Background
Part of the Alberta Centre for Active Living’s 2002 Alberta Survey on Physical Activity looked at whether perceived access to places and facilities influences self-reported physical activity among urban residents. Some evidence suggests that neighbourhoods have an independent effect on physical activity over and above individual demographic characteristics (Gauvin et al., 2001). Evidence has also shown that more facilities are available in higher SES neighbourhoods than in medium and low SES neighbourhoods (Estabrooks, Lee, & Gyurcsik, 2003).

Adults living in higher SES neighbourhoods report being more physically active (Gauvin et al., 2001), while children in higher SES neighbourhoods report more opportunities for physical activity (Duncan, Duncan, Strycker, & Chaumeton, 2002). This suggests that physical activity is a result both of the quality of the neighbourhood and the availability of facilities.

However, it is still unclear whether features in the neighbourhoods or the perceptions of the people living in those neighbourhoods most influence physical activity (see Giles-Corti & Donavan, 2002; Spence & Lee, 2003). We included several questions to address this issue in the 2002 Alberta Survey on Physical Activity.

Methodology
The sample consisted of 1,209 adults aged 18 years and over. Three separate sub-samples were drawn to represent the cities of Edmonton and Calgary and the rest of the province. We used a random-digit dialling approach to ensure that respondents had an equal chance to be contacted whether or not they were in the telephone directory. This survey took place over three months, from October to December 2002.

We collected information on demographics, current leisure-time physical activity (using the Godin Leisure-Time Exercise Questionnaire), beliefs, attitudes, and perceptions of neighbourhood.

Of particular interest was the response to the following two statements:

- "I have easy access to places where I can get physical activity," and
- "My neighbourhood has several free or low-cost recreational facilities."

Approximately 54% of the total number of valid households responded to the survey. A random sample of this size is considered accurate within +/- 3, 19 times out of 20.

While we can take the results of the age and gender breakdowns of the sample as an adequate reflection of the overall Alberta population, dividing further into sub-groups within the sample would not necessarily represent the Alberta population.

Results
Seventy-four per cent of respondents either agreed or strongly agreed with the statement that they had easy access to places where they could be physically active. Eighty-five per cent agreed or strongly agreed that their neighbourhood had several low-cost recreational facilities. Further, people who agreed or strongly agreed with either of these statements reported higher levels of total physical activity than those who were not in agreement.

When age, years of schooling, and income level were taken into account, easy access to places for physical activity was still a significant predictor of physical activity ($F_{(4, 619)} = 11.16, p < .001$), while low-cost recreational facilities located in the neighbourhood were not a significant predictor ($F_{(3, 614)} = 1.99, p = .114$).

Discussion
Most residents in urban areas in Alberta agree that they have access to places where they can be physically active. Most also state that some of these places are in their neighbourhoods and are available at a low cost. The easier the access to places and facilities, including low-cost facilities, the higher the activity level of residents.

Further, perceived ease of access to places and facilities (even those outside the neighbourhood) is a better predictor of physical activity than access to low-cost facilities within neighbourhoods.

The Alberta Centre for Active Living’s 2002 Alberta Survey on Physical Activity will be published in the fall of 2003.
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References


- Giles-Corti, B., & Donovan, R. J. (2002). Socioeconomic status differences in recreational physical activity levels and real and perceived access to a supportive physical environment. Preventive Medicine, 35, 601–611.