NON COMMUNICABLE DISEASE PREVENTION:

Investments that Work for Physical Activity

A complementary document to
The Toronto Charter for Physical Activity: A Global Call to Action

Physical inactivity is the fourth leading cause of deaths due to non communicable disease (NCDs) worldwide - heart disease, stroke, diabetes and cancers - and each year contributes to over three million preventable deaths .[1] Physical inactivity is related (directly and indirectly) to the other leading risk factors for NCDs such as high blood pressure, high cholesterol and high glucose levels; and, to the recent striking increases in childhood and adult obesity, not only in developed countries but also in many developing countries. Substantial scientific evidence supports the importance of physical inactivity as a risk factor for NCD *independent* of poor diet, smoking and alcohol misuse.

Physical activity has comprehensive health benefits across the lifespan: It promotes healthy growth and development in children and young people, helps to prevent unhealthy mid-life weight gain, and is important for healthy ageing, improving and maintaining quality of life and independence in older adults.

The most recent global estimates indicate that 60% of the world population are exposed to health risks due to inactivity.[2] Increasing population-wide participation in physical activity is a major health priority in most high and middle income countries and is a rapidly-emerging priority in lower income countries experiencing rapid social and economic transitions.

The **Toronto Charter for Physical Activity** (May 2010) outlines the direct health benefits and co benefits of investing in policies and programs to increase levels of physical activity.[3] Already translated into 11 languages, the Toronto Charter makes a strong case for increased action and greater investment on physical activity as part of a comprehensive approach to NCD prevention. The Charter was developed with extensive world-wide stakeholder consultation and calls for action in four key areas consistent with the WHO Global Strategy for Diet and Physical Activity: 1) national policy; 2) policies and regulations; 3) programs and environments; and 4) partnerships.

There is strong evidence to guide the implementation of effective approaches to increase physical activity.[4,5,6] Reversing downward trends in physical activity will require countries to commit to a combination of strategies aimed at the individual, social-cultural, environmental and policy determinants of inactivity. Physical activity is influenced by policies and practices in education, transportation, parks and recreation, media, and business, so multiple sectors of society need to be involved in the solutions. There is the clear need to inform, motivate and support individuals and communities to be active in ways that are safe, accessible and enjoyable. ***There is no one single solution to increasing physical activity, an effective comprehensive approach will require multiple concurrent strategies to be implemented.*** To support countries ready to respond, there are seven "best investments" for physical activity, which are supported by good evidence of effectiveness and that will have worldwide applicability.

Whole-of-community approaches where people live, work and recreate have the opportunity to mobilize large numbers of people.

7 Best Investments for Physical Activity

1 'Whole-of-school' programs

Schools can provide physical activity for the large majority of children and are an important setting for programs to help students develop the knowledge, skills and habits for life-long healthy and active living. A 'whole of school' approach to physical activity involves prioritizing: regular, highly-active, physical education classes; providing suitable physical environments and resources to support structured and unstructured physical activity throughout the day (e.g., play and recreation before, during and after school); supporting walk/cycle-to-school programs and enabling all of these actions through supportive school policy and engaging staff, students, parents and the wider community. More information on the best approaches to implement whole of school approaches to physical activity is available from:

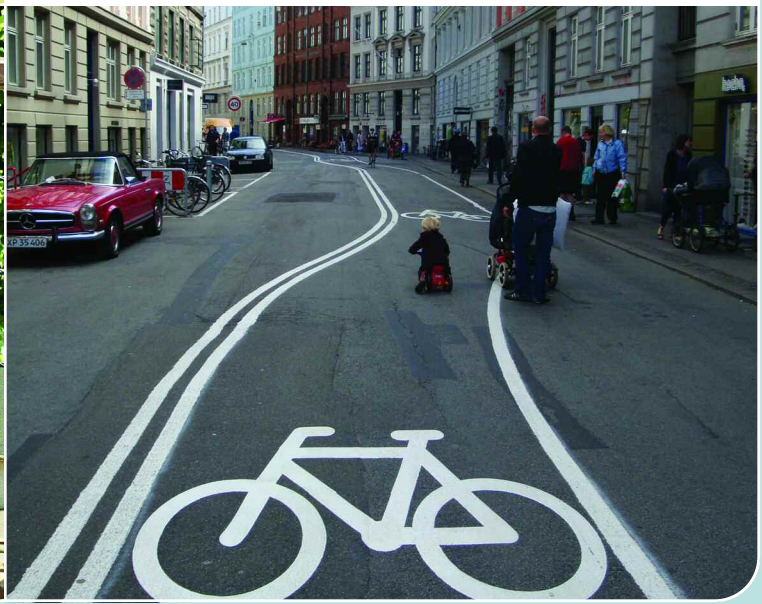
- *Ribeiro IC, Parra DC, Hoehner CM, Soares J, Torres A, Pratt M, et al. School-based physical education programs: evidence-based physical activity interventions for youth in Latin America. Global Health Promotion; 17(2) 2010.*
- *International Union for Health Promotion and Education (IUHPE). Achieving Health Promoting Schools: Guidelines for Promoting Health in Schools.2009 http://www.iuhpe.org*
- *World Health Organisation. School policy framework: Implementation of the WHO global strategy on diet, physical activity and health. Geneva: World Health Organization; 2008.*

