

Results From Wales' 2018 Report Card on Physical Activity for Children and Youth

Lowri C. Edwards, Richard Tyler, Dylan Blain, Anna Bryant, Neil Canham, Lauren Carter-Davies, Cain Clark, Tim Evans, Ceri Greenall, Julie Hobday, Anwen Jones, Marianne Mannello, Emily Marchant, Maggie Miller, Graham Moore, Kelly Morgan, Sarah Nicholls, Chris Roberts, Michael Sheldrick, Karen Thompson, Nalda Wainwright, Malcolm Ward, Simon Williams, and Gareth Stratton

Introduction

This is the third Active Healthy Kids Wales (AHK-Wales) Report Card following the inaugural and second report card published in 2014 and 2016 respectively.^{1,2} The 2018 report card (Figure 1) consolidates and translates research related to physical activity among children and young people in Wales. The report card aimed to raise the awareness of children and young people's engagement in physical activity behaviours and influences, and advocate for children's right to be active and healthy.

Methods

The AHK-Wales Research Work Group (RWG) consisted of 24 members, and comprised of academics, postgraduate researchers, professionals and practitioners with expertise in physical activity and access to national data sources. Ten physical activity indicators were graded using the harmonized Report Card development process involving a synthesis and expert consensus of the best available evidence. The ten indicators included: Overall Physical Activity, Organised Sport and Physical Activity, Active Play, Active Transportation, Sedentary Behaviours, Physical Fitness, Family and Peers, School, Community and Environment and Government. In Wales, an additional indicator was included: Physical Literacy. The indicators were evaluated using a standardized grading scheme ranging from A+ (94–100% of children met the criteria), to F (0–19% meet the criteria) or Inconclusive (Inc; indicated that data was inadequate or not available). Data from the following nationally representative surveys, distributed between 2016 and 2018 were analysed by the RWG to grade each indicator: the Health Behaviour in School-Aged Children survey (2017/18),³ National Survey for Wales (2016/17),⁴ Play Sufficiency Assessment Surveys⁵ and the Health-Enhancing Physical Activity (HEPA) Policy Audit Tool.⁶

Results and Discussion

As illustrated in Table 1, out of the ten grades, two indicators were graded C+ (Organised Sport and Physical Activity and

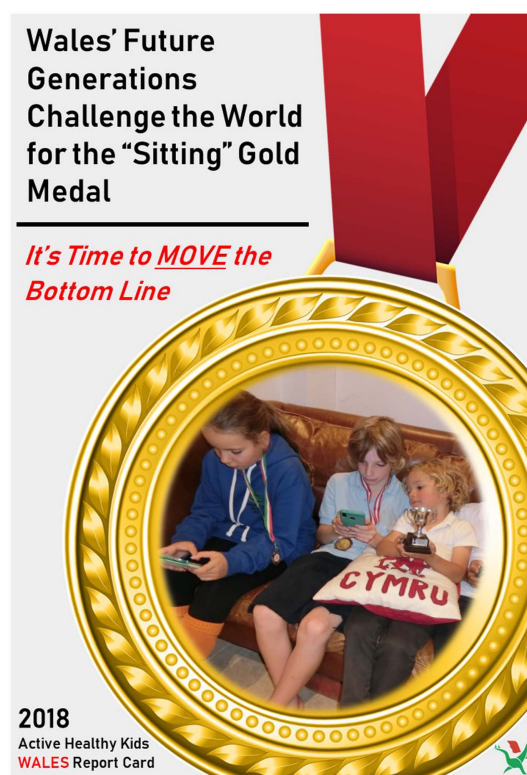


Figure 1 — Wales' 2018 Report Card cover.

