

## **Comparative analysis of working age population mortality in selected developed countries**

### **Abstract**

The main aim of this thesis was to analyze trends in mortality situation of working-age population (20–64 years old) in 31 developed countries in period 1995–2010 and to find similarities and differences between them. Temporary life expectancy was used as an indicator which summarizes the intensity of mortality in productive age. One-dimensional and two-dimensional decomposition revealed the contributions of individual age groups and selected nine major groups causes of death defined by ICD to the difference in temporary life expectancy values between 1995 and 2010 in five selected countries. An analysis of the development of this indicator has shown that there has been a prolongation of life span in working age in all surveyed countries and differences in mortality rates between countries decreased. Major cause of this trend was probably reduction of the mortality rate in the middle-aged population, mainly of external causes, in the 20–54 age group in countries with lower life expectancy rates. However, to verify this hypothesis, it would be necessary to analyze other developed countries with a higher level of mortality in working age population than Bulgaria and Lithuania. Countries with higher temporary life expectancy, Sweden, Ireland and Czechia, have experienced only moderate growth, the largest shift among them is in reducing mortality rate in malignant neoplasms in women and circulatory diseases in men, aged 40–64 years.

**Keywords:** mortality, productive ages, developed countries, comparative analysis, temporary life expectancy, causes of death