



# How can we advance systems approaches for physical activity in Australia?



## Key messages

- Insufficient physical activity in the Australian population has been a longstanding issue, with little evidence of improvement over the past 25 years.
- Effective national action requires a systems-based approach which engages multiple sectors and addresses systems-level determinants of physical inactivity. These include governance, legislation and regulation, and an improved national surveillance of the physical activity system.
- Together with policy makers and stakeholders the project mapped the existing physical activity landscape to understand how different sector's policies and programs contribute to population physical activity, and how states and territories measure adult physical activity.
- We developed practical resources, including a conceptual systems map for physical activity, and a world-first comprehensive guide on systems approaches for physical activity, *Getting Australia Active 3: A systems approach to physical activity for policy makers*.
- The project also progressed understanding about the role of laws and regulation for physical activity and on laws that affect the built environment for walking and cycling in Australia.
- We identified an urgent need for policy, practice and research to move beyond describing the system, to implementing and evaluating systems interventions.
- This project sets a strong foundation for further policy-relevant practice and research to support systems approaches for physical activity in Australia.

**The project:** Harnessing the power of physical activity for improving the prevention system: Australian systems approaches to physical activity (ASAPa project)

**Project lead:** Professor Adrian Bauman AO, University of Sydney

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## Why is this issue important?

Physical inactivity contributes nearly the same as obesity and smoking to the global burden of disease, however compared to other risk factors, the role of physical inactivity is under-recognised in Australia's chronic disease strategic planning. This is despite a global commitment by the Australian Government to achieve a 15% reduction by 2030.

Like many complex public health problems, it is an issue which cannot be comprehensively approached with simple or single interventions. Effective action requires an integrated, system-wide approach that engages stakeholders across multiple sectors and involves coordinated interventions that influence population physical activity levels.

## What did we do?

The project first mapped policies, programs, prevalence (3Ps) in the physical activity landscape to understand how physical activity is incorporated in policies and programs across different sectors, and how jurisdictions measure physical activity in the adult-population.

In association with the National Physical Activity Network (NPAN) an informal, cross-sectoral network of interested and engaged policy makers involved in physical activity the team collected perspectives on health and cross-agency data relevant to physical activity, and on building a standardised physical activity surveillance system for Australia.

It then developed a set of core indicators (corresponding to the elements in Figure 1) that could form part of a comprehensive physical activity surveillance system for Australians.

