countries, policy in 22.6 % of countries, and research in 39.1 % of countries [1]. Due to these GoPA! findings, new indicators have been proposed to be included in the 3rd set of Country Cards.

Epidemiological monitoring of global physical activity has specific requirements for:

- **Gender inequalities in physical activity prevalence**

In the 1st and 2nd sets of Country Cards, the prevalence of physical activity was included for adults based on the prevalence of insufficient physical activity age-standardized to the World Health Organization (WHO)'s Standard Population 2016 and estimated in [2]. Previous studies have shown [3–5] that women are less active and engage in lighter activities than men, and reducing the gender gap in physical activity might be aided by providing more chances for women to engage in physically active leisure activities in safe and easily accessible settings [2]. Therefore, GoPA! decided to include physical activity prevalence estimates considering inequalities by sex and assess it with classical methods for equity analysis [6].

- **Physical activity plan/policy and implementation**

Having a government-endorsed national physical activity plan is a must for every country, and health-promoting physical exercise should not only be supported but should be encouraged and monitored on a regular basis [7]. In past years, GoPA! has analyzed the availability of physical activity policies; however, there is now a need to focus on one of the most essential aspects of making an impact on public health: policy implementation. In 2020, GoPA! surveyed 173 countries on their implementation of policies to increase population physical activity and found that of the 76 countries that responded, most of them had only half of their policy statements implemented [8]. It is important to strengthen the national and local implementation of physical activity policies to have more countries successfully tackling physical inactivity [9]. Thus, the pyramid for a country's capacity for physical activity will account for whether the country has a policy/plan mentioning implementation using the *GoPA! Policy Inventory version 3.0* [10], results from the Physical Activity Policy at the National and Local Levels project [11,12], and the *GoPA! Policy Directory* [13].

- **Gender inequalities in physical activity research**

It is crucial to track physical activity research on a regular basis to understand the local knowledge being produced in each country, thereby informing and focusing public health initiatives to enhance research capacity and promote population physical activity [14]. The relevance of research is demonstrated by the positive correlation between research, policy, and surveillance of physical activity [15]. Several countries, especially those with limited resources, still lack substantial investment in local research, resulting in a scenario where scientific knowledge is heavily dependent on the production of high-income countries [14].

Between 2000 and 2020, women's first authorship in exercise and sports sciences research was infrequent, and less than a fifth of articles published had women as senior authors. An annual increase of 0.5 % in the proportion of female first authors was seen over the past two decades. However, the number of senior female authors did not increase every year [16]. *Gender* equality is recognized as a determinant of health and economic development. In terms of research, teams with a diverse combination of men and women are more likely to be innovative [17,18]. As a result, it is crucial to examine the differences in research production between countries in terms of gender dynamics, and a new indicator is proposed to gauge the trends in gender research inequalities.

References

1. Ramírez Varela A, Hallal PC, Mejía Grueso J, Pedišić Ž, Salvo D, Nguyen A, et al. Status and Trends of Physical Activity Surveillance, Policy, and Research in 164 Countries: Findings From the Global Observatory for Physical Activity—GoPA! 2015 and 2020 Surveys. *J Phys Act Health*. 2023 Feb 1;20(2):112–28. <https://doi.org/10.1123/jpah.2022-0464>.
2. 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 Oct 1;6(10):e1077–86. [https://doi.org/10.1016/S2214-109X\(18\)30357-7](https://doi.org/10.1016/S2214-109X(18)30357-7).
3. Mielke GI, Da Silva ICM, Kolbe-Alexander TL, Brown WJ. Shifting the Physical Inactivity Curve Worldwide by Closing the Gender Gap. *Sports Med*. 2018 Feb;48(2):481–9. <https://doi.org/10.1007/s40279-017-0754-7>.
4. SFM C, Van Cauwenberg J, Maenhout L, Cardon G, Lambert EV, Van Dyck D. Inequality in physical activity, global trends by income inequality and gender in adults. *International Journal of Behavioral Nutrition and Physical Activity*. 2020 Dec 26;17(1):142. <https://doi.org/10.1186/s12966-020-01039-x>.
5. Dumith SC, Hallal PC, Reis RS, Kohl HW. Worldwide prevalence of physical inactivity and its association with human development index in 76 countries. *Prev Med*. 2011 Jul;53(1–2):24–8. <https://doi.org/10.1016/j.ypmed.2011.02.017>.
6. Silva ICMD, Restarepo-Mendez MC, Costa JC, Ewerling F, Hellwig F, Ferreira LZ, et al. Mensuração de desigualdades sociais em saúde: conceitos e abordagens metodológicas no contexto brasileiro. *Epidemiol Serv Saúde*. 2018 Mar [cited 2024 Apr 9];27(1). <https://doi.org/10.5123/S1679-49742018000100017>.
7. The Global Observatory for Physical Activity. Project Mission and Methods [Internet]. The Global Observatory for Physical Activity; 2015. Available from: <https://new.globalphysicalactivityobservatory.com/project-description-2/>.
8. Klepac Pogrmilovic B, Ramírez Varela A, Pratt M, Milton K, Bauman A, Biddle SJH, et al. National physical activity and sedentary behaviour policies in 76 countries: Availability, comprehensiveness, implementation, and effectiveness. *Int J Behav Nutr Phys Act*. 2020 Sep 18;17(1). <https://doi.org/10.1186/s12966-020-01022-6>.
9. Pratt M, Ramírez Varela A, Kohl HW, Klepac Pogrmilovic B, Pedišić Ž, Sallis JF. Plan globally and act locally for physical activity? *J Phys Act Health*. 2021 Oct 1;18(10):1157–8. <https://doi.org/10.1123/jpah.2021-0471>.
10. Global Observatory for Physical Activity-GoPA! The Global Observatory for Physical Activity-GoPA! Policy Inventory; 2019.
11. Resendiz E, Ramírez-Varela A, Mejía-Grueso J, Moon J, Mitáš J, Brownson RC, et al. Breaking Barriers: An Innovative Tool to Assess the National and City-Level Physical Activity Policy Development to Practice Disconnect. *J Phys Act Health*. 2024 Jan 19;21(5):1–9. <https://doi.org/10.1123/jpah.2023-0471>.
12. Mejía Grueso J, Pratt M, Resendiz E, Salvo D, Niño Cruz GI, Ruiz Gómez NY, et al. Physical Activity Policies at National and Subnational Levels: A Study in Colombia, Costa Rica, Ecuador, and Mexico. *J Phys Act Health*. 2024 Feb 10;21(5):1–13. <https://doi.org/10.1123/jpah.2023-0342>.
13. Ramírez Varela A, Bauman A, Woods CB, Shawar YR, Hallal PC, Salvo D, et al. Unlocking Global Political Priority for Physical Activity: A Critical Examination of Two Decades. 2025. (Under review).
14. Ramírez Varela A, Nino Cruz GI, Hallal PC, Blumenberg C, da Silva SG, Salvo D, et al. Global, regional, and national trends and patterns in physical activity research since 1950: a systematic review. *Int J Behav Nutr Phys Act*. 2021 Dec 1;18(1):1–15. <https://doi.org/10.1186/s12966-020-01071-x>.
15. Ramírez Varela A, Salvo D, Pratt M, Milton K, Siefken K, Bauman A, et al. Worldwide use of the first set of physical activity Country Cards: The Global Observatory for Physical Activity - GoPA! *Int J Behav Nutr Phys Act*. 2018 Mar 27;15(1). <https://doi.org/10.1186/s12966-018-0663-7>.
16. Martínez-Rosales E, Hernández-Martínez A, Sola-Rodríguez S, Esteban-Cornejo I, Soriano-Maldonado A. Representation of women in sport sciences research, publications, and editorial leadership positions: are we moving forward? *J Sci Med Sport*. 2021 Nov;24(11):1093–7. <https://doi.org/10.1016/j.jsams.2021.04.010>.
17. Shannon G, Jansen M, Williams K, Cáceres C, Motta A, Odhiambo A, et al. Gender equality in science, medicine, and global health: where are we at and why does it matter? *Lancet*. 2019 Feb;393(10171):560–9. [https://doi.org/10.1016/S0140-6736\(18\)33135-0](https://doi.org/10.1016/S0140-6736(18)33135-0).
18. Nielsen MW, Alegria S, Börjeson L, Etzkowitz H, Falk-Krzesinski HJ, Joshi A, et al. Gender diversity leads to better science. *Proc Natl Acad Sci USA*. 2017 Feb 21;114(8):1740–2. <https://doi.org/10.1073/pnas.1700616114>.

