

Mortality Projections for Social Security Programs in Canada\*

Office of the Chief Actuary

Presented at the Living to 100 Symposium

Orlando, Fla.

January 8–10, 2014

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## **Abstract**

Worldwide, the 20<sup>th</sup> century brought tremendous reductions in mortality at all ages for both males and females. The reductions in mortality, combined with the aging of the baby boomers and lower fertility rates, are projected to increase the proportion of the Canadian population aged 65 and older in the coming decades. This paper examines past mortality trends in Canada and discusses how these trends may change over the next 75 years, thus influencing the growth of the elderly population. In addition, this paper describes the methodology and assumptions used to project future mortality rates in Canada, including assumed annual rates of mortality improvement and resulting projected life expectancies. These projections by the Office of the Chief Actuary are used for the purpose of actuarial valuations of the Canada Pension Plan and the Canada's national Old Age Security Program. This paper also discusses mortality by causes of death, provides international mortality comparisons, and looks at stochastic time series methods that are used to help quantify the variability in the mortality rate projections.