

# **THE COST OF PHYSICAL INACTIVITY IN HALIFAX REGIONAL MUNICIPALITY**

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**For:  
The Heart and Stroke Foundation of Nova Scotia**

## **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. Evidence indicates that in Halifax Regional Municipality 30% of heart disease, 22% of osteoporosis, 16% of stroke, hypertension, type 2 diabetes, and colon cancer, and 9% 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.

Urban planning offers excellent opportunities to increase chances for physical activity of residents by making walking or cycling viable alternatives to motorized transportation and by providing access to sports and recreation facilities. A recent study conducted in Atlanta, Georgia, found that walkability and connectedness of neighbourhoods are strongly associated with a decrease in the risk of obesity, while increased time spent in a car is associated with increasing risk of obesity.

According to the Canadian Community Health Survey, 48% of Halifax Regional Municipality (HRM) residents, 50% of Nova Scotians, and 47% of Canadians were physically inactive in 2003. HRM has the lowest rate of inactivity for any of the Nova Scotia statistical health regions, two of which have rates of inactivity of 54% (the South-SW Nova Scotia region and the Pictou-Guysborough-Antigonish-Strait region).

The evidence is clear that increased physical activity would save the province millions of dollars a year in avoided health care costs. It is estimated that physical inactivity in HRM costs the provincial health care system \$16 million a year in hospital, physician and drug costs alone.

When all direct health care costs are added, including private expenditures, the sedentary lifestyle of nearly half of HRM residents costs the province, and therefore the taxpayer, \$23.6 million a year in direct medical care expenditures. It should be noted that these cost estimates are quite conservative since they are based on the less stringent guidelines for physical inactivity now used by the Canadian Community Health Survey (resulting in a 50% rate of inactivity for HRM as compared with the 62% rate of earlier studies) and also the costs of mental health due to disorders related to physical inactivity are not included.

This spending is currently added to the provincial Gross Domestic Product and economic growth statistics, and is thus 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 in HRM costs the provincial economy an additional \$ 44.7 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 HRM is estimated at over \$68 million annually. This amounts to \$180 per person per year in Halifax Regional Municipality.

Two hundred HRM residents die prematurely each year due to physical inactivity, accounting for 7% of all premature deaths in the municipality. These premature deaths result in the loss of 850 potential years of life every year in HRM before age 70. In other words, if all HRM residents were physically active, the municipality would gain 850 productive years of life each year, with corresponding gains to the economy.

An increase in the rate of physical activity could save the province millions of dollars. If just 10% fewer residents of HRM over the age of 12 were physically inactive, the rate of physical inactivity would be 43.2% (10% of 48 is 4.8%, subtracted from 48% = 43.2). With this lower rate of physical inactivity, the province could save an estimated \$1 million every year in avoided hospital, drug, and physician costs, and \$1.65 million in total health care spending. Added to an estimated \$3.1 million in productivity gains, total economic savings from a 10% reduction in physical inactivity amount to \$4.75 million.

Given the enormous health care burden of a sedentary lifestyle, a regional plan in HRM that provides for safe and walkable communities, sidewalks and biking paths, as well as access to quality sport and recreation programs and facilities, has the potential to reduce the enormous human and economic burden of physical inactivity, and to improve the health of HRM residents.