GoPA! Methodology

Data collection methods

GoPA! compiles a comprehensive set of standardized indicators that capture key aspects of each country's physical activity landscape (see Table 1).

Table 1. Observatory Indicators

Country and
Demographic
Data

- Country
- Capital
- Total population
- Urban population
- Life expectancy
- Gini inequality index
- Human development index
- Literacy rate
- Risk of premature non-communicable disease mortality ***new***
- Human capital index ***new***
- Democracy index ***new***
- Deaths due to non-communicable diseases
- World Bank income group classification
- World Bank Region classification
- World Health Organization regional office classification

Physical Activity Participation	- Physical activity prevalence estimates for adults by domain (overall, active leisure, active transport) *new* - Gender inequalities in adults' physical activity prevalence *new*
Policy	- Availability of a national physical activity plan/policy, classified as: - No physical activity policy/plan - NCDs policy/plan integrating physical activity - Standalone (exclusive) physical activity policy/plan - Title and year of publication - National physical activity recommendations
Surveillance	- Existence of a national survey that includes physical activity questions for 'most recent' and 'next' year - Survey title, surveillance tool (instrument), and year of publication
Research	- Number of articles and contribution to physical activity and health research worldwide from 1950-2023 - Position in the ranking of research articles - Physical activity research quintiles - Gender inequalities in physical activity research from 1950-2019 *new*
Country Capacity for Physical Activity Promotion	High, medium, or low country capacity for physical activity promotion based on the policy (including availability and implementation), surveillance (including periodicity and data by domain), and research indicators *new*

Note: Deaths due to physical inactivity: The new GoPA! Dashboard will include estimates of deaths attributable to physical inactivity.

Using a standardized methodology, GoPA! collected physical activity data and statistics from 218 countries, states, and economies (hereafter referred to as “countries”) and approved data for 186 of them with the participation of a country representative.

The Country Cards provide the most current and reliable data to improve physical activity surveillance, policy, and research indicators. In the 3rd set of Country Cards, GoPA!’s core indicators were updated to the most recent and available information. Based on the current monitoring gaps, seven new indicators were proposed with their description, data collection methods, and references.

Sources and Data Collection

Phase 1 | Data Collection (December 2022–November 2024)

The data for the 3rd set of Country Cards was obtained following the standardized methods used for data collection of the 1st set of Country Cards described in

- Ramírez Varela A, Pratt M, Powell K, Lee IM, Bauman A, Heath G, et al. Worldwide Surveillance, Policy and Research on Physical Activity and Health: The Global Observatory for Physical Activity - GoPA! J Phys Act Health. 2017 Sep 1;14(9):701–709. <https://doi.org/10.1123/jpah.2016-0626>.

All data was updated with the most recent available information. Data were gathered from secondary data sources to obtain information in each of the countries of the GoPA! countries list (186 in total).

Data were collected for country and demographic data, physical activity participation with prevalence estimates for adults by domain, gender inequalities in adults’ physical activity prevalence by domain, national physical activity policies, national physical activity guidelines, national surveys including physical activity, contribution to physical activity and health research worldwide, physical activity research quintiles, gender inequalities in physical activity research, and country capacity for physical activity promotion.

The country and demographic data were first updated in April 2024. As new information became available, the income groups, population, and Human Capital Index were updated again in November 2024.

Phase 2 | Data Completion, Review, and Approval (January 2024–May 2025)

With the data obtained in Phase 1, all GoPA! Country Contacts were contacted and asked to complete, review, and approve the data included in their Country Card.

The cards’ launch was planned for Fall 2025 as the 3rd set of GoPA! Country Cards and the 3rd GoPA! Physical Activity Almanac.

Country and Demographic Data



COUNTRY AND DEMOGRAPHIC DATA

Capital - **Brasília**
 Population - **203,080,756**
 Urban population - **87.8%**
 Life expectancy (years) - **73.4**
 Gini index for income inequality - **0.52**
 Human Development Index - **0.76**
 Literacy rate - **94.7%**
 Risk of premature non-communicable disease mortality - **15.0%**
 Human Capital Index - **0.81**
 Democracy Index - **6.68**
 Deaths from non-communicable diseases - **74.7%**
 World Bank income category - **Upper middle income**



1. Country

Country name

We used the World Bank list of 215 countries, with the exception that we divided the United Kingdom into its constituent parts: England, Scotland, Wales, and Northern Ireland. Additionally, we combined information from China and Taiwan to form the Greater China Area, and merged the information on Palestine, the West Bank, and Gaza as requested by the contact persons from these countries. The Cook Islands were added as a new country for this set of Country Cards. Our list, therefore, had 186 countries.

