



# Whole-of-school approach to the promotion of physical activity

using research, policy and practice to understand system's needs and structures





# Whole-of-school approach to the promotion of physical activity

using research, policy and practice to understand system's needs and structures

#### **Abstract**

Promoting physical activity through schools provides substantial health and well-being benefits and enhances academic outcomes. Yet, challenges persist with designing effective programmes which can be delivered at scale to address physical inactivity. While whole-of-school physical activity programmes show promise, their implementation and effectiveness is impacted by the broader health and education system. This publication presents the findings from a Europe-wide research project to understand the national systems and conditions required to support effective programmes at the subnational and national level. The publication concludes with seven key recommendations that all countries should action to create effective whole-of-school physical activity programmes to address population levels of physical inactivity.

## **Keywords**

HEALTH PROMOTION

EXERCISE

PHYSICAL EDUCATION AND TRAINING

SPORTS

EDUCATION

SYSTEMS APPROACHES

Document number: WHO/EURO:2025-12499-52273-80389 (PDF)

© World Health Organization 2025

 $\textbf{Some rights reserved.} \ \ \textbf{This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; https://creativecommons.org/licenses/by-nc-sa/3.0/igo).}$ 

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition: Whole-of-school approach to the promotion of physical activity: using research, policy and practice to understand system's needs and structures. Copenhagen: WHO Regional Office for Europe; 2025".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (http://www.wipo.int/amc/en/mediation/rules/).

**Suggested citation.** Whole-of-school approach to the promotion of physical activity: using research, policy and practice to understand system's needs and structures. Copenhagen: WHO Regional Office for Europe; 2025. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

**Sales, rights and licensing.** To purchase WHO publications, see http://apps.who.int/bookorders. To submit requests for commercial use and queries on rights and licensing, see https://www.who.int/about/policies/publishing/copyright.

**Third-party materials.** If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

**General disclaimers.** The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Design by: Studio 2M

# **Contents**

Acknowledgements	iv
Abbreviations	iv
Executive summary	v
Actions	vi
Introduction	1
Method	4
Findings	6
Summary and recommendations	10
Conclusions	12
References	14

# **Acknowledgements**

This report was produced as a result of a collaboration between the WHO Regional Office for Europe and members of the Children and Adolescents working group of the WHO European network for the promotion of health enhancing physical activity (HEPA Europe), under the leadership of the Wolfson Centre for Applied Research Healthy Childhood Group (University of Bradford).

The writing team comprised Anna Chalkley, Andy Daly-Smith, and Jade L Morris (Faculty of Health Studies, University of Bradford, United Kingdom; Wolfson Centre for Applied Educational Research; and the Centre for Applied Health Research, Bradford Royal Infirmary, Bradford, United Kingdom), in collaboration with Adriana Pinedo, Stephen Whiting, Gundo Weiler, Gauden Galea and Kremlin Wickramasinghe (WHO Regional Office for Europe).

The authors would like to acknowledge the support of Zoe Helme and Ellen Caroline Mendes da Silva for their assistance with the data collection and analysis. In addition, thanks go to the HEPA Europe Children and Adolescents working group members, the European Union Physical Activity Focal Point Network and all of the contributors to the online survey and focus groups.

### **Abbreviations**

GAPPA	Global Action Plan for Physical Activity
NCD	noncommunicable disease
NGB	non-governing body
PE	physical education
SDG	Sustainable Development Goal

# **Executive summary**

This publication provides government ministers, civil servants and wider system partners with seven key recommendations to improve whole-of-school physical activity within their countries. Countries are falling behind in their efforts to meet WHO's global target reduction in physical inactivity by 15% by 2030. Schools are central to addressing physical inactivity in childhood. WHO produced the *Promoting physical activity through SCHOOLS: A Toolkit* to support the development of effective whole-of-school physical activity provision. Yet, little work has taken place to understand the role of broader national systems in supporting whole-of-school physical activity. In response, this research was conducted with 94 stakeholders from 34 WHO European Region countries using surveys and focus groups to analyze a national system's needs to support whole-of-school physical activity implementation at a national, municipality and school level. The report identifies key themes, including the need for policy alignment, enhanced collaboration, funding clarity and staff training. The findings inform seven actionable reccomendations for countries to develop national systems for whole-of-school physical activity.



