Children's cognition and aircraft noise exposure at home—the West London Schools Study.

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The association of aircraft noise exposure with cognitive performance was examined by means of a cross-sectional field survey. Two hundred thirty-six children attending 10 primary schools around Heathrow Airport in west London were tested on reading comprehension, immediate/delayed recall and sustained attention. In order to obtain the information about their background, a questionnaire was delivered to the parents and 163 answers were collected. Logistic regression models were used to assess performance on the cognitive tests in relation to aircraft noise exposure at home and possible individual and school level confounding factors. A significant dose-response relationship was found between aircraft noise exposure at home and performance on memory tests of immediate/delayed recall. However there was no strong association with the other cognitive outcomes. These results suggest that aircraft noise exposure at home may affect children's memory.

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