Edwards, Tyler, Marchant, Miller, Nicholls, Sheldrick, and Stratton are with the Applied Sport, Technology Exercise and Medicine Research Centre, School of Management and School of Medicine, Swansea University, Wales, UK. Blain and Wainwright are with the Faculty of Business and Management and Coleg Cymraeg Cenedlaethol, University of Wales Trinity Saint David, Wales, United Kingdom. Bryant and Jones are with the Cardiff School of Sport and Health Sciences, Cardiff Metropolitan University, Wales, United Kingdom. Morgan and Moore are with the School of Social Sciences, Cardiff University, Wales, United Kingdom. Williams is with the Faculty of Life Sciences and Education, University of South Wales, Wales, United Kingdom. Clark is with the Sport, Exercise and Wellbeing Arena, Hartpury College and University Centre, England, United Kingdom. Canham is with Sustrans, Wales, UK. Mannello is with Play Wales, Wales, United Kingdom. Ward and Thompson are with Public Health Wales, Wales, United Kingdom. Greenall and Roberts are with Welsh Government, Wales, United Kingdom. Hobday is with the County Youth Dance Company, Wales, United Kingdom. Carter-Davies and Evans are with Sport Wales, Wales, United Kingdom. Edwards (L.C.Edwards@swansea.ac.uk) is corresponding author.

Table 1 Grades and Rationales for Wales' 2018 Report Card

| Indicator | Grade | Rationale |
|---------------------------------------|-------|---|
| Overall Physical Activity | D + | 18.4% of children and young people aged 11–16 years met the recommendation of at least 60 minutes of MVPA every day of the week; 16.8% children and young people aged 11–16 usually exercised in their free time every day of the week (Health Behaviour in School-Aged Children survey [HBSC]). ³ In another survey, 51% of 3–17 year olds were active for at least an hour seven days a week (National Survey for Wales [NSW]). ⁴ The weighting for this indicator was as follows: an average of the HBSC data (18.42% and 16.78% = 17.6%) and the NSW data (51%) was weighted 50/50 resulting in a 34% of 3–17 year olds meeting activity guidelines in Wales. |
| Organised Sport and Physical Activity | C + | 55% of children and young people aged 11–16 years took part in organised activities outside of school/outside of lessons. These children took part in: i. Organised team sport activities (e.g. football, basketball and volleyball); ii. Organised individual sport activities (e.g. tennis, gymnastics and karate); iii. Children and youth organisations (e.g. scouting, guides, cadets, Duke of Edinburgh). ³ |
| Active Play | C - | 41% of children aged 5–17 years reported playing out most days. ³ In another survey, 44% of 11–16 year olds exercised in their free time during their summer holidays. ³ |
| Active Transportation | D + | 44% primary school children and 33% secondary school pupils traveled actively to school (walked with an adult, walked on their own or with other children, cycled). ⁴ In another survey, 33.8% of children and young people aged 11–16 years walked/cycled to school; 36.1% children and young people walked/cycled from school. ³ |
| Sedentary Behaviours | F | 80% of children/young people aged 11–16 years spent 2 or more hours sitting in their free time (e.g. watching TV, using a computer or mobile phone, travelling in a car or by bus, sitting and talking, eating and studying) on weekdays and 87% on the weekend. ³ In another survey, 81% percent of children had at least two hours screen time on an average weekday and 92% had at least two hours screen time on a weekend day. ⁴ |
| Physical Fitness | Inc. | There is a growing dataset of physical fitness measures of children in Wales but there is no national data covering all components of physical fitness and full age range were available therefore inconclusive. ¹⁰ |
| Family and Peers | D | 59% of parents were active for 150 minutes+ a week, 8% of parents take part in vigorous activity for >75 minutes/week, 31% of parents take their child to the playground and 20% of parents take part in informal games such as playing Frisbee. ⁴ |
| School | Inc. | No updated data available for 'School' since AHK-Wales 2016 (2016 score: B), therefore School is inconclusive. |
| Community and Environment | Inc. | No updated data available for 'Community and Environment' since AHK-Wales 2016 Report Card (2016 score: C), therefore Community and Environment is inconclusive. |
| Government | C + | 21 Policy documents assessed across different sectors including Health, Sport, Education, Environment, Transport, Urban Design/ Planning, Other (Play, Sustainable Development; Cross-cutting). Using the HEPA Policy Assessment Tool to evaluate the 21 policies, the grade for Government was 54%. ⁶ |

