Recent reports on time trends in atopic disease suggest that the prevalence of asthma and allergic rhinitis has levelled off in some European countries after several decades of increasing.\(^1\)\(^2\) We reported earlier that the prevalence of asthma in young Finnish men remained stable from 1926 to 1961 but started to rise steeply during the 1960s; a sixfold, virtually linear increase in asthma prevalence was found between 1966 and 1989, in parallel with increases in indicators of disabling asthma (on the basis of the percentage of men exempted from military service at call-up owing to asthma and of men discharged during service as a result of asthma).\(^3\) We examined whether similar trends have continued during the subsequent 13 years (1990-2003). As data on current trends in prevalence of allergic conditions are scarce, we also examined the trends in prevalence of allergic rhinitis and eczema from 1966 to 2003 among these young men.

**Methods and results**

In Finland, about 98% of all men aged 18-19 are examined to establish their fitness for military service. Diagnostic codes (based on the international classification of diseases) are registered. During 1966-2003 almost 1.4 million men were examined. The examination procedure has been described earlier.\(^3\) Since 1972 the examination has been a two stage procedure: a clinical examination (including medical history and a questionnaire) by a local general practitioner followed by a re-examination at call-up by an army physician. Specialists are consulted when needed.

The figure shows the prevalence trends for asthma, rhinitis, and eczema. We found that the prevalence of asthma increased 12-fold between 1966 (0.29%) and 2003 (3.45%), showing a continuous rising trend during this period. The average annual increment in prevalence during this period was 0.1%. By contrast, the trends for indicators of disabling asthma turned downwards in 1989. Since then, the percentage of men exempted at call-up owing to asthma has continued to decrease, whereas the percentage of men discharged during service as a result of asthma started to rise again in 1998. Prevalence of allergic rhinitis remained low (<0.1%) till 1970 but increased steadily thereafter. The rise in prevalence of allergic rhinitis has been particularly striking since 1991, with the peak in 2000 (8.9%), and the trend is still upwards. Prevalence of atopic eczema, however, has remained fairly constant (about 1.2%) since the early 1980s.

**Comment**

By the year 2003, no signs of a reduction in the prevalence of asthma and allergic rhinitis in young Finnish men were found in...
this study, which included a very large dataset of homogeneous populations with a participation rate of about 98% throughout and a high number of repeated surveys. For asthma and allergic rhinitis, the results are similar to those reported recently from Sweden but discordant with findings from several other European countries. Some environmental factors may still continue to induce disease in susceptible individuals in Sweden and Finland, whereas in several European countries the process may have come to an end.

Asthma has become milder or better controlled, or both, during the past 15 years, as the percentage of men exempted from military service at call-up owing to asthma has shown a downward trend. Implementation of the national and global asthma prevention programmes that have led to improved asthma management are thought to be involved in this change; the impact of other (environmental) factors is more difficult to evaluate. A similar steadily decreasing trend was not found, however, in the percentage of men discharged during service as a result of asthma, which points to a need to re-examine selection and classification criteria for asthmatic men at call-up, as well as to better treatment during service.

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What is already known on this topic

The prevalence of asthma and allergic rhinitis has levelled off in some European countries after several decades of increasing.

The increase in the prevalence of asthma in Finland has been nearly linear since the 1960s.

What this study adds

No signs of a reduction in the prevalence of asthma and allergic rhinitis in young Finnish men by 2003 were found, although asthma seems to have become milder and better controlled during the past 13 years.