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ATLANTIC MEN BECOMING COUCH POTATOES Increased Heart Disease Risk Will Cost Health Care Systems

Halifax Nova Scotia, Tuesday February 8, 2000.... Atlantic Canadians will pay more per capita for their health care than most Canadians in the coming years, as a result of their own physical inactivity levels. Fifteen years ago Atlantic Canadians were more physically active than most Canadians, exercising more frequently in their leisure time. Today all four Atlantic provinces rank significantly *below* the Canadian average.¹

"While Atlantic Canadian men had a relatively lower risk of heart disease in 1985 compared to other Canadians, they now have a significantly higher risk," says Jane Farqharson, Executive Director of Heart Health Nova Scotia. "Being inactive carries similar risks to smoking more than 20 cigarettes a day. Strategic investments in sports, recreation and exercise promotion programs at this time can reverse these disturbing trends, restore an earlier Atlantic advantage, and reduce long-term health care costs."

With physical inactivity clearly identified as a primary risk factor in coronary heart disease, the decline in exercise levels has serious implications for long-term health care costs.² Regular physical activity greatly reduces premature mortality, and particularly the risk of dying from heart disease. It also reduces the risk of developing diabetes, hypertension, and colon cancer; enhances mental health; fosters healthy muscles, bones and joints; improves behavioral development in children and adolescents; and helps maintain function and preserve independence in older adults, all of which produce additional savings to the health care system.³

¹ Statistics Canada, *Health Statistics, National Population Health Surveys,* and *CANSIM databases,* Matrices M1011 and M6367-6371. Percentage changes are calculated by correlating Statistics Canada's electronic population health data with provincial population figures for the corresponding years. Caution must be exercised in interpreting trend for Prince Edward Island as sample sizes are smaller and produce a larger margin of error than for the other provinces.

² Dr. Adrienne Hardman, "The Benefits of Low-Intensity Exercise," in N.G. Norgan (ed.), *Physical Activity and Health, Society for the Study of Human Biology Symposium 34*, Cambridge University Press, Cambridge, 1992, page 149.

³ U.S. Department of Health and Human Services, *Physical Activity and Health: A Report of the Surgeon-General*, Atlanta, Georgia, 1996, pages 7-8; Prof. Robert Malina (University of Texas), "Physical Activity and Behavioural Development," in Norgan, op. cit., pages 101-120; Prof. Andrew Steptoe (St. George's Hospital Medical Centre, London, "Physical Activity and Psychological Wellbeing," in Norgan, op. cit., pages 207-229; William P. Morgan (ed.), *Physical Activity and Mental Health*, Taylor and Francis, Washington D.C., 1997.

South of the border, government has responded to the inactivity crisis. United States health authorities have identified increasing physical activity as a key factor in controlling health care costs, through the prevention of unnecessary illness, disability and premature death, and the maintenance of an improved quality of life into old age.⁴ And the U.S. Surgeon-General has issued a "national call to action" to put increased physical activity on the same level as the use of seat belts and the discouragement of tobacco use, because of the strong evidence that it will produce comparable "clear and substantial health gains."⁵

"Our *Play Sport: Live Longer* billboards have been around Metropolitan Halifax and other parts of the province for some months now, and clearly show one part of a solution," says Scott Logan, Executive Director of Sport Nova Scotia. "These statistics identify a worrying trend. The long-term message about inactivity is clear; if it doesn't hit you in the heart it will hit you in the pocket book. There's never been a more important time to make sport a significant part of the province's long-term planning and investment," he added.

While more Canadian men than ever are exercising in other parts of the country, males in the Atlantic region are becoming couch potatoes. In all four Atlantic provinces, there has been a dramatic decline in physical activity by men. In fact, men are entirely responsible for the negative population health trend as a whole.

"Every time user fees are introduced, or facilities are closed, access to recreation and sport is denied to another group of Atlantic Canadians. Combined with our changing, more sedentary lifestyles, these people *become* the sorts of statistics we're seeing," says Dawn Stegen, Executive Director of Recreation Nova Scotia.

Six out of ten Atlantic region men are physically inactive in their free time, with declines in male activity rates of 36% in P.E.I., 18% in New Brunswick, 13% in Nova Scotia, and 4% in Newfoundland since 1985.

In 1985, 48% of Maritime men exercised on a regular basis compared to just 42% of Canadian men. Today, 44% of Canadian men exercise regularly, compared to 42% of Nova Scotia men, 40% of Newfoundland men, 39% of New Brunswick men, and only 31% of men in Prince Edward Island.

A recent Statistics Canada analysis controlling for age, education, income, smoking, blood pressure, weight, and other factors, found that sedentary Canadians have *five times* the risk of developing heart disease as those who exercise moderately in their free time.

⁴ David Satcher, M.D., Ph.D, Director, U.S. Centers for Disease Control and Prevention, and Philip R. Lee, M.D., Assistant Secretary for Health, in Forward to the *Report of the U.S. Surgeon-General*, footnote above.