World region

For further analyses, countries were grouped by region following the World Health Organization's regional office classifications: EURO—Europe; AFRO—Africa; PAHO—The Americas and the Caribbean; EMRO—Eastern Mediterranean; WPRO—Western Pacific; SEARO—South-East Asia

- <https://www.who.int/countries>

Income group

The income group follows the World Bank classification: (HICs—high income, UMICs—upper middle income, LMICs—lower middle income, and LICs—low income). Data collected for the World Bank's fiscal year of 2026 and calendar year of 2024 (available for 2024).

- <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519>
- Venezuela was classified as a UMIC until the fiscal year of 2021 and has been unclassified since then due to the unavailability of data. We maintained the UMIC classification.

In the Country Card, income classification is represented by a star system, consistent with the approach used in the 2nd set. One star indicates a LIC, two stars a LMIC, three stars a UMIC, and four stars a HIC.

2. Capital

Most recent geography country data (available for 2024):

- <https://geographyfieldwork.com/WorldCapitalCities.html>
- <https://www.worlddata.info/capital-cities.php>

3. Total population

Inhabitants of the country.

Most recent data from the World Bank (available for 2023):

- <http://data.worldbank.org/indicator/SP.POP.TOTL/countries/CO?display=default>

National statistics (available for 2020–2025): Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Aruba, Austria, Bahrain, Bangladesh, Belarus, Bolivia, Brazil, Brunei Darussalam, Burkina Faso, Burundi, Canada, Cape Verde, Central African Republic, Channel Islands/ Guernsey, China, Colombia, Cook Islands, Cuba, Cyprus, Denmark, Dominican Republic, Egypt, Arab Rep., El Salvador, England, Finland, France, Guam, Hungary, Iceland, Israel, Italy, Latvia, Luxembourg, Malawi, Malta, Mauritius, Mexico, Moldova, Republic of, Monaco, Morocco, Mozambique, Namibia, New Caledonia, North Macedonia, Northern Ireland, Oman, Panama, Peru, Puerto Rico, Qatar, Romania, São Tomé e Príncipe, Saudi Arabia, Scotland, Senegal, Singapore, Slovak Republic, Slovenia, Suriname, Sweden, Switzerland, Thailand, Timor-Leste, Tonga, Trinidad and Tobago, Uganda, Uruguay, Vietnam, Virgin Islands (U.S.), Wales, Zimbabwe.

4. Urban population

Percentage (%) of the total population living in urban areas.

Most recent data available from the World Bank (available for 2023):

- <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS?view=chart>

Country-specific data:

- Cook Islands (available for 2023): <https://www.cia.gov/the-world-factbook>
- England (available mid-year estimate for 2020): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1028819/Rural_population__Oct_2021.pdf
- Kosovo (available for 2021): <https://datareportal.com/library>
- Northern Ireland (estimated as 1 – % of rural population) (available mid-year estimate for 2021): <https://www.daera-ni.gov.uk/publications/key-rural-issues>
- Scotland (available mid-year estimate for 2021): <https://www.nrscotland.gov.uk/files//statistics/population-estimates/sape-2021/sape-21-report.pdf>
- St. Martin (French part) (available for 2021): <https://datareportal.com/library>
- Wales (estimated as 1 – % of rural population) (available mid-year estimate for 2021): https://rural-urban.eu/sites/default/files/Rural_Vision_Evidence_Report_Final_Eng.pdf
- Virgin Islands (U.S.) (available for 2023): <https://www.cia.gov/the-world-factbook>

National statistics (available for 2011–2024): Afghanistan, Albania, Angola, Antigua and Barbuda, Aruba, Austria, Belarus, Burkina Faso, Burundi, Cape Verde, Central African Republic, China, Cyprus, Denmark, Dominican Republic, Egypt, Arab Rep., Guam, Iceland, Italy, Latvia, Luxembourg, Mexico, Moldova, Republic of, Morocco, Mozambique, Namibia, New Caledonia, North Macedonia, Panama, Peru, Romania, São Tomé e Príncipe, Senegal, Slovak Republic, Suriname, Thailand, Timor-Leste, Tonga, Trinidad and Tobago, Ukraine, Vietnam.

5. Life expectancy (years)

The average number of years a person in the population is expected to live.

Most recent data available from the World Bank, Our World in Data, and World Health Organization (available for 2021):

- <https://data.worldbank.org/indicator/SP.DYN.LE00.IN>

- <https://ourworldindata.org/grapher/life-expectancy>
- <https://data.who.int/countries>
- <https://gateway.euro.who.int/en/>

National statistics (available for 2020–2024): Afghanistan, Andorra, Angola, Aruba, Austria, Bahrain, Brunei Darussalam, Burkina Faso, Cape Verde, Central African Republic, Channel Islands/Guernsey, China, Colombia, Cuba, Denmark, Dominican Republic, Egypt, Arab Rep., England, France, Iceland, Iran, Islamic Rep., Latvia, Lithuania, Macao SAR, China, Mexico, Moldova, Republic of, Monaco, Morocco, Mozambique, Namibia, Northern Ireland, Oman, Philippines, Qatar, Romania, Rwanda, São Tomé e Príncipe, Saudi Arabia, Scotland, Singapore, Slovenia, Switzerland, Thailand, Ukraine, Uruguay, Vietnam, Virgin Islands (U.S.), Wales.

6. Gini inequality index (number between 0 and 1)

A measure of income inequality that summarizes the dispersion of income across the entire income distribution. 0: perfect equality; 1: perfect inequality. Most recent data available from the World Bank, Our World in Data, the CIA World Factbook, and World Health Organization (available for 1998–2022):

- <http://data.worldbank.org/indicator/SI.POV.GINI?page=1>
- <https://ourworldindata.org/grapher/economic-inequality-gini-index>
- <https://gateway.euro.who.int/en/>

Country-specific data:

