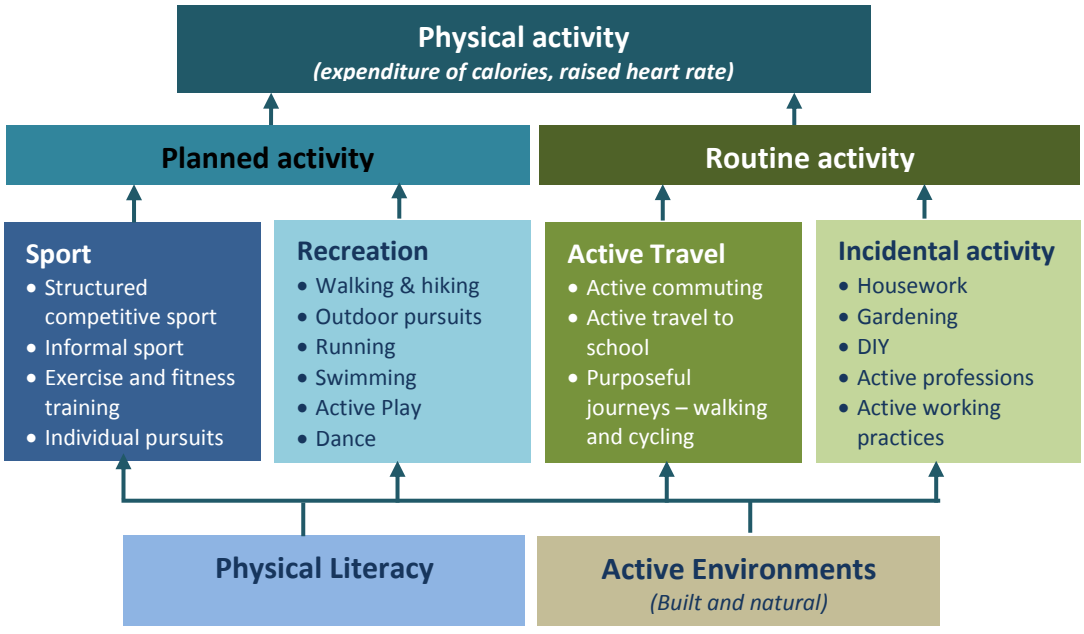
Natural Resources Wales

Consultation response: WG inquiry into physical activity of children and young people *(FINAL)*

1. Natural Resources Wales (NRW) welcomes the opportunity to contribute to this inquiry into physical activity of children and young people for the Health, Social Care and Sport Committee.
2. NRWs purpose is to pursue the sustainable management of natural resources in all its work to improve Wales' well-being, and provide a better future for everyone. Wales' natural resources provide our basic needs; the air we breathe, the water we drink, and the food we eat. They give us energy, prosperity and security; they protect us and make us healthier and our lives better. In exercising our functions and duties regard is taken to the health and social well-being of individuals and communities in order to help people live healthier and more fulfilled lives. As one such function, we advocate outdoor physical activity opportunities and the appropriate environmental infrastructure to enable physical activity for children and adults.
3. In responding to this inquiry, it is our belief that other organisations such as Public Health Wales and Sport Wales are better placed to focus on overall physical activity participation, therefore the focus of our response will be on outdoor activity of children and young people and other outdoor environment factors effecting participation.
4. **What do we know about physical activity levels in children in Wales? How robust is the data on this issue?**
5. Although there are a number of different sources of data about the physical activity levels of adults in Wales, this evidence is more limited for children, particularly in terms of pre-school age groups. The CMO Physical Activity Guidelines have separate levels for children 0-5 an 5-18. The main source of robust population-level physical activity data for school age children in Wales comes from the Health Behaviour School Children Survey, supplemented by the School Sport Survey (Sport Wales) and the Active Travel data from the National Survey for Wales. However, there is currently no robust source of data to measure the physical activity levels of 0-5.
6. The physical activity spectrum illustrates the multifaceted nature of potential participation and external influences:



7. NRW is specifically interested in children's physical activity in natural / outdoor environments, including both public and private spaces (ranging from urban parks, to woodlands and beaches, along with private gardens).

