



## **MAKING A DIFFERENCE**



## ***Creating more supportive environments for physical activity***

The environment plays an important role in developing healthy behaviours. Certain factors in the environment can have a restrictive effect on the physical activity behaviours of an individual, and some factors can facilitate physical activity behaviour. These environmental determinants can include a variety of social, physical, and institutional factors.<sup>1</sup> Social factors can involve social support, such as from spouses or partners, peers, friends, parents, siblings, work colleagues, incentives, rewards, role models, networking, and so on.<sup>2</sup> The physical environment includes climate and weather, geography, the physical make-up of the community, availability of facilities, and physical access to facilities.<sup>3</sup> Finally, institutional factors involve the policies, procedures, programs, and rules adopted by the key settings for physical activity, such as communities, workplaces, and schools.<sup>4</sup>

To encourage a change in physical activity behaviour, a balanced approach to intervention strategies is important: it must include both individual factors, such as a positive intention to modify behaviour and develop the skills to achieve the behaviour, and available and accessible environmental supports, which facilitate behaviour change.<sup>5</sup> The last Benchmarks report, *Increasing physical activity: Creating effective communications*,<sup>6</sup> examined the role of social marketing in physical activity promotion and the role of communication strategies in building awareness, knowledge, motivation, and intention of physical activity. In this report, the data from the 1999 Physical Activity Monitor explore Canadians' access to physical activity information and opportunities in their communities and systemic factors influencing their participation in physical activity. The latter environmental factors include barriers to physical activity for adults and children, as well as factors that would help Canadian adults and children become more active.

### ***Providing a variety of opportunities***

Many Canadians believe that the provision of a wide variety of activity programs, facilities, and places to be active, along with an increase in opportunities for trying out different activities, would help them become more active. Furthermore, many parents believe that the provision of a wide variety of activity programs, facilities, and places to be active, the provision of more opportunities at school to participate in different physical activities, and the provision of daily physical education would help their children to become more active.

A variety of opportunities can encourage Canadians to become more active:

- ✓ Provide a variety of activities including both structured versus non-structured types of activities and competitive versus non-competitive activities. This will encourage participation by people of all skill, development, and confidence levels. This is of particular relevance to less active individuals, older adults, and women, who report a stronger perception that their lack of skill and ability to do physical activity and sport is a barrier to participation in physical activity.

- ✓ Individuals should be presented with trial opportunities or “activity sampling” for physical activities. Recent research indicates that half of adults observe or try some kind of physical activity to see if they might like to do it on a regular basis.<sup>7</sup> This may help less active individuals, women, or older adults to overcome feelings of discomfort, lack of skill, or lack of confidence in their ability to engage in new physical activities.
- ✓ Service providers could consider advertising incentive or reward programs for physical activity through the media to increase awareness.<sup>8</sup>
- ✓ Schools can expose students and staff to a comprehensive curriculum of physical activity, including daily physical education programming, structured and unstructured physical activity programs at recess, at lunch, and after school, or intramural and inter-school sports programs.
- ✓ Schools can seek input from students in the course of their involvement or participation in the development, organization, and, for older children, the administration of extracurricular activities that would further enhance their interest and participation in physical activity.<sup>9</sup>
- ✓ Schools could consider asking municipal recreation departments to assist them with after-school programs.
- ✓ Encourage and provide coaching or instruction for physical activities that are appropriately targeted for a range of age and ability levels. Again, this is particularly important for inactive individuals, older adults, women, and children. Encourage different levels of instruction, including trial and beginner classes.
- ✓ Explore programs or opportunities of particular interest to women and girls.
- ✓ Provide a variety of family-, group-, and individual-oriented programming in the community. The variety of programming will appeal to different segments: family-oriented programming will be more important for 25–44 year-olds, who perceive child care issues and lack of time as major barriers;<sup>10</sup> group-oriented programming may appeal more to women or young adults, who perceive a lack of partner as more of a barrier to their physical activity;<sup>11</sup> and individual-oriented programming will be appropriate for inactive Canadians, who are more likely to report feeling uncomfortable about physical activity.<sup>12</sup> This lack of self-confidence or self-efficacy may prevent less active adults from engaging in physical activity with others whom they perceive as more skilled.
- ✓ Workplaces can also encourage a variety of activities by providing on-site facilities for physical activity and supporting facilities such as showers, change rooms, or lockers, and by encouraging unstructured forms of physical activity such as taking the stairs, bicycling to work, or taking walking breaks.
- ✓ Workplaces could subsidize memberships to off-site health clubs or recreation facilities both to reduce cost, which may be a barrier for some employees, and to provide an incentive to be active.