- Afghanistan (available for 2020): <https://fscluster.org/afghanistan/document/income-and-expenditure-labor>
- Aruba (available for 2019): https://www.deaci.aw/wp-content/uploads/2021/12/FINAL_SDG-IWG-INDICATORS-2021_REPORT.pdf
- Bolivia (available for 2021): https://statistics.cepal.org/portal/databank/index.html?lang=es&indicator_id=3289
- Cook Islands (available for 2020): https://www.intaff.gov.ck/wp-content/uploads/2022/06/Minimum-Wage-Review-4May2022_FINAL.pdf
- Faroe Islands (available for 2020): <https://hagstova.fo/en/economy/wages-and-income-distribution/income-distribution>
- New Caledonia (available for 2014): <https://journals.openedition.org/etudescaribeennes/31660>
- New Zealand (available for 2019): <https://www2.deloitte.com/content/dam/Deloitte/my/Documents/risk/my-risk-sdg10-inclusive-growth.pdf>
- Puerto Rico (available for 2019): <https://www.census.gov/library/publications/2020/acs/acsbr20-03.html>
- Singapore (available for 2022): <https://www.singstat.gov.sg/-/media/files/publications/households/pp-s26.pdf>
- Switzerland (available for 2019): https://ec.europa.eu/eurostat/databrowser/view/ilc_di12/default/table?lang=en
- Venezuela (available for 2019): <https://www.proyectoencovi.com/encovi-2019>
- England, Northern Ireland, Scotland, and Wales (United Kingdom's estimate - available for 2021–2022): <https://researchbriefings.files.parliament.uk/documents/CBP-7484/CBP-7484.pdf>

2nd set of Country Cards (available for 2020): Antigua and Barbuda, Cambodia, Cayman Islands, Channel Islands/Guernsey, Curaçao, Dominica, Grenada, Northern Mariana Islands, St. Kitts and Nevis, St. Vincent and the Grenadines.

National statistics (available for 2016–2023): Andorra, Austria, Burkina Faso, Burundi, China, Denmark, Dominican Republic, France, Greenland, Grenada, Hong Kong SAR, China, Latvia, Luxembourg, Macao SAR, China, Morocco, North Macedonia, Singapore, Slovenia, Suriname, Switzerland, Timor-Leste, Trinidad and Tobago, Uruguay.

7. Human development index (number between 0 and 1)

A summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable, and having a decent standard of living.

Most recent data available from the United Nations Development Programme, Global Data Lab, Our World in Data, and World Health Organization (available for 2021–2022):

- <http://hdr.undp.org/en/content/download-data>
- <https://globaldatalab.org/shdi/table/shdi/>
- <https://ourworldindata.org/grapher/human-development-index>
- <https://gateway.euro.who.int/en/>

Country-specific data:

- Cook Islands (available for 2013): <https://ccprojects.gsd.spc.int/wp-content/uploads/2016/06/CI5-Cook-Islands-CC-Profile-v2.pdf>
- New Caledonia (available for 2014): https://www.senat.fr/rap/r13-710/r13-710_mono.html
- Puerto Rico (available for 2014): <https://www.redalyc.org/pdf/392/39238126012.pdf>

2nd set of Country Cards (available for 2020):

Aruba, Bermuda, Cayman Islands, Curaçao, Sint Maarten (Dutch part), St. Martin (French part).

National statistics (available for 2020–2022): Macao SAR, China, Morocco.

The data available for England, Northern Ireland, Scotland, and Wales correspond to the United Kingdom's estimate (available for 2021).

8. Literacy rate (%)

Percentage (%) of adults aged 15 and older who can both read and write.

Most recent data available from the World Bank, UNESCO Institute for Statistics, and CIA's World Factbook (available for 1970–2023):

- <https://data.worldbank.org/indicator/SE.ADT.LITR.ZS?view=chart>
- <https://databank.worldbank.org/reports.aspx?source=Education%20Statistics#>
- <http://sdg4-data.uis.unesco.org>
- <https://www.cia.gov/the-world-factbook/field/literacy/>

Country-specific data (available for 2005–2016):

- American Samoa, Curaçao, Sint Maarten (Dutch part): <https://islandstudies.com/research/jurisdiction-project/island-jurisdiction-database>

National statistics (available for 2003–2023): Algeria, Austria, Bangladesh, Burkina Faso, Cape Verde, China, Dominican Republic, Hong Kong SAR, China, Malta, Panama, Philippines, Qatar, Romania, Switzerland, Timor-Leste, Trinidad and Tobago, Uganda, Uruguay.
The data available for England, Northern Ireland, Scotland, and Wales correspond to the United Kingdom's estimate (available for 2003).

9. Deaths due to non-communicable diseases (%)

Percentage (%) of deaths by non-communicable diseases including cancer, diabetes mellitus, cardiovascular diseases, digestive diseases, skin diseases, musculoskeletal diseases, and congenital anomalies.

Most recent data available from the World Bank, World Health Organization, Data Portal, and Global Burden of Disease (available for 2019):

- <http://data.worldbank.org/indicator/SH.DTH.NCOM.ZS>
- <http://ghdx.healthdata.org/gbd-results-tool>
- <https://ncdportal.org/>
- <https://gateway.euro.who.int/en/>

Country-specific data:

- Puerto Rico (available for 2019): <https://platform.who.int/mortality/countries/country-details/MDB/puerto-rico>

National statistics (available for 2020–2022): Austria, Brunei Darussalam, Burkina Faso, China, Lithuania, Macao SAR, China, Malta, New Caledonia, São Tomé e Príncipe, Switzerland.

The data available for England, Northern Ireland, Scotland, and Wales correspond to the United Kingdom's estimate (available for 2019).

New Country Indicators

Recent literature has acknowledged significant factors that influence the implementation of policies, which are shaped by the specific contexts within countries. These circumstances encompass elements such as the burden of non-communicable diseases, the availability of human resources, and political ideologies.

- Allen LN, Nicholson BD, Yeung BYT, Goiana-da-Silva F. Implementation of non-communicable disease policies: a geopolitical analysis of 151 countries. *Lancet Glob Health*. 2020 Jan;8(1):e50–8. [https://doi.org/10.1016/S2214-109X\(19\)30446-2](https://doi.org/10.1016/S2214-109X(19)30446-2).

We considered the following indicators: the risk of premature non-communicable disease mortality, the Human Capital Index, and the Democracy Index.

10. Risk of premature non-communicable disease mortality (%) *new*

Probability of dying between the ages of 30 and 70 years from the four main noncommunicable diseases (cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases). Most recent data available from the World Health Organization and NCD Data Portal 2022 (available for 2019):

- <https://www.who.int/publications/i/item/9789240047761>
- <https://www.paho.org/en/enlace/risk-dying-prematurely-ncds>
- <https://ncdportal.org/>
- <https://gateway.euro.who.int/en/>

Country-specific data (available for 2019):

- Armenia: <https://www.who.int/europe/publications/i/item/WHO-EURO-2019-3642-43401-60939>
- Cook Islands: https://www.iccp-portal.org/system/files/plans/COK_B3_s21_TMO_NCDPlan_21%20June%20Final%20NCD.pdf
- Switzerland: <https://ind.obsan.admin.ch/indicator/monam/wahrscheinlichkeit-vorzeitiger-todesfaelle-aufgrund-von-ncd-alter-30-70>; <https://www.bfs.admin.ch/bfs/de/home/statistiken/gesundheit/erhebungen/ecod.html>

National statistics (available for 2018–2022): Brunei Darussalam, China, Egypt, Arab Rep., Uruguay.

