

## **2007 Alberta Survey on Physical Activity: A Concise Report**

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The Alberta Centre for Active Living is supported by

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## 2007 Alberta Survey on Physical Activity

### Background to the Survey

#### *What Is the Purpose of the Survey?*

The Alberta Centre for Active Living (formerly the Alberta Centre for Well-Being) has carried out a survey every other year since 1995 to monitor the status of physical activity in Alberta. This Alberta survey series is part of the centre's mandate to provide credible and user-friendly physical activity information for researchers and practitioners.



#### *Survey Method*

The centre sponsored a series of questions on physical activity for the 2007 Alberta survey (conducted by the Population Research Laboratory at the University of Alberta). The sample included 1,207 adults aged 18 years and over.

Data collection methods included the following:

- Data were collected by telephone interview between March 30, 2006, and May 18, 2006.
- The data included three separate subsamples, representing Edmonton, Calgary and the rest of the province.
- A random-digit dialling approach ensured that respondents had an equal chance of being contacted whether or not their household was listed in a telephone directory.
- The data also collected information on demographics, current leisure-time physical activity, beliefs, attitudes and perceptions of neighbourhood.

#### *Data Quality*

Depending on the response rate calculation used, between 28.9% and 42.5% of valid households responded to the survey. The random sample of 1,207 is considered accurate within  $\pm 2.8$ , 19 times out of 20. The subsample of 400 is considered accurate within  $\pm 5$ , 19 times out of 20.

Although the results of the age and gender sample breakdowns adequately reflect the overall Alberta population, the subsamples do not necessarily represent the Alberta population. We advise caution in generalizing the findings related to subsamples to the overall population.

### ***Estimating Leisure-Time Physical Activity Levels***

To estimate leisure-time physical activity levels, we used the following question (adapted from the *Godin Leisure-Time Exercise Questionnaire*, Godin & Shephard, 1985):

**Question:** Considering a seven-day period (a week), how many times a week, on average, do you do the following kinds of activity for more than 15 minutes during your free time?

- Strenuous activity (where the heart beats rapidly, e.g., running, jogging, hockey, football, soccer, squash, basketball, cross country skiing, judo, in-line skating, vigorous swimming, vigorous long-distance bicycling).
- Moderate activity (not exhausting, e.g., fast walking, baseball, tennis, easy bicycling, volleyball, badminton, easy swimming, alpine skiing, popular folk dancing).
- Mild activity (minimal effort, e.g., yoga, archery, fishing from a river bank, bowling, horseshoes, golf, snowmobiling, easy walking).

Weekly frequencies of strenuous, moderate and light activities are multiplied by their estimated value in METs<sup>1</sup> (nine, five and three, respectively). We calculated total weekly leisure activity by adding the products of the separate components.

Based on cut-offs determined by García Bengoechea, Spence, & McGannon (2005), we considered men sufficiently physically active if they expended 38 METs per week, and women sufficiently physically active if they expended 35 METs per week.

According to Jacobs, Ainsworth, Hartman, & Leon (1993), these measures equal 300 to 400 MET-minutes per day. This number of MET-minutes equals 2,000 kcals per week (Elosúa, García, Aguilar, Molina, Covas, & Marrugat, 2000). An energy expenditure of 2,000 kcals or more per week is associated with a reduced risk of heart disease (Paffenbarger, Wing, & Hyde, 1978).

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<sup>1</sup> A MET is the ratio of energy expended in kilocalories, divided by resting energy expenditure in kilocalories. A MET is a unit of resting metabolic rate. Thus, 2 METs are equivalent to an intensity twice that of the resting metabolic rate.

### ***Statistical Analyses***

We performed a series of chi-square analyses to test differences in leisure-time physical activity status (sufficiently active vs. insufficiently active) related to several sociodemographic, psychological and environmental factors.

To test differences between total leisure-time physical activity METs and sociodemographic, psychological and environmental factors, we conducted one-way ANOVAs (these analyses of variance measure differences between means).