- ✓ Prominently display signs in buildings and facilities showing the location of stairs, especially just outside of elevators and escalators. Research has shown that a “point-of-decision” prompt, such as visible signage encouraging physical activity like taking the stairs, can represent both an effective and economical way of increasing physical activity and deterring inactive behaviour.<sup>13</sup> (Point-of-decision interventions are designed to change the environment in order to influence people to make active, instead of inactive, decisions or choices.)
- ✓ Because home is the most frequent location for physical activity for children, parents can encourage children to be active at home by providing or supporting opportunities to engage in a variety of physical activities in this setting. This should be supported by the reduction or elimination of more sedentary behaviours, including television viewing or video games. The television viewing habits of children need to be reviewed on a regular basis by parents, as television viewing has been associated with obesity.<sup>14,15</sup>
- ✓ Children are typically more active outdoors than indoors. When engaged in outdoor play, the “temptations” toward more sedentary activities such as television viewing, video games, and computer activity are reduced, thereby encouraging more active play.<sup>16</sup>
- ✓ Physical activity programs should introduce and promote key concepts to children and youth, including teamwork, discipline, leadership, participation, and fair play.
- ✓ Retirement homes could offer programs for walking or wheeling and recognize those who attend regularly or who reach specified distance targets.

### ***Increasing social support***

- ✓ Parents should encourage their children to be active. Research shows that parental encouragement is correlated with higher levels of physical activity in children. There also appears to be a strong relationship between adolescent physical activity and parental support in the form of verbal support and support by other means, including payments, transportation, etc.<sup>17</sup>
- ✓ Besides providing a supportive environment, parents can also play a role by modelling appropriate physically active behaviour, helping their children establish physical activity goals, and reinforcing physical activity with rewards when goals are achieved.
- ✓ Parents should be encouraged to organize family activities that include physical activity and to support their children’s physical activity in the school environment.
- ✓ Teachers, coaches, and instructors should also encourage and support physical activity by providing counselling and advice and by promoting physical activity through their communications with their students. School personnel are in an influential position to act as role models for appropriate physical activity behaviour.<sup>18</sup>
- ✓ Health care providers should encourage patients to participate in a healthy and physically active lifestyle.

- ✓ Encourage social support for women and less active adults in particular, who perceive lack of support, lack of a partner, and lack of child care as major barriers.<sup>19</sup>
- ✓ Promote networking to encourage active individuals to “buddy” up with other people who want to be active in the community.
- ✓ Provide outreach services as well as appropriate instruction through a variety of settings, featuring age-, sex-, and culturally appropriate role models, and providing opportunities for adults to observe physical activity behaviours and activities prior to engaging in the activity themselves.

## ***Creating more supportive environments in the sport and recreation system***

Canadians have indicated that lack of information on local physical activities, inconvenient scheduling, difficulty getting to places to be active, lack of skill, excessive cost, and safety concerns are reasons why they do not participate more in physical activity. Service providers in the sport and recreation system could assist in overcoming such barriers by understanding the needs of their local residents and modifying their opportunities to accommodate these needs.

### ***Addressing concerns and perceived barriers of participants***

Whether a person is active or not is influenced by numerous factors. Intention to be active and perceived barriers toward physical activity are key factors that predict participation in physical activity now and in the future. To increase physical activity among Canadians, the sport and recreation system must implement interventions that address perceived barriers to physical activity such as safety, cost, access issues, etc.:

- ✓ Address access to facilities and safety issues, particularly for older adults and women.<sup>20</sup>
- ✓ Reduce perception of cost associated with physical activity by offering “pay-as-you-go” payment of physical activity-related fees, reduced user fees for low-income households, or alternatives to paying fees (including services in lieu of payment).
- ✓ Provide facilities that support family-oriented programming. For example, provide safe and affordable child care programs in facilities where parents can do their own physical activities or arrange or organize car pools that enable only one parental resource to transport children to physical activities so that the other parents can participate in physical activity during the same time slot.
- ✓ Evaluate programs regularly in terms of scheduling, accessibility, safety, and convenience to reduce factors that may be limiting the apparent choices available of programs and facilities. These appear to be a more important issue for women and older adults.
- ✓ Research has shown that the physical activity levels of young children tend to be associated with weather patterns and climate change.<sup>21</sup> For example, their activity levels are average in the spring, increase dramatically in the summer, and fall in the autumn and winter months. Strategies within the community, home, and school environments can incorporate seasonal activities or accommodate these seasonal patterns by providing appropriate facilities during the months when children’s activities are typically in decline. This can include a focus on activities such as cross-country skiing, ski trips to local ski facilities, indoor soccer training, basketball, early-morning or after-school walking clubs in the halls, and so on.

