





The 2016 Zimbabwe Report Card on the Physical Activity for Children and Youth

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INTRODUCTION

The World Health (WHO) Organization estimates that non-communicable diseases (NCDs) are now the leading cause of death worldwide [1]. In 2008, 63% of all global deaths were due to NCDs; nearly 80% of the NCDrelated deaths occurred in low-to-middle income countries such as Zimbabwe [1] and age-standardized NCD mortality rates were highest in Africa [1]. Lifestyle behaviours such as unhealthy diets [2], physical inactivity, and sedentary behaviours are known major risk factors for cardiovascular disease, diabetes and certain cancers [1,3,4]. Meanwhile, there is evidence showing that physical inactivity and sedentary behaviours among children and youth are increasing globally [5,6,7]. Data from 105 countries obtained from a combination of the global school-based student health, and the health behaviour in school-aged children surveys show that over 80% of 13-15 year olds do not meet the WHO recommendations of 60 minutes of moderate to vigorous physical activity per day [6]. Physical inactivity and sedentary behaviours among children and youth may be more impactful in low to middle

income countries which are experiencing rapid urbanization [8], a shift from active to motorized transportation [9], and transitions from traditional/native diet to a more energy dense "western" diet [10,11]. At present, there are limited reliable prevalence estimates on levels of key physical activity indicators among children and youth in Zimbabwe. The lack of these data mean that the evidence needed to inform the development of effective strategies to combat these public health challenges, and the capacity to appropriately assess and evaluate future interventions, are limited. This inaugural report card is a comprehensive assessment of physical activity levels among Zimbabwean children and youth, and borrows from similar initiatives in Canada and elsewhere in Africa. The development and authorship of this report card was partly inspired by results from the first Global Summit on the Physical Activity of children and Active Health Kids Global Alliance (www.activehealthykids.org), a global network of researchers and stakeholders with interests in the promotion of healthy and active lifestyles for children and youth.





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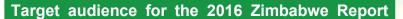






What is The Report Card?

The Report Card is a comprehensive summary of best available and current evidence regarding key indicators of physical activity such as participation in organized sports, active play, school, family, community and the built environment, policy etc. among children and youth. The Report Card was first developed in 2005 by Active Healthy Kids Canada (www.activehealthykids.ca) which with works **ParticipACTION** now partnership (www.participactionreportcard.com) to translate research knowledge into practice [12]. Over the past 10 years, it has been used as an "annual state of the nation" on how Canada is doing as a nation in encouraging physical activity opportunities for children and youth [12]. In addition, the Report Card describes benefits and outcomes of regular physical activity for children [12]. Furthermore, the Report Card also identifies areas needing improvement, research and policy gaps and drives social action for behavior change regarding physical activity among children and youth [12]. The Report Card has now been exported and adapted for local/specific contexts in other jurisdictions including six African countries. In 2016, thirty eight (38) countries including Zimbabwe have prepared their own Report Cards and will participate in Active Healthy Kids Global Alliance's 2nd Global Summit (described in detail below) on the Physical Activity of children from around the world.



This report is targeted towards a wide audience, including those with interest in active healthy living among children and youth in Zimbabwe. Specifically, the report card is geared towards:

- □ Parents, children and youth
- □ General Public
- ☐ Teachers, College/University Instructors/lecturers
- □ Policy makers
- □ Relevant government Ministries
- □ Non-governmental organizations
- □ Corporations with interest in active healthy living
- □ Local collaboration partners









The Indicators and Grading Criteria

The 2016 Zimbabwe report card assigns letter grades "A to F" or "incomplete" to 10 key indicators of physical activity among children and youth. Due to limited research, only a handful of studies were available for use in developing the 2016 Report Card. The indicators included in this report card are for: Overall physical activity, organized sport participation, active play, active transportation, sedentary behaviours, school environment, family and peers, community and the built environment, non-governmental strategies and investments, governmental policies, strategies and investments. A grading framework (Table 1) and standard benchmarks (Table 2) originally developed for the Canadian Report Card, and now adopted by other countries including Kenya, South Africa, Mozambique, Nigeria and Ghana were used to determine the letter grade to be assigned for each indicator based on the best available research data. Published and unpublished research articles (without restrictions on when they were conducted or published), policy documents and materials from non-governmental organizations were used to inform the allocation of grades. Collectively, the graded indicators provide a summary of how Zimbabwe is doing as a country to promote physical activity among children and youth. The letter grades are deliberately intended to resemble an actual student's school report card (Table 3) and hopefully make it easier for all readers to understand or interpret.