### **Actions**

To develop national systems that support whole-of-school physical activity.

1

Frame whole-of-school provision through the perspective of how it impacts, or is influenced by, people's physical activity choices and behaviours rather than applying a narrow focus, such as sport.

2

Rebalance the curriculum to increase the focus on holistic child development and place a stronger emphasis on health and well-being.

3

4

Develop accountability systems to establish good practices and reward schools that promote the health and well-being of their students. Establish authentic and sustained cross-government ministerial leadership to facilitate longer-term planning.

7

Understand how education and physical activity systems work and how factors influencing them vary across different contexts.

6

Review commitments to invest in and implement whole-of-school physical activity provision.

7/

Increase the knowledge and skills of school and wider system partners at all levels to design and implement whole-of-school physical activity.



#### **Introduction**

As the WHO Regional Office for Europe and its Member States intensify efforts to achieve the Sustainable Development Goals (SDGs), planning for long-term, generational shifts will make the WHO European Region more resilient to noncommunicable diseases (NCDs). This requires addressing the risk factors for NCDs, including physical inactivity and sedentary behaviour among children and adolescents. Large-scale solutions, including a range of systems-based actions, are needed to support population-wide shifts in physical activity across multiple settings (1), with the Global action plan on physical activity 2018–2030 (GAPPA) recommending a whole-of-system approach to reduce the global prevalence of physical inactivity by 15% by 2030 (2) – a target that the majority of countries globally will not meet (3).

A core component of a whole-system approach is a "whole-of-school" approach to promoting physical activity that integrates all aspects of the school environment, making it central to the school's culture (4). Whole-of-school approaches are recognized internationally as one of the eight best investments for physical activity, which, when implemented at scale, can contribute to increasing physical activity levels among children (5). This approach goes beyond traditional physical education (PE) and sports, incorporating active learning in the classroom, promoting active play during recess, facilitating extracurricular sports and activities, and encouraging active transport to and from school. It also involves engaging staff, families and the broader community in supporting and modelling active lifestyles. To achieve these changes, it is essential for schools to embed physical activity within internal policies and improve social and physical environments. Embedding physical activity as part of the school culture and throughout the school day ensures that all students have ample opportunities to move and develop healthy habits early in life. This approach encourages regular physical activity and supports broader goals of creating safe, healthy and equitable environments for children and adolescents, helping build an NCD-resilient future for the Region.

The GAPPA recommends that WHO Member States enact the following policy actions to support the development of a whole-of-school approach:

- strengthen pre-service and in-service training for physical activity (GAPPA Action 1.4, 3.1);
- support schools with active travel provision (GAPPA Action 2.2);
- improve the shared use of school facilities for activity (GAPPA Action 2.4); and
- strengthen the national implementation of whole-of-school physical activity in all educational institutions and strengthen national education policy implementation and monitoring (GAPPA Action 3.1).

To support these endeavours, the WHO Secretariat is responsible for assisting the strengthening of the implementation and evaluation of effective evidence-based quality physical education and whole-of-school approaches that:

- target the least active and those in low- and middle-income countries;
- support a diverse range of initiatives that increase the opportunities for physical activity before and after school hours; and
- facilitates research on policy, and the implementation and impact of PE and whole-of-school physical activity approaches to strengthen the evidence base and share best practice.

Aligning all policy actions will aid countries' progress towards achieving many of the SDGs, including, but not limited to, health (SDG 3) and education (SDG 4) (Fig. 1).

Fig. 1. Economic, social and environmental co-benefits of policy action to increase physical activity



Source: (6).