- ✓ Overcome the perceived lack of skill by providing instruction for activities that range from not competitive at all to competitive. For the relatively non-competitive activities, the focus should be on the importance of participation, the benefits of the activity, skill development or acquisition, and an atmosphere of fair play. While important for individuals of all skill levels, the shift in focus from “winning” to “participating” takes the pressure of the activity off of those who have lower self-confidence or self-efficacy.

### ***Increase awareness of physical activity programs, services, and facilities in local communities***

To encourage Canadians to increase their use of programs, services, and facilities,

- ✓ Municipalities can promote and support active lifestyles by maintaining safe walking environments in their communities. Since walking is considered by many to be an activity of low cost, low skill, and little risk of injury, it is an ideal activity for less active people, women, older adults, and lower income Canadians.
- ✓ Promote and support bicycling by enforcing cyclist safety in mixed traffic; expanding and integrating bike path networks with current municipal infrastructure; maintaining or increasing the security features for bicycling, such as adequate lighting and maintenance of roads, bike paths, lanes, and trails; and providing safe, bicycle-friendly parking, storage, or facilities. In one survey, streets with bicycle lanes or marked bicycle routes were reported to have about half the risk of local streets, and bicycle paths were reported to be even safer.<sup>22</sup> Therefore, communities may want to ensure bicyclist safety by expanding cycling networks and developing lanes that are completely separate from vehicle traffic. In the case where such lanes do not exist, municipalities can focus on enforcing strict vehicle adherence to road sharing, thus increasing the safety of cyclists in mixed traffic.

### ***Increase opportunities for physical activity in local communities***

- ✓ Municipalities and communities can encourage “passive” interventions, by making changes in the environment that do not require individuals to make “active” decisions.<sup>23</sup> These can include making stairs accessible and convenient, restricting some streets for walking or bicycling only, or encouraging mixed land use (business, residential, shopping, etc.) in new community developments, which fosters active commuting to local facilities.<sup>24</sup>
- ✓ Facilities in the sport and recreation system should be seen as convenient, safe, accessible, and affordable.
- ✓ Provide a system of safe trails, including well-lighted and secure paths and trails, secure areas for locking bicycles, and so on.<sup>25</sup>
- ✓ Earlier research shows that many Canadian parents (56%) believe that having access to safe streets and other public places plays an important role in their children’s physical activity.<sup>26</sup> Maintaining facilities such as sidewalks, lanes, trails, and lighting to local safety standards is also an important factor for childhood safety. Providing a

crime-, violence-, harassment-, and vandalism-free environment is also an important component of a safe environment for physical activity.

- ✓ Ensure that teachers and early childhood educators (including preschool, nursery, and day-care instructors) receive appropriate training in age-appropriate motor development, movement, play, health-related fitness, or guidelines for all children.<sup>27</sup> In addition, these educators should understand the importance of physical activity during the early years and know how to incorporate physical activity into their curriculum. Health Canada and the Canadian Society for Exercise Physiology are expected to release guidelines for physical activity for children and youth in the near future. It is anticipated that these guidelines would be similar in format to those released since 1998 for adults and older adults.<sup>28,29</sup>
- ✓ Support physical activity among young children by ensuring that day-care facilities, preschool facilities, and nursery schools are equipped with an appropriate variety of safe equipment and facilities to assist motor skill development and physical activity.<sup>30</sup> This includes indoor and outdoor opportunities (e.g., balls, hoops, balance beams, jump ropes, hopscotch and other game facilities, playgrounds, slides, swings, climbing apparatus, and so on). Again, it is important to provide a balance of both structured and unstructured play opportunities. With 64% of Canadian households having two parents employed in 1998,<sup>31</sup> many Canadian households use day-care services. It is therefore important that parents and caregivers communicate openly about children's physical activity requirements, set physical activity goals, and agree on how these goals will be met.
- ✓ Consider establishing physical activity standards through provincial and territorial day-care legislation.

### ***Link messages on how to become more active with opportunities in the sport and recreation system***

With Canadians generally being aware of physical activity information (two-thirds of Canadian adults report that there is a lot of information on physical activity and sports available in their community), it is important to tie this information to facilities in the community. For example,

- ✓ Provide incentives, such as certificates of achievement or participation, or rewards, such as discounts in registration fees, to participants who attend classes or use facilities regularly. Alternatively, municipalities can consider holding media-promoted contests with associated rewards to encourage facility use (such as bicycle trails). Of course, contests alone would probably not sustain a behaviour change, but would have to be combined with prompting, awareness of benefits, and so on.<sup>32</sup>
- ✓ Service providers can use health promotion programs to provide counselling on various aspects of physical activity. Topics can include the benefits of physical activity, how to overcome barriers to physical activity, how to develop goals, how to establish a personal physical activity program, opportunities for physical activity in the community, injury prevention, and so on.