Active Healthy Kids Global Alliance

Active Healthy Kids Global Alliance (www.activehealthykids.org) "is a network of researchers, health professionals and stakeholders who are working together to advance physical activity in children and youth from around the world" [13]. It was established in 2014, following the success of the world's first Global Summit on the physical activity of children held in Toronto, Canada [14]. At the summit, 15 countries presented Report Cards which were developed using harmonized procedures, awarding letter grades to key indicators of physical activity among children and youth. Using harmonized procedures allowed for the grades to be compiled into a global matrix of nine (9) common indicators of physical activity [14]. Due mostly to the success of the first summit, the Report Card has since been replicated in many countries around the world. At the time of drafting this document, the Active Healthy Kids Global Alliance was in its final stages of organizing a second summit dubbed "Global Matrix 2.0" to be held concurrently with the International Congress on Physical Activity and Public Health (ISPAH, 2016) in Bangkok Thailand. The fact that more than double the number of countries that participated in the first summit will present report cards at the Bangkok summit confirms the great success of Active Healthy Kids Global Alliance in powering the movement to get kids moving. Specifically, 38 countries including Zimbabwe will present grades on 9 common indicators from their countries' Report cards, and these will be compiled into the second global matrix of key indicators of physical activity of children and youth from around the world.





Why is Physical Activity Important for Zimbabwean Children

establishing healthy active adulthood [15]. Physical activity helps children and activity can have a direct and positive impact on: youth to grow, do well in school, thrive, feel good and be overall happy. Regular structured and unstructured physical activity in childhood and adolescence improves strength and endurance, helps build healthy bones and muscles, helps to manage weight, reduces anxiety/stress and increases self-esteem Furthermore, physical inactivity and sedentary behaviours are known independent risk factors for chronic non-communicable diseases such as high blood pressure, diabetes and heart disease Physical inactivity is also known to increase the risk of premature death. The World Health Organization recommends that for health benefits, children and youth aged 5-17 should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity per day [1]. Simply put, physical activity participation $\frac{5}{7}$ (childhood))[22].

Being physically active (i.e. habitual active play, among children and youth can minimize the risks of planned exercise, chores, playing sports etc.) is an non-communicable disease. This may be helpful in essential part of a healthy childhood. Moreover, many ways including reducing costs to the health care behaviours early in system, increasing lifespans etc. Specifically, regular childhood lays the foundation for a healthy and active participation in moderate- to vigorous-intensity physical

> Physical health (increased physical fitness (both) cardiorespiratory fitness and muscular strength), reduced adiposity, favourable cardiovascular and metabolic disease risk profiles, and enhanced bone health)) [1].

> Mental health and well being (reduced symptoms of anxiety and depression [16,17], and increased self-reported happiness) [18].

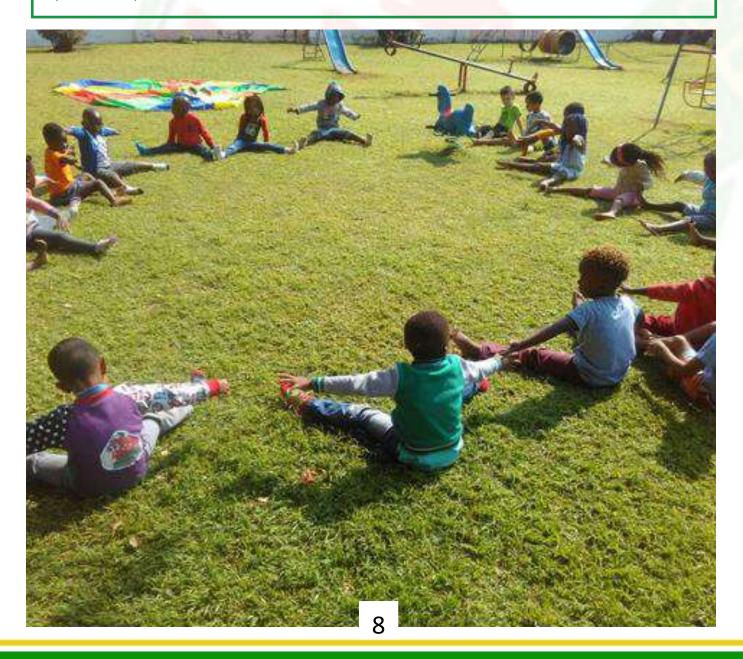
- Academic achievement (improved attention/ concentration, improved standardized test scores, and better classroom conduct) [19,20].
- ☐ Brain health and development (more active brains [21], better cognitive development in early



