Objective: The objective of this study was to measure the prevalence of parental smoking and its association with respiratory symptoms among 6-15 years old school boys in Al-Khobar city, Saudi Arabia.

Methods: This is a cross-sectional study. The methodology included the distribution of a self-administered questionnaire, which was filled by the parents of 1482 school boys who satisfied the selection criteria of the study.

Results: The overall rate of smoking among parents of this sample was 18.2% (32% among fathers and 4% for mothers). There was an increased risk between parental smoking and respiratory symptoms among asthmatic and non-asthmatic children. The magnitude of this risk was variable for different respiratory symptoms. Smoking rate among parents of asthmatic children was significantly higher than in those with normal children although the logistic regression model showed paternal smoking to be significantly associated with bronchial asthma in their children.

Conclusions: There is an increased risk of respiratory symptoms among asthmatic and non-asthmatic children because of parental smoking. The smoking rate and trend among fathers and mothers were comparable to those reported earlier indicating an on-going problem. School children with smoking parent(s) may better be screened for bronchial asthma. Management of children presenting with respiratory symptoms should include inquiry about exposure to passive smoking. Tobacco smoking should be considered a public health problem with serious implications and its import should be banned.