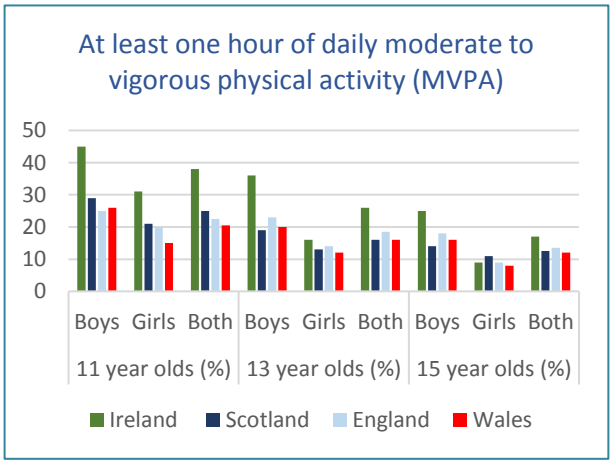
8. There is currently no robust population-level data on children's engagement with the outdoor environment in Wales, nor on the level of physical activity that is gained from play or recreation in these places. However, NRW will be asking a new series of questions in the National Survey for Wales on 'Children's Use of the Outdoor Environment'. Although this will not specifically measure physical activity levels, it will provide data on the frequency of outdoor recreation and play, and the activity which is undertaken. An indication of physical activity levels could be gained from using standard MET figures for these activities.

9. Even with the addition of the above data, there is a lack of robust evidence on the physical activity levels of children in Wales, and a breakdown based on the 'domains' (sport; recreation and play; active travel; incidental), and the CMO PA guidelines ages groups (0-5 and 5-18).

10. Equally, the robustness of the data is comprised by a reliance on self-report surveys (either direct from children or from parents / guardians), and a significant lack of accurate observed data (such as from accelerometers).

11. **Differences in gender-based attitudes towards, and opportunities for, participation in physical activity in Wales.**

12. It is well evidenced that there are gender differences in participation, the Health Behaviour of School Aged Children Survey (HBSC) 2013/2014) illustrates that in comparison to the other home nations, Welsh children in secondary school (aged 11-15) participate in the least amount of physical activity, are the most sedentary and are more overweight or obese. Boys participate more than girls in all age groups and this gender gap continues into adulthood. As children progress through their teenage years it is evident that there is a considerable drop off in participation (with a corresponding increase in sedentary behaviour). In fact, only 8% of Welsh 15 year old girls participate to the recommended guidelines of an hours activity a day.



13. NRW has not undertaken a review of the evidence relating to gender differences in children's participation in active outdoor recreation and play. However, in Wales, we know women are much more likely to take part in outdoor recreation activities with children, than men. There are also significant differences in activity choices and physical activity levels in adults over 16, based on gender and social economic group. It is likely that these originate during childhood, so we would expect to see these activity preferences emerging at earlier ages. In general, men / boys are more likely to participate in active outdoor recreation pursuits and achieve higher levels of physical activity than women / girls (Welsh Outdoor Recreation Survey, 2014/15.)

14. Children's physical activity levels and their engagement with the outdoor environment are both significantly correlated with that of their parents (i.e. active, outdoor parents are linked to similar increased levels of physical activity in children). In terms of inequalities: ethnicity and social economic group are the strongest determinants of children's visits to the outdoors, whilst gender and age differences are less significant. *(HUNT, A., STEWART, D., BURT, J. & DILLON, J. 2016. Monitor of Engagement with the Natural Environment: a pilot to develop an indicator of visits to the natural environment by children - Results from years 1 and 2 (March 2013 to February 2015). Natural England Commissioned Reports, Number 208.)*

15. The extent to which Welsh Government policies are aimed at whole populations and/or particular groups, and what impact that approach has on addressing health inequalities.

16. Further discussion is also required on other vulnerable groups in addition to gender, e.g. disability, rural and urban populations, etc.

17. Education polices are aimed at all in school and provide an opportunity to instill positive behaviors and ensure minimum physical activity levels are achieved through a mixture of timetabled PE and outdoor learning. However, families need support outside of the school setting. A survey by Public Health England and Disney found 57% of children said they were more likely to be active if their parents were.

18. Barriers to increasing the levels of physical activity among children in Wales, and examples of good practice in achieving increases in physical activity, and in engagement with hard to reach groups, within Wales, the UK and internationally.

19. NRW has not undertaken a review of the evidence relating to barriers to children's participation in active outdoor recreation and play.

20. However, there is a growing reliable and extensive body of evidence which suggest that the use of natural environments for physical activity promotes benefits to health and suggests that people enjoy physical activities more when undertaken in greener environments. There is also evidence that distance from greenspaces appears to influence frequency of use for physical activity - a study of people living in Bristol found that those who lived closest to a park were most likely to achieve the national physical activity recommendations.

