

# 1 ABSTRACT

Asthma is the most common chronic childhood disease in developed countries and is a complex disease that has high social and economic costs.

The aim of this questionnaire based study was to describe the prevalence of asthma in the population of 13-15 years old children in the Czech Republic and to determine the risk factors predisposing to asthma and allergies. During the september 2005 we've sent 3775 questionnaires to 64 grammar schools in the Czech Republic and till the end of february 2006 we've received 2050 questionnaires back.

Of these 2050 children 111 (5,41%) were according to our criteria determined as asthmatic and 765 (37,3%) as nonallergic. Among the asthmatic children there were 72 (64,9%) boys and 39 (35,1%) girls. Asthmatic children were more often described as messy (60,6% vs. 50,0%; OR=1,54) and helpless (25% vs. 14,9%; OR=1,91;  $1,06 < OR < 3,13$ ). According to the results of our study we may also say, that early BCG vaccination may reduce the risk of developing asthma, but not the risk of allergies. Our data also suggest, that parasite infections do not protect against asthma and it seems, that they may represent one of the risk factors predisposing to asthma. We've also found no association between asthma and the type and frequency of the hygiene.