Dokumenttyp:  
journal article

Autor(en) des Beitrags:  
Krämer, U; Oppermann, H; Ranft, U; Schäfer, T; Ring, J; Behrendt, H

Titel des Beitrags:  
Differences in allergy trends between East and West Germany and possible explanations.

Abstract:  
At the time of the German reunification in 1990, manifestations of most allergic diseases were less prevalent in East than in West Germany. It was hypothesized that these East-West differences would diminish with lifestyle and pollution changes in East Germany. To investigate whether changes in the prevalence of asthma, hayfever, eczema or allergic sensitization in East Germany approached the levels seen in West Germany and to identify possible lifestyle or environmental factors that may influence this. Between 1991 and 2000, 6-year-old children from four areas in East Germany participated in an annual survey. Every 3rd year, a parallel survey was performed in four areas of West Germany. In total, 31,903 children were included. Parents completed a questionnaire regarding lifestyle factors and diagnoses and symptoms of asthma, hayfever and eczema. In sub-areas, eczema was clinically assessed by a dermatologist. Specific IgE sensitization was determined for 6121 children. Logistic regression was used to analyse differences in time trends and the influence of lifestyle and pollution changes. Lifestyle and pollution changed significantly differently between East and West Germany. The trends in hayfever and in strong (specific IgE>3.5) sensitization against pollen, and particularly birch pollen, were steeper in East than in West Germany. The trend towards marked pollen sensitization was four times stronger (95% confidence interval
1.2-13.9) in East than in West Germany. Increasing numbers of only children, less single-room heating with fossil fuels and increasing importance of traffic-related pollution in East Germany partly explained these differences in time trends. Hayfever and sensitization against pollen were the most sensitive allergic manifestations to changes experienced specifically in East Germany. Influences of lifestyle (single-room heating, living as a single child) were important in explaining different trend developments.