The purpose of this thesis is to define norms for inspiratory (Pimax) and expiratory (Pemax) pressures and
mouth occlusion pressure (P0.1) in healthy white population of the 16-17 age group in the Czech
Republic, specifically the capital city of Prague and its close vicinity. Furthermore, this work aspires to
ascertain whether there is a correlation between the respiratory pressures, P0.1 and selected
anthropometric and pulmonary values. In order to define the norms, 79 children were tested, including
41 boys and 38 girls 16 to 17 years old. After establishing the subjects’ case histories, anthropometric,
spirometric inspiratory, expiratory and forced vital capacity measurements were made. The study
defined the norms of respiratory pressures and P0.1 in 16 to 17-year-old boys and girls, thus achieving
its main goal. Furthermore, a difference was found between the average measured Pimax and Pemax
values for boys and girls, with the boys showing higher values comparing with the girls. The study did
not ascertain a correlation between respiratory pressures, P0.1 and selected anthropometric values (age,
height, weight, BMI, BSA). No correlation was found between respiratory pressures and static
pulmonary volumes.