

## FO-380-4 Morbidity attributable to secondhand smoke exposure in children under 5 years old in Spain, 2015

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**Background:** Children are especially vulnerable to the detrimental health effects of secondhand smoke (SHS), which has been widely linked to asthma and otitis media (OM), among other diseases. This study aimed to estimate hospital admissions and disability-adjusted life years (DALY) attributable to SHS exposure in terms of asthma and OM among children under 5 years old in Spain during the year 2015.

**Methods:** The prevalence of SHS exposure in children under 5 was estimated through a telephone survey performed in 2016 in a representative sample of Spanish households with children. The Rate risks for asthma and otitis media were selected from different published international meta-analysis. The number of hospital admissions were obtained for each disease from the Minimum Basic Data Set provided by the Ministry of Health of Spain. Information about DALYs were obtained from estimations made by the World Health Organization. Both hospital admissions and DALYs attributable to SHS exposure were calculated using the population attributable fraction (PAF).

**Results:** 25.7% of children under 5 are exposed to SHS at home (any household member reported smoking either inside or on balconies or terraces). According to the literature, SHS exposure increases the risk of both asthma and OM by 1.32. The estimated percentage of children presenting each disease attributable to SHS exposure at home is 7.6%. In 2015, the number of children with at least one hospital admission for asthma (n=2,451) and OM (n=1,226) attributable to SHS exposure was 186 and 93, respectively. Likewise, attributable DALYs were 273 for asthma and 159 for OM.

**Conclusions:** 7.6% of burden disease for asthma and OM among young children is due to SHS exposure at home. This figure highlights the need of implementing smoke-free home interventions to reduce hospital admissions and DALYs for asthma and OM.

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