Table 1: Report Card grading framework

Grade	Definition	Benchmark
Α	We are succeeding with a large majority of children and youth	81-100%
В	We are succeeding with well over half of children and youth	61-80%
С	We are succeeding with about half of children and youth	41-60%
D	We are succeeding with less than half, but some, children and youth	21-40%
F	We are succeeding with very few children and youth	0-20%
INC	Incomplete. At the present time there is not enough information available for grading	-

Note: Developed by Active Healthy Kids Canada for the Active Healthy Kids Canada Report Card on Physical activity for Children and Youth¹²





6 of children and youth who meet physical activity guidelines 7 of children and youth who participate in organized sport and/or physical activity programs 8 of children and youth who engage in unstructured/unorganized active play for several hours a day 9 of children and youth who use active transportation to get to and from places school, park, mall, friend's place) 9 of children and youth who meet sedentary behavior or screen-time guidelines 9 of parents who facilitate physical activity and sport opportunities for their children e.g. volunteering, coaching, driving, paying for membership fees and equipment) 9 of parents who meet the physical activity guidelines for adults 9 of parents who are physically active with their kids
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% of parents who are physically active with their kids
% of children and youth with friends and peers who encourage and support them to be physically active
% of children and youth who encourage and support their friends and peers to be physically active
% of schools with active school policies (e.g. Daily Physical Activity, recess, everyone plays" approach, bike racks at school, traffic calming on school property, butdoor time)
% of schools where the majority (≥ 80%) of students are taught by a PE specialist
% of schools where the majority (≥ 80%) of students are offered at least 150 ninutes of PE per week
% of schools that offer physical activity opportunities (excluding PE) to the majority ≥ 80%) of their students
of parents with children and youth who have access to physical activity opportu- nities at school in addition to PE
% of schools with students who have regular access to facilities and equipment that support physical activity (e.g. gymnasium, outdoor playgrounds, sporting fields, equipment in good condition)
% of children or parents who perceive their community/municipality is doing a good ob at promoting physical activity (e.g. variety, location, cost, quality)
of communities/municipalities that report they have policies promoting physical activity
% of communities/municipalities that report infrastructure (e.g. sidewalks, trails, paths, bike lanes) specifically geared toward promoting physical activity
% of children or parents with facilities, programs, parks, and playgrounds available o them in their community
6 of children or parents living in a safe neighbourhood where they can be physical- y active
% of children or parents reporting well-maintained facilities, parks/playgrounds in heir community that are safe



the grade assignment for each Indicator
Evidence of leadership and commitment in providing physical activity opportunities for all children and youth
Allocated funds and resources for the implementation of physical activity promotion strategies and initiatives for all children and youth
Demonstrated progress through the key stages of public policy making (i.e. policy agenda, policy formation, policy implementation, policy evaluation, and decisions about the future)
Evidence of leadership and commitment in providing physical activity opportunities for all children and youth
Allocated funds and resources for the implementation of physical activity promotion strategies and initiatives for all children and youth

Adopted wholesome from: Tremblay et al. Physical Activity of Children: A Global Matrix of Grades Comparing 15 Countries (2014)₁₄





Table 3: 2016 Zimbabwe Report Card Grades according to Physical Activity Indicator

Category	Indicator	Grades
Physical Activity	Overall physical activity level	C+
- L	Organized sport participation	В
	Active play	D+
	Active transportation	A-
Sedentary Behaviour	Screen-based and non-screen based behaviours	В
School	Infrastructure, policy, and programs	D
Family and Peers	Support and behaviour	INC
Community and Built Environment	Infrastructure, policy, programs, safety	F
Government	Strategies and investments	D
Non-Governmental	Strategies and investments	INC

Note: The grade for each indicator is based on the percentage of children and youth meeting a defined benchmark 12,14.