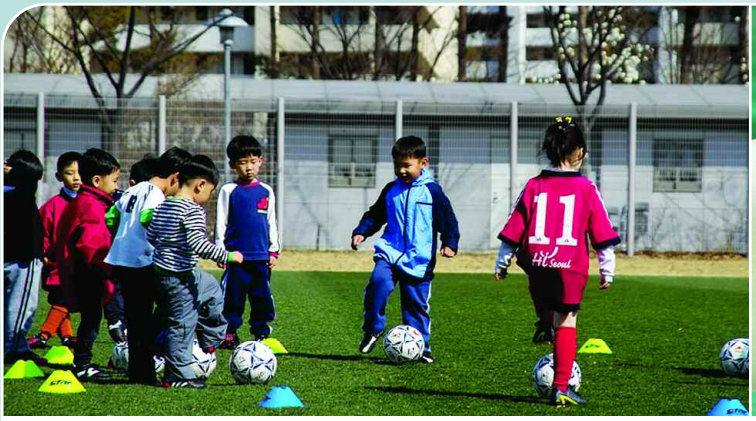
2 Transport policies and systems that prioritise walking, cycling and public transport

'Active transport' is the most practical and sustainable way to increase physical activity on a daily basis; and increased active transport will achieve co-benefits such as improved air quality, reduced traffic congestion, and reduced CO_2 emissions. Increasing active transport requires the development and implementation of policies influencing land use and access to footpaths, bikeways and public transport, in combination with effective promotional programs to encourage and support walking, cycling and use of public transport (e.g. trains, trams and buses) for travel purposes. This combination of strategies can shift mode choice away from personal motorised vehicles and increase physical activity. Examples of successful actions are available worldwide. More information on the best approaches to increase non-motorised transport is available from:

- *Pucher J, Dill J, Handy S. Infrastructure, programs, and policies to increase bicycling: An international review. Prev Med. 50 S106–S125; 2010.*
- *An Australian Vision for Active Transport. A report prepared by Australian Local Government Association, Bus Industry Confederation, Cycling Promotion Fund, National Heart Foundation of Australia, International Association of Public Transport. 2010. http://www.alga.asn.au/policy/transport/ActiveTransport.pdf*
- *World Health Organization; A physically active life through everyday transport with a special focus on children and older people and examples and approaches from Europe. WHO Regional Office for Europe, Copenhagen 2002.*

support structured and unstructured physical activity throughout the day...





3 Urban design regulations and infrastructure that provide for equitable and safe access for recreational physical activity, and recreational and transport-related walking and cycling across the life course

The built environment provides opportunities for or barriers to safe, accessible places for people to be involved in recreation, exercise, sports, walking and cycling.

National, regional, and local urban planning and design regulations should require mixed-use zoning that places shops, services, and jobs near homes, as well as highly connected street networks that make it easy for people to walk and cycle to destinations. Access to public open space and green areas with appropriate recreation facilities for all age groups are needed to support active recreation. Complete networks of footpaths, bikeways, and public transit support both active travel and active recreation. More information on the best approaches to creating urban environments that support physical activity is available from:

- *National Institute for Health and Clinical Excellence (NICE) Promoting and creating built or natural environments that encourage and support physical activity. London, UK 2008. http://www.nice.org.uk/nicemedia/live/11917/38983/38983.pdf*
- *Heath GW, Brownson RC, Kruger J, Miles R, Powell K, Ramsey LT. The effectiveness of urban design and land use and transport policies and practices to increase physical activity: A systematic review. J Phys Act Health. (S1):S55-S76. 2006.*
- *Healthy Spaces & Places: A national guide to designing places for healthy living. Developed by the Australian Local Government Association, the National Heart Foundation of Australia and the Planning Institute of Australia and funded by the Australian Government Department of Health and Ageing. www.healthyplaces.org.au*