The data available for England, Northern Ireland, Scotland, and Wales correspond to the United Kingdom's estimate (available for 2019).

11. Human capital index (number between 0 and 1) *new*

Captures where countries stand in terms of four components defined by the United Nations: adult literacy; combined primary, secondary, and tertiary gross enrolment ratios; expected years of schooling; and average years of schooling.

Most recent data available from the United Nations E-Government Survey 2024 (available for 2024):

- <https://publicadministration.un.org/egovkb>

Country-specific data (available for 2020):

- Hong Kong, SAR China: https://databankfiles.worldbank.org/public/ddpext_download/hci/HCI_2pager_HKG.pdf
- Kosovo: <https://thedocs.worldbank.org/en/doc/64e578cbeaa522631f08f0cafba8960e-0140062023/related/HCI-AM23-XKX.pdf>
- Macao, SAR China: https://databankfiles.worldbank.org/public/ddpext_download/hci/HCI_2pager_MAC.pdf

12. Democracy index (number between 0 and 10) *new*

The weighted average of 60 items defined by the Economist Intelligence Unit covering civil liberties, pluralism, and political culture.

Most recent data available from the Economist Intelligence Unit (available for 2023):

- <https://www.eiu.com/n/campaigns/democracy-index-2023/>

The data available for England, Northern Ireland, Scotland, and Wales correspond to the United Kingdom's estimate, and for Puerto Rico, to the United States' estimate.

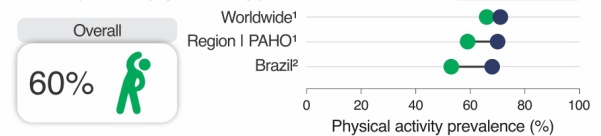
Physical Activity Participation



PHYSICAL ACTIVITY PARTICIPATION

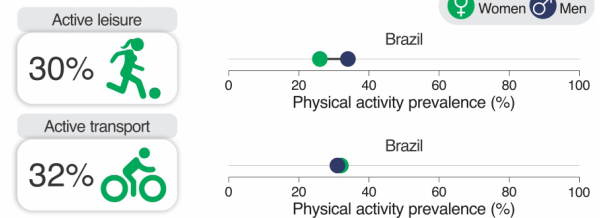
Physical activity prevalence estimates for adults

Gender inequalities in physical activity prevalence



Physical activity prevalence estimates for adults by domain

Gender inequalities in physical activity prevalence



1 Global estimates (18+ years, Strain et al. (2024))
 2 Country estimates

13. Physical activity prevalence estimates for adults by domain *new*

Domains

The domains refer to distinct purposes for which physical activity occurs. Three domains were included: 1) overall, 2) active leisure, and 3) active transport. The overall physical activity prevalence estimate was based on the prevalence of insufficient physical activity, age-standardized to the WHO Standard Population 2022, and estimated in:

- Strain T, Flaxman S, Guthold R, Semanova E, 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 August;12(8):e1232–e1243. [https://doi.org/10.1016/S2214-109X\(24\)00150-5](https://doi.org/10.1016/S2214-109X(24)00150-5).

The estimates produced in the reference above may vary from national estimates due to adjustments for factors such as differences in questionnaires and age-standardization. The estimates may also be based on different data sources, as Strain et al. required questionnaires to cover all domains in a quantitative manner. The estimates from Strain et al. apply to all domains; however, some countries provide prevalence estimates based on leisure-time activity only. For more details on the methods used by Strain et al., see the reference above.

WHO regional estimates were obtained from the Global Health Observatory [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-insufficient-physical-activity-among-adults-aged-18-years-\(age-standardized-estimate\)-\(-\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-insufficient-physical-activity-among-adults-aged-18-years-(age-standardized-estimate)-(-)).

In GoPA!, we present physical activity prevalence instead of insufficient physical activity. Therefore, the estimate was calculated as = 100 – prevalence of insufficient physical activity age-standardized.

We focus on prioritizing and ensuring the comparability of data between GoPA! network countries. However, if the Country Contact decided and strongly suggested including other data sources for the physical activity prevalence estimate, the following requirements had to be:

A. Physical activity definition: Meeting the physical activity recommendation is defined as at least 150 minutes (2 hours and 30 minutes) a week of moderate-intensity, or 75 minutes (1 hour and 15 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity.

B. Physical activity instruments: Based on self-reported physical activity assessed using the Global Physical Activity Questionnaire (GPAQ), the International Physical Activity Questionnaire (IPAQ), or a similar questionnaire covering activity at work/in the household, in transport, and during leisure time.

C. National or subnational representativeness: The prevalence of physical activity has been estimated with a national or subnational sample.

The active leisure and active transport physical activity prevalence estimates were based on the results from:

- Salvo D, Crochemore-Silva IM, Wendt A, Tarp J, et al. Reconceptualising physical activity for the 21st Century using a global equity and social justice lens. 2025. (Under review)

If the Country Contact decided and strongly suggested including other data sources for the physical activity prevalence estimates for active leisure and active transport, the following definitions had to be:

A. Active leisure: Meeting the WHO physical activity guidelines—at least 600 MET-minutes per week (equivalent to 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity activity per week, or a combination of both)—while engaging in activities like exercise, sports, active play, dancing, or leisure walking.

B. Active transport: Meeting the WHO physical activity guidelines through walking and cycling to get to and from places. It is also known as transport-based physical activity or active travel.

14. Gender inequalities in adults' physical activity participation *new*

Gender inequalities in adults' physical activity participation were determined using physical activity prevalence estimates by gender and domain (overall, active leisure, active transport), and assessed with classical equity analysis methods, such as equiplots.

The development of equiplots was done following the methods described in:

- Chastin SFM, Van Cauwenberg J, Maenhout, L, Cardon G, Lambert EV, Van Dyck, D. Inequality in physical activity, global trends by income inequality and gender in adults. *Int J Behav Nutr Phys Act*. 2020 Nov 26; 17:142. <https://doi.org/10.1186/s12966-020-01039-x>.
- Da Silva ICM, Restrepo-Mendez MC, Costa JC, Ewerling F, Hellwig F, Ferreira LZ, et al. Measurement of social inequalities in health: concepts and methodological approaches in the Brazilian context. *Epidemiol Serv Saude*. 2018 Mar 5; 27(1): e000100017. <https://doi.org/10.5123/S1679-49742018000100017>.
- Barros AJD, Victora CG. Measuring Coverage in MNCH: Determining and Interpreting Inequalities in Coverage of Maternal, Newborn, and Child Health Interventions. *PLoS Med*. 2013 May 7;10(5): e1001390. <https://doi.org/10.1371/journal.pmed.1001390>.