The (+/-) signs were added to indicate that the grade was awarded based on evidence at the extreme end of the defined benchmark, or when variation by gender, area or residence or age spanned the extreme ends of two grades 12.





Indicators

Overall physical activity (C+)

This indicator was graded based on research evidence from two studies. The main study was a 2015 survey done by Makaza and others [23], which included over 4000 school children (8-16 years old) from all provinces in Zimbabwe. The survey collected self-reported data on diet, key indicators of physical activity, and objectively measured the participants" body composition. A smaller study conducted by Mushonga and others [24] involving 320 preschoolers all recruited in Harare also contributed data used to grade this indicator. The grade was awarded based on the proportion of the preschoolers, children and youth who self-reported or were observed to engage in moderate- to vigorous-intensity physical activity for at least 60 minutes the previous or on a regular day.

□ Key findings

- o A little over half (59%) of 8-16 year-old Zimbabwean children and youth met the recommended 60 minutes of moderate to vigorous physical activity per day.
- The study also showed that boys spent more time engaged in moderate to vigorous activity than girls.
- o More (63%) children attending rural schools were meeting the recommended 60 minutes per day of physical activity compared to 55% of those attending school in urban areas.
- The study of 3-5 years old children recruited from 24 preschools in Harare by Mushonga and others [24] reported that 67% participated in average to high physical activity.

□ Research gaps

- There is limited and only self-reported research data to accurately report on levels of physical activity among Zimbabwean children and youth.
- o The current data are based on studies of less than robust design with samples that are not representative of most Zimbabwean children and youth.
- o There are inconsistencies in the amount of time recommended to be spent by children and youth engaging in moderate to vigorous physical activity per day.

□ Recommendations

- There is need for more research data, collected using objective methods (e.g. pedometers or accelerometers).
- There is need for studies with stronger design and including samples that are representative of most Zimbabwean children and youth.
- Research should also focus on understanding physical activity levels of all child age groups.
- o It is also important to understand the variation in physical activity levels based on different characteristics (e.g. district/province of residence, gender, age etc.).







Organized sport participation (B)

Two studies by Makaza and colleagues [23]; Djarova and others [25] contributed data which was used to grade this indicator. Djarova and others mainly compared key indicators of physical activity between youth with type 1 diabetes mellitus and a group of healthy controls. Data for the control group was used to partly inform the grade for this indicator.

□ Key findings

- A greater proportion of boys (75%) than girls (59%) reported to have participated in an organized sporting activity the previous day.
- Age did not seem to matter as 70% of those older than 13 years and 67% of the 13 or younger age group reported to have engaged in a sporting activity the previous day.

□ Research gaps

o There is limited data mostly from children in urban areas to accurately evaluate the levels and types of organized sport participation around the country.

□ Recommendations

o There is a need for research to document the different types of organized sports available to children and youth and then assess/evaluate how many children are participating and for how long each day.

proximately 67% of children and youth surveyed by Makaza and others [23] participated in sporting activities such as football, tennis or swimming the previous day.

o Djarova and colleagues [25] reported that on average, a group of healthy 6-14 year old children and youth recruited from Magwegwe and Mpopoma suburbs of Bulawayo spent about 2.5 hours playing organized sports per day compared to only 0.8 hours by those diagnosed with type 1 diabetes mellitus.











Active play (D+)

Data to grade this indicator was obtained from the 2015 study by Makaza and others [23]. The results of this survey showed a surprisingly low proportion of Zimbabwean children and youth to be engaging in active play before or after school.

Key findings

- o Almost half (49%) of Zimbabwe children and youth who were surveyed by Makaza and others reported spending less than 1 hour playing outside before or after school. Another 13% said they did not play outside at all the previous day.
- About a third (35%) of children and youth reported spending at least an hour playing outside.
- o The proportion of girls (29%) who reported spending at least an hour playing outside was far less than that of boys (41%).
- o There was an almost even split between younger and older children with 48% of those older than 13 years and 46% of those 13 years or younger, reporting spending at least an hour engaging in active play.

□ Research gaps

With only one survey, there was not enough

evidence to provide confident estimates for grading this indicator.