To enable countries to achieve these aims, WHO produced the *Promoting physical activity through SCHOOLS: A Toolkit (7)*. The guidance and best practice examples included in this toolkit help schools and key stakeholders to develop and implement programmes to improve the physical activities offered within a school. While this work and extensive research have led to progress in recent years in the development and delivery of whole-of-school physical activity programmes, few countries have scaled them effectively (8). As a result, the global implementation of whole-school physical activity policies remains suboptimal (9).

To improve programme impact, policy-makers, practictitioners and researchers must collaborate to ensure effective in-school provision (10), while also aligning the broader systems beyond schools to help this provision to be sustainable over time. To achieve this goal, it is essential to understand the broader systems, beliefs, goals and structures (11). While recent research has improved our understanding of in-school system structures and how to operationalize these for whole-of-school physical activity (4), knowledge of local (i.e. of municipalities) and national structures, and the beliefs, goals and systems that drive them, is lacking (8).

This report aims to provide cross-European insights on the research, policy and practice needs related to the broader system which supports the design and delivery of whole-of-school physical activity approaches. Common cross-country themes are identified to understand the system needs and to develop stakeholder capabilities, opportunities and motivations for creating and implementing whole-of-school physical activity programmes.



## **Method**

This project included three phases to gain rich insights into stakeholder training needs beyond the school setting across the Region. Overall, 94 stakeholders from 34 countries were engaged, including policy-makers, practitioners, researchers and people from non-governing bodies (NGBs). Table 1. for a visual representation of stakeholder engagement across countries (in and around Europe).

**Table 1.** Country representation throughout the project, stratified by either survey participation or focus group participation

Country representation throughout the project			
Survey and focus group	Survey only	Focus group only	
Austria	Bosnia and Herzegovina	Canada	
Belgium	Bulgaria	Cyprus	
Croatia	Czechia	Kazakhstan	
Denmark	Monaco	Malta	
England	Netherlands (Kingdom of the)	Russian Federation	
Finland	Portugal	Slovakia	
France	Türkiye		
Germany	Wales		
Greece			
Hungary			
Ireland			
Lithuania			
North Macedonia			
Norway			
Romania			
Scotland			
Slovenia			
Spain			
Sweden			
Switzerland			

Phase one included a stakeholder mapping survey to identify and categorize key stakeholders involved in influencing and/or operationalizing whole-of-school physical activity in countries across the Region. Questions were asked about:

- (i) their current role and (in)direct experience of working with schools on children's physical activity;
- (ii) existing national and local support for the implementation of whole-of-school physical activity specific to their country; and
- (iii) the developmental needs of stakeholders within and beyond the school to support effective whole-ofschool approaches to physical activity.

The survey was responded to by 67 individuals representing 27 countries. This included 36 researchers, 15 policy-makers, 10 practitioners and six people from NGBs.

Phase two involved having four online focus groups to undertake a needs analysis to identify whole-of-school physical activity systems within and across countries, and the training needs for key stakeholders and how these differ across countries. We invited 30 individuals (representing 18 countries), who engaged in the phase one survey, to ensure a diverse cross-Europe range of researchers, practitioners and policy-makers. Interview transcripts were thematically analysed (12) using a process of open inductive coding. The authors met to discuss their independent analyses and the patterns they identified. During this process, data were moved into different first-order and second-order themes, with each author describing their justification for the placement of the data. The resultant themes were then refined for presentation in phase three.

Phase three included a second round of focus groups housed within a virtual workshop. The focus group's aim was to review and discuss the themes and data from phase two, to ensure breadth and depth of insights across as many European countries as possible. The session format consisted of overviews of initial findings, broken down by theme, followed by theme-based breakout discussions. Twenty-four researchers, policy-makers and practitioners participated, representing 15 countries. Phase three focus group transcripts were analysed using inductive coding to identify new themes, and deductive coding was used where data aligned with themes from phase two. Once completed, data from both phases were reviewed and moved into different first-order and second-order themes, with each author justifying their data and theme alignment. This ensured that themes were strongly linked to the data without trying to fit them into the phase two coding frame. The resultant themes were discussed with external researchers and the senior author before confirming the final eight themes.