- ✓ Sports and recreation facilities and communities may consider using local media to advertise schedules, lists of community resources, and information on skill development and registration. Municipalities may also want to consider a toll-free number for providing information on the age-specific short- and long-term benefits of being active, as one-third of Canadians strongly believe that such a service would be beneficial in helping them become more active.
- ✓ Provide specific messages when dealing with different segments of the population (a global message is appropriate for strategies aimed at the general population but targeted messages are best for reaching specific groups). For example, when customizing messages for individuals, service providers can focus more on what is required or involved in the activities—for youth, focus on physical activity as “cool”; for adults in their thirties, focus on how they can find time to do physical activity; for older adults, focus on trying physical activity and stress its potential for companionship and maintaining independence.<sup>33</sup>
- ✓ Encourage the use of technology when implementing physical activity interventions. For national and provincial governments and organizations who are promoting population-based interventions, it is important to communicate cost effectively to large numbers of individuals.<sup>34</sup> For example, an effective strategy for communicating with the population, especially those who are insufficiently active, may be to use a “proactive” approach by directly reaching the population and offering a particular service, combined with the use of the Internet.<sup>34</sup>
- ✓ Municipalities can link up with existing resources to obtain information on available programs, services, and facilities. Some helpful resources include:
  - 1) TrailPAQ. Go for Green, a national organization, spearheaded an electronic initiative called TrailPAQ, which provides a wealth of information on Canadian trails. This Web site ([www.trailpaq.com](http://www.trailpaq.com)) boasts a national inventory of established local trails in Canada, a bulletin board where users can post questions on trail development, an electronic newsletter on trails, information on issues, benefits, and so on;<sup>35</sup>
  - 2) SummerActive. Health Canada and provincial and territorial governments sponsor physical activity opportunities, including SummerActive, a yearly campaign in late spring–early summer to promote and increase physical activity. A national SummerActive Internet site ([www.summeractive.canoe.ca](http://www.summeractive.canoe.ca)) contains practical and ready-to-use information and resources, enabling community leaders and the media to access leading-edge public education and promotion materials supporting local SummerActive activities (newspaper and magazine PSAs, pre-recorded radio PSAs and announcer-read scripts, posters and print promotional materials, and event leader “how-to” resources);
  - 3) An inventory of physical activity facilities. The National Recreation and Parks Association in the United States has established a comprehensive Web database following an approach resembling Go for Green’s trail inventory. This resource allows individuals to search for information on all types of physical activity

facilities, such as swimming pools, arenas, etc., for different cities and states within the United States.<sup>36</sup> While this resource only applies to the United States, it provides a striking example of how technological initiatives can increase the information resources available to service providers.

- ✓ Municipalities could link up with other municipalities—electronic interactions may be the most economical—in order to share innovative ideas, lessons, samples, and “success” stories for how they have been able to incorporate physical activities into their programs and services.
- ✓ Municipalities can create a database of best practices for sport and recreation, clearly identifying why the program is a best practice, any issues involved in implementing the program, and the program’s impact, so that other municipalities can determine its applicability and relevance to their own situation.

## *Community mobilization for encouraging physical activity*

**Strategies should target key settings, like workplaces, schools, communities, and health care facilities, to reach large segments of the population and to change and enhance supportive environments, policies, and programs in order to reinforce behaviour change.**

Intervention strategies for increasing physical activity should involve several key settings, such as workplaces, schools, communities, and health care facilities. For example,