4 Physical activity and NCD prevention integrated into primary health care systems

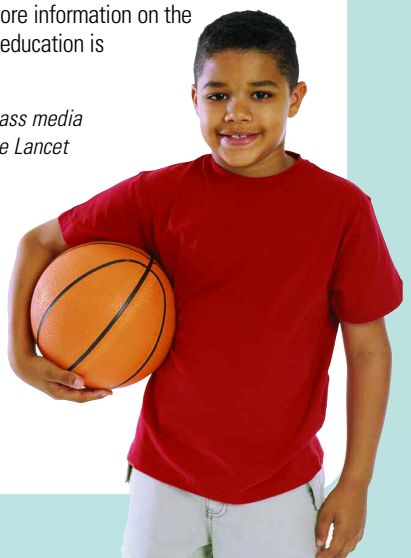
Doctors and health care professionals are important influencers of patient behaviour and key initiators of NCD prevention actions within the heath care system and can influence large proportions of the population. Health care systems should include physical activity as an explicit element of regular behavioural risk factor screening for NCD prevention, patient education and referral. Positive messages about physical activity are important for primary and secondary prevention. Opportunities for NCD prevention should be integrated with communicable disease management systems, tailored to the context and resources available. The focus should be on practical brief advice and links to community-based supports for behaviour change. Most countries will require additional training of health professionals to build competencies in NCD prevention through behavioural risk factor modification and physical activity. More information on the best approaches to promoting physical activity through primary health care is available from:

- *Joint Advisory Group on General Practice and Population Health. Integrated approaches to supporting the management of behavioural risk factors of Smoking, Nutrition, Alcohol and Physical Activity (SNAP) in General Practice. Australian Government Department of Health and Ageing, Canberra 2001. www.cphce.unsw.edu.au/cphceweb.nsf/resources/CGPISresources61to65/$file/SNAP+Framework+for+General+Practice.pdf*
- *Mendis S. The policy agenda for prevention and control of non-communicable diseases. Br Med Bull November 8Dec 2010.doi: 10.1093/bmb/ldq037*
- *World Health Organization. The world health report 2008: primary health care now more than ever. Geneva, Switzerland: World Health Organization; 2008.*

5 Public education, including mass media to raise awareness and change social norms on physical activity

Mass media provide an effective way to transmit consistent and clear messages about physical activity to large populations. In most countries, physical activity promotion is absent from mass media. Both paid and non-paid forms of media can be used to raise awareness, increase knowledge, shift community norms and values and motivate the population to be more active. Public education can involve print, audio and electronic media, outdoor billboards and posters, public relations, point of decision prompts, mass participation events, mass distribution of information as well as new media such as text messaging, social networking and other uses of the internet. Combinations of approaches, supported by community-based events and community engagement and which are sustained over time, are most effective in building health literacy and changing community values. More information on the best approaches to mass media and public education is available from:

- *Wakefield M, Loken B, Hornik R. Use of mass media campaigns to change health behaviour. The Lancet 2010;376:1261-1271.*
- *Bauman A, Chau J. The Role of Media in Promoting Physical Activity. J Phys Act Health 2009;6:S196-S210. Health Development Agency. The effectiveness of public health campaigns.*
- *Briefing No. 7, June 2004 www.nice.org.uk/niceMedia/ documents/ CHB7-campaigns147.pdf*

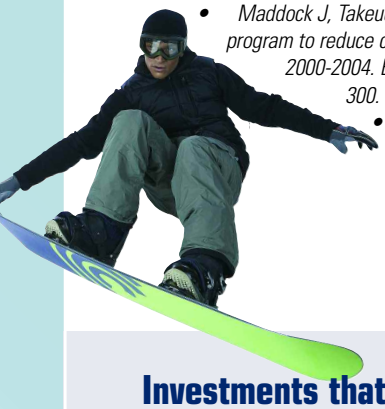





6 Community-wide programs involving multiple settings and sectors and that mobilize and integrate community engagement and resources