Two separate multivariate logistic regressions allowed us to determine the unique contributions of psychological variables (e.g., self-efficacy) and environmental variables (e.g., perception of shops nearby) in predicting the likelihood of being sufficiently active when controlling for other variables (e.g., age).

Data were weighted to compensate for sample sizes in three categories—Edmonton, Calgary and “the rest of Alberta,” as these were not proportional to the Alberta population they represent.

## Factors Influencing Leisure-Time Physical Activity

### *Current Participation in Leisure-Time Physical Activity*

Our survey shows that 62.4% of Albertans (61.5% of women and 63.3% of men) are physically active enough to experience health benefits.

Three types of factors influenced leisure-time physical activity in our sample:

- sociodemographic factors
- psychological factors
- environmental factors

#### *Sociodemographic Factors*

##### i. Age

$$\chi^2 (5, 1178) = 41.53, p < 0.001$$

The survey divided results into six age groups. The percentage of sufficiently active people decreased with age:

- 76.2% (18–24)
- 72.4% (25–34)
- 63.1% (35–44)
- 59.1% (45–54)
- 58.3% (55–64)
- 44.6% (65+)

##### ii. Education

$$\chi^2 (2, 1200) = 21.65, p < 0.001$$

The percentage of sufficiently active Albertans was higher among people who completed high school or pursued post-secondary studies, compared to people who did not complete high school.

- 65.2% (pursued post-secondary studies)
- 60.3% (completed high school)
- 42.9% (did not complete high school)



### iii. Annual household income

$$\chi^2 (6, 931) = 17.28, p < 0.01$$

Overall, the percentage of sufficiently active Albertans was higher among people with the highest annual household income:

- 68.4% (> \$100,000)
- 66.4% (\$80,000–\$99,999)
- 62.5% (\$60,000–\$79,999)
- 62.9% (\$40,000–\$59,999)
- 49.3% (\$30,000–\$39,999)
- 49.2% (\$20,000–\$29,999)
- 52.9% (< \$20,000)

### iv. Marital status

$$\chi^2 (5, 1194) = 27.88, p < 0.001$$

The percentage of sufficiently active Albertans was highest among people who have never been married and people who are separated. Results related to marital status are:

- 70.4% (never married)
- 69.0% (separated)
- 63.4% (married)
- 57.1% (common-law or live-in partner)
- 49.5% (divorced)
- 40.3% (widowed)

### v. Employment status

$$\chi^2 (3, 1202) = 39.32, p < 0.001$$

The percentage of Albertans who are sufficiently active is highest among those who have both a paid job and are self-employed (81.6%).

The percentage of those who are sufficiently active is higher among those who have a paid job or who are self-employed, compared to those who neither have a paid job nor are self-employed.

However, these results may reflect the fact that a high proportion of retired older adults are in the group who neither have a paid job nor are self-employed.

- 81.6% (both paid job and self-employed)
- 69.3% (self-employed)
- 65.5% (paid job)
- 48.7% (neither a paid job nor self-employed)

### ***Psychological Factors***

We found differences in leisure-time physical activity related to three types of self-efficacy.

- i. General self-efficacy (i.e., confidence in being able to participate in regular physical activity)

$$x^2 (2, 1187) = 182.17, p < 0.001$$

The percentage of sufficiently active Albertans increases as general self-efficacy increases:

- 74.1% (high general self-efficacy)
- 51.6% (moderate general self-efficacy)
- 20.0% (low general self-efficacy)

- ii. Coping self-efficacy (i.e., confidence in being able to overcome potential barriers to physical activity such as time constraints, bad weather, feeling tired or in a bad mood)

$$x^2 (2, 1140) = 164.44, p < 0.001$$

The percentage of sufficiently active Albertans increases as coping self-efficacy increases:

- 83.7% (high coping self-efficacy)
- 71.3% (moderate coping self-efficacy)
- 40.4% (low coping self-efficacy)

- iii. Scheduling self-efficacy (i.e., confidence in being able to arrange one's schedule to participate in physical activity)

$$x^2 (2, 1171) = 93.34, p < 0.001$$

The percentage of sufficiently active Albertans increases as scheduling self-efficacy increases:

- 74.1% (high scheduling self-efficacy)
- 56.8% (moderate scheduling self-efficacy)
- 40.8% (low scheduling self-efficacy)

We also found differences in leisure-time physical activity behaviour resulting from people's beliefs, intentions and perceptions.