- o Data are needed to explore why so few children are playing outside, and evaluate the reason for the big difference between boys and girls.
- No research evidence on the correlates of active play

□ Recommendations

- o There is need to encourage the conduct of research studies focusing on examining different aspects of active outdoor play.
- Evaluation of neighbourhood safety and encourage parental support for active play among children and youth.
- Promotion of after school programming that may encourage children to play in safe and secure school environment.
- o Strategies to encourage more habitual out-of-school play should include deliberate efforts and messaging to remind parents and children that play is not only an important part of childhood, but that it also has health benefits and should therefore not be ignored.



Active transportation (A-)

Three studies [23,24,26] provided the data that were used to grade this indicator. As expected, a greater proportion of preschoolers living in Harare used motorized transport whereas older (> 8 years) children and youth relied more on active and non-motorized transport to and from school. Results from the three studies were based on self-report of the children and youth suse of active or motorized transport.

□ Key findings

- o On average, over 80% of 8-16 year-old children and youth used active (walking, bicycle etc.) transport.
- There was variation in active transport use based on province, rural vs. urban residence and age group.
- A greater (57%) proportion of 3-5 year-old preschoolers living in Harare were driven to preschool compared to 43% who walked.
- o Comparatively, active transportation by province was lowest in Harare (77%) and highest in Manicaland (83%).
- A lower proportion (77%) of urban dwelling school-children used active transport compared to 88% among rural school-children.
- o A surprisingly high (41%) and (32%) proportion of girls and boys respectively preferred to be driven to and from school if they had a choice.

□ Research gaps

- o There is no research evidence for transportation of pre-schoolers in rural areas, and the only study [24] to report on children younger than 5 years old was conducted in Harare which is not representative of all urban areas in Zimbabwe.
- o There is no data reporting the time it takes and distance to and from school.
- o Results from one of the studies [26] used to grade this indicator are outdated
- There are no research data on the correlates of active transportation









Sedentary behaviours (B)

Two studies [23,24] provided data that were used to grade this indicator. Generally, it is recommended that preschoolers (2-5 years old) spend no more than 1 hour per day in sedentary behaviours except when sleeping [27] whereas children and youth should not spend more than 2 hours per day engaging in sedentary behaviours [27,28].

□ Key findings

- o A substantial (75%) of Zimbabwean children and youth spent the recommended 2 or fewer hours per day in sedentary behaviours.
- o Nearly a quarter (24%) of 3-5 year-old preschoolers watched between 2-3 hours of television the previous day.
- Only 15% of 8-16 year-old children reported having watched television for 5 or more hours the

previous day.

- o The most commonly reported sedentary behaviours were electronic video games (23%) and watching television
- There are no objectively measured data on sedentary times.
- There are very limited data on sedentary behaviours of all child age groups

□ Recommendations

- There is need for objectively measured sedentary times for children and youth.
- There is need for messages to reinforce and encourage that more children spend less time in sedentary behaviours.





School (D)

The school environment was graded mostly based on expert opinion and the national physical education (PE) syllabi for primary [29] and secondary education [30,31]. Through the Ministry of Primary and Secondary Education, the government of Zimbabwe promotes and mandates the teaching and examination of PE.

Research gaps

- o There are no research data documenting the types and serviceability of school infrastructure which encourages PE.
- o There is need to strengthen mechanisms of surveillance and enforcement to ensure compliance with P.E. requirements.
- o There are no consolidated data on the PE teachers to student ratios per school, or formal assessments of the school environments to ensure compliance with adequate PE.

Recommendations

- o Accessible physical activity school policies are needed.
- o There is need for a systematic school infrastructure and environmental audit.
- There needs to be mechanisms of surveillance and enforcement to ensure compliance with PE syllabi requirements.
- o Research is needed to consolidate data on Teacher to student ratios, and the resources available for PE teachers to effectively perform their roles.

Family and Peers (Incomplete)

There was insufficient research evidence to accurately grade this indicator. Although anecdotally, there seemed to be indications of peer and family influence on children's key physical activity indicators, it was not enough for the Report Card Working Group to confidently award a grade.

□ Research gaps

- There is lack of data about what and how peers and families influence children's physical activity.
- o There is a lack of research data on the percentages of parents who are active with their children encourage/facilitate opportunities for their children to be physically active.

□ Recommendations

Research documenting, those and what influences children and youth, and how much they do so, is needed to better inform future grade assignment for this indicator.







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- There is lack of data about what and how peers and families influence children sphysical activity.
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□ Recommendations

o Research documenting, those and what influences children and youth, and how much they do so, is needed to better inform future grade assignment for this indicator.





