

Physical activity in Canadian early childhood education and care

Regular physical activity and movement enhances fitness, fosters growth and development, and helps teach children about their bodies and world, with enormous benefits for children's bodies and minds. It helps children build and maintain healthy bones, muscles, and joints, develop both gross and fine motor skills, may reduce feelings of depression and anxiety, all of which increase children's capacity for learning (Bellows, 2008 ^[1]) and play a role in countering the increased childhood obesity that is of concern in many countries including Canada.

The Canadian Society for Exercise Physiology released the first-ever Canadian Physical Activity Guidelines for the Early Years 0-4 in 2012; its guidelines state that toddlers (1-2 yrs) and preschoolers (3-4yrs) should participate in '180 minutes of physical activity at any intensity spread throughout the day' (Canadian Society for Exercise Physiology, 2012 ^[2]). However, we know little about how much physical activity children of these ages are getting due to a 'research gap' in this area (Active Healthy Kids- Canada Report Card on Physical Activity for Children and Youth, 2012 ^[3]).

Today in Canada, a majority of preschool-age children attend some form of early childhood education and child care (ECEC) program (including kindergarten and pre-kindergarten) at some time before they enter compulsory schooling. Thus, proactively ensuring that these environments embrace regular physical activity would be an ideal way to increase dispositions towards, and actual physical activity among young children (van Zandvoort et al, 2010 ^[4]).

While ECEC could play a significant role in enhancing physical activity, research suggests that Canadian children may not be getting enough physical activity in early childhood programs (Obeid et al., 2011 ^[5]; van Zandvoort et al, 2010 ^[4]; Anderson, 2008 ^[6]). Currently, physical activity remains an ambiguous component in Canadian child care programs. While some provinces/territories have regulations regarding time spent outdoors, these are generally not specific re: the nature of outdoor activities. At the same time, requirements for physical space indoors and outdoors are often quite limited, so the space and/or equipment to promote physical activity are often not available.

Child care staff and their approaches to programming (which may be linked to their training) also are key in determining whether physical activity is promoted and implemented in ECEC programs. Researchers Dietze and Crossley note that "The role of the facilitator directly relates to increased play quality and the duration of outdoor play. As well, they note that "Outdoor play requires preparation similar to that for the indoor portion of the program. It requires planning, observation and evaluation". However, in ECEC programs, outdoor time may be viewed as a time for 'free play' or 'blowing off steam', an approach that does not guarantee adequate levels of physical activity. While good physical activity may occur indoors as well, it is agreed that outdoor time (in all kinds of weather) provides an optimal opportunity to engage children in regular activities planned to promote physical activity (also see CRRU's Issue File *Bringing the outdoors into early childhood education* ^[7]).

The purpose of this ISSUE File is to gather research on the situation regarding physical activity for young children in ECEC environments. As well, we hope to promote an increased focus on physical activity in early childhood education and care programs by providing practical resources and more information on this issue, which is under-studied in Canada. We have tried to choose resources that are available and accessible online but have included a few research articles that must be accessed through a university library or purchased from the publisher.

The ISSUE file is organized into four categories.

- Activity levels of young children in Canada ^[8]
- Research about physical activity for young children generally ^[9]
- Resources for services providers ^[10]
- Provincial/territorial requirements in regulated child care for physical activity, outdoor space and time ^[11]

Mon, 12/01/2014

Tags:

health ^[12]

physical environment ^[13]

curricula and pedagogy ^[14]

Activity levels of young children in Canada

Are we driving our kids to unhealthy habits? 2013 Active Healthy Kids Canada report card on physical activity for children and youth ^[15], Active Healthy Kids Canada

Is active play extinct? 2012 Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth ^[16], Active Healthy Kids Canada

Physical activity in Ontario preschoolers: prevalence and measurement issues

Obeid, J., Nguyen, T., Gabel, L., Timmons, B. W. (2011). *Applied Physiology, Nutrition and Metabolism*, 36(1), 291-297.


Summary available via paid subscription ^[17]

Physical activity levels of Canadian children and youth, 2007 to 2009 ^[18]

Statistics Canada

Provincial/territorial requirements in regulated child care for physical activity, outdoor space and time

Table in pdf (See attachment below)

Attachment	Size
 Issue File Physical Activity TABLE PTs.pdf ^[19]	96.52 KB

Research about physical activity for young children generally

Physical activity promotion in the preschool years: A critical period to intervene ^[20]

Goldfield, Gary S.; Harvey, Alysha; Grattan, Kimberly & Adamo, Kristi B.(2012). *International Journal of Environmental Research and Public Health*, 9(4), 1326-1342.

Moving bodies, building minds: Fostering critical thinking and problem-solving through movement ^[21] (Abstract online)

Marigliano, M.L. & Russon, M.J. (2011). *Young Children*, September 2011.

What the research says about physical activity and the early years ^[22]

Best start, 2011

Physical activity in child-care centers: do teachers hold the key to the playground? ^[23]

Copeland, K.A., Kendeigh, C.A., Saelens, B.E., Kalkwarf1, H.J. & Sherman, S.N. (2011). *Health Education Research*

Interventions to promote physical activity in young children ^[24]

Trost, S.G. (2011). *Encyclopedia on Early Childhood Development*

Physical activity at daycare: issues, challenges and perspectives. (Abstract online ^[4])

van Zandvoort, M., Tucker, P., Irwin, J. D., & Burke, S. M. (2010). *Early Years: Journal of international research & Development*. 30(2), 175-188.

