

# **The Mortality Gradient. An Analysis of Sweden Using Full-Population Data, 1950-2020**

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## **Abstract**

In most contemporary developed societies, health and longevity vary dramatically by education, income, and social class. Mounting evidence suggest that this has not always been the case. In the past, when mortality to a large extent was determined by the spread of infectious diseases, there was no universal mortality gradient across societies, even though there are plenty of examples where mortality differed by wealth or occupation in some places, during some periods. Research on Sweden has previously demonstrated that the modern, universal, socioeconomic gradient in adult mortality emerged from around the mid-twentieth century, while mortality differences were even reversed for men earlier in the century. In this paper we present a detailed analysis of the development of socioeconomic differences in adult mortality in Sweden between 1950 and 2020; the period when the modern gradient was definitely established and also grew steeper by each decade. We use linked full-population data from censuses and death registers including detailed information about occupation, income and education, as well as place of residence and cause of death, offering the ability to examine the issue with unique precision.

The analysis charts the regional patterns and rural-urban differences in age-specific mortality by socioeconomic status. We also analyze the long-term development of the socioeconomic gradient by cause-of-death. The analyses will offer unique insights into the mechanisms driving the diverging mortality gradient, linked to differences between locations in lifestyles and behavior but also the environmental insults they subject their residents to. In doing so, this detailed analysis will shed new light on where and when the gradient emerged and in which diseases, which will contribute to a fuller understanding of this important process in demographic history.

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