



Long-term trends of asthma, allergic rhinitis and atopic eczema in young Finnish men: a retrospective analysis, 1926–2017

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Asthma and allergic conditions have been on an almost linear rise in young Finnish men since the 1960s. The prevalence increase slowed down in the 2000s and may be levelling off in the 2020s. <https://bit.ly/30DbsqS>

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ABSTRACT The aim of this study was to assess the long-term time trends of the prevalence of asthma, allergic rhinitis and atopic eczema in young Finnish men.

A retrospective analysis was carried out on cross-sectional data from the Finnish Defence Forces taken from call-up examinations of candidates for military conscription and examinations of conscripts discharged from service because of poor health. Roughly 1.7 million men aged 18–19 years (98% of men of conscription age) were examined from 1966 to 2017. A proportional but unknown number of young men were examined from 1926 to 1961.

The main outcome measures were asthma recorded at call-up examination as the main diagnosis in 1926–2017 and any diagnosis in 1997–2017, exemption or discharge from military service due to asthma, and allergic rhinitis and atopic eczema recorded as the main diagnosis in 1966–2017 and any diagnosis in 1997–2017.

During 1926–1961 the prevalence of asthma remained low at between 0.02% and 0.08%. A linear rise began between 1961 and 1966, with a 12-fold increase in the prevalence from 0.29% in 1966 to 3.44% in 2001. Thereafter, the prevalence of asthma as the main diagnosis stabilised but continued to increase to 5.19% in 2017 if secondary diagnoses of asthma were included. Exemption rates from military service due to asthma have similarly increased but fluctuated more. The prevalence of allergic rhinitis increased from 0.06% to 10.70% and atopic eczema from 0.15% to 2.90% during the period 1966–2017.

In Finland, an increase in asthma and allergic conditions among young men became evident in the mid-1960s. The increase slowed in the 2000s and may be levelling off in the 2020s.