



[Anaphylaxis: assessment of a disease-based military medical standard.](https://arctichealth.org/en/permalink/ahliterature131737)

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Author: Peter R Zeindler

Alan Gervais

Author Affiliation: Canadian Forces Environmental Medicine Establishment, 1133 Sheppard Avenue West, Toronto, Ontario M3K 2B3.

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Abstract: Although widespread, the use of disease-based employment medical standards is poorly understood or researched. A probabilistic model and threshold value are developed and applied to a military (Canadian Forces [CF]) medical standard for anaphylaxis. Frequency estimates of prevalence, occurrence, and impairing reactions are determined from the literature for military applicants and from medical chart review of military members identified by prescriptions for self-administered epinephrine. The prevalence of prescriptions is 1.13% (CI 1.05, 1.22) and 0.86% (CI 0.72, 1.00) in the CF Regular Force and applicant populations, respectively. The proposed model predicts the annual risk of an impairing allergic reaction in the CF population ranges from 0.1% to 0.16%/year, well below the proposed threshold of 0.5%. The majority of this risk arises from new cases and not recurrences. Requirement for care increases with recurrence. This model allows a useful method of disease-based medical standard review.

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