- iv. Belief in the health benefits of physical activity (outcome expectancy)

$$x^2 (2, 1185) = 34.15, p < 0.001$$

As the belief in the health benefits of physical activity increases, so does the percentage of sufficiently active Albertans:

- 68.4% (high outcome expectancy)
- 58.9% (moderate outcome expectancy)
- 41.9% (low outcome expectancy)

v. Intention to participate in regular physical activity in the near future

$$x^2 (2, 1186) = 125.08, p < 0.001$$

As the intention to participate in physical activity in the near future increases, so does the percentage of physically active Albertans.

Participants were asked whether they strongly agreed, agreed, were neutral, disagreed or strongly disagreed with the following statement: "It is my goal for the near future to participate in regular physical activity." Percentages of physically active Albertans in each response category were as follows:

- 71.2% (agree or strongly agree)
- 42.5% (neutral)
- 26.0% (disagree or strongly disagree)

vi. Perception that if they wanted to, they could easily participate in regular physical activity (perceived behavioural control)

$$x^2 (2, 1186) = 89.01, p < 0.001$$

As perceived opportunities to participate in regular physical activity increase, so does the percentage of sufficiently active Albertans.

Participants were asked whether they strongly agreed, agreed, were neutral, disagreed or strongly disagreed with the following statement: "If I wanted to, I could easily participate in regular physical activity." Percentages of physically active Albertans in each response category were as follows:

- 69.5% (agree or strongly agree)
- 54.0% (neutral)
- 28.6% (disagree or strongly disagree)

### ***Environmental Factors***

Many features of the perceived built environment had an impact on leisure-time physical activity.

i. The perception that one has easy access to places for physical activity

$$x^2 (2, 1188) = 15.71, p < 0.001$$

The percentage of sufficiently active Albertans rises with increases in perceptions about access to places for physical activity.

Participants were asked whether they strongly agreed, agreed, were neutral, disagreed or strongly disagreed with the following statement: "I have easy access to places where I can get physical activity." Percentages of physically active Albertans in each response category were as follows:

- 65.6% (agree or strongly agree)

- 56.8% (neutral)
  - 46.9% (disagree or strongly disagree)
- ii. The perception that many shops, stores or other places to buy things one needs are within easy walking distance from home

$$x^2 (2, 1171) = 13.28, p < 0.01$$

The percentage of sufficiently active Albertans rises with increases in perceptions of neighbourhood convenience.

Participants were asked whether they strongly agreed, agreed, were neutral, disagreed or strongly disagreed with the following statement: “Many shops, stores or other places to buy things I need are within easy walking distance of my home.” Percentages of physically active Albertans in each response category were as follows:

- 67.6% (agree or strongly agree)
- 59.0% (neutral)
- 56.9% (disagree or strongly disagree)

- iii. The perception that in and around one’s neighbourhood there are facilities for bicycling such as special bicycle lanes, bicycle paths and shared use trails for cyclists and pedestrians.

$$x^2 (2, 1137) = 11.33, p < 0.01$$

The percentage of sufficiently active Albertans rises with increases in perceptions of facilities for bicycling.

Participants were asked whether they strongly agreed, agreed, were neutral, disagreed or strongly disagreed with the following statement: “In and around my neighbourhood, there are facilities for bicycling such as special bicycle lanes, bicycle paths and shared use trails for cyclists and pedestrians.” Percentages of physically active Albertans in each response category were as follows:

- 67.1% (agree or strongly agree)
- 58.6% (neutral)
- 57.0% (disagree or strongly disagree)

- iv. The perception that the crime rate in one’s neighbourhood makes it unsafe to walk at night.

$$x^2 (2, 1162) = 9.53, p < 0.01$$

The percentage of sufficiently active Albertans rises with **decreases** in perceptions of crime in one’s neighbourhood making it unsafe to walk at night.

