Objective The aim of the present study was to assess the association between smoking and both behavioral and environmental factors among adolescents in the public school system in the city of Campina Grande (northeastern Brazil). Methods An analytical cross-sectional study was carried out involving 574 school children between 10 and 19 years, with the use of a structured questionnaire addressing behavioral factors, environmental factors and smoking. The chi-squared test and Fisher’s exact test were used for the statistical analysis (5% level of significance). Results The prevalence of smoking was 3.3%. The lowest age regarding the use of tobacco for the first time was eight years and the age group with the greatest frequency of initiation into this habit was 11 to 14 years (44.3%). A total of 84.3% of tobacco users smoked between one and 10 cigarettes per day. Smoking was associated with delays in schooling (p=0.047), gender (p=0.016), alcohol use and frequency of alcohol use (p<0.001) and the relationship with one’s father (p=0.014) and mother (p=0.004). Conclusions Despite the low prevalence, an early initiation into smoking was found, suggesting that educational campaigns should be directed at earlier ages. Alcohol use stood out among the variables studied, suggesting that smoking is influenced by both the use and intensity of this substance.

Keywords
Smoking, students, alcoholism, epidemiology, risk factors