Tuberculosis is a serious infectious disease responsible for significant morbidity and mortality throughout the world. The Czech Republic ranks among countries with the world lowest incidences of tuberculosis, which is achieved by a very well conducted system of tuberculosis surveillance and control. This system includes vaccination of newborns against tuberculosis, whose preservation is currently a hot issue in the Czech Republic.

In my thesis I focus on the adverse effects of the tuberculosis vaccine and the issue of current vaccination strategies. The thesis also contains a general chapter dealing with the immunological principals of vaccination, which is neccessary for proper understanding of how the vaccine works. Also included are chapters concerning the tuberculosis disease and its etiological agent, Mycobacterium tuberculosis. The quoted information comes from the published results of international studies, and the quoted statistical data from the reports published by SÚKL, ÚZIS and WHO. The discussion on possible vaccination strategies, their risks and benefits, is based, among others, on declaration of the Czech professional medical associations, to whom it highly concerns.

It can be concluded that, concerning low incidences of tuberculosis in the Czech Republic, along with a well conducted system of tuberculosis control and surveillance, low BCG vaccine efficacy and the possible risk of serious adverse effects, that it is neccessary to re-evaluate the current vaccination strategy in the Czech Republic. This recommendation is necessary at least until the development of a new, safer and more effective vaccine against tuberculosis.