Whole-of-community approaches to physical activity across the life course will be more successful than a single program to increase population levels of physical activity. Using key settings, such as cities, local governments, schools and workplaces provides the opportunity to integrate policies, programs and public education aimed at encouraging physical activity. Whole-of-community approaches where people live, work and recreate have the opportunity to mobilize large numbers of people. There are good examples of success from high and middle income countries. More information on the best approaches for community wide programs is available from:

- *Matsudo SM, Matsudo VR, Araujo TL et al. The Agita Sao Paulo Program as a model for using physical activity to promote health. Rev Panam Salud Publica 2003;14:265-272.*
- *Matsudo V, Matsudo S, Araujo T et al. Time Trends in Physical Activity in the State of Sao Paulo, Brazil:2002-2008. Med Sci Sports Exerc 2010; doi 10.1249/MSS.0b013ec3181c1fc8c.*
- *Gamez R, Parra D, Pratt M et al. Muevete Bogota: promoting physical activity with a network of partner companies. Promot Educ 2006;13:138-143.*
- *Maddock J, Takeuchi L, Nett B et al. Evaluation of a statewide program to reduce chronic disease: The Healthy Hawaii Initiative, 2000-2004. Evaluation and Program Planning 2006;29:293-300. DOI: 10.1016/j.evalprogplan.2005.12.007.*
- *Brown WJ, Mummery K, Eakin E et al. 10,000 Steps Rockhampton: Evaluation of a Whole Community Approach to Improving Population Levels of Physical Activity. J Phys Act Health 2006;3:1-14.*



7 Sports systems and programs that promote 'sport for all' and encourage participation across the life span.

Sport is popular worldwide and increased participation in physical activity can be encouraged through implementation of community sport or '*Sport for All*' policy and programs. Building on the universal appeal of sport, a comprehensive sport system should be implemented that includes the adaption of sports to provide a range of activities to match the interests of men and women, girls and boys of all ages, in addition to well coordinated coaching and training opportunities. However, providing enjoyable physical activity needs to be an explicit priority of sports programs. Implementation should involve partnerships between International Sports Federations, National Olympic Committees and national/regional sporting organizations along with community-based clubs and other sports providers. The sport and fitness industries are large world wide businesses and a potentially influential communication medium. Sports stars can act as role models and promote participation, but such promotional initiatives are not sufficient in themselves. Organizations can promote physical activity through supportive policies and programs that reduce social and financial barriers to access and participation, and increase motivation to be involved, including in individuals with mental or physical disabilities. More information on the sport systems and *Sport for All* are available from:

- *The Sport for All Commission. http://www.olympic.org/sport-for-all-commission?tab=0*
- *The development of Sport for All in the countries of Europe. http://www.sport-in-europe.eu/index.php?option=com_content&task=view&id=46&Itemid=140*
- *Baumann W. The Global Sport for All Movement: Achievements and Challenges. International Council of Sports Science and Physical Education Bulletin No 50 May 2007. http://www.icsspe.org/*
- *Canadian Sport For Life. See http://www.canadiansportforlife.ca/default.aspx?PageID=1000&LangID=en*

Investments that work for Physical Activity is a complementary document to the *Toronto Charter for Physical Activity* and identifies seven best investments to increase population levels of physical activity which, if applied at sufficient scale will make a significant contribution to reducing the burden of non-communicable diseases and promote population health. In addition, these investments will contribute to improving the quality of life and the environments in which we live.

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2. Bull FC, Armstrong TP, Dixon T, Ham S, Neiman A, Pratt M. Physical Inactivity. In: Ezzati M, Lopez A, Rodgers A, Murray C, editors. Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors. Geneva: World Health Organization; 2005.
3. Global Advocacy Council for Physical Activity, International Society for Physical Activity and Health. The Toronto Charter for Physical Activity: A Global Call to Action. May 20 2010.www.globalpa.org.uk.
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5. Hoehner CM, Soares J, Parra Perez D, Ribeiro IC, Joshu CE, Pratt M, Legetic BD, Carvalho Malta D, Matsudo VR, Ramos LR, Simões EJ, Brownson RC. Physical Activity Interventions in Latin America: A Systematic Review. Am J Prev Med 2008;34(3):224–233.
6. Brown DR, Heath GW, Martin, SL (Eds.). Promoting Physical Activity: A Guide to Community Action, 2nd ed. Champaign, IL: Human Kinetics, 2010.

ISPAH International Society for Physical Activity and Health

GAPA GLOBAL ADVOCACY FOR PHYSICAL ACTIVITY Advocacy Council of ISPAH