Participants were asked whether they strongly agreed, agreed, were neutral, disagreed or strongly disagreed with the following statement: “The crime rate in my neighbourhood makes it unsafe to go for walks at night.” Percentages of physically active Albertans in each response category were as follows:

- 65.4% (disagree or strongly disagree)
  - 55.5% (neutral)
  - 55.6% (agree or strongly agree)
- v. The perception that there is so much traffic on the streets that it makes it difficult or unpleasant to walk in one's neighbourhood
- $\chi^2 (2, 1163) = 7.10, p < 0.05$

The percentage of sufficiently active Albertans rises with **decreases** in perceptions of traffic making it difficult or unpleasant to walk.

Participants were asked whether they strongly agreed, agreed, were neutral, disagreed or strongly disagreed with the following statement: "There is so much traffic on the streets that it makes it difficult or unpleasant to walk in my neighbourhood." Percentages of physically active Albertans in each response category were as follows:

- 64.1% (disagree or strongly disagree)
  - 63.1% (neutral)
  - 52.4% (agree or strongly agree)
- vi. The perception that there are many interesting things to look at while walking in one's neighbourhood
- $\chi^2 (2, 1187) = 13.43, p < 0.01$

The percentage of sufficiently active Albertans rises with increases in perceptions of interesting things to look at.

Participants were asked whether they strongly agreed, agreed, were neutral, disagreed or strongly disagreed with the following statement: "There are many interesting things to look at while walking in my neighbourhood." Percentages of physically active Albertans in each response category were as follows:

- 67.3% (agree or strongly agree)
- 62.4% (neutral)
- 55.2% (disagree or strongly disagree)

## Predictors of Physical Activity

### *Sociodemographic Predictors*

As Table 1 shows, age and number of children were the only sociodemographic factors that predicted physical activity status (sufficiently active vs. insufficiently active).

Albertans who were 45–54, 55–64 and 65 or older were only 0.44, 0.42 and 0.39 times, respectively, as likely to be sufficiently active as Albertans aged 18–24.

Also, Albertans with two or more children under the age of 18 in the household were 0.57 times as likely to be sufficiently active as Albertans with no children under the age of 18 in the household.



### *Psychological Predictors*

After controlling for sociodemographic factors, the only psychological predictors of physical activity status were high general self-efficacy, moderate or high coping self-efficacy, and high intention to participate in physical activity (see Table 1):

- Albertans with *high general self-efficacy* were 2.08 times as likely to be active as Albertans with low general self-efficacy.
- Albertans with *moderate or high coping self-efficacy* were 2.24 and 4.53 times as likely to be sufficiently active, respectively, as Albertans with low coping self-efficacy.
- Albertans with *high intention* were 2.0 times as likely to be sufficiently active as Albertans with low intention.

**Table 1. Sociodemographic and psychological factors related to activity status**

Sociodemographic Variables	Step 1 <sup>a</sup>		Step 2 <sup>b</sup>	
	OR <sup>c</sup>	CI <sup>d</sup>	OR	CI
Gender				
Male	1		1	
Female	1.13	0.83–1.52	1.20	0.85–1.69
Age				
18–24	1		1	
25–34	0.98	0.50–1.91	1.07	0.52–2.20