# **Findings**

Forty-two participants from 26 different countries engaged in phases two and three. This included 22 researchers (e.g. academics), 13 policy-makers (e.g. civil servants) and seven practitioners (e.g. NGBs). Eight themes were identified through the analysis of the data captured in phases two and three, presented below.

**What is whole-of-school physical activity?** There was a lack of clarity on what constitutes a whole-of-school PE approach. The interchangeable use of sport, PE, physical activity and exercise created confusion across stakeholder groups. This often resulted in a dominant narrative of sports, which undermined whole-of-school physical activity efforts and reinforced negative perceptions of participation among some. Examples of comments made include the following:

44

"Physical activity gets derailed, and schools think that PE provision is enough to achieve the [daily] physical activity. There is a lack of clarity and consistency about what [whole -of-school physical activity] actually means."

(researcher, United Kingdom (England))

"Policy-makers, they have no idea about what's the difference between making environments friendly for physical activity and also promoting competitive sport...We need education for policymakers to have a broader view [of] what physical activity is."

(researcher, Lithuania)

**Physical activity not a priority.** Physical activity was often perceived as less important than other lifestyle behaviours (e.g., smoking or nutrition) and, therefore, did not appear in national agendas. At a school level, the many so-called fad initiatives and a lack of strategic decision-making were seen as overburdening. Evidence of the role of physical activity in improving educational outcomes, such as attainment and school engagement, was perceived as essential to building value for physical activity. This was also thought to involve educating key decision-makers on the role and benefits of leading a physically active lifestyle.

**Different support systems across countries.** There was high variability in leadership, responsibility and accountability between the national and local physical activity support systems across countries. The complexity of the school system was seen as a significant implementation barrier due to many different levels and responsibilities. Many participants suggested that, to improve whole-of-school physical activity provision, we need to simplify the systems and what stakeholders are asking at all system levels. One example is:

44

"Basically, unpick the idea that complexity is something that scares people, particularly at the policy level. I think one of the first things to do is unpick the complexity for them to be able to understand, so that it's accessible." (researcher, United Kingdom (Scotland))

**Cross-system collaboration.** Collaboration between system partners was undermined by poor communication, lack of leadership, misaligned priorities and limited accountability. High-level political support helped to leverage system partners, galvanize support and secure resources. Often, ministries would view school-based physical activity as another ministry's responsibility, or different ministries funded different system partners, creating tension and competition rather than collaboration. Examples of comments include:



"We tried to combine different players, like the Minister of Sports or the Minister of Health. But I guess that's one of the main problems that we realize every player pushes topics to every player."

(policy-maker, Austria)

"Different actors were not communicating or not having the same kinds of direction and vision to work towards."

(researcher, United Kingdom (Scotland))

"There was a bit of feeling that we should leave the schools under the responsibility of the Department for Education, rather than contributing as well." (policy-maker, Malta) **Policy.** The prioritization and positionality of whole-of-school physical activity within national policy differed across countries. Many countries lacked policies and national-level strategies for school-based physical activity, with others citing the dominance of PE and school sports undermining efforts to promote whole-of-school physical activity more broadly. In some countries, the constantly changing political landscape and ministerial roles resulted in differing priorities that resulted in misaligned policies. Many countries suggested that, when a country plans to reform its curriculum, this is an opportunity for it to establish health and well-being as a key educational pillar. Many participants highlighted concerns over whole-of-school physical activity implementation due to a policy-to-practice disconnect. This policy-practice gap was due to a lack of knowledge of the policy and/or an associated implementation strategy, implementation support, and/or infrastructure investment. For policy changes to impact practice, top-down advocacy and bottom-up development were deemed essential. Examples of comments made include the following:

44

"So we start to talk with Ministry for Health, and then in a year, it changes, the person changes. So we have to start from the beginning. This is now repeating for some years. So, this is an issue we are facing when we are trying to achieve some changes on national level whole-school." (researcher, Solvenia)

"Within the curriculum in Scotland, we have health and well-being as one of the core pillars. That's where PE, physical activity, and sport sits. But even having that, the challenges remain, but at least it's there. So that's a really good starting point for us."