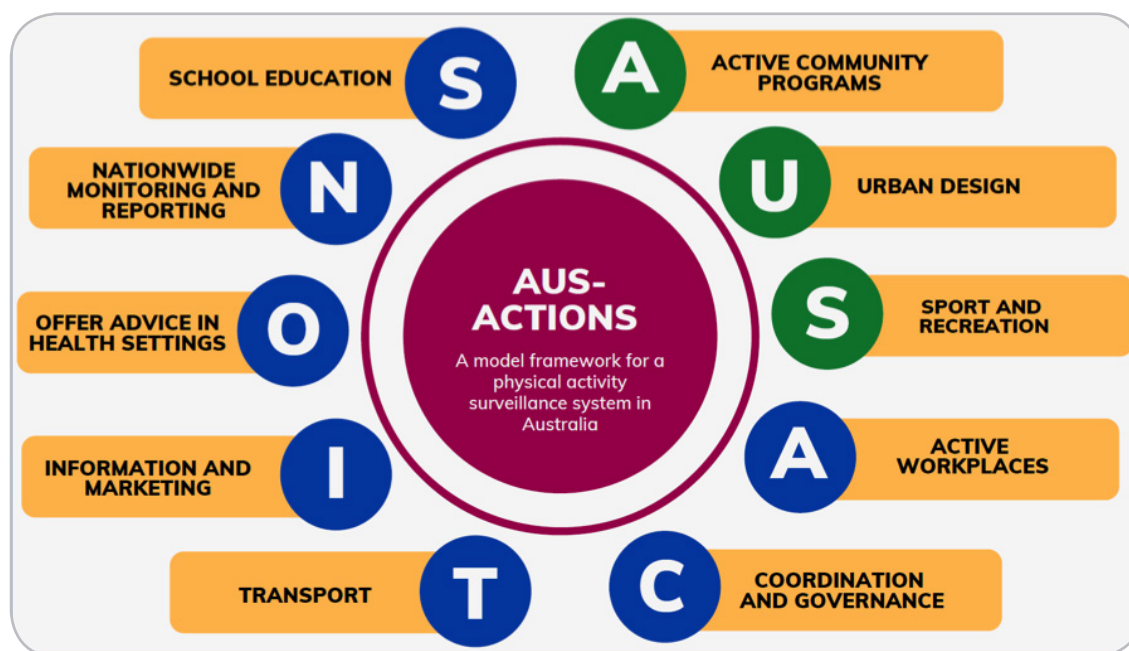
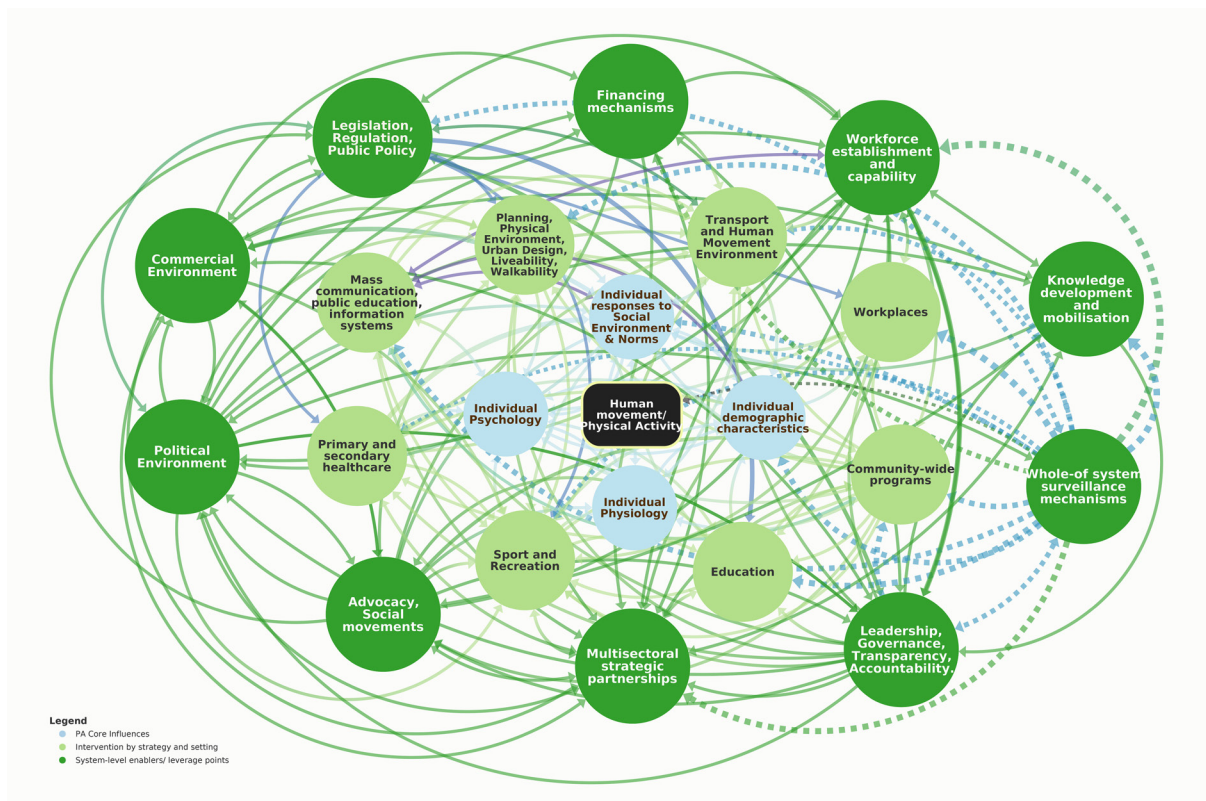


Figure 1. The AUS-ACTIONS model framework for a physical activity surveillance system in Australia

To support understanding and promote discussion and policy planning that addresses the multiple factors that influence physical activity, we developed a conceptual systems map for physical activity that supports systems approaches (Figure 2).