⁵ Audrey F. Manley, M.D., Preface to the *Report of the U.S. Surgeon-General*, footnote above.

Sedentary Canadians are 60% more likely to suffer from depression than those who are active, and Statistics Canada concluded that, "physical activity has protective effects on heart health and mental health, that are independent of many other risk factors."⁶

Current trends not only predict a poorer health prognosis for Atlantic Canadians compared to the national average, but will also increase health care costs in the long run. Cardiovascular disease costs Canadians more than \$20 billion a year in direct and indirect costs, 15% of the total cost of all illnesses, and is the largest cost among all diagnostic categories.⁷ Diseases of the circulatory system accounted for more hospital days than any other physical illness, 6.3 billion days in 1996, and taxpayers paid more than \$5 billion in hospital costs alone for cardiovascular disease.⁸

⁶ Jiajian Chen and Wayne J. Millar, "Health Effects of Physical Activity," Statistics Canada, *Health Reports*, volume 11, no. 1, Summer, 1999, catalogue no. 82-003-XPB, pages 21-30, esp. Table 1, page 24. The statistics presented here refer to regular physical activity at a moderate level of energy expenditure, which is calculated in the National Population Health Survey as total kilocalories expended per kilogram of body weight per day (kcal/kg/day or KKD). Energy expenditure of 1.5 to 2.9 KKD is considered "medium" energy expenditure; 3 or more KKD is "high" and less than 1.5 KKD is "low." "Regular" physical activity is at least 15 minutes of leisure time physical activity 12 or more times per month. (*Health Reports*, 11,1, page 23). The Statistics Canada analysis cited here found that those with a low level of regular physical activity had 3.7 times the odds of developing heart disease as those who exercised moderately (*ibid.*, page 24). For that reason the statistics cited refer to those expending 1.5 ore more KKD regularly, and the phrase "physical inactivity" includes those with low energy expenditure in their free time.

⁷ Heart and Stroke Foundation, Health Canada, Statistics Canada, *The Changing Face of Heart Disease and Stroke in Canada 2000,* pages 61-62: "Cost of Cardiovascular Disease," Heart and Stroke Foundation, Ottawa, 1999.

⁸ Canadian Institute for Health Information, *Hospital Morbidity Database, 1995-96,* cited in ACPH, *Toward a Healthy Future,* exhibit 6.4, page 142 on hospital days; and *The Changing Face of Heart Disease,* Table 2-2, page 62, adjusted to 1996 dollars, on hospital costs for cardiovascular disease.

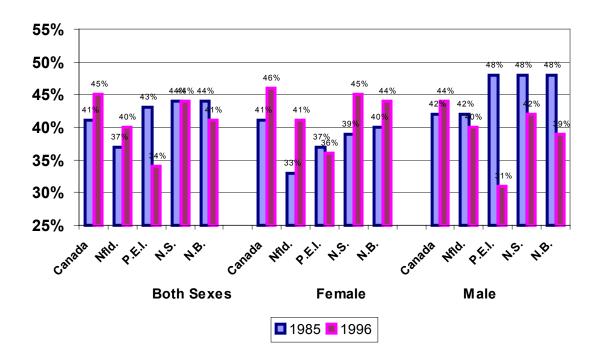


Chart 3: Persons Who Exercise, 1985 - 1996 (%)ⁱ

(i) Statistics Canada, *CANSIM database* Matrix #M1011, Tables H501100 - H501212; available at <u>http://cansima.statcan.ca/cgi-win/CNSMCGI.EXE</u> Percentages calculated by the author using population figures for 1985 and 1996 from Statistics Canada, *CANSIM Database*, Matrices #M6367 - M6371 inclusive, and selected Tables from C892268 to C893542. In this, as in all provincial tables, caution must be exercised in interpreting trends for Prince Edward Island, as sample sizes are frequently small and produce a larger margin of error than for the other provinces.

*These statistics were identified in a GPI Atlantic report for the Maritime Centre of Excellence for Women's Health.

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For more information, contact:

Ronald Colman, Ph.D	Dawn Stegen	Steve Fairbairn
Director, GPI Atlantic	Recreation Nova Scotia	Sport Nova Scotia
Phone: 823-1944	Phone: 425-1128	902-425-5450
e-mail: gcolman@istar.ca	stegenda@sportns.ns.ca	fairbasg@sportns.ns.ca

¹ Statistics Canada, *CANSIM database* Matrix #M1011, Tables H501100 - H501212; available at <u>http://cansima.statcan.ca/cgi-win/CNSMCGI.EXE</u> Percentages calculated by the author using population figures for 1985 and 1996 from Statistics Canada, *CANSIM Database*, Matrices #M6367 - M6371 inclusive, and selected Tables from C892268 to C893542. In this, as in all provincial tables, caution must be exercised in interpreting trends for Prince Edward Island, as sample sizes are frequently small and produce a larger margin of error than for the other provinces.