21. Natural England (NE) have produced a series of evidence briefings regarding the natural environment and health:
    - NE Evidence Briefing – Natural Env. and Physical Activity
    - NE Evidence Briefing – Natural Env. and Obesity
    - NE Evidence Briefing – Natural Env. and Mental Health
    - NE Evidence Briefing – Natural Env. and Physiological Health
    - NE Evidence Briefing – Natural Env. and Learning

22. There are also a range of reports and evidence notes on physical activity and health by Forest Research, e.g. Physical activity and health and Public Health England in association with Natural England www.fph.org.uk/uploads/bs_great_outdoors.pdf.

23. NICE Guideline PH17 (2009) Physical Activity for Children and Young People states evidence on participation, barriers etc. based on systematic reviews: https://www.nice.org.uk/guidance/ph17/chapter/Appendix-C-The-evidence (see Evidence Statement 8.1, 8.4 and 8.5 re outdoor play, facilitators and barriers). Included in this evidence:
    - moderate-to-strong positive association between time spent outside and physical activity in young people
    - barriers for both girls and under 8's include a 'competition' and 'sport'
    - other barriers include fear of traffic, adult disapproval of playing outside, fear of strangers, lack of facilities near to home, risk of accidents, poor quality play spaces
    - facilitators for children were:
        - (a) valued opportunities for independent outdoor play (for example, the chance to play away from adult supervision with friends; parents preferring these places for independent play to be courtyards or cul-de-sacs rather than through roads)
        - (b) preferred activities that emphasised fun, play and enjoyment rather than skills practice (for example, older children attending athletics club liked playing with friends).

24. Nice (2015) *Promoting Physical Activity for Children and Young People* Evidence Update https://www.nice.org.uk/guidance/ph17/evidence/evidence-update-pdf-65748637 includes the following statement: Interventions aimed at increasing physical activity levels among pre-school children do appear to increase physical activity in this age group. Interventions with the largest effect include those that are unstructured and are outdoors.

25. Physical activity must be incorporated into children's lives in educational settings above and beyond PE and sport opportunities. The school curriculum is currently not sufficiently addressing the opportunities for learning in the outdoors and the knock on effects on increasing physical activity. See Lovell et al 2009 https://www.era.lib.ed.ac.uk/handle/1842/4146

26. With the current large scale review into the curriculum in Wales there is real opportunity to make learning and play outside the classroom mandatory across the age ranges. This form of learning can contribute significantly to increasing physical activity.

27. Outdoor Learning removes barriers with children being active without realising it. Forest Research (2006) found that on a day spent learning in a woodland environment, '*children were found to be significantly more active than on other typical school days*'. Levels of activity were '*2.2 times greater than those on the active school days and 2.7 greater than on an inactive school days*'. Active school days were those with a timetabled PE lesson. Children also regularly exceeded the daily recommended one hour of moderate to vigorous physical activity (MVPA) averaging 89.4 minutes. On typical school days, the children on average did not meet the recommendation – active days 29.1 minutes and inactive school days 20.5 minutes.

28. The 2006 NEF report stated that an evaluation of Forest Schools found that children developed physical stamina and their gross motor skills improved through free and easy movement around the site. They developed fine motor skills by making objects and structures. '*The role of Forest School in children's physical development has health implications and should not be overlooked'.*

29. We must ensure teachers and education support staff have the training and skills to implement high quality outdoor learning (NB: Forest School is one specific delivery mechanism – there are many others). Accredited modules are available through Agored Cymru and best practice is demonstrated by Cardiff Met and the University of South Wales who deliver OL qualifications within their teaching and Early Years degree courses.

30. Outdoor learning also creates a valuable link to the sustainable management of natural resources. The earlier in life people experience our natural resources, the more likely they are to continue to use and value them as they progress in to adulthood.

31. There is also an opportunity to set a minimum requirement for school grounds improvements in order to benefit pupil learning, health and skills development and wider biodiversity/ ecosystem management. If not available on site, every education setting should have a formal link to another natural area. There are many other benefits associated with this, e.g. a report, published by Natural England and the Royal Society for the Protection of Birds, also found that children's behaviour and school work improved if their playground had grassy areas, ponds and trees.