Community and the built environment (F)

Although there were no research data to inform the grading of this indicator, expert opinion consensus led to it being awarded a failing grade. The experts agreed that indeed there were recreational facilities and public parks, mostly in major urban areas, however it was noted that the majority were in derelict conditions, unsafe and without proper upkeep.

Research gaps

- There are no data to estimate the numbers, serviceability conditions, location and distribution of recreational facilities, public parks and other infrastructure.
- o There is need to harmonise various laws and policies to adequately deal with the state of disrepair to ensure safety for most of the public spaces.
- There are no data to accurately estimate the numbers of children and youth who would want to access these spaces and the reasons they may not have used the existing ones.

□ Recommendations

o Research is required to provide accurate estimates of available infrastructures, their location and distribution, serviceable conditions, number of children and youth accessing and productively using them, and what policies and procedures exist for upkeep and maintenance.

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Governmental strategies and investments (D)

This indicator was graded based on the Ministry of sources allocation for promoting physical activity, Sports and Recreation's national policy [32] and the sports and recreation. priorities set by the Sports and Recreation Commission Act [33]. Both policy documents provide guidelines on recreation, physical activity and sport participation in Zimbabwe.

□ Key findings

- o The Ministry of Sports and Recreation's draft (Incomplete) policy [32] calls for inter-ministerial collaboration in promoting physical activity and has a well delineated five year implementation plan.
- roles include to: ensure that recreational facilities are profit organization which can advocate and engage established; oversee training programmes for sports policy makers on matters pertaining to healthy active persons; ensure that opportunities for sport and rec- lifestyles among Zimbabwean children and youth. reation are made available to all persons throughout Only one corporation, Nestle Zimbabwe [34], Zimbabwe [33].

□ Research gaps

collaboration.

□ Recommendations

- o Systematic surveillance and enforcement mecha- o There is currently no independent not-for-profit prioritized among children.
- o There should be efforts to implement the interministerial collaboration which is mandated by the Recommendations draft national policy.

o There is need for ongoing engagement and collaboration between government, the corporate sector and not-for-profit organizations to promote active healthy living among children and youth.

Non-Governmental strategies and investments

There were neither research data nor sufficient anecdotal evidence to inform expert opinion in order to confidently award a grade for this indicator. Furthero The Sports and Recreation Commission Act's more, at present, there is no independent not-forpartners with the government through the National Association of Primary School Headmasters in the Nestle Kids Athletics Physical Activity Program to o There is no evidence of resource allocation for the promote active healthy living among primary school draft national policy or robust inter-ministerial -children. Given the foregoing, this indicator was awarded an incomplete grade.

□ Key findings

nisms are needed to ensure that physical activity is organization to coordinate, engage and advocate for active healthy living among children and youth in Zimbabwe.

 There is need for strengthening of stakeholder o There is need for direct financial and human re- networks by forming a national organization which





Overall recommendations for Research, Policy and Practice

- ☐ Prevalence of physical inactivity needs to be described and addressed as an emerging and serious public health problem among children and youth in Zimbabwe.
- ☐ There is need for context-specific and culturally relevant physical activity and sedentary behaviour guidelines in Zimbabwe.
- ☐ There is need for an effective physical activity promotion strategy, which includes national physical activity guidelines making it a public health priority in Zimbabwe.
- Research capacity building, targeted training, and ongoing engagement of all stakeholders must be prioritized.
- ☐ There is need for earnest and ongoing efforts to establish mutually beneficial partnerships with potential funders and collaboration networks.
- ☐ There is need for structural changes and policy initiatives to address the potential unintended consequences of "development" such as urbanization and an over-reliance on motorized transportation which may be negatively impacting habitual physical activity among children and youth.
- □ Public health messages must have a dual focus to be effective in addressing the emerging and challenging consequences of the double burden of malnutrition in which under nutrition among Zimbabwean children and youth, now coexist with over-nutrition and obesity.



