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**Title:** Helminths for asthma: Findings of a Cochrane systematic review

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**Body:** Background: Helminths modulate the natural immune responses of their human hosts, and may prevent or cure immune-mediated or allergic diseases, such as asthma. Non-randomised studies support this hypothesis. Objectives: To assess the safety and effectiveness of helminth therapy in people with asthma. Methods: We searched the Cochrane Airways Group Specialised Trials Register and additional sources for published and unpublished trials. We included all randomised controlled trials where the intervention was any helminth species administered to people with asthma. We combined dichotomous data using risk ratio (RR) and continuous data using mean difference (MD). Results: We found 5 published reports, describing 2 studies (64 adult participants). Both studies used a single percutaneous application of 10 third stage *Necator americanus* (i.e. hookworm) larvae. Pooling of data showed no difference in airway hyperresponsiveness between the helminth and placebo groups (MD 0.51, 95% CI –0.54 to 1.56) and no difference in study dropouts (OR 2.15, 95% CI 0.36 to 12.76). Other outcomes (asthma symptoms, use of reliever inhalers, quality of life) did not differ between the groups. Adverse events were few. Conclusions: There was no clinical benefit from helminth therapy. The trials however were small and not powered to show effectiveness. Administered to humans in carefully measured doses, helminths appear to be safe. More preclinical studies should be performed, before larger and extended duration trials of helminths for asthma are carried out. 'Trickle colonisation' with helminths may be more effective than the administration to patients of a single large helminth bolus, but this therapeutic approach has not yet been tested for asthma.