



We can all PLAY: Participation in Adapted Sports and Recreation for children and youth with disabilities

Adapted Sports and Recreation Committee Fact Sheet

Introduction-

Participation is defined by the WHO International Classification of Function, Disability and Health (ICF) as “engagement in life activities.”¹

Engagement in leisure activities in the community, and play is a human right according to the United Nations Convention on the Rights of the Children, and on the Rights of Persons with Disabilities.

- **Participation in active-physical leisure activities has undisputed physical health benefits:**

- “Leisure activities” are pursued when not at school/work, or engaged in self-maintenance care or domestic tasks.
- These activities are comprised of active-physical, recreational, social, skill-based or self-improvement activities.
- Participation in these activities also promotes mental health and well-being (e.g. emotional health, self-efficacy and self-worth, social connections).
- The World Health Organization (WHO)² strongly endorses activities that support attainment of good health.

- **Participation is especially important for those living with physical and intellectual disabilities:**

- For children with disabilities, leisure participation develops skill competencies, promotes peer interactions, and enables children to

develop personal interests and identity³.

- Adolescents with cerebral palsy (CP) indicate that pursuing leisure activities of their choosing, with peers, is very important to their quality of life.^{4,5}
- Adults with physical disabilities further emphasize this important relationship between accessing leisure activities of their choosing and quality of life.^{6,7}
- Families of children with disabilities experience less stress and caregiver burden when engaging in leisure activities as a family⁸.
- Participating in leisure activities as a family is related to positive effects on adaptive coping and family cohesion.^{9,10}

- **Children and adolescents with disabilities participate in leisure activities less than their peers:^{11,12}**

- Children and youth with CP most often participate in unstructured recreational (e.g. TV, computer games) and social activities,¹³⁻¹⁷ but indicate a preference to participate more in active-physical as well as social activities with peers.^{18,19}
- Children with physical disabilities are at elevated risk for decline in their health status (‘cycle of deconditioning’) due to physical inactivity, enhancing risk for chronic health conditions in adulthood²⁰.

- **There are numerous barriers that limit participation in preferred physical activities:**

FACT SHEET



American Academy
for Cerebral Palsy and
Developmental Medicine

- Personal attributes such as low self-concept, poor mastery motivation and sociodemographic characteristics, developmental delays and activity limitations can limit participation.
- Environmental barriers include a lack of resources and inclusive programs, social supports, accessible venues and spaces, and challenges related to family coping and distress.
- Other potentially modifiable contextual factors also contribute to limited engagement across the life span.²¹⁻²⁴

- Special Olympics
 - Largest internal year-round organization of sports competition for athletes with intellectual impairments (<http://www.specialolympics.org/>)

Leisure activities

- Board games
- Cooking
- Outdoor activities: fishing, boating, camping, hiking, sailing, frisbee
- Arts: painting, drama, music, dance

Community participation

- Volunteering
- Elections
- Playgrounds – accessible playgrounds in the public spaces
- Adapted day camps

Psychosocial benefits of participating in adapted sports and recreation

- The Right to Play – it's good for all children when growing
- Engagement in the community – Inclusion
- Social – find friends, and make new networks that can be global
- Find motivation – examples of how people started as recreational program and now are Paralympians
- Find a passion to life – self-esteem, purpose, drive
- Possibility to adapt to different needs, ages, abilities

Resources to get more information

1. Disabled Sports USA:
<http://www.disabledsportsusa.org/>
2. National center of physical activity (NCHPAD): www.nchpad.org
3. UN office sports for development and peace document
<http://www.un.org/wcm/content/site/sport/home/unplayers/unoffice>

There are a wide variety of options for children, adolescents and adults with disabilities to participate in more physical and social activities. There are local, regional, and national programs available, some states and provinces have specific policies and financial supports that can be accessed. The list below details a few of the options for children, families, and youth to consider.

Possibilities in adapted sports and recreation

Recreational Sports

- Individual
 - Dance, martial arts, tennis, swimming, cycling, track & field, road racing, skiing (Nordic & Alpine), equestrian, bowling, archery
 - “Extreme” Sports: rock climbing, scuba diving
- Team sports
 - Dance group, soccer, basketball, baseball, volleyball

Competitive Sports

- Paralympics
 - International organization involving elite sports for athletes with primarily physical disabilities (<https://www.paralympic.org/>)