Conclusions

Collectively, the results of the 2016 Zimbabwe Report Card clearly show that there is a lack of reliable Information on key indicators of physical activity among children and youth. Evidence from the limited data gathered for this report card illustrate that although most Zimbabwean children are using active transport (e.g. walking or cycling), engaged in organized sports, and did not spend too much time in sedentary behaviours; their levels of physical activity are generally lower than desired. Due to

lack of opportunities, safe recreational areas and investments, programs, and investments; Zimbabwean children may be at risk of becoming increasingly physically inactive and sedentary, putting them at a higher risk for non-communicable diseases early in their adulthood. Overall, the results suggest a need for robust research, strong advocacy and stakeholder engagement, as well as policies that prioritize healthy active living among Zimbabwean children and youth.



Where

do we go from here



This inaugural Report Card provides important data that is intended to generate interest and conversations around physical activity among children and youth in Zimbabwe. It lays a firm foundation from which to build a strong case for research and policy initiatives that will promote physical activity among children. Specifically, this document provides evidence supporting the need for:

□ Establishing Active Health Kids Zimbabwe, an independent not-for-profit organization whose role will be to advocate for policies and research that will promote healthy active living among children and youth in Zimbabwe.

☐ Cultivating and establishing enduring links and

relationships between Active Healthy Kids Zimbabwe and reliable local or international partners.

- ☐ Firm commitment to biennial development and authorship of the Report Card and ongoing participation in the Active Healthy Kids Global Alliance's global matrix.
- □ Devoting time, financial and human resources to research and advocacy work promoting healthy active lifestyles among children and youth in Zimbabwe.
- ☐ Prioritizing areas identified in this document as needing urgent attention and which can be addressed using few resources.



References

- 1. World Health Organization. Global recommendations on physical activity for health. Geneva, Switzerland; 2010. http://www.who.int/dietphysicalactivity/factsheet_recommendations/en.
- 2. Wagner KH, Brath H. A global view on development on non-communicable diseases. Preventive Medicine. 2012;54(Suppl): S38-S41.
- 3. Bauman AE, Reis RS, Sallis JF, Wells JC, Loos RJF, Martin BW for the Lancet Physical Activity Series Working Group. Correlates of physical activity: why are some people physically active and others not? Lancet. 2012;380(9838): 258-71.
- 4. Sedentary Behaviour Research Network. Letter to the Editor: standardized use of the terms "sedentary" and "sedentary behaviours". Applied Physiology and Nutrition Metabolism. 2012;37(6): 1256.
- 5. World Health Organization. Report of the Commission on ending childhood obesity. WHO Library, Geneva; 2016. http://www.who.int/end-childhood-obesity/final-report/en/
- 6. Hallal PC, Bo Andersen L, Bull FC, Guthold R, Haskell W, and Ekelund U for the Lancet Physical Activity Series Working Group. Global physical activity levels: surveillance progress, pitfalls and prospects. Lancet. 2012;380(9838): 247-57.
- 7. Guthold R, Cowan MJ, Autenrieth CS, Kann L, Riley LM. Physical activity and sedentary behavior among schoolchildren: a 34-country comparision. The Journal of Pediatrics. 2010;157(1): 43-49.e1.
- 8. Oni T, Unwin N. Why the communicable/non-communicable disease dichotomy is problematic for public health control strategies: implications of multimorbidity for health systems in an era of health transition. International Health. 2015;7(6): 390-399.
- 9. Larouche R, Oyeyemi A, Prista A, Onywera V, Akinroye KK, Tremblay MS. A systematic review of active transportation research in Africa and the psychometric properties of measurement tools for children and youth. International Journal of Behavioral Nutrition and Physical Activity. 2104;11: 129.
- 10. Vorster HH, Kruger A, Margetts. The Nutrition Transition in Africa: Can It Be Steered into a More Positive Direction? Nutrients. 2011;3(4): 429-41.