Footnotes

We have added footnotes to distinguish between global physical activity prevalence estimates and country estimates.

The global and regional estimates were based on the prevalence of insufficient physical activity, age-standardized to the WHO Standard Population 2022, and estimated in:

- Strain T, Flaxman S, Guthold R, Semenova E, 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 August;12(8):e1232–e1243. [https://doi.org/10.1016/S2214-109X\(24\)00150-5](https://doi.org/10.1016/S2214-109X(24)00150-5).

The country estimates were based on national surveys provided by the Country Contacts.

Physical Activity Policy



POLICY AND SURVEILLANCE STATUS

National physical activity policy/plan **YES**

GoPA! Policy Directory

1. Strategic Action Plan to Tackle Noncommunicable Diseases (NCD) in Brazil, 2011-2022
2. Strategic Action Plan to Tackle Noncommunicable Diseases (NCD) in Brazil, 2021-2030

Link to GoPA! Policy Directory: new.globalphysicalactivityobservatory.com/directory.php

National recommendations **YES**

15. Physical activity plan/policy and year

Physical activity policy is indicated by the totality of formal written policies, unwritten formal statements, written standards and guidelines, formal procedures, and informal policies (or lack thereof) that may directly or indirectly affect community- or population-level physical activity.

Defined by:

- Klepac Pogrmilovic B, O'Sullivan G, Milton K, Biddle SJH, Bauman A., Bellew W, et al. The development of the Comprehensive Analysis of Policy on Physical Activity (CAPPA) framework. *Int J Behav Nutr Phys Act.* 2019 Aug 02;16:60. <https://doi.org/10.1186/s12966-019-0822-5>.

The GoPA! Policy Directory (based on the Country Cards, Policy Inventory, and other public documents gathered by GoPA!) was used to determine whether each of the 186 world countries has a physical activity policy/plan. The policy documents published in 2018 and beyond, as well as materials published prior to 2018 but covering the time period through 2018 (valid/enforced/current/applicable document), were included in the 2024 Country Cards (3rd set). For countries with only pre-2018 publications, the documents spanning the years 2012 to 2018 were included.

- Ramírez Varela A, Bauman A, Woods CB, Shawar YR, Hallal PC, Salvo D, et al. Unlocking Global Political Priority for Physical Activity: A Critical Examination of Two Decades. 2025. (Under review)

How was this country classified?

According to the GoPA! Country Capacity for Physical Activity Promotion, a country can either be classified as having a standalone physical activity policy plan (i.e., exclusive to physical activity), a non-communicable diseases policy/plan integrating physical activity, or no policy at all.

Consequently, the country was categorized as 1) Having a standalone physical activity policy/plan if at least one record of such a policy/plan appears in the documents retrieved for the country; 2) Having a non-communicable diseases policy or plan that includes physical activity if all the documents retrieved were non-communicable diseases policies/plans that included physical activity and there was no standalone policy/plan record; 3) Not having a physical activity policy if neither a standalone policy/plan nor a non-communicable diseases policy/plan including physical activity could be located.

16. National physical activity guidelines

National recommendations are official consensus statements issued by a government body and/or endorsed by the government. Physical activity recommendations typically state the amount of physical activity required for health benefits.

The GoPA! Policy Directory (based on the Country Cards, Policy Inventory, and other public documents gathered by GoPA!) was used to determine whether each of the 186 world countries has physical activity guidelines. The guidelines documents published in 2018 and beyond, as well as materials published prior to 2018 but covering the time period through 2018 (valid, enforced, current, or applicable documents), were included in the 2024 Country Cards (3rd set). For countries with only pre-2018 publications, the documents spanning the years 2012 to 2018 were included.

- Ramírez Varela A, Bauman A, Woods CB, Shawar YR, Hallal PC, Salvo D, et al. Unlocking Global Political Priority for Physical Activity: A Critical Examination of Two Decades. 2025. (Under review)

Physical Activity Surveillance



National survey(s) including physical activity questions

YES

2023 | Most recent

2024 | Next

Surveys and instruments used to assess physical activity

1. VIGITEL 2014-2024 (Other);
2. PNS 2019 (PNS questionnaire)

17.1 National survey including physical activity most recent year

17.2 National survey including physical activity next year

National surveys are defined as surveys conducted at the national level that cover physical activity at work, in the household, for transportation, and during leisure time. Surveys should include a representative sample of the entire population or, in some cases, a clearly defined geographic segment of the population.

In the 3rd set of Country Cards, there will be more emphasis on the ‘most recent’ and ‘next year’ national surveys identified for each country that include physical activity. The standardized methodology developed for the 1st and 2nd sets of Country Cards data collection was used, along with the input of Country Contacts, to complete the missing information and ensure that the indicators have the most up-to-date information. *Note.* In some countries, the most recent survey may also be the first survey if the country has not conducted any further physical activity epidemiological surveillance.

We used the results from the search conducted for the previous sets of Country Cards:

From September to December 2022, the following stepwise methodology was used to search for national physical activity surveys or physical activity surveillance systems:

1. Review the Demographic & Health Survey (DHS) <http://dhsprogram.com/>. The country’s survey characteristics section will be reviewed.
2. If step 1 does not provide the information for a specific country, the website <http://www.who.int/chp/steps/reports/en/> will be reviewed to complete the information.
3. If the prior step does not retrieve results, a Google search will be conducted using the terms “national survey,” “physical activity,” and “name of each country.”
4. The fourth step is to search Google for information on the countries from which no data was obtained. Terms to consider are “ncd,” “risk factors,” and “national survey.”
5. For the missing data, a fifth search will be conducted using the terms “name of each country,” “national survey,” and “ncd.”
6. Some of the national surveys can be found using the WHO Multi-Country Studies Data Archive—Data Catalog for the World Health Surveys (WHS) <https://apps.who.int/healthinfo/systems/surveydata/index.php/catalog/whs>.
7. The information in the NCD Microdata Repository for the WHO STEPS <https://extranet.who.int/ncdsmicrodata/index.php/catalog/STEPS>.
8. Information will also be collected from the supplement of the articles on the prevalence of insufficient physical activity, age-standardized to the WHO standard population, and estimated in:
 - 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 October;6(10): e1077–e1086. [https://doi.org/10.1016/S2214-109X\(18\)30357-7](https://doi.org/10.1016/S2214-109X(18)30357-7).

