

## EU membership may have led to allergy increase in rural Poland

December 16 2013

---

Poland's entry into the EU may have had the surprising consequence of increasing allergies in rural villages, according to a new study. Surveys show that the prevalence of atopy, a predisposition towards allergic reactions, jumped from seven per cent to 20 per cent in villages in southwest Poland between 2003 and 2012.

Scientists believe the rise is linked to changes in [farming practices](#) that occurred when Poland adopted of the EU Common Agricultural Policy. In 2003, many villagers kept cows or pigs on their land, but after joining the EU it became uneconomical to do so.

Exposure to farm animals, especially at a young age, is thought to protect against developing allergies. The findings add to evidence that westernised lifestyles increase the risk of [allergic diseases](#).

Previous research has suggested that farm dwellers, especially children who grow up on farms, have lower rates of hayfever and atopy than people living in towns.

Study author Professor Paul Cullinan, from the National Heart and Lung Institute at Imperial College London, said: "Asthma, hayfever, and other allergic diseases are becoming more common in many countries and there's growing evidence that they're linked to modern, clean lifestyles.

"We found that rapid changes in farming practices after Poland joined the EU were accompanied by a sharp increase in allergies over a very

short period of time. It's likely that similar changes are occurring in other places in Europe, and we can expect that elsewhere in the world, we may see major increases in allergies, asthma and hayfever over the coming decades as countries become more westernised and less rural."

Researchers from Wroclaw Medical University and Imperial College London conducted surveys in villages and a small town in southwest Poland in 2003, one year before Poland joined the EU, and 2012, to study the prevalence of asthma, hayfever, and atopy, which is diagnosed with a skin prick test.

In 2003, 7.3 per cent of villagers tested positive for atopy, compared with 20 per cent of townspeople. In 2012, the prevalence of atopy in villages had risen to 19.6 per cent. Hayfever also rose, from 3.0 per cent to 7.7 per cent, but the prevalence of asthma did not change significantly. In towns, there were no changes in the prevalence of allergies.

Twenty-four per cent of village dwellers had regular or occasional contact with cows in 2003, but this fell to four per cent in 2012. Thirty-three per cent had contact with pigs in 2003 but only 14 per cent in 2012.

The study appears in the *Journal of Allergy and Clinical Immunology* and was funded by the National Science Centre, Poland.

**More information:** B. Sozanska et al. 'Atopy and allergic respiratory disease in rural Poland before and after accession to the European Union.' *Journal of Allergy and Clinical Immunology*, 2013. [DOI: 10.1016/j.jaci.2013.10.035](https://doi.org/10.1016/j.jaci.2013.10.035)

Provided by Imperial College London

Citation: EU membership may have led to allergy increase in rural Poland (2013, December 16)  
retrieved 18 April 2024 from

<https://medicalxpress.com/news/2013-12-eu-membership-allergy-rural-poland.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.