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**MEASURING SUSTAINABLE DEVELOPMENT**

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**APPLICATION OF THE GENUINE PROGRESS INDEX TO BRITISH COLUMBIA**

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# THE COST OF PHYSICAL INACTIVITY IN BRITISH COLUMBIA

## EXECUTIVE SUMMARY

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## EXECUTIVE SUMMARY

Physical activity provides proven health benefits. It protects against heart disease, stroke, hypertension, type 2 diabetes, colon cancer, breast cancer, osteoporosis, obesity, depression, anxiety, and stress. Epidemiological studies estimate that 36% of heart disease, 27% of osteoporosis, 20% of stroke, hypertension, diabetes 2, and colon cancer, and 11% of breast cancer are attributable to physical inactivity.

Regular physical activity also protects against obesity and assists weight control; fosters development of healthy muscles, bones and joints; increases strength and endurance; improves behavioural development in children and adolescents; and helps maintain function and preserve independence in older adults. Studies show that regular exercisers have much less *overall lifetime morbidity* than those who are sedentary, indicating that avoided medical costs due to physical activity are not simply deferred to older ages.

According to the Canadian Fitness and Lifestyle Research Institute, 47% of British Columbians and 61% of Canadians in 1999 were too inactive to reap the health benefits of regular physical activity. According to the Canadian Community Health Survey, 38% of British Columbians are physically inactive. While B.C. still has the highest rate of physical activity in Canada, this rate has declined 1.1% from 27.2% in 1994 to 26.9% in 1999). This is due to a decrease in physical activity of 6.6% among men, which more than offsets an increase of 5.8% among women. Another 22% of British Columbians are moderately active.

It is estimated that physical inactivity costs the British Columbian health care system \$185.7 million a year in direct costs (hospital, physician, drug, institutional and other costs) equal to 1.6% of total government spending on these services. This spending is currently added to the provincial Gross Domestic Product and economic growth statistics, and is thus mistakenly taken as a sign of prosperity and progress. The Genuine Progress Index counts this spending due to physical inactivity as a cost – not a gain – to the economy.

Physical inactivity costs the British Columbian economy an additional \$236 million each year in indirect productivity losses due to premature death and disability. Adding direct and indirect costs, the total economic burden of physical inactivity in British Columbia is estimated at \$422 million annually.

More than 1700 British Columbians die prematurely each year due to physical inactivity, accounting for 6.4% of all premature deaths. These premature deaths result in the loss of more than 4,380 potential years of life every year in the province before age 70. In other words, if all British Columbians were physically active, the province would gain 4,380 productive years of life each year, with corresponding gains to the economy. In Canada, with a physical inactivity rate of 61%, premature deaths due to physical inactivity account for 10.3 % of all premature deaths.

If just 10% fewer British Columbians were physically inactive – that is, if the rate of physical inactivity were 34.2% instead of 38% - the province could save an estimated \$16.1 million every year in avoided hospital, drug, physician and other direct costs. Added to an estimated \$19.9 million in productivity gains, total economic savings to British Columbia from a 10 % reduction in physical inactivity amount to \$36 million.

Given the enormous health care burden of a sedentary lifestyle, health campaigns aimed at promoting regular physical activity, including provision of adequate access to quality sport and recreation programs and facilities for all British Columbians, have the potential to reduce the enormous human and economic burden of physical inactivity.