Physical activity for preschool children--how much and how? ^[25]

Timmons, B. W., Naylor, P., & Pfeiffer, K. A. (2007). *Applied Physiology, Nutrition & Metabolism*, 32.

Societal values and policies may curtail preschool children's physical activity in child care centers ^[26]

Copeland, K.A., Sherman, S.N., Kendeigh, C.A., Kalkwarf, H.J. and Saelens, B.E. (2012). *Pediatrics*, 129 (2), pp. 265 -274.

Physical activity of preschool aged children in child care settings: Final report [link no longer available]

Anderson, L. (2008). Mount Royal College, Alberta.

The childcare environment and children's physical activity (Abstract online ^[27])

Bower, J.K., Hales, D.P., Tate, D.F., Rubin, D.A., Benjamin, S.E. and Ward, D.S. (2008). *American Journal of Preventive Medicine*, 34(1), pp. 23-29.

Physical activity in young children: the role of child care ^[28] (Abstract online)

Ward, D.S. (2010). *Medicine & Science in Sports & Exercise*, 42 (3).

Resources for service providers

Canadian physical activity guidelines for the early years 0-4 ^[29]
Canadian Society for Exercise Physiology, April 2012

Best-Practice Guidelines for Physical Activity at Child Care ^[30]
McWilliams, C., Ball, S.C., Benjamin, S.E., Hales, D., Vaughn and Ward, D.S. (2009). *Pediatrics*, 124(6), pp. 1650 -1659.

Physical activity information sheets: Active solutions ^[31]
Government of Saskatchewan

Physical activity resource guide for child care centres ^[32]
Sudbury Children's Services (2009)

Physical Activity at Childcare among Preschool-aged Children ^[33]
The Research File, 2010

Moving and growing (Resources available online ^[34] and to purchase)
Canadian Child Care Federation

Physical activity in child care ^[35]
Preschooler Focus, Issue 2, April 2011.

Source URL (modified on 13 Jul 2022): <https://childcarecanada.org/resources/issue-files/physical-activity-canadian-early-childhood-education-and-care>
Links

[1] <https://link.springer.com/article/10.1007/s10900-007-9079-z> [2] <https://csepguidelines.ca/guidelines/early-years/> [3] <http://dvqdas9jty7g6.cloudfront.net/reportcards2012/AHKC%202012%20-%20Report%20Card%20Long%20Form%20-%20FINAL.pdf> [4] <https://www.tandfonline.com/doi/abs/10.1080/09575141003667282> [5] <http://www.csep.ca/english/view.asp?x=724&id=326> [6] https://www.mtroyal.ca/wcm/groups/public/documents/pdf/conted_ihi_phedfinal.pdf [7] <https://childcarecanada.org/resources/issue-files/bringing-outdoors-early-childhood-education> [8] <https://childcarecanada.org/resources/issue-files/resources/issue-files/resources/issue-files/physical-activity-canadian-early> [9] <https://childcarecanada.org/resources/issue-files/physical-activity-canadian-early-childhood-education-and-care/research-about> [10] <https://childcarecanada.org/resources/issue-files/physical-activity-canadian-early-childhood-education-and-care/resources> [11] <https://childcarecanada.org/resources/issue-files/physical-activity-canadian-early-childhood-education-and-care-0> [12] <https://childcarecanada.org/category/tags/health> [13] <https://childcarecanada.org/category/tags/physical-environment> [14] <https://childcarecanada.org/category/tags/curricula-and-pedagogy> [15] <http://dvqdas9jty7g6.cloudfront.net/reportcard2013/AHKC-Summary-2013.pdf> [16] <http://dvqdas9jty7g6.cloudfront.net/reportcards2012/AHKC%202012%20-%20Report%20Card%20Short%20Form%20-%20FINAL.pdf> [17] <https://cdnsiencepub.com/doi/abs/10.1139/h11-002> [18] <https://www150.statcan.gc.ca/n1/pub/82-625-x/2011001/article/11553-eng.htm> [19] <https://childcarecanada.org/sites/default/files/Issue%20File%20Physical%20Activity%20TABLE%20PTS.pdf> [20] <https://childcarecanada.org/documents/research-policy-practice/13/10/physical-activity-promotion-preschool-years-critical-period> [21] <https://eric.ed.gov/?id=EJ959743> [22] https://www.beststart.org/resources/physical_activity/pdf/Research_2011_Eng_Final.pdf [23] <https://academic.oup.com/her/article-pdf/27/1/81/1713193/cyr038.pdf> [24] <http://www.child-encyclopedia.com/physical-activity/according-experts/interventions-promote-physical-activity->

young-children [25] <https://www.nrcresearchpress.com/doi/pdf/10.1139/H07-112> [26] <https://pediatrics.aappublications.org/content/129/2/265> [27] <https://www.ajpmonline.org/article/S0749-3797%2807%2900616-2/abstract> [28] <https://pubmed.ncbi.nlm.nih.gov/20068500/> [29] <http://www.csep.ca/english/view.asp?x=804> [30] <https://pediatrics.aappublications.org/content/124/6/1650.full> [31] <https://www.saskatchewan.ca/government/government-structure/ministries/education> [32] http://www.greatersudbury.ca/content/div_childrens services/documents/Phys%20Guide%20for%20Child%20Care3.pdf [33] https://www.cflri.ca/media/node/310/files/ResearchFile_May_Eng.pdf [34] <http://cccfcscge.ca/topics/physical-activity/> [35] https://canchild.ca/en/childrenfamilies/resources/physical_activity_preschooler_newsletter_apr_2011.pdf