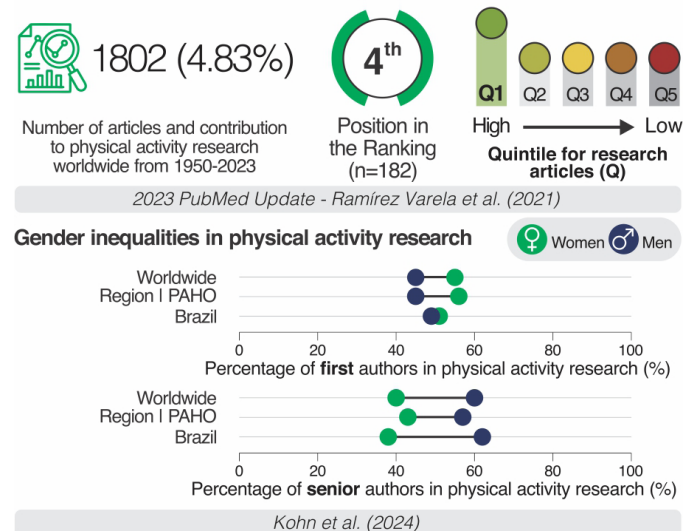
Additional surveys were provided by the Country Contacts and from the last 10 years, as identified in the 2024 results from:

- Strain T, Flaxman S, Guthold R, Semenova E, 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 August;12(8);e1232–e1243. [https://doi.org/10.1016/S2214-109X\(24\)00150-5](https://doi.org/10.1016/S2214-109X(24)00150-5).

Physical Activity Research



PHYSICAL ACTIVITY RESEARCH



The systematic review conducted for the 2nd set of Country Cards collected data for the research indicators from 1950 to 2019. The search was then updated to include publications up to 31/12/2023 for this set of cards. The systematic review is described in:

- Ramírez Varela A, Niño Cruz GI, Hallal P, Blumenberg C, da Silva SG, Salvo D, et al. Global, regional, and national trends and patterns in physical activity research since 1950: a systematic review. *Int J Behav Nutr Phys Act*. 2021 Jan 07;18:5. <https://doi.org/10.1186/s12966-020-01071-x>.

18. Number of articles and contribution to physical activity and health research worldwide from 1950–2023

The total number of articles per country from 1950 to 2023 was determined by the final selection of articles for the systematic review. In addition, if an article included multiple countries, a list with the names of the study's participating countries was created, and it was verified that the article was included in the list of each of the other participating countries. The country's contribution to worldwide physical activity and health research from 1950 to 2023 was estimated as the percentage of publications per country (total articles per country/total of articles worldwide) * 100.

19. Position in the ranking of research articles

Countries were ranked by total number of published articles (position 1 was assigned to the country with the most articles published).

20. Physical activity research quintiles

Research articles' quintiles were calculated to compare countries on the Country Cards. The quintiles were labeled 1—high, 2—upper-middle, 3—middle, 4—lower-middle, and 5—low.

21. Gender inequalities in physical activity research from 1950–2019 *new*

Gender inequalities in physical activity research were determined using the results from the study described in:

- Kohn ER, Hallal PC, Niño-Cruz GI, Almentero J, Pinzón D, Böhlke M, et al. Gender Differences in Physical Activity and Health-Related Authorships Between 1950 and 2019. *J Phys Act Health*. 2024 Apr 2;21(5):458–464. <https://doi.org/10.1123/jpah.2023-0442>.

This bibliometric study estimated the participation of male and female researchers in publications from 1950 to 2019, drawing on articles identified in the systematic review described in:

- Ramírez Varela A, Nino Cruz GI, Hallal PC, Blumenberg C, da Silva SG, Salvo D, et al. Global, regional, and national trends and patterns in physical activity research since 1950: a systematic review. *Int J Behav Nutr Phys Act*. 2021 Dec 1;18(1):1–15. <https://doi.org/10.1186/s12966-020-01071-x>.

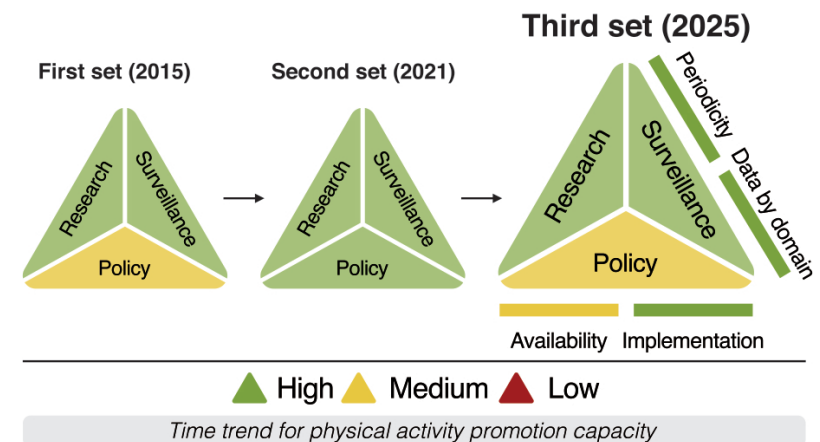
The analysis classified the frequency of female authorship by position (first, senior, and overall) across countries and regions. Gender identification was based on author names and verified through institutional websites, social media, and other online sources. The indicator was constructed by estimating the percentage of male and female first and senior authors in physical activity research, which was assessed with classical methods of equity analysis, such as equiplots. The development of equiplots was done following the methods described in:

- Da Silva, ICM, Restrepo-Mendez MC, Costa JC, Ewerling F, Hellwig F, Ferreira LZ, et al. Measurement of social inequalities in health: concepts and methodological approaches in the Brazilian context. *Epidemiol Serv Saude*. 2018 Mar 5; 27(1): e000100017. <https://doi.org/10.5123/S1679-49742018000100017>.
- Barros AJD, Victora CG. Measuring Coverage in MNCH: Determining and Interpreting Inequalities in Coverage of Maternal, Newborn, and Child Health Interventions. *PLoS Med*. 2013 May 7;10(5): e1001390. <https://doi.org/10.1371/journal.pmed.1001390>.