Sociodemographic Variables	Step 1 <sup>a</sup>		Step 2 <sup>b</sup>	
	OR <sup>c</sup>	CI <sup>d</sup>	OR	CI
35–44	0.71	0.36–1.39	0.95	0.46–1.98
45–54	0.44*	0.22–0.86	0.54	0.26–1.12
55–64	0.42*	0.20–0.91	0.49	0.21–1.15
>65	0.39*	0.16–0.94	0.41	0.16–1.08
Education				
Less than high school	1		1	
High school	1.44	0.75–2.74	1.27	0.61–2.64
Post-secondary	1.49	0.84–2.63	1.13	0.60–2.13
Income				
< 20,000	1		1	
20,000–29,999	0.64	0.27–1.52	0.32*	0.11–0.91
30,000–39,999	0.80	0.35–1.83	0.54	0.19–1.49
40,000–59,999	1.02	0.47–2.21	0.53	0.20–1.37
60,000–79,999	1.03	0.48–2.21	0.50	0.20–1.28
80,000–99,999	1.18	0.54–2.59	0.49	0.19–1.30
> 100,000	1.36	0.64–2.89	0.50	0.20–1.27
Job status				
Yes, paid	1		1	
Yes, self-employed	1.47	0.96–2.24	1.24	0.77–1.99
Yes, both	2.26	0.95–5.35	1.63	0.66–4.04
No, neither	0.75	0.49–1.17	0.72	0.43–1.19
Children				
None	1		1	
One	0.73	0.47–1.14	0.79	0.49–1.29
Two or more	0.57**	0.38–0.87	0.59*	0.37–0.95
Marital status				
Never married	1		1	
Married	1.00	0.61–1.64	1.09	0.63–1.87

Sociodemographic Variables	Step 1 <sup>a</sup>		Step 2 <sup>b</sup>	
	OR <sup>c</sup>	CI <sup>d</sup>	OR	CI
Common-law	0.73	0.37–1.43	0.85	0.40–1.80
Divorced	0.79	0.41–1.52	0.58	0.28–1.23
Separated	1.93	0.62–6.02	1.90	0.54–6.67
Widowed	0.76	0.30–1.95	0.77	0.26–2.30

Psychological Variables	Step 1 <sup>a</sup>		Step 2 <sup>b</sup>	
	OR <sup>c</sup>	CI <sup>d</sup>	OR	CI
General self-efficacy				
Low SE			1	
Moderate SE			1.89	0.98–3.64
High SE			2.08*	1.10–3.93
Scheduling self-efficacy				
Low SE			1	
Moderate SE			1.16	0.68–1.97
High SE			1.30	0.79–2.14
Coping self-efficacy				
Low SE			1	
Moderate SE			2.24**	1.47–3.43
High SE			4.53**	2.65–7.73
Outcome expectancy				
Low OE			1	
Moderate OE			1.35	0.71–2.55
High OE			1.54	0.83–2.85
Intention to participate				
Low intention			1	
Moderate intention			0.96	0.46–1.98
High intention			2.00*	1.04–3.87

Psychological Variables	Step 1 <sup>a</sup>		Step 2 <sup>b</sup>	
	OR <sup>c</sup>	CI <sup>d</sup>	OR	CI
Perceived behavioural control				
Low PBC			1	
Moderate PBC			1.95	0.94–4.08
High PBC			1.44	0.74–2.80

**Table Notes:**

Self-efficacy scores range from 1 to 5 (not at all confident to completely confident). Outcome expectancy, intention and perceived opportunities range from 1 to 5 (strongly disagree to strongly agree).

<sup>a</sup> Step 1 refers to the variables entered first in the regression (in this case, socio-demographic variables).

<sup>b</sup> Step 2 refers to the variables subsequently entered in the regression (in this case, sociodemographic and psychological variables). This way, we determine the contribution of psychological variables in predicting activity status after controlling for socio-demographic variables.

<sup>c</sup> OR stands for “Odd Ratio.” OR is an indicator of the change in odds resulting from a unit change in the predictor (e.g., the change in the odds of being sufficiently active resulting from a unit change in self-efficacy). If the value is greater than 1, then it indicates that, as the predictor increases, the odds of the outcome occurring increase (and the opposite is also true). The first group in each variable category (the one assigned a value of 1) is a reference group to which the other values are compared.

<sup>d</sup> CI stands for “confidence interval.” CI is an estimate of the values between which the OR would fall in the actual population—rather than the sample—i.e., 95 out of 100 occasions.

