

EVERGREEN



Evergreen is a registered national charity founded in 1991. Its mission is to bring communities and nature together for the benefit of both. Evergreen engages people in creating and sustaining healthy, dynamic outdoor spaces - in schools, communities and homes. It believes that local stewardship creates vibrant neighbourhoods, a healthy natural environment and a sustainable society for all

Scope of Engagement

The engagement for this project involved the application of the Life at Risk™ quantitative engine to the Canadian population for the purposes of understanding the effects of lowering childhood obesity and increasing physical activity.

Evergreen's Challenges

In order to work out the long and short-term strategies addressing the issues of increasing obesity and lack of physical activity among Canadian school children, Evergreen needed to know:

- The expected future obesity prevalence among Canadian school children and associated health and economic impacts;
- The expected future involvement of Canadian school children in physical activity;
- The degree to which risk factors for obesity will affect its future prevalence among Canadian school children; and
- The effect of the changes in school children exposure to obesity risk factors and changes in their involvement with physical activity on youth obesity prevalence and associated health and economic impacts.

RiskAnalytica Solutions

- **Obtaining historical prevalence for obesity and physical activity among Canadian school children.** RiskAnalytica obtained the necessary historical data from the Canadian statistical agencies. The data were then screened for quality and completeness as well as to ensure that they satisfy all the necessary modeling assumptions.
- **Identifying obesity risk factors and their health and economic impact on obesity prevalence.** RiskAnalytica performed a review of academic literature and identified risk factors that were proven to be correlated with obesity among children of school age.

- **Conducting base and counterfactual simulation scenarios.** RiskAnalytica applied its Life at Risk™ framework to conduct the base and counterfactual simulation scenarios of future obesity prevalence among school children, their involvement with physical activity and exposure to risk factors associated with obesity over the next thirty years. The base scenario assumed no changes in school children's involvement with physical activity and in their exposure to risk factors. The counterfactual scenario assumed changes in the involvement and exposure that were expected as the result of possible Evergreen's strategies aimed at reducing youth obesity and physical inactivity. In the course of the analyses, health, life and economic impacts of future obesity prevalence and physical activity exposure were computed for base and counterfactual scenarios.
- **Using RiskAnalytica's analysis as a benchmark for designing future strategies.** The results of RiskAnalytica's analysis demonstrated that the increase physical activity among the Canadian schoolchildren and the decrease of their exposure to the obesity risk factors is expected to have substantial impacts on future prevalence of obesity and the associated life, health and economic consequences. The analysis identified how physical activity and risk factors are expected impact child obesity prevalence and its consequences in the long and the short run. Using the results of the RiskAnalytica's analysis will enable Evergreen to design more effective strategies for dealing with obesity and physical inactivity among school children in Canada.