

Lifetime swimming pool attendance, asthma, eczema and respiratory symptoms in school-age children

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Synopsis

An increased risk of asthma has been associated with pool attendance in children, although evidence is inconclusive (1,2). We conducted a survey in 3,301 school-age children in a municipality (Sabadell, Spain) to evaluate the association between swimming pool attendance and respiratory symptoms. The parents completed a questionnaire on frequency of indoor and outdoor pool attendance currently and from birth, respiratory and allergic symptoms in the last 12 months (wheezing, asthma medication, rhinitis and allergic rhinitis), ever having asthma and eczema and potential confounders. Indicators of indoor and outdoor swimming pool attendance early in life, cumulative and currently were created.

None of the pool attendance indicators was associated with having ever asthma. Early pool attendance (<2 years old) reduced the risk of current asthma medication (OR=0.58; 95% CI=0.38-0.90) and allergic rhinitis symptoms (OR=0.75; 95% CI:0.60-0.95). No association was found between current wheezing and pool attendance. Lifetime indoor pool attendance was associated with eczema, adjusted odds ratio (OR) =1.71 (95% CI: 1.38-2.12) for >5 vs. 0 years.

In conclusion, swimming pool attendance in Spanish children was associated with less upper and lower respiratory tract symptoms and with more eczema. Longitudinal studies are required to confirm these associations, as some reverse causation may have occurred.

Bibliography

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