(policy-maker, United Kingdom (Scotland))

"We experience a disconnect between what policy says and what actually happens in schools." (researcher, United Kingdom (England))

**Funding.** There was considerable variation between countries in the amount of funding available for whole-of-school physical activity, and where funding did exist, how this was distributed to schools. The funding of national sporting organizations to deliver physical activity in schools drew criticism as many participants felt that a conflict of interest existed, with certain organizations using this funding as an opportunity to drive membership sales rather than upskill or build capacity within the system. In some countries, municipalities often had to fund separate partners to deliver the whole-of-school physical activity agenda, which was perceived as a duplication of effort and ineffective use of valuable resources. One comment was:



"[Schools] have to apply for funding and they have to have a plan [on] how they spend the money and what they will do, activities and things like that." (NGB, Finland)

**Staff capability.** Many felt the need for greater teacher competency to develop and deliver whole-of-school physical activity programmes. Primary schools often lacked specific expertise on physical activity. While PE specialists were deemed advantageous to a certain extent, there was a broad recognition that further professional development was required for all teachers to develop their capability to deliver whole-of-school physical activity initiatives.

**Schools as community hubs.** Several participants suggested the benefits of establishing schools as community hubs – namely, places that support the development of better-connected and more resilient communities with education at the centre – to provide opportunities for physical activity outside of school time. While mandated by some countries, many schools were still reluctant due to uncertainty regarding legal responsibility and fear of litigation. Despite the challenges, many felt it was a positive step to encourage schools to open their facilities as this would reduce transport requirements for parents, provide revenue for the school (if fees are charged) and place the school at the centre of the community. Examples of comments include:



"But they are still reluctant because they think of what might happen if, from a legal point of view, one of the children gets injured."

(policy-maker, Romania)

"Having school as a hub is really quite attractive to parents. Often it's about transport; they can they do this as an extension of their day as opposed to, you know, have to take them home and bring them back. All of those types of things were barriers to sort of engaging the wider community." (researcher, United Kingdom (Scotland))



# **Summary and recommendations**

The findings highlight the fragmented nature of whole-of-school physical activity within and across many countries in the Region. A lack of authentic and sustained leadership, combined with misaligned beliefs that often favour sport over broader physical activity, has led to a disconnected system. If national governments fail to address the outlined systemic issues, we will continue to fail future generations of young people. Seven evidence-based recommendations are made to address these issues to facilitate the development of effective system-based approaches to whole-of-school physical activity across different countries. While the recommendations are generic, and there will be shared learning across countries, it will be essential for some of the implementation to be informed by local context.

Frame whole-of-school provision through the perspective of how it impacts, or is influenced by, people's physical activity choices and behaviours rather than applying a narrow focus, such as sport.

To provide sufficient daily opportunities for in-school physical activity for all students, national systems need to broaden their policies and guidance beyond the narrow frame of sport to prioritize physical activity across the school day and beyond. Broadening beyond sports and PE will help to consider how the entire school – including curriculum design, daily routines and the physical environment – shape student's choices, movement patterns and attitudes towards physical activity. By recognizing the diverse ways in which schools can influence student's physical activity, policy-makers and educators can ensure more equitable provision and opportunities that engage all students, fostering lifelong healthy habits beyond traditional sports participation.

Rebalance the curriculum to increase the focus on holistic child development and place a stronger emphasis on health and well-being.

Across many countries, curricula focus largely on academic achievement in schools. The narrative must shift to empower education settings to support children's holistic development alongside academic achievement. This approach recognizes that physical, mental and emotional well-being are fundamental to a child's overall growth and success. A well-rounded curriculum that values the importance of physical activity and well-being not only enhances academic performance but also fosters resilience, socioemotional skills and a lifelong commitment to healthy living.

systems to establish good practices and reward schools that promote the

schools that promote the health and well-being of their students.

