

## **Sustainability | Individual communication**

### **IC - (20870) - EXPOSURE OF YOUNG CHILDREN TO SETTLED DUST: AN ANALYSIS OF PARENTAL KNOWLEDGE AND RISK PERCEPTION**

Raquel Bertoldo<sup>2</sup>; Laure Malleret<sup>1</sup>

1 - Aix Marseille Univ, CNRS, LCE, Marseille, France; 2 - Aix Marseille Univ, LPS, Aix-en-Provence, France

#### **Background and objectives**

The exposure of young children to fine aerial or settled dust potentially has serious consequences to their health. Because of the behaviour typically observed among young children - floor play and hand-to-mouth contact – this group is particularly exposed to settled dust in the household, where their parents are most often responsible for managing children's exposure to these particles: they are the ones who know about the dangers presented by these particles; perceive this danger as important and, consequently, take actions. Still, these actions are related to household chores that are also part of the household management styles.

#### **Process and methods (for empirical research)**

This research proposed to explore parents of young children perception about this domestic risk exposure through two waves of online questionnaires. Parents were mostly contacted through parent-school associations in the Aix-Marseille perimeter, located South-East of France. Participants were inquired about (1) what they knew about settled dust and household air quality (knowledge); (2) how did they estimate their children's exposure to settled dust in a variety of environments (risk perception); and (3) what type of parenting style they adopted.

#### **Main results (or main arguments in the case of critical reviews)**

Results show an 'optimism bias': they estimate their children to be less exposed to dust than children in general. Perceived risk of exposure is seen to be higher in open air situations than indoor at school or at home. Finally, dust cleaning behaviours are mainly explained by parental style – other predictive variables seem to play a minor role.

#### **Implications for research and practice/policy | Importance and originality of the contribution**

In conclusion, home cleaning practices in densely populated or industrialized areas could play a role in preventing young children exposure to dust. Still the prevention of young children exposure to dust is deeply rooted in household practices and habits – highly dependent on family organisation. Experimental studies could shed light in how information about risks presented by dust could reinforce cleaning habits in the household.

**Palavras-chave : settled dust, fine particles, risk perception, household hazard, parental style, perception heuristics**