

Abstract

This thesis is focused on the development of HIV/AIDS mortality in the world starting from the year 1990 and the main goal is estimating the possible future development of the number of inhabitants of the world and defined regions and the influence of HIV/AIDS on the number of inhabitants up to the year 2065. The possible number of HIV/AIDS deaths and people, who were not born because of HIV and AIDS, is computed up to this year. In the theoretical part of the thesis, the most important institutions, which include fight against HIV and AIDS as a part of their programme, are presented. Natural history of HIV infection and the successes in the research of HIV vaccine are described. In the analytical part, the demographic reproduction of the population of the world and selected regions between years 1950 and 2010 is described, followed by population projection of the world and regions up to year 2065 using the cohort component method. The projection is created in four variants. The first one eliminates the HIV/AIDS mortality. The second one is the constant variant, which conserve the level of HIV/AIDS mortality from the year 2010 up to the year 2065. Last two variants, higher and lower, consider changing levels of HIV/AIDS mortality at time. According to the results of this population projection, HIV/AIDS will be still one of the common causes of death. Regions, which experience fast population growth, can have in some cases rising number of HIV/AIDS related deaths although the level of HIV/AIDS related mortality will decrease.