The project team combined the latest evidence on 'what works' and recommendations for policy action and investment in physical activity with a focus on using a systems approach into a guide, Getting Australia Active 3.



Note: Access [interactive map](#) and [explanatory video](#).

Figure 2. Conceptual systems map for physical activity

Since there is limited understanding around the role of law and regulation for physical activity compared to other areas of public health regulation such as tobacco and alcohol control, we developed a conceptual framework known as RAMPARTS (Regulatory Approaches to Movement, Physical Activity, Recreation, Transport and Sport). It aims to focus researcher and policy maker attention on the breadth of legal strategies that could help achieve the objectives in the World Health Organization’s Global Action Plan on Physical Activity.

We also analysed the legal framework influencing the built environment for walkability and identified specific features and variations of laws between states and territories relevant to walking and cycling.

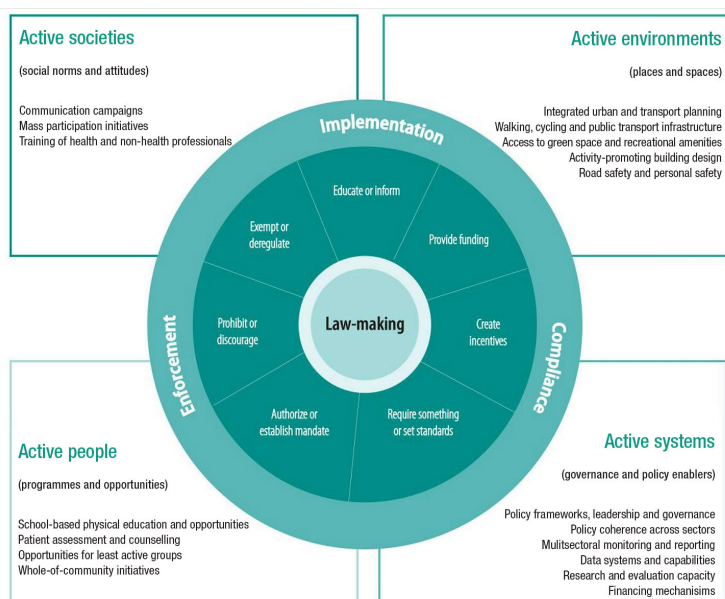


Figure 3. The RAMPARTS framework – Regulatory Approaches to Movement, Physical Activity, Recreation, Transport and Sport

Available from Nau T, Smith BJ, Bauman A, Bellew B. Legal strategies to improve physical activity in populations. Bull World Health Organ. 2021;99(8):593-602. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8319864/>

## What did we find?

We found numerous opportunities for strengthening the physical activity system in Australia and identified priorities for the future application and evaluation of systems approaches for physical activity.

### Mapping the physical activity landscape

Our mapping of the physical activity landscape revealed the following key gaps where policies, programs and prevalence or surveillance systems could be improved.



#### Policy audit

- Policy action is strong in planning and transport sectors.
- Positive indications of multisectoral engagement.
- Limited consideration of high needs groups or healthcare and workplace settings.
- Scope for wider range of policy mechanisms (beyond public education/guidance for policy makers).
- Need to strengthen systems enablers as few policies were clear on funding or indicators that monitor implementation.



#### Prevalence audit and surveillance workshops

- Differences in how states and territories measure physical activity in population health surveys make comparisons difficult.
- Inconsistent questions and definitions in jurisdictions' health surveys may also contribute to variation in physical activity trend data and the proportion of people meeting physical activity guidelines.
- Standardisation of state and territory survey systems is needed for reliable interpretation and to help inform policy and practice.
- Most physical activity surveillance focuses on measuring individual behaviours.
- There is limited monitoring of broader elements within the 'physical activity system', for example changes in the built environment, schools and workplaces.
- Need cross-agency planning and leadership to progress national discussions about a comprehensive and standardised physical activity surveillance system.



