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**Title:** Age at onset and persistence of eczema and the subsequent risk of asthma and allergic rhinitis

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**Body:** Background: Few studies have simultaneously addressed the importance of age of onset and persistence of eczema for the subsequent development of asthma and allergic rhinitis in children. Objective: To examine age of eczema onset and eczema persistence as predictors for childhood asthma and allergic rhinitis at ages 6, 7 and 12 years. Methods: A prospective birth cohort was recruited comprising 620 infants with a family history of allergic diseases. Telephone interviews were conducted 18 times in the first two years of life, annually from age 3 to 7, and at 12 years to document any episodes of eczema. Current asthma and allergic rhinitis were assessed at ages 6, 7 and 12. Results: Very early-onset (<6 months) persistent eczema was related to current asthma (adjusted OR= 6.0; 95%CI 2.4-14.7) and allergic rhinitis (aOR=4.5; 95%CI 1. 9-10.9) at age 12 years. Adjustment for aero-allergen sensitisation in infancy dramatically reduced these associations. There was no evidence that early-onset remitting eczema (only present < 2 years) or late-onset eczema (onset > 2 years) were associated with current asthma and allergic rhinitis. These results were consistent with the 6-7 year findings. Conclusion: Eczema which commences very early in life and persists into toddler years is strongly associated with childhood asthma and allergic rhinitis, and is possibly mediated by aero-allergen sensitization. However remitting and late-onset eczema do not appear to be related to these outcomes. With effective early intervention, the risk of diseases associated with early-onset eczema might be reduced.