

DECEMBER 2022

Canadian Disability Participation Project



The CDPP is an alliance of university, public, private and government sector partners working together to enhance community participation among Canadians with disabilities. The team of this project consisted of a panel that included representation from parents of children and adolescents with disabilities (CAWD), community service providers, disability advisory committees, researchers with expertise in disability and health behaviour change, surveillance and inclusive physical education and programming.



Canadian Physical Activity Report Card for Children and Adolescents with Disabilities

The Disability Report Card¹ is Canada's first-ever comprehensive summary of physical activity data for children and adolescents with disabilities (CAWD). A report card that is informed by evidence specific to CAWD is important for ensuring that the resulting grades and recommendations consider the unique barriers to physical activity that CAWD encounter. Ultimately, this disability-specific report card would give effect to the participation rights of CAWD².

Using a set of previously established benchmarks from the Global Matrix³, an interdisciplinary team of experts reviewed national level surveys and government reports to grade 13 indicators of childrens' and adolescents' physical activity behaviours through a disability-focused lens. Panel discussions were facilitated to assess the available evidence based on data gaps and opportunities as well as to create recommendations for promoting physical activity in CAWD.

What was the grading process?

1) Establishing the Expert Panel

Included researchers, representatives from disability and physical activity organizations, and parents of CAWD

2) Extracting the Data

Four national level data sources were assessed.

1. Canadian Health Measures Survey, 2018-19
2. Canadian Health Survey on Children and Youth, 2019
3. Health Behaviours of School-aged Children, 2018
4. National Physical Activity Measurement Study, 2018-20

3) Appraising the Evidence

Two facilitated online panel discussions were held to assess the available evidence and identify data gaps and opportunities, and create recommendations

4) Reviewing Grades and Identifying Recommendations

Once all grades were set, the team reviewed the grades, discussed rationales and recommendations

The Grades

Letter grades were assigned to eight of the 13 indicators. The remaining five indicators (40%) were assigned as incomplete (INC) due to their being a lack of national data available.

Indicator	Benchmark(s)	Grade
<i>Overall Physical Activity</i>	- Percent meeting the physical activity recommendation of an average of at least 60 mins of moderate-to-vigorous physical activity each day	D
<i>Active Play</i>	- Percent engaging in active play and non-organized/ unstructured leisure activities for 2 hours or more each day	F
<i>Organized Sport & Physical Activity</i>	- Percent who participated in organized sport or physical activity programs	C+
<i>Active Transportation</i>	- Percent who use active transportation to get to/from places (e.g., school, park, mall, friend's house)	D-
<i>Sedentary Behaviours</i>	- Percent meeting the screen time recommendation of less than 2 hours of recreational screen time each day, on average	D
<i>Sleep</i>	- Percent meeting the age-appropriate sleep recommendation (5- to 13-year-olds: 9-11 hours per night on average; 14- to 17-year-olds: 8-10 hours per night on average)	B+
<i>24-Hour Movement Behaviours</i>	- Percent meeting the all three recommendations (physical activity, screen time and sleep recommendations) within the Canadian 24-Hour Movement Behavior Guidelines for Children and Youth	F
<i>Government</i>	- Evidence of leadership and commitment in providing physical activity opportunities for all children and adolescents - Allocated funds and resources for the implementation of physical activity promotion strategies and initiatives for all children and adolescents	C-
<i>Physical Literacy</i>	- Percent meeting the recommended levels of physical competence, knowledge and understanding, motivation and confidence and daily behaviors needed for a physically active lifestyle	INC
<i>Physical Fitness</i>	- Average percentile achieved on certain physical fitness indicators based on the normative values published by Tomkinson et al. (2018)	INC
<i>School</i>	- Percent of schools with active school policies (e.g., daily physical education (PE), recess, "everyone plays" approach, bike racks at school) - Percent of schools where the majority (at least 80%) of students taught by PE specialist - Percent of schools where the majority (at least 80%) of students are offered the mandated amount of PE (for the given state/territory/region/country) - Percent of schools that offer physical activity opportunities (excluding PE) to the majority (at least 80%) of their students - Percent of parents who report their children have access to physical activity opportunities at school in addition to PE classes - Percent 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)	INC
<i>Family & Peers</i>	- Percent of family members who facilitate physical activity and sport opportunities for their children - Percent of family members who meet the guideline of ≥ 150 minutes of moderate-intensity aerobic physical activity each week or do ≥ 75 min of vigorous-intensity aerobic physical activity throughout the week or an equivalent combination of moderate- and vigorous-intensity physical activity. - Percent of parents who are physically active with their kids - Percent of CAWD with friends and peers who encourage and support them to be active - Percent of CAWD who encourage and support their friends to be active	INC
<i>Community & Environment</i>	- Percent of communities/municipalities that report they have infrastructure specifically geared toward promoting physical activity - Percent of children or parents who report living in a safe neighbourhood where they can be physically active	INC

Data Gaps

Our appraisal of the current Canadian data on physical activity among CAWD identified major data gaps. Specifically, these can be characterized as gaps in measurement, surveillance, and policy. Additionally, ableist language was consistently identified by the panel amongst measurement and benchmarks.