\*  $p < 0.05$

\*\*  $p < 0.01$  compared to reference group

***Environmental Predictors***

As Table 2 shows, after controlling for sociodemographic factors, perception of neighbourhood convenience was the only environmental predictor of physical activity status. Those who agreed or strongly agreed that shops were within walking distance were 1.59 times as likely to be sufficiently active than those who disagreed or strongly disagreed.

**Table 2. Sociodemographic and neighbourhood factors related to activity status**

Sociodemographic Variables	Step 1		Step 2	
	OR	CI	OR	CI
<b>Gender</b>				
Male	1		1	
Female	1.01	0.74–1.37	1.02	0.74–1.40
<b>Age</b>				
18–24	1		1	
25–34	0.94	0.47–1.88	0.99	0.48–2.02
35–44	0.62	0.31–1.25	0.71	0.34–1.48
45–54	0.36*	0.18–0.73	0.39*	0.19–0.80
55–64	0.38**	0.17–0.85	0.40**	0.18–0.92
> 65	0.29*	0.12–0.71	0.30**	0.12–0.76
<b>Education</b>				
Less than high school	1		1	
High school	1.56	0.82–2.99	1.59	0.81–3.11
Post-secondary	1.58	0.89–2.80	1.56	0.87–2.81
<b>Income</b>				
< 20,000	1		1	
20,000–29,999	0.67	0.28–1.62	0.62	0.25–1.52
30,000–39,999	0.65	0.29–1.49	0.65	0.28–1.53
40,000–59,999	1.09	0.50–2.37	1.04	0.47–2.33
60,000–79,999	0.92	0.43–1.97	0.86	0.39–1.88
80,000–99,999	1.21	0.55–2.66	1.06	0.47–2.40
> 100,000	1.30	0.61–2.77	1.06	0.48–2.34
<b>Job status</b>				
Yes, paid	1		1	
Yes, self-employed	1.41	0.91–2.20	1.38	0.87–2.18
Yes, both	2.15	0.84–5.51	2.09	0.81–5.43
No, neither	0.84	0.54–1.31	0.80	0.51–1.27

Sociodemographic Variables	Step 1		Step 2	
	OR	CI	OR	CI
Children				
None	1		1	
One	0.73	0.46–1.15	0.71	0.44–1.13
Two or more	0.57*	0.37–0.87	0.57**	0.37–0.89
Marital status				
Never married	1		1	
Married	1.04	0.64–1.72	1.02	0.61–1.71
Common-law	0.79	0.39–1.58	0.76	0.37–1.56
Divorced	0.88	0.45–1.72	0.82	0.41–1.65
Separated	1.80	0.60–5.40	1.57	0.51–4.83
Widowed	1.16	0.47–2.83	1.22	0.49–3.08

Environmental Variables	Step 1		Step 2	
	OR		CI	
Access				
Disagree or strongly disagree			1	
Neutral			1.02	0.49–2.12
Agree or strongly agree			1.32	0.72–2.41
Shops close-by				
Disagree or strongly disagree			1	
Neutral			1.28	0.77–2.15
Agree or strongly agree			1.59**	1.09–2.32
Sidewalks in neighbourhood				
Disagree or strongly disagree			1	
Neutral			0.61	0.27–1.40
Agree or strongly agree			0.69	0.40–1.20
Bicycle lanes				
Disagree or strongly disagree			1	
Neutral			1.12	0.65–1.92
Agree or strongly agree			1.36	0.89–2.10
Low-cost facilities				
Disagree or strongly disagree			1	
Neutral			1.01	0.59–1.74
Agree or strongly agree			0.93	0.56–1.53
Crime rate makes it unsafe				
Disagree or strongly disagree			1	
Neutral			0.66	0.40–1.11
Agree or strongly agree			0.87	0.54–1.40

Environmental Variables	Step 1		Step 2	
	OR		CI	
Traffic interferes				
Disagree or strongly disagree			1	
Neutral			1.20	0.72–2.00
Agree or strongly agree			0.75	0.46–1.22
Many people engaging in physical activity in the neighbourhood				
Disagree or strongly disagree			1	
Neutral			0.82	0.52–1.30
Agree or strongly agree			1.01	0.66–1.55
Interesting things				
Disagree or strongly disagree			1	
Neutral			1.14	0.73–1.78
Agree or strongly agree			1.35	0.89–2.03

**Table Notes:**

\*  $p < 0.01$

\*\*  $p < 0.05$

## Conclusions and Recommendations

### *Activity Levels*

Currently, approximately 62% of Albertans are sufficiently active. This is an increase from 2005, when only 60% of Albertans reported being sufficiently active (see Appendix, p. 24).

