

# THE DEBATS STUDY: HEALTH EFFECTS OF AIRCRAFT NOISE NEAR THREE FRENCH AIRPORTS

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**Background and Aims:** A national survey carried out in 2005 shows that 6.6% of the French population are annoyed by aircraft noise (Lambert *et al.*, 2009). While many surveys carried out both in France and abroad address aircraft noise annoyance or report adverse effects on sleep quality, much fewer consider at the same time the physiological effects of this noise exposure. DEBATS aims to characterize the relations between aircraft noise exposure and health status of the French population living in the vicinity of airports, both physically and mentally but also in terms of annoyance.

**Methods:** DEBATS is an on-going research program (2011-2016) involving residents around three French airports: Paris-Charles de Gaulle, Toulouse-Blagnac, and Lyon Saint-Exupéry. It includes an ecological study based on drug prescriptions, and on nonprescription drug sales, as well as a longitudinal field study following-up approximately 1,200 of these residents for four years. This study addresses the existence of a link between aircraft noise exposure (measured or calculated) and the measurements of different parameters related to health. In particular, annoyance and health status (current and past) are assessed by questionnaires, and physiological variables like blood-pressure or salivary cortisol are also considered within the frame of the study.

**Results and Conclusions:** While contributing to a wider and deeper knowledge of the French sanitary situation resulting from aircraft noise exposure, DEBATS will make it possible to assess the expected health benefits of the implementation of aircraft noise abatement policies around airports.

**References:**

Lambert J et Philipps-Bertin C (2009). Les nuisances environnementales des transports : résultats d'une enquête nationale. Rapport INRETS (278). INRETS.