Government), one indicator was C- (Active Play), two indicators were D+ (Overall Physical Activity and Active Transportation), one was D (Family and Peers), one was F (Sedentary Behaviours) and three were inconclusive (Physical Fitness, School and Community and Environment).⁷ Wales' eleventh indicator, physical literacy, was also inconclusive.^{8,9}

Overall, there is limited nationally representative data on children and young people's physical activity and health. Grades for each indicator were based on the results of self-reported survey data as opposed to objective measures, for example accelerometers to measure physical activity. More effort is required to address this gap through systematic robust data collection methods within schools and in the community. The AHK-Wales RWG recommends that more effort needs to be made to generate nationally representative data on the AHK indicators and to develop effective approaches that seek to increase children's physical activity and decrease sedentary behaviours.

Conclusion

Despite 21 national policies that incorporate strategies, action plans, legislation and guidance that aim to promote physical activity in children and young people in Wales, the proportion of children meeting the guidelines for physical activity remains low and sedentary behaviours remain high. The AHK-Wales RWG urges for (i) a concerted effort to generate more nationally representative data and (ii) a redoubling of efforts to create opportunities

that will help increase children's physical activity and decreasing sedentary behaviours so that future generations receive the lifelong health and developmental benefits of physical activity.

References

1. Stratton G, Williams C, Brophy S, et al. Active healthy kids report card 2014– Wales. <http://www.swansea.ac.uk/media/AHK-Wales%202014%20final.pdf>. Accessed May 5, 2018.
2. Tyler R, Mannello M, Mattingley R, et al. Results from Wales' 2016 report card on physical activity for children and youth: is Wales turning the tide on children's inactivity? *J Phys Act Heal*. 2016;13(11 suppl 2):S330–S336. PubMed ID: 27848724 doi:10.1123/jpah.2016-0309
3. Health behaviour in school-aged children Wales survey 2017/18. <https://gov.wales/statistics-and-research/health-behaviour-school-aged-children/?lang=en>. Accessed May 20, 2018.
4. National survey for Wales 2016/17. <https://gov.wales/statistics-and-research/national-survey/?lang=en>. Accessed February 20, 2018.
5. Play sufficiency assessment surveys 2016. <http://www.playwales.org.uk/eng/sufficiency>. Accessed March 19, 2018.
6. Health-Enhancing Physical Activity (HEPA) Policy Audit Tool (PAT). http://www.euro.who.int/__data/assets/pdf_file/0006/151395/e95785.pdf. Accessed February 10, 2018.
7. Active Healthy Kids Wales. <http://activehealthykidswales.com>. Accessed April 15, 2018.

8. Edwards LC, Bryant AS, Keegan RJ, et al. Definitions, foundations and associations of physical literacy: a systematic review. *Sports Med.* 2017;47(3):113–126. PubMed ID: [27365029](#) doi:[10.1007/s40279-016-0560-7](#)
9. Edwards LC, Bryant AS, Keegan RJ, et al. ‘Measuring’ physical literacy: a systematic review of empirical findings. *Sports Med.* 2018;48(3):659–682. PubMed ID: [29143266](#) doi:[10.1007/s40279-017-0817-9](#)
10. Tyler, R. Mackintosh, K, Brophy, S, et al. Swan-Linx: fitness fun day report– Swansea schools. 2015. '[https://www.swansea.ac.uk/media/Swan-Linx%20Swansea%20Schools'%20Fitness%20Fun%20Day%20feedback%20report%20\(2015\).pdf](https://www.swansea.ac.uk/media/Swan-Linx%20Swansea%20Schools'%20Fitness%20Fun%20Day%20feedback%20report%20(2015).pdf).