### *Factors Affecting Leisure-Time Physical Activity*

According to our survey, the most significant factors affecting leisure-time physical activity are:

- age
- number of children under the age of 18
- general self-efficacy
- coping self-efficacy
- intention to participate in physical activity
- perceptions of neighbourhood convenience



### **Taking a Determinants of Health Approach**

Several sociodemographic, psychological and environmental factors affected and/or independently predicted participation in physical activity. This finding further supports the determinants of health framework advocated in the Alberta surveys on physical activity conducted in 1999, 2002 and 2005 (García Bengoechea & Spence, 2003; García Bengoechea, Spence, & Fraser, 2005; Spence & Poon, 2000).

The term “determinants of health” includes the broad range of personal, social and environmental factors (beyond personal risk factors and coping skills) that affect individual and population health. The determinants of health framework, along with current and previous research, underscores the need for a balance between individual behaviour change strategies and environmental change strategies (Wharf-Higgins, 2002).

The fact that several sociodemographic, psychological and environmental factors affect and/or independently predict participation in physical activity highlights the need to position policy initiatives (Alberta Active Living Task Force, 1998) and public health campaigns to reduce physical inactivity (Health Canada, 1998) within a determinants of health framework.

As the authors of the *1999 Alberta Survey of Physical Activity* noted, “...encouraging more Albertans to become physically active will require a shift in policies and practices that reflect this broader health determinants thinking” (Spence & Poon, 2000, p. 9). Today, as then, it is important to understand that physical inactivity is a public health issue and not simply a personal problem.

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## Appendix

**Table 3: Evolution of Variables of Interest (2000–2007)**

Variable	2000	2002	2005	2007
Participation in leisure-time physical activity				
% of Albertans who state that they often participate in regular physical activity long enough to work up a sweat	35%	32%	N/A <sup>a</sup>	N/A <sup>a</sup>
% of Albertans who are active enough to experience health benefits	54.3%	57%	60.2%	62.4%
METs per week spent by 50% of Albertans	39 or more	41 or more	44 or more	45 or more
Awareness of the importance of being physically active				
% of Albertans who agree or strongly agree that physical activity will keep them healthy	91%	91%	93.1%	93.6%
% of Albertans who agree or strongly agree that physical activity will reduce their chances of getting serious health problems	83%	87%	88.2%	88.2%
Confidence in being able to overcome barriers to physical activity				
% of Albertans who are very to extremely confident that they can be physically active when they are a little tired	37%	45%	25.7% <sup>b</sup>	31.2% <sup>b</sup>
% of Albertans who are very to extremely confident that they can be physically active when they have many other demands on their time	20%	27%	39.8%	42.8%
% of Albertans who are very to extremely confident that they can be physically active when the weather is bad	32%	35%	31.9%	39.2%

	2000	2002	2005	2007
Perceived opportunities to be physically active				
% of Albertans who agree or strongly agree that they have easy access to places where they can get physical activity	70%	72%	75.1%	81.1%
Sufficiently active Albertans by provincial location (%)				
Edmonton	51.1%	55.9%	61.4%	61.1%
Calgary	56.8%	59.9%	59.2%	62.3%
Other Alberta	54.4%	55.5%	60.2%	63.8%

**Table Notes:**

<sup>a</sup> This question was not asked in the 2005 or 2007 survey.

<sup>b</sup> The 2005 and 2007 question asked respondents about their confidence to be physically active when they were *tired* and not when they were *a little tired*, as in 2000 and 2002. This helps explain the considerably lower percentage.