**Develop accountability** 

Where national-level school accountability systems exist, they should align with an updated holistic curriculum and recognize and reward schools that embed a culture of whole-of-school physical activity, which supports and values opportunities to be active across all areas of the school and school community. Broadening the expectation of schools beyond educational outcomes, and rewarding provision that recognizes this, is essential for school improvement and driving systems change.

Establish authentic and sustained crossgovernment ministry leadership to facilitate longer-term planning.

Consistent cross-government leadership is essential, especially in areas impacting public health and education, to ensure whole-of-school physical activity does not fall between the gaps. Leadership should draw together all relevant ministries to collaborate with a shared vision to develop cohesive policies that address complex, interconnected issues such as physical activity, mental health and well-being. While health, sport or education may lead, other ministries should be included (e.g. social policy). Shared objectives must be agreed upon, and each ministry should commit to appropriate staff capacity and funding to deliver on agreed outcomes. This unified leadership would foster consistency, ensure resource efficiency and promote strategic investments that yield lasting benefits. By breaking down silos and encouraging sustained cooperation, governments can create more resilient systems capable of adapting to evolving societal needs and achieving long-term positive outcomes.

5

Understand how education and physical activity systems work and how factors influencing them vary across different contexts.

In order to know where to intervene in a complex system, first, it is important to understand the system. Each country should develop a systems map to understand the national picture and areas of strength and gaps within whole-school physical activity policy and provision. Through this, system leaders can develop a shared knowledge and understanding of how and where to intervene within the system through allocating funding and identifying (potential) collaborations with key organizations, actors and programmes to ensure that initiatives are context-specific and impactful. Addressing both upstream and downstream determinants is key to creating effective interventions.

6

Review commitment to invest in and implement whole-of-school physical activity provision.

Countries should evaluate their commitment to supporting the development, delivery and evaluation of whole-of-school physical activity, for example, by assessing policy frameworks, funding allocations and the integration of physical activity into educational standards. Mechanisms at the national, regional and local (municipal) level should support the distribution of resources to schools based on their level of need to strengthen nationwide efforts towards improving health and well-being.

7

Increase the knowledge and skills of school and wider system partners at all levels to design and implement whole-ofschool physical activity. Educators, administrators, policy-makers, and community organizations all play a role in creating environments that promote movement throughout the school day. To drive systemic change, all system partners must be trained on the value of whole-of-school physical activity and how to develop and deliver whole-of-school physical activity programmes. Strengthening capacity at a national, municipality and school level would foster a collaborative approach. National partners would benefit from training to understand the need to prioritize physical activity, map national and local systems and create effective structures to support the expansion of effective approaches. Local stakeholders require training to deliver whole-of-school physical activity, focusing on supporting schools in organizational change for whole-of-school physical activity.

#### **Conclusions**

Most countries and territories globally are not on target to reduce the prevalence of physical inactivity by 15% by 2030 (3). As a result, concerted multisectoral efforts are needed to strengthen national, municipality and school level structures and services that support comprehensive whole-school physical activity provision. In response, the seven key recommendations presented in this report provide a blueprint for how countries can provide national and subnational actions to address physical inactivity through schools. Based on the report's findings, it is suggested that a review of best practices across the WHO European Region be undertaken, and a toolkit and training programme should be developed to support all countries in acting on the seven recommendations. If key decision-makers within countries fail to act, the physical and mental well-being of many children and young people, especially those who live in socially and economically challenged communities, may continue to worsen.

