

## **Improvement in Late-Life Mortality and Its Impact on the Increase in the Number of Centenarians in Quebec (Canada)**

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# Improvement in Late-Life Mortality and Its Impact on the Increase in the Number of Centenarians in Quebec (Canada)

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## Abstract

The recent decrease in adult and late-life mortality led to a very rapid increase in the number of centenarians within low mortality countries. The purpose of this paper is to examine the increase in the number of centenarians in Quebec (Canada) across birth cohorts (1871 to 1901), and to outline some of the underlying demographic mechanisms involved. We study the demographic situation of centenarians from Quebec (Canada) using all aggregated data available since 1871 (census data, vital statistics, and population estimations). Census data and population estimates are taken from Statistics Canada, while vital statistics come from the Canadian Human Mortality Database (CHMD, 2014 [www.bdlc.umontreal.ca](http://www.bdlc.umontreal.ca)) and the Institut de la statistique du Quebec.

With demographic indicators such as the centenarian ratio, the survival probabilities and the maximal age at death, we try to demonstrate the remarkable progress realised in old age mortality. We also analyze the determinants of the increase in the number of centenarians in Quebec: increase in the number of births, in the probabilities of surviving from birth to age 80, from age 80 to 100. Among the factors identified, the improvement in late-life mortality is the main determinant of the increase of the number of centenarians.

This study stresses the importance of monitoring the number as well as the quality of life of this emerging population of centenarians. It also helps us gain greater perspective on what should be expected in the coming years among low mortality countries such as Canada.

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