Country Capacity for Physical Activity Promotion



PHYSICAL ACTIVITY PROMOTION CAPACITY PYRAMID



21. Country capacity for physical activity, including physical activity data by domain and policy implementation ***new***

The research triangles:

- **Green:** Research is in the Q1 and Q2 quintiles of productivity (based on the update of the systematic review).
- **Yellow:** Research is in the Q3 or Q4 quintiles of productivity (based on the update of the systematic review).
- **Red:** Research is in the Q5 quintile of productivity (based on the update of the systematic review) or does not have physical activity research.

Note: The quintiles were labeled 1—high; 2—upper-middle; 3—middle; 4—lower-middle; and 5—low based on the results for the update of the systematic review described in:

- Ramírez Varela A, Nino Cruz GI, Hallal PC, Blumenberg C, da Silva SG, Salvo D, et al. Global, regional, and national trends and patterns in physical activity research since 1950: a systematic review. *Int J Behav Nutr Phys Act.* 2021 Dec 1;18(1):1–15. <https://doi.org/10.1186/s12966-020-01071-x>.

The surveillance triangles:

The surveillance triangles account for the periodicity of surveys that assess physical activity

- **Green:** The country has periodic physical activity surveillance (data for most recent and next surveys).
- **Yellow:** The country has physical activity surveillance but without a clear periodicity (data for most recent or next surveys).
- **Red:** The country does not have physical activity surveillance.

The data by domain status (overall, active leisure time, and active transport physical activity prevalence estimates)

- **Green:** The country has overall and active leisure and/or active transport physical activity prevalence estimates.
- **Yellow:** The country has overall or active leisure or active transport physical activity prevalence estimates.
- **Red:** The country does not have information from the last 10 years for overall, active leisure, and active transport physical activity prevalence estimates.

The policy triangles:

- **Green:** The country has an available standalone plan/policy for physical activity, and there is evidence of implementation (defined as meeting at least half of the statements in the GoPA! Policy Inventory (version 3.0), or having three or more of the implementation enablers identified in the GoPA! Policy Directory).
 - Klepac Pogrmilovic B, Ramírez Varela A, Pratt M, Milton K, Bauman A, Biddle SJH, et al. National physical activity and sedentary behaviour policies in 76 countries: Availability, comprehensiveness, implementation, and effectiveness. *Int J Behav Nutr Phys Act.* 2020 Sep 18;17(1). <https://doi.org/10.1186/s12966-020-01022-6>.
 - Ramírez Varela A, Bauman A, Woods CB, Shawar YR, Hallal PC, Salvo D, et al. Unlocking Global Political Priority for Physical Activity: A Critical Examination of Two Decades. 2025. (Under review)
- **Yellow:** The country has an available standalone plan/policy for physical activity, and there is evidence of insufficient implementation (defined as meeting less than half of the statements in the GoPA! Policy Inventory (version 3.0), or having fewer than three of the implementation enablers identified in the GoPA! Policy Directory).
 - Klepac Pogrmilovic B, Ramírez Varela A, Pratt M, Milton K, Bauman A, Biddle SJH, et al. National physical activity and sedentary behaviour policies in 76 countries: Availability, comprehensiveness, implementation, and effectiveness. *Int J Behav Nutr Phys Act.* 2020 Sep 18;17(1). <https://doi.org/10.1186/s12966-020-01022-6>.
 - Ramírez Varela A, Bauman A, Woods CB, Shawar YR, Hallal PC, Salvo D, et al. Unlocking Global Political Priority for Physical Activity: A Critical Examination of Two Decades. 2025. (Under review)
- **Yellow:** The country has an available non-communicable disease plan that includes physical activity, and it is being implemented to any degree.
- **Red:** The country does not have a physical activity plan/policy.

A policy is considered to include an implementation enabler if it specifies at least one of the following elements: tasks and subtasks to be carried out (what), budgets or allocated resources (how much), timelines or timeframes (when), or responsible actors and collaborators (who).

- Kelly L, Twohig C, Woods CB, Luszczynska A, Murrin C, Lien N, et al. Reaching consensus on definitions for food and physical activity policies: experience from the Policy Evaluation Network. *Eur J Public Health.* 2022 Nov 28;32(Supplement_4):iv10–20. <https://doi.org/10.1093/eurpub/ckac147>.
- Ramírez Varela A, Bauman A, Woods CB, Shawar YR, Hallal PC, Salvo D, et al. Unlocking Global Political Priority for Physical Activity: A Critical Examination of Two Decades. 2025. (Under review)

The development of the GoPA! physical activity promotion capacity pyramid is described in:

- Ramírez Varela A, Salvo D, Pratt M, Milton K, Siefken K, Bauman A, et al. Worldwide use of the first set of physical activity Country Cards: The Global Observatory for Physical Activity - GoPA! *Int J Behav Nutr Phys Act.* 2018 Mar 27;15(1). <https://doi.org/10.1186/s12966-018-0663-7>.

Deaths Related to Physical Inactivity

These estimates were calculated using the same methodology applied in the previous edition of the Country Cards, ensuring consistency and comparability. Deaths related to physical inactivity are the estimated population attributable fractions for all-cause mortality associated with physical inactivity by country.

Deaths related to physical inactivity were estimated using the semi-adjusted population attributable factor-PAF (partial population attributable risk).

- Wong BHW, Peskoe SB, and Spiegelman D. The effect of risk factor misclassification on the partial population attributable risk. *Stat Med.* 2018 Jun 15;37(8): 1259-1275. <https://doi.org/10.1002/sim.7559>

Partial population attributable risk equation

$$par_{sem1} = 1 - \frac{1}{(1-p_1) + p_1 \cdot rr_1^{(a)}},$$

In the partial population attributable risk equation:

rr = 1.28 and corresponds to the adjusted relative risk of all-cause mortality due to physical inactivity.

- Lee IM, Shiroma EJ, Lobelo F, Puska P, Blair SN, Katzmarzyk PT; Lancet Physical Activity Series Working Group. Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. *Lancet* 2012 Jul 21;380(9838):219-29. [https://doi.org/10.1016/S0140-6736\(12\)61031-9](https://doi.org/10.1016/S0140-6736(12)61031-9)

p1 = prevalence of insufficient physical activity age-standardized in the country

- Strain T, Flaxman S, Guthold R, Semanova E, 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 August;12(8):e1232–e1243. [https://doi.org/10.1016/S2214-109X\(24\)00150-5](https://doi.org/10.1016/S2214-109X(24)00150-5).

Estimates of deaths attributable to physical inactivity are not included in the 2025 Country Cards but remain available in the GoPA! Almanac and the new GoPA! Dashboard, accessible through the GoPA! website.

3rd Set of GoPA!



GoPA!
Global Observatory for
Physical Activity