32. Research by the Policy Studies Institute (PSI) at the University of Westminster found that only 25% of primary school children are allowed to travel home from school alone compared with 86% in 1971. Figures collected by the Institute in 1971, 1990 and 2010 discovered a large reduction in the youngsters' independent mobility - the extent to which parents allow them to play and travel around in their local area without any adults. The study also found that the children have far less independence to get about alone when compared to German children of the same age. Children from 11 to 15 years old have also been facing greater restrictions on their independence.

33. Two year-long programmes run by NRW during the 2014/15 academic year looked at four propositions one of which was "Learning outside the classroom increases the level of physical activity in a normal school day". The report found that 'By using local sites within walking distance of the setting the programmes added a considerable amount of additional physical exercise to a "normal" school day through walking to site alone.'

34. Physical activity guidelines and how we benchmark physical fitness in children.

35. We recommend that we continue to use the CMO Guidelines for children and young people's PA levels, and this is then disaggregated by:
    (a) Domain – sport; active travel; recreation and play; domestic
    (b) Factors that differentiate participation: age; gender; deprivation; ethnicity

36. Measurement, evaluation and effectiveness of the Welsh Government's programmes and schemes aimed at promoting physical activity of children.

37. This needs to include all public and 3rd sector programmes and schemes that impact, both positively and negatively, on the physical activity levels of children (not just on those programmes that have a specific aim of increasing PA levels).

38. We would recommend the development of standard evaluation questions, indicators and metrics to enable the comparison of different interventions, and to build a more comprehensive evidence base of 'what works' to increase children's physical activity levels in Wales.

39. The use of observational methods (such as accelerometers) should be recommended where possible, to improve the robustness of evaluation data. We would also recommend more longitudinal evaluation studies to monitor how sustainable any increases in physical activity levels are over time.

40. **Value for money of Welsh Government spending to promote exercise in children.**

41. Consideration should be given to assessing the cumulative 'value for money' for the public purse of interventions that deliver multiple benefits, including increasing children's physical activity levels. For example, a new green outdoor play space in an urban area could deliver a range of tangible benefits, including increasing children's physical activity levels, improving air quality, and reducing flooding through mitigating surface water drainage. Cumulative valuation of these benefits will provide a much more accurate assessment of total 'value for money' than more silo-based intervention assessments. This approach would also support the aims and goals of the Well-being of Future Generations Act.

42. If Outdoor Learning at all ages and use of the natural environment is written into ITE as a statutory part of the training curriculum it will flow naturally to all children and young people. This would follow good practice from Scotland who include the following in their mandatory requirements for Registration with the General Teaching Council for Scotland:
    - *demonstrate that they can select and use a wide variety of resources and teaching approaches, including digital technologies and outdoor learning opportunities;*
    - *skilfully deploy a wide variety of innovative resources and teaching approaches, including digital technologies and, where appropriate, actively seeking outdoor learning opportunities.*

43. **The role of schools, parents and peers in encouraging physical activity, and the role of Sport Wales, NHS Wales and Public Health Wales in improving levels of physical activity.**

44. This point should be expanded to include wider public and 3rd sector bodies, including NRW and the environment sector in Wales. It is the role of many bodies to embed physical activity in to daily life.

45. Embedding strategic priorities in collaboration with Schools, parents and peers is of primary importance in order to gain effective delivery.

46. NHS Wales has a vital role to engage with other sectors and providers to increase the prevalence of social prescribing for improved mental and physical outcomes. The natural environment holds great value in this agenda and using it for the delivery of projects for children and young people is a vital link.

47. Links need to be made to other strategic priorities, e.g. First 1000 days and family life - mothers who are not active a less likely to transfer active behaviour to children.

48. Schools need to gain confidence to take children outside. There is a need to increase knowledge within Estyn on what to look for and acknowledging the lack of inclusion of use of the natural environment in teacher training.

49. There are opportunities to include outdoor learning in the new curriculum. This form of learning and an understanding of the need to sustainably manage our natural environment supports the Four Purposes outlined in A Curriculum for Wales – a Curriculum for Life" in particular supporting children to become "ethical and informed citizens" and "healthy, confident individuals" whilst providing "opportunities and activities that expand horizons within and beyond the traditional learning environments of the classroom".

50. Foundation phase originally had equal access to indoor and outdoor but frameworks like literacy and numeracy lead to more assessment and the perceived need to carry that out indoors. The new Digital Literacy Framework has the potential to lead to more in class teaching so there is a need to be creative about the use if IT in the outdoors.