- ✓ Workplaces can develop policies to encourage physical activity such as flextime for physical activity, casual attire days, or incentives and rewards to recognize employees who actively commute.
- ✓ Workplaces can help their employees to be more active by sponsoring physical activity events and encouraging participation in lunch-time team sports.
- ✓ Encourage workplaces to partner with local community facilities to allow their employees to access these types of facilities before work, during lunch hour, after work, etc. if on-site exercise facilities are not available at the workplace. Workplaces may also want to consider subsidies for these facilities, as half of Canadians report that they would be more active if such subsidies were in place.
- ✓ Encourage workplaces to link up with other workplaces in the community that have implemented successful physical activity programming. Encourage interaction to share innovative ideas, success stories, and lessons learned from their experiences.
- ✓ Ensure that schools also have appropriate facilities, equipment, and supplies to meet the physical activity requirements of their students. This will help to ensure that students are not required to “wait their turn” to do an activity and, consequently, be unnecessarily inactive for part of the physical education class.
- ✓ Schools should ensure that students are active for the majority of the time spent in physical education classes.
- ✓ Encourage schools to obtain appropriate tools and resources to promote physical activity.
- ✓ Promote provincial or territorial testing in physical activity for children and youth. Some provinces have adopted mandatory provincial testing for subjects such as literacy.<sup>37</sup> Similar testing can be introduced for physical activity.
- ✓ Schools can provide more opportunities at recess periods to increase children’s physical activity levels, as research shows that children spend much of their recess time being inactive.<sup>38</sup> This research also suggests that modifications to school policies such as increasing the frequency of recesses, providing suitable facilities, and educating staff to prompt physical activity may contribute to higher physical activity.

- ✓ Ensure that extracurricular activities not only promote team sports such as basketball, soccer, and volleyball but also encourage physical activity clubs, featuring such activities as dance, yoga, and walking.
- ✓ Ensure that health promotion programs, either in conjunction with or separate from physical education classes, incorporate physical activity topics into the curriculum. Topics can include the benefits of physical activity, how to overcome barriers to physical activity, how to develop goals, how to establish a personal physical activity program, opportunities for physical activity in the community, and so on.
- ✓ Partner municipalities with schools to offer incentive or reward programs for active commuting to and from schools as a means of increasing children's physical activity levels. An example of this type of program is "International Walk to School Day," offered through Go for Green to encourage active transportation initiatives.<sup>39</sup>
- ✓ Community leaders can help communities establish a network of Neighbourhood Watch programs along paths and trails used for physical activity, in order to alleviate safety concerns.
- ✓ Communities can consider programs that increase physical activity opportunities for low-income families. This can include facilitating transportation to and from physical activities, child care assistance, and fee subsidies or waivers.
- ✓ Provide role models for physical activity in the community.<sup>40</sup> For example, highlight local celebrities such as the mayor, city council members, local media personalities, local athletes, and other respected figures in physical activity promotion campaigns.
- ✓ Physicians and health care providers can play a key role in promoting physical activity among adults and children. These health professionals interact with the general public on a regular basis and are typically viewed as a primary and credible resource for health behaviours and issues.<sup>41</sup>
- ✓ Not only can health care providers discuss the benefits of physical activity with their patients, they can also offer an environment that promotes physical activity, through posters, pamphlets, and other types of resources in the waiting and examination rooms.<sup>41</sup>
- ✓ Primary care physicians and professionals should provide counselling of regular physical activity as part of routine visits, to ensure a healthy perspective from the start. Involve parents in the guidance and counselling when appropriate and provide education materials to help patients become knowledgeable and modify behaviour.<sup>41</sup>
- ✓ Provide references to other professionals, such as nutritionists, exercise physiologists, trainers, and physiotherapists, when necessary and appropriate.<sup>41</sup>
- ✓ Physical activity can be an important topic in the curricula of medical schools and associations, thus educating physicians and health care providers on the role of physical activity in disease prevention and on effective counselling with respect to physical activity.<sup>41</sup>

***Establish partnerships with municipal and provincial infrastructure departments (such as transport, municipal planning and development boards, urban planners, etc.) to help plan local infrastructures that encourage physical activity.***

- ✓ Communities can encourage the use of facilities *not specifically designed* for physical activity, especially in more rural or small communities that do not have access to many physical activity facilities. Communities can make use of schools outside of traditional school hours for other types of activities, including walking clubs, dance classes, team sports, etc. Alternatively, community centres or church halls or basements can be used for activities such as tai chi, yoga, or aerobics classes.
- ✓ School boards, municipalities, and community groups could develop cooperative agreements to share the use of facilities and human resources (e.g., community access to school facilities).
- ✓ Ensure a balance between physical activity routes and public transportation routes. Determine whether public transportation routes support walking or bicycling alternatives, and clearly identify potential hazards for active commuting.
- ✓ Encourage and support bicycle commuting by providing lanes separated from vehicle traffic, designated bicycle lanes, preferential signage, and signage reminding motorists to share the road.
- ✓ Provide an environment conducive to physical activity with linkages to residential, business, and retail areas with a system of well-networked paths and trails.
- ✓ Encourage active commuting by providing an aesthetically pleasing environment, which encourages physical activity. This can include tree-lined streets, green spaces, and so on.
- ✓ Ensure appropriate maintenance of sidewalks and paths to create a safe commuting environment.

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