#### Programs audit

- Most physical activity programs designed for the whole population.
- Most common physical activity programs were in sport and recreation, and local government and community settings.
- Few physical activity programs in workplace and health care settings.
- Most common program modes were funding to support the delivery of programs by others and provision of information.
- Least common program mode was environmental change and transportation interventions.

## Developing understanding about legal and regulatory approaches for physical activity

Our conceptual framework of legal approaches for physical activity (RAMPARTS) found opportunities where laws could be strengthened to promote more active environments.



### Influences of the legal framework on walking

- ❑ States and territories are using various legal instruments and approaches to incorporate built environment characteristics that influence 'walking needs'. These range from basic to higher order needs such as accessibility, safety, convenience, comfort and enjoyment.
- ❑ We found there is uncertainty about the scope and strength of legal support for creating walkable environments at the national level. We subsequently conducted scientific legal mapping to help uncover specific features and variations of these laws.



### Scientific legal mapping of laws that influence the built environment for walking and cycling

- ❑ Most jurisdictions in Australia do not currently embed objectives in legislation that promote physical activity or use an integrated approach to land use and transport planning that encourage active and sustainable lifestyles.
- ❑ Only four jurisdictions addressed most of the evidence-based standards that promote active living. Of the standards addressed in law, few fully met evidence-based recommendations.
- ❑ While most jurisdictions legislated responsibility for enforcement of planning law, few legislated obligations for monitoring implementation.
- ❑ Our findings reveal opportunities where laws could be strengthened to promote more active environments.



### Application of systems approaches for physical activity from the literature

- ❑ Current practice is skewed towards basic methods and frameworks for systems approaches, with many papers focused on conceptual framing and predictive modelling.
- ❑ There are few well-described examples of systems interventions which have been planned, implemented and evaluated through a systems lens.
- ❑ The field needs to focus on showing the effectiveness of systems-informed approaches, and to the development, implementation and evaluation of systems-level interventions for example, governance, legislation and regulation, system surveillance and financing mechanisms.
- ❑ Discussion, formulation and evaluation of these strategic system-level interventions remain largely untouched and should be a priority for future practice and research.

## What did we produce?

This project developed Australia's first policy-informing guide for using a systems approach to increase and monitor population level physical activity – Getting Australia Active 3.

The guide is accompanied by a conceptual systems map for physical activity, and the RAMPARTS framework for laws and physical activity. These focus researcher and policy maker attention on the range of areas and strategies that are important for developing comprehensive policy action in relation to physical activity.

We have reported and identified gaps and opportunities where policies, programs and prevalence or surveillance systems can be improved, and where laws can be strengthened to promote more active environments. This project has produced at least 10 journal articles, a compilation of videos, conference presentations, news articles and an episode for the Prevention Works podcast.

These resources are all available from the Prevention Centre website's Resource Hub, [preventioncentre.org.au](http://preventioncentre.org.au)

## Why does it matter?

We identified an urgent need to move beyond describing the system, to implementing and evaluating systems interventions.

Our research provides policy makers and key stakeholders with tools and resources to support the implementation of systems approaches for physical activity in Australia. Our foundational mapping and analysis of policies, programs, prevalence and surveillance systems, and the laws affecting the built environment for walking and cycling, identifies specific opportunities where aspects of the system can be strengthened.

Since this research began the Australian Government has developed the National Preventive Health Strategy 2021–2030 which lists objectives around making changes to the health system overall and the environments around us to help Australians live healthier lives for as long as possible.

## Next steps?

This systems project will continue to develop under a new program of work that will be known as ASAPa+. The core aim of ASAPa+ is to co-create a decision-support tool with policy makers and other stakeholders to assess the complex interactions between environmental change, climate and human health and provide estimates and forecasts of the co-benefits and trade-offs associated with different intervention scenarios. ASAPa+ aims to continue:

- Supporting national discussion around the core elements to advance the surveillance of physical activity in Australia
- Providing systems evaluation expertise and support in systems mapping exercises at regional, state and national levels
- Investigating legal approaches to strengthen physical activity promotion.



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