As a result, concerted multisectoral efforts are needed to strengthen national, municipal, and school-level systems and services that support comprehensive whole-of-school physical activity provision





#### References<sup>1</sup>

- [1] Reis RS, Salvo D, Ogilvie D, Lambert EV, Goenka S, Brownson RC, et al. Scaling up physical activity interventions worldwide: stepping up to larger and smarter approaches to get people moving. Lancet 2016;388 (10051):1337-48 (https://pubmed.ncbi.nlm.nih.gov/27475273/).
- [2] Global action plan on physical activity 2018–2030: more active people for a healthier world. Geneva: World Health Organization; 2018 (https://iris.who.int/handle/10665/272722). License: CC BY-NC-SA 3.0 IGO.
- [3] 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 population-based surveys with 5·7 million participants. Lancet Glob Health. 2024;12(8):e1232–43 (https://pubmed.ncbi.nlm. nih.gov/38942042/).
- [4] Daly-Smith A, Quarmby T, Archbold VSJ, Corrigan N, Wilson D, Resaland GK, et al. Using a multi-stakeholder experience-based design process to co-develop the Creating Active Schools Framework. Int J Behav Nutr Phys Act. 2020;17(1):13 (https://ijbnpa.biomedcentral.com/articles/10.1186/s12966-020-0917-z).
- [5] Milton K, Cavill N, Chalkley A, Foster C, Gomersall S, Hagstromer, et al. Eight Investments That Work for Physical Activity. J Phys Act Health. 2021;18(6):625-30 (https://doi.org/10.1123/jpah.2021-0112).
- [6] ACTIVE: a technical package for increasing physical activity. Geneva: World Health Organization; 2018 (https://iris.who.int/handle/10665/275415). License: CC BY-NC-SA 3.0 IGO.
- [7] Promoting physical activity through schools: a toolkit. Geneva: World Health Organization; 2021 (https://iris.who.int/handle/10665/350836). License: CC BY-NC-SA 3.0 IGO.
- [8] McKay HA, Kennedy SG, Macdonald HM, Naylor P-J, Lubans DR. The Secret Sauce? Taking the Mystery Out of Scaling-Up School-Based Physical Activity Interventions. J Phys Act Health. 2024;21(8):731-40 (https://journals.humankinetics.com/view/journals/jpah/21/8/article-p731.xml).
- [9] Ding D, Chastin S, Salvo D, Nau T, Gebel K, Sanchez-Lastra MA, et al. Realigning the physical activity research agenda for population health, equity, and wellbeing. Lancet. 2024;404(10451):411-3 (https://doi.org/10.1016/S0140-6736(24)01540-X).
- [10] Rütten A, Frahsa A, Abel T, Bergmann M, de Leeuw E, Hunter D, et al. Co-producing active lifestyles as whole-system-approach: theory, intervention and knowledge-to-action implications. Health Promot Int. 2019;34(1):47-59 (https://academic.oup.com/heapro/article-abstract/34/1/47/4107885?redirectedFrom=fulltext).
- [11] Nobles JD, Radley D, Mytton OT, Whole Systems Obesity programme team. The Action Scales Model: A conceptual tool to identify key points for action within complex adaptive systems. Perspect Public Health. 2022;142(6):328-37 (https://journals.sagepub.com/doi/10.1177/17579139211006747).
- [12] Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77-101 (https://doi.org/10.1191/1478088706qp063oa).

<sup>&</sup>lt;sup>1</sup> All references were accessed on 11 July 2025.



#### The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

#### **Member States**

Andorra

Armenia Austria

Albania

Azerbaijan Belarus Belgium

Bosnia and Herzegovina Bulgaria

Croatia
Cyprus
Czechia
Denmark

Estonia Finland

Georgia Germany Greece Hungary

Iceland
Ireland
Israel
Italy

Kazakhstan Kyrgyzstan Latvia Lithuania Luxembourg Malta

Montenegro Netherlands (Kingdom of the)

North Macedonia Norway Poland Portugal

Republic of Moldova

Romania

Russian Federation

San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Türkiye
Turkmenistan
Ukraine

United Kingdom Uzbekistan

Document number: WHO/EURO:2025-12499-52273-80389 (PDF)

# World Health Organization Regional Office for Europe

UN City, Marmorvej 51,

DK-2100, Copenhagen  $\emptyset$ , Denmark

Tel.: +45 45 33 70 00 Fax: +45 45 33 70 01 Email: eurocontact@who.int Website: www.who.int/europe