Measurement Gaps

- The evidence for movement behaviours was limited to child and parent report measures.
- The Global Matrix grading guidelines prioritize data sources that include device-based measures over self-report data. However, there is a lack of validity regarding accelerometry as a measure of physical activity in persons with mobility impairments⁴.
- There was limited representation of children and adolescents with moderate-to-severe impairments in the current data.

Overall, existing reporting benchmarks are focused on participation quantity, and neglect attention to the *quality* of the participation experience. For CAWD, being present does not always equate to active participation, having fun, and feeling satisfied⁵.

Surveillance Gaps

- Surveillance data on accessible and inclusive resources and infrastructure in schools as well as the community (e.g., accessibility of playgrounds, teacher training) was minimal.
- Representative and adequate powered population-level data for diverse impairment types was negligible and is needed within existing monitoring and surveillance systems⁴.

These systems of surveillance must consider access, the quality of the setting (e.g., schools, community), and the disability/inclusion training of professionals (e.g., teachers, sports coaches).

Policy Gaps

- Existing accessibility legislations have limited actions specific to physical activity.
- Immediate need for greater leadership and funding from all levels of government.

Dedicated government support is necessary to ensure the full participation of CAWD in physical activity.

Ableism

- The use of ableist language (e.g., “normative data”) within benchmarks explicitly exclude CAWD from participating in surveillance and monitoring⁶.
- Many of the benchmarks use a one-size-fits-all approach that does not acknowledge the many ways CAWD participate in movement behaviours⁷.

Immediate need for more inclusive benchmarks and measurements in order to appreciate the lived experience of CAWD and their participation in physical activity.



Panel Recommendations for a Better Reporting of Promotion of Physical Activity in CAWD

- 1) Greater use of reliable and valid instruments for measuring the full capabilities of CAWD.
- 2) Must incorporate quality of participation in measurement and benchmarks.
- 3) Remove ableist language in existing reporting benchmarks.
- 4) Prioritize funding and policies to make physical activity more accessible and inclusive for CAWD.

In Summary

This Canadian Physical Activity Report Card for Children and Adolescents with Disabilities is a first step to addressing the limited representation of CAWD in national physical activity reporting, surveillance, and policy. Many of the indicators received incomplete grades due to data gaps in existing national data sources. These gaps must be addressed in order to provide a complete picture of physical activity for CAWD, and ultimately, to enhance physical activity among CAWD in Canada.



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References

1. Arbour-Nicitopoulos, K. P., Kuzik, N., Vanderloo, L. M., Martin Ginis, K. A., James, M. E., Bassett-Gunter, R. L., Ruttle, D., DaSilva, P., Disimino, K., Cameron, C., Arthur, M., Shikakp, K. & Latimer-Cheung, A. E. (2022). Expert Appraisal of the 2022 Canadian Para Report Card on Physical Activity for Children and Adolescents with Disabilities. *Adapted Physical Activity Quarterly*. Ahead of print.
2. United Nations. (2008). United Nations Convention on the Rights of Persons with Disabilities and Optional Protocol. <https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>
3. Ng, K., Sit, C., Arbour-Nicitopoulos, K.P., Aubert, S., Stanish, H., Hutzler, Y., Augusto Santos Silva, D.A., Kang, M.-G., Francisco Lopez-Gil, J., Young Lee, E., Asunta, P., Pozeriene, J., Kazimierz Urbanski, P., Aguilar Farias, N., Wilson, O.W.A., & Reilly, J. (2022). *A Global Matrix of Para report cards for children and adolescents with disabilities*. Manuscript submitted for publication.
4. Martin Ginis, K.A., van der Ploeg, H.P., Foster, C., Lai, B., McBride, C.B., Ng, K., Pratt, M., Shirazipour, C.H., Smith, B., Vasquez, P.M., & Heath, G.W. (2021). Participation of people living with disabilities in physical activity: A global perspective. *Lancet*, 398, 443–455.
5. Evans, M.B., Shirazipour, C.H., Allan, V., Zanhour, M., Sweet, S.N., Martin Ginis, K.A., & Latimer-Cheung, A.E. (2018). Integrating insights from the parasport community to understand optimal experiences: The Quality Parasport Participation Framework. *Psychology of Sport and Exercise*, 37, 79–90.
6. Smith, B., Mallick, K., Monforte, J. & Foster, C. (2021). Disability, the communication of physical activity, sedentary behavior, and ableism: A call for inclusive messages. *British Journal of Sports Medicine*, 55(20), 1121–1122.
7. Bull, F.C., Al-Ansari, S.S., Biddle, S., Borodulin, K., Buman, M.P., Cardon, G., Carty, C., Chaput, J.-P., Chastin, S., Chou, R., Dempsey, P.C., DiPietro, L., Ekelund, U., Firth, J., Friedenreich, C.M., Garcia, L., Gichu, M., Jago, R., Katzmarzyk, P.T., ... Willumsen, J.F. (2020). World Health Organization 2020 guidelines on physical activity and sedentary behaviour. *British Journal of Sports Medicine*, 54(24), 1451–1462.