FACT SHEET



American Academy
for Cerebral Palsy and
Developmental Medicine

4. Some US and Canada based resources for education, leisure and recreation
 - a. <http://www2.ed.gov/about/offices/list/ocr/letters/colleague-201301-504.pdf>
 - b. <http://www.christopherreeve.org/atf/cf/%7B173bca02-3665-49ab-9378-be009c58a5d3%7D/RECREATION414.PDF>
 - c. <http://sportforlife.ca/>
 - d. <https://www.participaction.com/en-ca>
5. CanChild Participation Knowledge hub: <https://www.canchild.ca/en/research-in-practice/participation-knowledge-hub>
6. Childhood Disability Link: Leisure research and policies www.childhooddisability.ca/leisure
7. Jooay App (Canada-wide list of adapted and inclusive leisure activities): www.jooay.com
5. Shikako-Thomas K, Lach L, Majnemer A, Nimignon J, Cameron K, Shevell M. Quality of life from the perspective of adolescents with cerebral palsy: “I just think I’m a normal kid, I just happen to have a disability.” *Qual Life Res.* 2009;18(7):825–832.
6. Livingston MH, Stewart D, Rosenbaum PL, & Russell DJ. Exploring issues of participation among adolescents with cerebral palsy: what’s important to them? *Phys Occup Ther Pedi.* 2011;31(3):275–87.
7. Badia M, Orgaz BM, Verdugo MA, Ullán AM, Martínez MM. Personal factors and perceived barriers to participation in leisure activities for young and adults with developmental disabilities. *Res Dev Disabil.* 2011;32(6):2055–2063.
8. Statistics Canada. (2008). Participation and activity limitation survey 2006: Families of children with disabilities in Canada. Statistics Canada – Catalogue No 89-628 No. 009. <http://www.statcan.gc.ca/pub/89-628-x/89-628-x2008009-eng.pdf> Accessed December 12, 2017.
9. Ginsburg KR. The importance of play in promoting healthy child development and maintaining strong parent-child bonds. *Pediatrics.* 2007;119(1):182–91.
10. King G, Law M, King S, Rosenbaum P, Kertoy MK, Young NL. A conceptual model of the factors affecting the recreation and leisure participation of children with disabilities. *Phys Occup Ther Pedi.* 2003;23(1):63–90.
11. Law M, Finkelman S, Hurley P, Rosenbaum P, King S, King G, Hanna S. Participation of children with physical disabilities: relationships with diagnosis, physical function, and demographic variables. *Scand J Occup Ther.* 2004;11(4):156–162.
12. Engel-Yeger B, Jarus T, Anaby D, Law M. Differences in patterns of participation between youths with cerebral palsy and typically developing peers. *Am J Occup Ther.* 2009;63(1):96–104.

References

1. Imms C, Adair B, Keen D, Rosenbaum P, Granlund M. ‘Participation’: A systematic review of language, definitions, and constructs used in intervention research with children with disabilities. *Dev Med Child Neurol.* 2016;58(1):29-38.
2. Noncommunicable diseases and mental health, the Global Strategy on Diet, Physical Activity and Health. World Health Organization (WHO) Website. <http://www.who.int/nmh/wha/59/dpas/en/> Accessed December 12, 2017.
3. Shikako-Thomas K, Dahan N, Shevell M, Law M, Birnbaum R, Rosenbaum P, Poulin C, Majnemer A. Play and be happy? – Quality of life and participation in school-aged children with cerebral palsy. *International Journal of Pediatrics.* 2012; ID387280. doi:10.1155/2012/387280
4. Dahan-Oliel N, Shikako-Thomas K, & Majnemer A. (2012). Quality of life and leisure participation in children with neurodevelopmental disabilities: a thematic analysis of the literature. *Qual Life Res.* 2012;21(3):427–39.



13. Bedell G, Coster W, Law M, Liljenquist K, Kao Y.-C, Teplicky R, Anaby D, Khetani MA. Community participation, supports, and barriers of school-age children with and without disabilities. *Arch Phys Med Rehabil.* 2013;94(2):315–23.
14. King G, Petrenchik T, Dewit D, McDougall J, Hurley P, Law M. (2010). Out-of-school time activity participation profiles of children with physical disabilities: a cluster analysis. *Child Care Hlth Dev.* 2010;36(5):726–41.
15. Palisano RJ, Orlin M, Chiarello LA, Oeffinger D, Polansky M, Maggs J, Gorton G, Bagley A, Tylkowski C, Vogel L, Abel M, Stevenson R. (2011). Determinants of intensity of participation in leisure and recreational activities by youth with cerebral palsy. *Arch Phys Med Rehabil.* 2011;92(9):1468–1476.
16. Shikako-Thomas K, Majnemer A, Law M, Lach L. Determinants of participation in leisure activities in children and youth with cerebral palsy: systematic review. *Phys Occup Ther Pedi.* 2008;28(2):155–169.
17. Law M, King G, King S, Kertoy M, Hurley P, Rosenbaum P, Young N, Hanna S. Patterns of participation in recreational and leisure activities among children with complex physical disabilities. *Dev Med Child Neurol.* 2006;48(5):337–342.
18. Shikako-Thomas K, Shevell M, Lach L, Law M, Schmitz N, Poulin C, Majnemer A; QUALA group. Are you doing what you want to do? Leisure preferences of adolescents with cerebral palsy. *Dev Neurorehabil.* (in press) *Neurorehabil.* (in press)palsy. *Dev Neurorehabil.* (in press)
19. Majnemer A, Shikako-Thomas K, Chokron N, Law M, Shevell M, Chilingaryan G, Poulin C, Rosenbaum P. (2010). Leisure activity preferences for 6- to 12-year-old children with cerebral palsy. *Dev Med Child Neurol.* 2015;18(4):234-240.
20. Rimmer JH, Schiller W, Chen MD. Effects of disability-associated low energy expenditure deconditioning syndrome. *Exerc Sport Sci Rev.* 2012;40(1):22–29.
21. Shikako-Thomas K, Shevell M, Lach L, Law M, Schmitz N, Poulin C, Majnemer A.; QUALA group. Determinants of participation in leisure activities among adolescents with cerebral palsy. *Res Dev Disabil.* 2013;34(9):2621-2634.
22. Shikako-Thomas K, Shevell M, Lach L, Law M, Schmitz N, Poulin C, Majnemer A.; QUALA group (2013). Picture me playing – A portrait of participation and enjoyment of leisure activities in adolescents with cerebral palsy. *Res Dev Disabil.* 2013;34(3):1001-1010.
23. Majnemer A, Shevell M, Law M, Birnbaum R, Chilingaryan G, Rosenbaum P, Poulin C. Participation and enjoyment of leisure activities in school-aged children with cerebral palsy. *Dev Med Child Neurol.* 2008;50(10):751–758.
24. Shikako-Thomas K, Law M. Policies supporting participation in leisure activities for children and youth with disabilities in Canada: From policy to play. *Disabil Soc.* 2015;30(3):381-400.