

The objective of the SAmBa (Environment and health in children) study was to evaluate the association between aircraft noise exposure, cognitive performance, blood pressure and annoyance in children living around the Ciampino airport in Rome, Italy. We investigated 700 children, aged 9-11 years, attending 14 schools located in the airport area. In our sample, 40% of children was exposed at school at 65-75 dB, while 4.3% lived in homes exposed at 65-75dB. We found an association between aircraft noise levels at school and auditory discrimination ability this impairment became statistically significant when children cognition was taken into account. When we considered exposure at home, we found a borderline excess risk for impairment in cognition and a strong effect for auditory discrimination ability. According to previous studies no association was found between exposure to aircraft noise and blood pressure, while a strong association with annoyance was detected.

 [Rapporto S.Am.Ba.](images/stories/pdf/rapporto_samba.pdf)