- 11. Tzioumis E, Adair LS. Childhood dual burden of under- and over-nutrition in low- and middle-income countries: a critical review. Food Nutrition Bulletin. 2014;35(2): 230-43.
- 12. Colley RC, Brownrigg M, & Tremblay MS. A Model of Knowledge Translation in Health: The Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth. Health Promot Pract. 2012;13(3):320-330.
- 13. Active Healthy Kids Global Alliance. http://www.activehealthykids.org/about/
- 14. Tremblay MS, Gray CE, Akinroye K, Harrington DM, Katzmarzyk PT, Lambert EV et al. (2014). Physical activity of children: A global Matrix of Grades comparing 15 countries. J Phys Act Health. 2014;11(S1):S113-S125.
- 15. Strategic Knowledge Cluster on Early Development. Physical Activity in Early Childhood: Setting the stage for lifelong healthy habits. http://www.excellence-earlychildhood.ca/documents/parenting_2011-04.pdf
- 16. Larun L, Nordheim LV, Ekeland E, Hagen KB, Heian F. Exercise in prevention and treatment of anxiety and depression among children and young people. Cochrane Database Systematic Reviews. 2006; (3):CD004691.
- 17. Biddle SJ, Asare M. Physical activity and mental health in children and adolescents: a review of reviews. British Journal of Sports Medicine. 2011;45(11):886-895.
- 18. Richards J, Jiang X, Kelly P, Chau J, Bauman A, Ding D. Don"t worry, be happy: cross-sectional associations between physical activity and happiness in 15 European countries. BMC Public Health. 2015;15:53.
- 19. Centers for Disease Control and Prevention. The association between school-based physical activity, including physical education and academic performance. http://www.cdc.gov/healthyyouth/health_and_academics/pdf/pa-pe_paper.pdf
- 20. Donnelly JE, Lambourne K. Classroom-based physical activity, cognition, and academic achievement. Prev Med. 2011;52 Suppl 1:S36-S42.
- 21. Hillman CH, Pontifex MB, Raine LB, Castelli, DM, Hall EE, Kramer AF. The effect of acute treadmill walking on cognitive control and academic achievement in preadolescent children. Neuroscience. 2009;159 (3):1044-1054.
- 22. Carson V, Hunter S, Kuzik N, Wiebe SA, Spence JC, Friedman A, Tremblay MS, Slater L, Hinkley T. Systematic review of physical activity and cognitive development in early childhood. J Sci Med Sport. 2015; pii:S1440-2440(15)00146-2.



- 23. Makaza D, Khumalo B, Makoni P, Mazulu M, Dlamini K, Tapera EM, Banda M, Mlalazi TF, Gundani PD, Chaibva CN. Nutritional Status and Physical Fitness Profiles, Knowledge, Attitudes, Nutritional and Physical Activity Practices of Zimbabwean Primary School Children: The Zimbabwe Baseline Study. Unpublished manuscript, National University of Science and Technology, Bulawayo, Zimbabwe; 2015.
- 24. Mushonga NGT, Mujuru HA, Nyanga LK, Nyagura S, Chikowore RM, and Siziba L. Factors associated with overweight/obesity among preschool children aged 3-5 years. Journal of Applied Science in Southern Africa. 2014;20(2).
- 25. Djarova T, Dube S, Tivchev G, and Chivengo A. Nutritional profiles, physical development and daily activities of African children in Zimbabwe with insulin-dependent diabetes mellitus. South African Journal of Science. 2006:102.
- 26. Sithole EGV. Global school-based health survey Zimbabwe. Unpublished report. Harare, Zimbabwe; 2003.
- 27. Australian Government. Australia's physical activity and sedentary behaviour guidelines. http://www.health.gov.au/internet/main/publishing.nsf/content/health-publith-strateg-phys-act-guidelines#npa05
- 28. Tremblay MS, LeBlanc AG, Janssen I, Kho ME, Hicks A, Murumets K, Colley C, Dugan M. Canadian Sedentary Behaviour Guidelines for Children and Youth. Applied Physiology, Nutrition and Metabolism. 2011;36(1):59-71.
- 29. Government of Zimbabwe. Primary School Physical Education Syllabus. Ministry of Primary and Secondary Education, Zimbabwe; 1997.
- 30. Government of Zimbabwe. Zimbabwe Junior Certificate Physical Education Syllabus. Ministry of Primary and Secondary Education, Zimbabwe; 2008.
- 31. Government of Zimbabwe. Zimbabwe Ordinary Level Physical Education Syllabus. Ministry of Primary and Secondary Education, Zimbabwe; 2008.
- 32. Government of Zimbabwe. National Sports and Recreation Policy. Unpublished report, Ministry of Sports and Recreation, Zimbabwe; 2015.
- 33. Government of Zimbabwe. Sports and Recreation Commission Act Chapter 25:15. Harare, Zimbabwe; 1991.
- 34. Nestle Zimbabwe. Healthy Kids Program. Harare, Zimbabwe; 2012. http://www.nestle-ea.com/en/ourcountries/zimbabwe/home.











